DEVELOPMENT OF PSYCHOLOGICAL READINESS TO WORK WITH GIFTED CHILDREN FOR PRESCHOOL INSTITUTION TEACHERS

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Abstract
The article presents a model of pre-school teachers’ psychological readiness to work with gifted children. The program of a special course designed for extensive development of readiness and teachers’ training to work with gifted children is presented. The effectiveness of the developed program is confirmed by a formative experiment. The obtained results can become a basis for psychological activities aimed at such readiness formation.

Key words: preschool education institution (PEI), PEI teachers, gifted children, psychological readiness.

Introduction
Problems and relevance of the research. Effective work of preschool teachers with gifted preschool children is possible only at a high level of psychological readiness to professional work. However, the authors’ data (Довгань, 2011a, 2011b, 2011c) show that a vast majority of preschool educators have average or low levels of psychological readiness to work with gifted children. In the authors’ view, this is because of a number of contradictions inherent in techniques of pre-school teacher training, including:

- the traditional system of teachers training and the reality of practical work with gifted preschool children;
- future teacher commitment to use standard programs for preschoolers’ education and lack of satisfaction of constant renewal with best practices of education methods and techniques for gifted preschoolers;
- traditional approaches to the development and training of preschool children without taking into account of gifted children’s specifics and needs;

Today, one of the most important areas of modern education is the need to prepare psychologically competent caregivers, teachers who can play a decisive role in preschooler’s
personality formation. Therefore, timeliness to introduce special forms into teachers’ preparing process has led the authors to creation of a program of psychological readiness development to work with gifted children for pre-school teachers.

It should be noted that the problem of working with gifted children was investigated by national and foreign researchers. Thus, foreign psychologists Guilford (1967); Taylor (1998); Sisk (1990) and others used a variety of conceptual models for education and training program development.

Over the past three decades, national scientists were creating programs to identify and support gifted children development Дьяченко (1997); Шадриков (1996); Богоявленская (2005); Щебланова (2008); Шумакова (2004); Савенок (2010); Джуманголова (2009); Рубцов (2010).

In Ukraine at the regional level, the targeted program “Talented Children” of the National Foundation is being implemented. The programs were designed to promote state provisions relating to talented creative children progress.

However, the question of psychological preparation of future preschool teachers to work with gifted preschool children during graduate and post-graduate courses in universities was not raised in psychological researches and state programs.

**Object of the research** is development of pre-school teachers’ psychological readiness to work with gifted children.

**Aim of the research** is to develop and test a program of development of pre-school teachers’ psychological readiness to work with gifted children.

**Objectives of the research:**
1) to propose a program of development of pre-school teachers’ psychological readiness to work with gifted children.
2) to test the program of development of pre-school teachers’ psychological readiness to work with gifted children
3) to prove the efficacy of the program on a base of a formative experiment.

**Sample of the research**
The study involved 50 teachers from preschool education institutions of traditional and new types in Kyiv. Levels of psychological readiness to work with gifted children and social and professional characteristics of the participants (intermediate variables) were relatively homogeneous.

**Methods and organization of the research**
A special diagnostic system was applied to determine the levels of teachers’ psychological readiness to work with gifted children at the beginning and at the end of the special course-training. Techniques from modern psychological diagnostics literature (Poron (2000), Райгородский (1998), Ярошевский (1982) that have passed appropriate checking and meet the context of the present research program have been selected. Unfortunately, most of the selected techniques are intended for secondary school teachers, so it was necessary to create customized options taking into account pre-school teachers’ diagnosis specific features. Therefore, it was necessary to develop additional diagnostic tools (questionnaires and a technique).

Statistical analysis of the data was performed using the computer statistical software package SPSS (version 16.0).
Methods of the research.

The formative experiment to develop teachers’ psychological readiness on the base of the program of a special course was held as extensive work within the preschools’ methodological framework (1 time per week) in experimental groups during 8 weeks in 2011-2012 in the preschool No 580 of a new type “Olbia” of educational institution “Giftedness” and in the traditional type preschool No 789 in Kyiv.

I) Standardized techniques were used: 1) the method to determine teachers’ orientation on interaction with gifted children by Torrance (1998) modified by Лейтес (1996), 2) the questionnaire “Studying of roles in a creative group” by Ярошевский (1982), 3) the method for diagnostics of empathic ability levels by Бойко (Райгородский, 1998); 4) the method for diagnostics of communicative tolerance by Бойко (Фетискин, 2002), and 5) the method “Your creative potential” by Рогов (2000).

II) Additional diagnostic tools: 1) the questionnaire “Psychological and pedagogical features for working with gifted children”, 2) the questionnaire “Styles of interaction with a gifted child”, and 3) the questionnaire “Features of gifted preschoolers”, and 4) the technique “The motives for working with gifted children.”

Principles of sampling of research participants

In order to form a representative sample, the respondents were divided into groups depending on:

1) their age: 32.3% were 24-34 years old, 33.3% were 35 to 44, 26% were 45 to 54; 8.3% were 55 to 70;
2) their length of service: 43.8% worked from 1 to 13 years; 32.3% did 14 to 22 years; 17.7% did 23 to 31 years; 6.2% worked 32 to 46 years;
3) types of pre-school educational institutions: 49% worked in traditional pre-schools, 51% in pre-schools of new forms.

The experimental group consisted of 25 teachers and was divided into the sub-groups: 13 teachers from the preschool No 580 of a new type “Olbia” of educational institution “Giftedness” and 12 educators from the traditional type preschool No 789. The control group consisted of 25 people (a subgroup of 12 educators from the preschool No 580 “Olbia” and 13 pre-school teachers from the traditional preschool No 789).

Development of preschool teachers’ psychological readiness to work with gifted children is based on the author’s model of preschool teachers’ psychological readiness to work with gifted children. According to the model, psychological readiness to work with gifted preschoolers is made of a combination of motives, knowledge, skills, personal qualities that provide effective training, education and personal development of gifted preschoolers. Accordingly, the structure of readiness includes the following components: 1) motivational (complex motives that raise teachers’ desire to educate gifted preschoolers with high quality), 2) cognitive (knowledge about psychological characteristics of gifted children and psychologically sound forms and methods of work with them), 3) operational and regulatory (set of abilities and skills necessary for effective interaction “teacher - gifted child”), 4) personal (set of personal qualities needed to work with gifted children – creativity, tolerance, etc.).

The program “Development of preschool teachers’ psychological readiness to work with gifted children” goes on 42 academic hours (4 hours for input and output diagnostics, 18 hours for lecture work, 18 hours for trainings, 2 hours for practical work) and 18 hours of independent work (home tasks).

The program was implemented in a form of a training workshop, where input and output diagnostics was performed to determine teachers’ psychological readiness before and after the formative experiment (see Table 1).
Table 1. Program of the special course “Development of preschool teachers’ psychological readiness to work with gifted children”

<table>
<thead>
<tr>
<th>Modules of the study course</th>
<th>Sections of the special course</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Input diagnostics</strong></td>
<td></td>
</tr>
<tr>
<td>in order to determine the levels of teachers’ psychological readiness to work with gifted children before the special course-training</td>
<td></td>
</tr>
</tbody>
</table>
| Module 1 “Development of the cognitive component of teachers’ psychological readiness to work with gifted children” | Theoretical part.  
Practical part.  
Independent work |
| Module 2 “Development of the motivational component of teachers’ psychological readiness to work with gifted children” | Theoretical part.  
Practical part.  
Independent work |
| Module 3 “Development of the operational and regulatory component of teachers’ psychological readiness to work with gifted children” | Theoretical part.  
Practical part.  
Independent work |
| Module 4 “Development of the personal component of teachers’ psychological readiness to work with gifted children” | Theoretical part.  
Practical part.  
Independent work |
| **Output diagnostics**      |                               |
| in order to determine the levels of teachers’ psychological readiness to work with gifted children after the special course-training |                               |

The main part of the program is aimed at solving of the problems identified during an acknowledged experiment 1) the cognitive component: lack of awareness among teachers about features and characteristics of gifted preschoolers and peculiarities of work with them, 2) the motivation component: insufficient focus on quality of gifted preschoolers’ training and education, 3) the operational and regulatory component: insufficiently developed skills of effective interaction at work with gifted children, and 4) the personal component: lack of personal qualities necessary for effective interaction with gifted children.

Thus, the experimental group, as a result of formative experiment, recorded statistically significant differences (p < 0.01) by criterion χ² between the results of the first and second studies that reflects the importance for teachers of motives of work with gifted children.

**Results of the research**

The analysis of implementation results for the program of development of pre-school teachers’ psychological readiness to work with gifted children has proved its effectiveness.

This is manifested, in particular, in the fact that teachers from the experimental group, who attended the extensive special course within the methodological work, reported increased share of such motives as self-development and self-improvement, professional, social motives, etc. The control group did not show positive trends as for these motives.

Table 2. Levels of the motivational component of teachers’ readiness to work with gifted children before (1st study) and after (2nd study) the formative experiment

<table>
<thead>
<tr>
<th>Levels of the motivational component</th>
<th>Tested groups (%)</th>
<th>1st study</th>
<th>2nd study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental</td>
<td>Control</td>
<td>Experimental</td>
</tr>
<tr>
<td>Low</td>
<td>20</td>
<td>8</td>
<td>0,0*</td>
</tr>
<tr>
<td>Average</td>
<td>68</td>
<td>88</td>
<td>44*</td>
</tr>
<tr>
<td>High</td>
<td>12</td>
<td>4</td>
<td>56*</td>
</tr>
</tbody>
</table>

* – differences are statistically significant at the level p < 0.01.
At the beginning of the experiment (see Table 2) only 12% teachers in the experimental group indicated a high level of significance of motivation to work with gifted children, but after the experiment of 56% teachers indicated such a level, as the number of teachers with a low level of motives to work with gifted children decreased from 20% to 0%.

As for the control group, the 1st and 2nd studies have only minor differences, which generally do not significantly alter the situation on the significance of motives to work with gifted children for the studied preschool teachers. Thus, 4% and 4.2% of tested persons had a high level of significance of motives before and after forming experiment respectively, and 8% and 25% preschool teacher had a low level.

Statistically significant changes (p < 0.01) were noted for levels of the readiness cognitive component among the teachers from the experimental group, while positive trend in the control group was not observed (Table 3).

In particular, the number of teachers with a high level of knowledge about psychological characteristics of gifted children and work with them significantly increased (from 0% to 56%) in the experimental group, while a number of teachers with a low level of knowledge decreased from 48% to 0%. Thus the results of the special course on cognitive matters showed that the main part of preschool teachers obtained the necessary knowledge.

The control group has not shown, as the result of cognitive component training workshop, significant changes in knowledge about psychological characteristics of gifted children and work with them.

**Table 3. Levels of the cognitive component of teachers’ readiness to work with gifted children before (1st study) and after (2nd study) the formative experiment**

<table>
<thead>
<tr>
<th>Levels of the cognitive component</th>
<th>Tested groups (%)</th>
<th>1st study</th>
<th>2nd study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental</td>
<td>Control</td>
<td>Experimental</td>
</tr>
<tr>
<td>Low</td>
<td>48</td>
<td>52</td>
<td>0,0*</td>
</tr>
<tr>
<td>Average</td>
<td>52</td>
<td>48</td>
<td>44*</td>
</tr>
<tr>
<td>High</td>
<td>0,0</td>
<td>0,0</td>
<td>56*</td>
</tr>
</tbody>
</table>

* – differences are statistically significant at the level p < 0,01.

Comparative analysis of the first and second studies for levels of the operational and regulatory component of teachers’ readiness from the experimental group showed positive dynamics of its indexes (at the trend) after formative experiment, while the control group showed negative dynamic (8% teachers with a high level of readiness before the formative experiment to 0% after it) (Table 4).

**Table 4. Levels of the operational and regulatory component of teachers’ readiness to work with gifted children before (1st study) and after (2nd study) the formative experiment**

<table>
<thead>
<tr>
<th>Levels of the operational and regulatory component</th>
<th>Tested groups (%)</th>
<th>1st study</th>
<th>2nd study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental</td>
<td>Control</td>
<td>Experimental</td>
</tr>
<tr>
<td>Low</td>
<td>60</td>
<td>48</td>
<td>48</td>
</tr>
<tr>
<td>Average</td>
<td>32</td>
<td>44</td>
<td>24</td>
</tr>
<tr>
<td>High</td>
<td>8</td>
<td>8</td>
<td>28</td>
</tr>
</tbody>
</table>
The fact draws attention that although the number of teachers from the experimental group with a high level of operational and regulatory component after formative experiment increased by 20%, statistically significant changes of this readiness component occurred only as a trend. This indicates that practical implementation of learned knowledge and skills acquisition require quite a long time.

Statistically significant differences in levels of the personal readiness component for experimental group teachers before and after the formative experiment were noted, while teachers from control group did not show statistically significant differences in the levels (table 5).

As it is shown in the table 4, a low level of the personal readiness component decreased from 52% to 32% in the experimental group after the formative experiment and a high level increased from 12% to 40% (p <0.05).

The results of the control group did not change, only the number of teachers with a high level of readiness slightly increased (from 4.5% to 12.5%). Other results were not changed significantly.

Table 5. Levels of the personal component of teachers’ readiness to work with gifted children before (1st study) and after (2nd study) the formative experiment

<table>
<thead>
<tr>
<th>Levels of the personal component</th>
<th>Tested groups (%)</th>
<th>1st study</th>
<th>2nd study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental</td>
<td>Control</td>
<td>Experimental</td>
</tr>
<tr>
<td>Low</td>
<td>52</td>
<td>50</td>
<td>32*</td>
</tr>
<tr>
<td>Average</td>
<td>36</td>
<td>45,5</td>
<td>28*</td>
</tr>
<tr>
<td>High</td>
<td>12</td>
<td>4,5</td>
<td>40*</td>
</tr>
</tbody>
</table>

* – differences are statistically significant at the level p < 0,05.

In general, the experimental group showed positive trends as for the level of teachers’ psychological readiness to work with gifted children, while significant changes during the training workshop in the control group did not occur (Table 6).

Table 6. Levels of teachers’ readiness to work with gifted children before (1st study) and after (2nd study) the formative experiment

<table>
<thead>
<tr>
<th>Levels of readiness development</th>
<th>Tested groups (%)</th>
<th>1st study</th>
<th>2nd study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental</td>
<td>Control</td>
<td>Experimental</td>
</tr>
<tr>
<td>Low</td>
<td>48</td>
<td>50</td>
<td>4*</td>
</tr>
<tr>
<td>Average</td>
<td>48</td>
<td>50</td>
<td>64*</td>
</tr>
<tr>
<td>High</td>
<td>4</td>
<td>0</td>
<td>32*</td>
</tr>
</tbody>
</table>

* – differences are statistically significant at the level p < 0,05.

Thus, a number of teachers with a high readiness level in the experimental group increased from 4% to 32%, and with a low one decreased from 48% to 4% (p <0.01). The results in the control group were virtually unchanged.

At the final stage of determination of the effectiveness of formative experiment, a comparative analysis of teachers’ positive expectations at the first and second studies of possibility was performed to find out and develop special and general giftedness of every
child on the base of the authors’ projective techniques “Circles”, where teachers mentally transformed images of gifted children in their groups into circles and extent of potential natural abilities was described by the circle sizes at the beginning and at the end of the training workshop (Table 7).

**Table 7. Teachers’ positive expectations as for possibility to find out and develop special and general giftedness of every child**

<table>
<thead>
<tr>
<th>Degree of teachers' positive expectations as for possibility to find out giftedness of every child</th>
<th>Tested groups (%)</th>
<th>1st study</th>
<th>2nd study</th>
<th>1st study</th>
<th>2nd study</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Experimental</td>
<td>56</td>
<td>28*</td>
<td>36</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>24*</td>
<td>56</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>Experimental</td>
<td>8</td>
<td>48*</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>36</td>
<td>24*</td>
<td>56</td>
<td>52</td>
</tr>
</tbody>
</table>

* – differences are statistically significant at the level p < 0.01.

A number of teachers with high expectations as for possibility to find out and develop giftedness in every child in the experimental group increased from 8% to 48% (p <0.01). At the beginning of the seminar these teachers pointed to “lack of clearly gifted children”, “a small number of children with high potential giftedness”, but after the formative experiment teachers, stating that they “had difficulty in performing this task”, while noted: “all children are gifted.” Teachers’ attitude towards talent waiting in each child in the control group did not change.

At the next step of the analysis of special course implementation, the features of the components of teachers’ psychological readiness to work with gifted children depending on age and professional organizational factors (such as pre-school types and lengths of work at pre-school) were investigated.

In order to determine the dependence of these characteristics on the levels of pre-school teachers’ psychological readiness to work with gifted children, the results of the formative experiment with $\chi^2$ criterion were analyzed and correlation analysis with Pearson’s rank correlation coefficient was performed.

The results showed the absence of statistically significant correlations between the overall level of psychological readiness, its components and the subjects’ age and professional organizational factors (pre-school types and lengths of work at pre-school).

This confirms once again the important influence of the special course-training “Development of teachers’ psychological readiness to work with gifted children” on development of psychological readiness and has proven its effectiveness.

**Conclusions**

1. Development of teachers’ psychological readiness to work with gifted children is possible with a special program that consists of modules including development of motivational, cognitive, operational & regulatory and personal components of readiness.
2. Analysis of program implementation during the methodological work with teachers in preschools proved its effectiveness. Thus, study of statistically significant indicators showed that importance of quality of work with gifted children increased for the teachers from the experimental group. Improvement of their psychological readiness to work with gifted children was also reported. Statistically significant changes of these parameters among the teachers from the control group were not observed.
3. In the future, the authors believe it is necessary to prepare individual programs of teachers’
psychological readiness to work with gifted children on the basis of continuous monitoring of personal and professional development. It is important from the authors’ point of view to develop programs for preschool psychologists’ training in the field of psychological support of work with gifted children.

References
DEVELOPMENT OF PSYCHOLOGICAL READINESS TO WORK WITH GIFTED CHILDREN FOR PRESCHOOL INSTITUTION TEACHERS

Summary

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The article states that effective teachers’ working with gifted preschool children is possible with a high level of psychological readiness for professional activity. The analysis of the scientific literature states that the issue of psychological preparation of preschool teachers to work with gifted preschoolers in the system of higher education and post-graduate teacher education in psychological research and government programs is not revealed. Aim of the research is to develop and test a program of development of pre-school teachers’ psychological readiness to work with gifted children. Object of the research is development of pre-school teachers’ psychological readiness to work with gifted children.

Sample of the research. The study involved 50 teachers from preschool education institutions of traditional and new types in Kyiv. Levels of psychological readiness to work with gifted children and social and professional characteristics of the participants (intermediate variables) were relatively homogeneous.

The paper presents the formative experiment of psychological readiness program of the designed course for teachers. The study was conducted with extensive option within the methodological work of preschool education. The work took place one day a week in the experimental group for 8 weeks in 2011-2012 at the CCA number 580 a new type of “Olbia” NVZOSH “Giftedness” and PEI traditional type number 789 in Kyiv.

The program “Development of preschool teachers’ psychological readiness to work with gifted children” goes on 42 academic hours (4 hours for input and output diagnostics, 18 hours for lecture work, 18 hours for trainings, 2 hours for practical work) and 18 hours of independent work (home tasks).

The program was implemented in a form of a training workshop, where input and output diagnostics was performed to determine teachers’ psychological readiness before and after the formative experiment.

The main part of the program is aimed at solving of the problems identified during an acknowledged experiment 1) the cognitive component: lack of awareness among teachers about features and characteristics of gifted preschoolers and peculiarities of work with them, 2) the motivation component: insufficient focus on quality of gifted preschoolers’ training and education, 3) the operational and regulatory component: insufficiently developed skills of effective interaction at work with gifted children, and 4) the personal component: lack of personal qualities necessary for effective interaction with gifted children.

The analysis of the results of the implementation of the program of development of pre-school teachers’ psychological readiness to work with gifted children has proved its effectiveness. This is manifested, in particular, that in the experimental group students who attended a special course for the option within the extensive technical work, growth reached a high level of psychological readiness and its components. In the control group, a positive trend with respect to these parameters was observed.

At the next step of the analysis of special course implementation, the features of the components of teachers’ psychological readiness to work with gifted children depending on age and professional organizational factors (such as pre-school types and lengths of work at pre-school) were investigated.

In order to determine the dependence of these characteristics on the levels of pre-school teachers’ psychological readiness to work with gifted children, the results of the formative experiment with
χ² criterion were analyzed and correlation analysis with Pearson’s rank correlation coefficient was performed.

The results showed the absence of statistically significant correlations between the overall level of psychological readiness, its components and the subjects’ age and professional organizational factors (pre-school types and lengths of work at pre-school).

This confirms once again the important influence of the special course-training “Development of teachers’ psychological readiness to work with gifted children” on the development of psychological readiness and has proven its effectiveness.

Conclusions show that the development of teachers’ psychological readiness to work with gifted children is possible with a special program that consists of modules including development of motivational, cognitive, operational & regulatory and personal components of readiness. The analysis of program implementation during the methodological work with teachers in preschools proved its effectiveness, too. Thus, study of statistically significant indicators showed that importance of quality of work with gifted children increased for the teachers from the experimental group. The improvement of their psychological readiness to work with gifted children was also reported. Statistically significant changes of these parameters among the teachers from the control group were not observed. In the future, the authors believe it is necessary to prepare individual programs of teachers’ psychological readiness to work with gifted children on the basis of continuous monitoring of personal and professional development. It is important from the authors’ point of view to develop programs for preschool psychologists’ training in the field of psychological support of work with gifted children.
Abstract

The paper presents the features of changes in professional value orientations of teachers in the system of postgraduate education. The means implementing the development of the program and change of teachers’ professional value orientations was a special course-training, which provided the impact on cognitive, emotional-evaluative and behavioral components of professional value orientations. Results of the formative experiment demonstrated the possibility of the development of professional value orientations of teachers and effectiveness of the special course-training proposed for professional teacher training in the system of postgraduate education.

Key words: teacher, changes in professional value orientations, special course-training, system of postgraduate education.

Introduction

A personality of a teacher has a special significance in the modern humanistic education paradigm because a teacher is a main acting person for implementation of education goals and objectives. The modern society needs a teacher who is characterized by a holistic humanistic worldview, professionalism, high professional and personal culture and who implements at own professional work the way of life based on the integration of universal and professionally significant values (Мешко, 2009).

The last decade in Ukraine, Europe and worldwide is characterized by spreading of interest in values in education (Booth & Dyssegaard, 2008; Kosnik & Beck, 2009) and to teachers’ value orientations. Thus, an axiological component of the future teachers’ training is revealed in the works of several researchers (Briska, 2008; Волькова, 2005; Іванцев, 2000; Курлянд, 2004 and others). Researchers’ attention is drawn to studies of different aspects of teachers’ professional values, their development and a role in professional activities (Astashova, 2000; Бобро, 2006; Никитина, 2000); the professional values of teachers of physical education
were studied in detail (Ennis & Chen, 1996; Gillespie, 2011; Morgan, 2008; Timken & Mars, 2009). Professional value orientations have a decisive impact on a teacher’s professional and personal identity, they determine all teaching activities. Existence of personal professionally meaningful values provides conscientious attitude to work, encourages professional searches, creativity, self-improvement and, to some extent, compensates underdeveloped skills and abilities; lack of positive orientation can cause occupational failure, loss of already existing skills (Никитина, 2000). Humanistic orientation is considered to be a positive professional value for teachers, which means that a teacher thinks about a child as about the highest value, recognizes their rights to freedom and happiness, free development and expression of their abilities.

Many researches are directed at uncovering of administrators’ values and examining how these values are articulated and acted upon (Бондарчук, 2008; Begley & Leonard, 1999).

It should be noted that the data obtained in previous studies (Печерська, 2012) indicate insufficient level of development of professional values for the majority of school teachers. This situation demonstrates the need of a special axiological training for teachers to develop and change their professional values that can be made in the system of postgraduate education. However, the problem development and change of teachers’ professional values in the system of postgraduate education remains unexplored.

**Aim of the research:** to test a program of teachers’ professional value changes in postgraduate education universities.

**Object of the research:** changes of professional value orientations of teachers in the system of postgraduate education.

Objectives of the research are:
1. To define conditions of changes in professional value orientations of teachers;
2. To make a special axiological course-training for teachers and test effectiveness of its implementation in the system of postgraduate education.
3. To review possibility of development and change in professional value orientations of the teachers by the means of using special axiological course-training.

**Sample of the research.** The investigation was done on a sample of 90 teachers. A formative experiment was made at the base of Crimean Republican University of Postgraduate Pedagogical Education (Simferopol).

**Methods and organization of the research**

The methodological basis of the formative experimental program was relied on the main ideas of the axiological genesis theory (Карпенко, 1999, 2009; Леонтьев, 1996; Радчук, 2007), humanistic and value approach in the system of postgraduate education (Бондарчук, 2009).

Indicators of the level of cognitive component development included teachers’ knowledge on professional values and awareness of their own professional values. In order to determine them, the questionnaire “My professional values” was used, teachers were asked to describe educational values and justify their answers. Indicators of the level of the development of emotional-evaluative component included teachers’ acceptance of their own professional values, their humanistic orientation, job satisfaction and positive attitude to professional work. In order to determine them, teachers were asked to arrange the list of values by rank, the test “Value orientations” (Rokeach, 1960) was used. The list of values by Rokeach (1960) was added with several educational values (e.g., respect for a child’s personality, pedagogical empathy, knowledge of child psychology, etc.). The test “Study of the teacher’s satisfaction with profession and job” was also used (Ильн, 2002). Indicators of the
level of the development of behavioral component included: implementation of professional values in professional activities and stability of demonstration of professional and value beliefs in daily professional activities and behavior. In order to determine them, the test “Teachers’ professional positions” (Мартинюк, 2003) was used that allows to determine stability of demonstration of professional and value beliefs in professional activities. Teachers were also asked to describe value implementation in their professional activities with the questionnaire “Styles of professional activities”. For comparison of results, the report of results is foreseen as a scale, the extreme values of which are characterized as “high” and “low” levels at each by a method. Statistical analysis of the data was performed using the computer statistical software package SPSS (version 16.0).

Principles of sampling of research participants for formative experiment
In order to form a representative sample, the respondents were divided into groups depending on:
1) their age: 31,1% were 26-35 years old, 48,9% were 36 to 45, 17,8% were 46 to 55; 2,2% were 56 to 70 years old;
2) their gender: 83,3% were women, 16,7% were men;
3) their duration of service: 24,4% worked from 3 to 10 years; 52,2% did 11 to 20 years; 21,1% did 21 to 30 years; and 2,2% worked from 31 to 40 years;
3) types of educational institutions: 81,1% worked in traditional secondary schools, 18,9% did in school of new forms (upper secondary schools, lyceums).
The respondents were divided into two subgroups of 45 people: an experimental group and a control one, homogeneous for socio-demographic, organizational and professional characteristics, as well as for development of professional value orientations.

Results and discussion
Given the features of professionals’ advanced training in the system of postgraduate education and the conditions for individual’s value orientation formation and development, the following organizational, methodological and psychological conditions for teachers’ professional value orientations changes have been identified:
Organizational and methodological conditions: 1) inclusion of knowledge on pedagogical axiology into the professional training of teachers, 2) a harmonious combination of subjective and objective aims of teachers’ training on the basis of personality oriented and humanistic and value approach, 3) usage of interactive learning and combining of team, group and individual work, 4) dialogical interaction based on subject-subject relations, 5) creating of a favorable learning atmosphere, of efficient interaction with the audience.
Psychological conditions: 1) motivation of teachers to work with their own professional value orientations; 2) formation of representations about teachers’ professional values, 3) actualization of existing professional values of teachers, 4) reflexive analysis of valuemaking attitudes to various aspects of educational activities, 5) involvement of emotional and evaluative teachers’ attitudes to professional values, focus on creative changes, enrichment of humanistic professional and value beliefs, 6) sharing experience regarding of the professional value orientations during teacher’s work.
Logics of the program for teachers’ professional value orientation changes are based on a technological approach (Карамушка, 2005), and consists of the following units:
  a) an information and meaning unit (teachers’ recognition of an essence of professional value orientations and their essential characteristics);
  b) a diagnostic unit (diagnostics of a level of the development of teachers’ professional value orientation);
c) A development and forming unit (actualization, development and changes of teachers’ professional value orientations).

A special course-training “Axiological problems of modern education” became the main way of implementation of the program for the development and change in teachers’ professional value orientation in educational process. As it is known, individual acceptance of values occurs the most effectively during active cognitive and valuation activities.

The program special course-training “Axiological problems of modern education” was planned in the volume of 36 academic hours, 10 hours of individual work, 8 hours of training and diagnostics after the training.

The special course-training influences cognitive, emotional-evaluative and behavioral components of teachers’ professional value orientations and involves psychological mechanisms: identification, reflection, self-evaluation of own values, interiorization, emotional experience, emotional evaluation, exteriorization, goal-setting, planning.

The special course-training consists of three interrelated thematic modules:

1 module. Pedagogical axiology in the activities of the teachers.

The module is aimed at development and changes of the cognitive component of teachers’ professional value orientations.

The theoretical part is focused at acquiring of knowledge on the basics of educational axiology: the humanistic sense of axiological characteristics of pedagogical activities; values of education and training; a human life as the highest value; free development of a personality as a value; education as a value.

The practical part and individual work consisted of a series of exercises designed to clarify teachers’ awareness about their own professional value orientations. For example, the exercises “Determination of professional value concept”, “Professional space”, writing a mini-composition “My professional position”.

2 module. Value priorities in the modern education.

The module is aimed at development and changes of the emotional-evaluative component of teachers’ professional value orientations.

The theoretical part of the second module discusses basic values of a modern society: democratization, informatization; transition to a new information-oriented society – society of global competence, which requires intellectual activities, information culture, communicative and social activities from a modern person; educational values of the modern society.

In the practical part and individual work of the second module teachers were offered the exercises the function of which was acquisition of skills and forming attitudes towards analysis and reflection, self-improvement, value approach in their professional activities; exercises aimed at the emotional experience, the emotional evaluation of professional values. For example, the exercises “Diamond values”, “Professional life schedule”, teachers also discuss people, events that caused deep emotions, feelings, strong impressions.

3 module. Values in my teaching activities.

The module is aimed at development and changes of the behavioral component of teachers’ professional value orientations.

The theoretical part is aimed on mastering of knowledge on teachers’ professional values: pedagogical values as a basis for development of teachers’ professional competence; professional value orientations as essential components of teacher’s professional consciousness; the essence, structure and content of teachers’ professional value orientations; value and meaning of self-determination of teachers in the system of professional communication.

The practical part and individual work of the third module includes exercises aimed at the emotional experience, the rational evaluation of professional values, exteriorization values, goal-setting, planning. For example, the exercise “Picture of professional values”, in which
teachers are asked to paint symbolically the structure of their professional values; role-playing game “Parents’ meeting”, etc.

**To test the effectiveness special axiological course-training** for development and change of professional value orientations of teachers by its implementation in the system of postgraduate education, a comparative analysis of professional value orientations of teachers before training (1st study) and after the training (2nd study) in the experimental and control groups were conducted.

A comparative analysis of diagnostic studies of an overall level of the development of teachers’ professional values before and after the formative experiment showed significant differences in the experimental and control groups (Fig. 1).

![Figure 1. The overall level of the development of teachers’ professional values before and after the formative experiment](image)

The experimental group after the formative experiment showed a positive trend for the overall level of professional value orientations: a number of teachers with the low level decreased significantly (from 44,4% to 2,2%), a number of teachers with the average level increased slightly (from 51,2% to 55,6%). Minor changes in the group with the average level were associated with teachers’ transition from low to average level, and teachers with the average levels achieved the high level. Significant increase of a number of teachers with the high overall level of professional value orientations drew attention (from 4,4% to 42,2%). Identified changes in the experimental group, unlike the control group, were statistically significant by Pearson $\chi^2$ criterion ($p<0,01$). The control group showed little changes in the direction of increasing of a number of teachers with the average level (from 42,2% to 44,4%) and reduction of the number of teachers with the low level (from 53,3% to 51,2%), a number of subjects with the high level remained unchanged (4,4%), these changes were not significant statistically and did not change, in general, the situation with the overall level of professional value orientations.

The changes as a result of formative experiment in the experimental and control groups for the components of professional teacher value orientations were also analyzed: cognitive, emotional-evaluative and behavioral ones.

Thus, statistically significant ($p<0,001$) difference between the levels of the cognitive component of the teachers’ professional value orientations for the experimental and control groups after the formative experiment was found out (Fig. 2).
Figure 2. The level of the cognitive component of teachers’ professional value orientations before and after the formative experiment

As it can be seen from Figure 2, the levels of the development of cognitive component in the experimental and control groups before the formative experiment did not differ significantly. After the formative experiment a positive trend for the development of cognitive component in the experimental group was observed: a number of teachers with the high level rose from 26.7% to 68.9%, while a number of teachers with the average level decreased from 46.7% to 31.1% because a large group of tested persons achieved the high level, a number of teachers with the low level, which before the experiment was 26.7%, became 0.0%. The control group showed little changes in the level of the development of cognitive component that are not statistically significant: a number of subjects with the low level declined from 28.9% to 26.7%, a number with the average level decreased from 46.7% to 44.4% and that with the high levels rose from 24.4% to 28.9%. Small positive change for the development of cognitive component of the control group is associated with diagnostics tool impact that updates ideas on values and led to their comprehension and attempts to justify.

For a more detailed analysis changes in several indicators of the components were examined. In case of the cognitive component indicator, teachers’ awareness about professional values, changes were observed in both the experimental and the control groups. However, changes in the experimental group are significantly more substantial. Most tested teachers who before the formative experiment had fragmented awareness of professional values, so they had the low level (15.6%), after the special course-training they demonstrated sufficient awareness of teachers’ professional values and, thus, went to a group with average development of the indicator of this cognitive component. In turn, a significant number of subjects with the average level (71.1%) after training with the program of the special course-training deepened their awareness and understanding of professional educational values, their humanist professional beliefs. Therefore, the results of the second study of the experimental group showed that 2.2% of subjects had the low level and 48.8% of teachers had the average one. A number of subjects with the high level of development before the experiment equalled 13.3%, after the formative experiment increased by three times and reached 48.9%. There were minor changes in the control group: a number of teachers with the low level decreased from 13.3% to 6.7%, a number of the ones with the average level increased from 77.8% to 82.2%, and a number of the ones with the high level increased from 8.9% to 11.1%. Data analysis by the Pearson
χ² criterion indicated statistically significant difference in changes (p<0.001) between the experimental and the control groups.

Level distributions of the next indicator of the cognitive component – educators’ knowledge of their own professional values – were the same in the experimental and control groups before the formative experiment. In particular, a number of subjects with the low level in the groups was: in the experimental group – 26.7%, in the control group – 28.9%. A number of teachers with the average level was 48.9% and 48.9%, of the ones with the high level was 24.4% and 22.2%, respectively. Results after the formative experiment varied: a number of subjects with the low level in the experimental group was 0.0%, whereas of the ones in the control group was 26.7%, a number of teachers with the average level in the experimental and control groups, at first glance, did not differ significantly – 42.2% and 48.9% respectively, however, a significant number of teachers of the experimental group who had the average level of awareness of their own professional values before the experiment, unlike the teachers with the average level of the control group, achieved the high level of knowledge, a number of subjects with the high level in the control group was 24.4%, but a number in the experimental group nearly doubled and amounted to 57.8%. Consequently, a major part of listeners from the experimental group after implementation of the formative program gained awareness and understanding of their own professional values, humanist professional beliefs and ability to defend own professional positions. In general, the difference between the indicators of educators’ awareness of own professional values after the formative experiment for the experimental and control groups was statistically significant (p<0.001).

As a result of the formative experiment a level of development of the emotional-evaluative component of teachers’ professional value orientations was changed (Fig. 3). Before the formative experiment a large percentage of the tested persons had the low level of the emotional-evaluative component: the percentage in the experimental group was 73.4%, in the control group it was 66.6%, teachers with the average level were: 24.4% in the experimental group, 31.1% in the control group. Only 2.2% of the tested persons had the high level, both in the experimental and in the control groups.

![Figure 3. The level of the emotional-evaluative component of teachers’ professional value orientations before and after the formative experiment](image-url)
As it can be seen from the data of Fig. 3, after the implementation of the formative program, the experimental group showed the decrease of a number of teachers with the low level (28.9%) and increase of a number of subjects with the average (51.1%) and high (20.0%) levels of emotional-evaluative component. In the control group, the difference between the results of the first and second studies is negligible: some growth of percentage of teachers with the average (35.6%) and high (4.4%) levels and reducing of percentage of teachers with low level (60.0%) and high level reaching by a small number of subjects with the average level of the emotional-evaluative component. The analysis of the data obtained during formative experiment showed statistically significant changes (p<0.006) in the experimental group in comparison with the control group.

Comparison of results for such an indicator of the emotional-evaluative component as professional value acceptance showed that before the formative experiment teachers from the experimental and control groups had mostly the average level of development (57.8% in both groups), numbers of subjects with the low level were: 28.9% in the experimental group, 31.1% in the control group; numbers of subjects with the high level were: 13.3% and 11.1% respectively. After the formative experiment, the experimental group indicated a positive trend in professional value acceptance by teachers: a number of subjects with the high level rose to 28.9%, of the ones with the average level increased up to 71.1%, but subjects with the low level of development were not recorded. In the control group, the changes in terms of professional value acceptance did not happen nearly at all: a number of subjects with the high level remained unchanged (11.1%), a number of teachers with the average level of development increased to 60.0% due to a proportional reduction of a number of teachers with low development (28.9%). Analysis of the data obtained after the formative experiment confirmed the existence of statistically significant changes (p<0.01) for the experimental group in contrast to the control group, where these changes did not occur.

Levels for the second indicator of the emotional-evaluative component – job satisfaction and positive attitudes to the profession – were compared in the experimental and control groups before the formative experiment. After the formative experiment, the experimental group showed the following positive changes: decreasing from 73.3% to 44.4% of subjects with the low level, increasing from 26.7% to 42.2% of teachers with the average level and, that is remarkable, there are teachers characterized by the high level – 13.3%. The control group also had changes but less significant ones: a number of the subjects with the low level decreased from 66.7% to 57.8%, a number of teachers with the average level increased proportionally from 33.3% to 42.2%, the high level was not recorded. A comparative analysis of the changes in the experimental and control groups revealed the existence of statistically significant (p<0.04) differences in the positive dynamics of the experimental group. Therefore, it can be noted that the attitudes of teachers towards various aspects of their job in the experimental group after formative experiment improved and their attitude to professional work became more positive.

At the following step, analysis of a level of the behavioral component of teachers’ professional value orientations was performed for the first and second studies (Fig. 4).

Analysis of the data for the experimental group in comparison with the control group indicated statistically significant changes (p<0.002). A part of the experimental group subjects with the low level (that before the experiment was 17.8% and after it was 2.2%) achieved the average level (40.0% before the experiment, 24.4% after it), and many teachers who had the average level came to the group with the high level of behavioral component (42.2% before the experiment, 73.2% after it). There were changes in the control group, reflecting a slight regression process. This was exhibited in increasing of a number of teachers with the average level (44.4% before the experiment, 46.6% after it) and in proportional decreasing
of a number of teachers with the high level (37.8% before the experiment, 35.6% after it). A number of subjects of the control group with the low level of the behavioral component remained unchanged (17.8%). Positive development in a form of level growth for the behavioral component is less expressive than level increase for the cognitive and emotional-evaluative components of teachers’ professional value orientations. This result explains and confirms the fact that practical acquisition of the learning material is somewhat complicated and requires elaboration and refinement in practice, and this component cannot be changed qualitatively for a short period of time.

For more detailed analysis of behavioral component change several indicators from the data of the first and second studies were compared: implementation of value orientation during professional activities and sustainability of professional and value beliefs in behavior. Data analysis for a level of the implementation of teachers’ professional value during teaching activities showed that changes in the experimental group compared with the changes in the control group were close to statistically significant (p=0.067) results. A number of subjects with the low level of this indicator in the experimental group after the formative experiment decreased (from 8.9% to 2.2%) and a number of subjects with the average level did also (from 68.9% to 60.0%), a number of teachers with the high level increased from 22.2% to 37.8%. At the same time small changes in the direction of indicator deterioration were observed in the control group: a number of subjects with the low level increased from 6.7% to 11.1%, a part of subjects with the average level decreased proportionally from 73.3% to 68.8%, a number of teachers with the high level remained at the previous level of 20.0%.

As for indicator of sustainability of professional and value beliefs in behavior, the level in the experimental and control groups before the formative experiment did not differ qualitatively. After the formative experiment, a percentage of teachers in the experimental group who had low level of this indicator decreased from 17.8% to 2.2%, a number of subjects with the average level increased from 48.9% to 51.1%, and a number of teachers with the high level rose from 33.3% to 46.7%. Small changes for the average level are due to the fact that a part of teachers with the average level achieved the high level of indicator development. However, in the control group, pre- and final diagnosis did not show changes for the levels
of sustainability of professional and value beliefs in behavior. Comparative analysis of the changes in the experimental and control groups for this indicator revealed the existence of statistically significant (p<0.03) differences in comparison with the results of the experimental group.

At the next step of the analysis of the implementation of special course, the features of teachers’ professional value orientations depending on age-gender and professional organizational factors (such as school types and duration of work at school) were investigated.

In order to determine the dependence of these characteristics on teachers’ professional value orientations, the results of the formative experiment with $\chi^2$ criterion were analyzed and correlation analysis with Pearson’s rank correlation coefficient was performed.

The results showed the absence of statistically significant correlations between the overall level of development of teachers’ professional value orientations, its components and the subjects’ age, gender, school types and duration of work at school.

This confirms once again the important influence of the special course-training “Axiological problems of modern education” on the development of teachers’ professional value orientations and has proven its effectiveness.

Conclusions

1. The conditions are determined changes in professional value orientations of teachers, among which are organizational-methodical (inclusion of knowledge on pedagogical axiology into the professional training of teachers, a harmonious combination of subjective and objective aims of teachers’ training, usage of interactive learning, etc.) and psychological (actualization of existing professional values of teachers; involvement of reflection, self-evaluation of own values, emotional experience, emotional evaluation; sharing experience regarding of the professional value orientations during teacher’s work, etc.).

2. The analysis of the results of implementation showed the effectiveness of introduction of the special axiological course-training in training programs for teachers in the system of postgraduate education. The study results showed statistically significant increase of the levels of the indicators of cognitive, emotional-evaluative and behavioral components of professional value orientations for the teachers of the experimental group who were trained with the special course-training programme: knowledge of professional values, the assignment of professional values, the development of their humanistic orientation, achieving demonstration of the stability of humanistic professional values in the everyday professional activity and behavior of teachers. Statistically significant changes for teachers from the control group were not observed.

3. Thus, the possibility of development and change of professional value orientations of teachers has been detected by the means of using special axiological course-training in the system of postgraduate pedagogical education.

The research findings can be used in teachers’ training at the institutions of postgraduate education. Prospects for further research are the study of readiness of lecturers’ system of postgraduate pedagogic education to develop and change teachers’ professional value orientations.

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CHANGES OF PROFESSIONAL VALUE ORIENTATIONS OF TEACHERS IN THE SYSTEM OF POSTGRADUATE EDUCATION

Summary

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The actuality of the study on changes of professional value orientations of teachers in the system of postgraduate education has been revealed. Aim of the research has been to test a program of changes of professional value orientations of teachers in postgraduate education universities. Objectives of the research were: 1) to define conditions of changes in professional value orientations of teachers; 2) to make a special axiological course-training for teachers and test effectiveness of its implementation in the system of postgraduate education; 3) to review the possibility of development and change in professional value orientations of the teachers by the means of using special axiological course-training. A formative experiment was made at the base of Crimean Republican University of Postgraduate Pedagogical Education (Simferopol).

The methodological basis of the experimental program on the development and change of value orientations of the teachers has been outlined. The organizational, methodological and psychological conditions for development and change of value orientations of the teachers have been identified. The means implementing the program on the development and change of value orientations of the teachers was a special course-training “Axiological problems of modern education”. The special course-training consisted of three interrelated thematic modules. Each module contained a theoretical part, practical training and individual work. First module “Pedagogical axiology in the activities of the teachers” is aimed at the development and changes of the cognitive component of professional value orientations of teachers. Second module “Value priorities in the modern education” is aimed at the development and changes of the emotional-evaluative component of professional value orientations of teachers. Third module “Values in my teaching activities” is aimed at the development and changes of the behavioral component of professional value orientations of teachers. To test the effectiveness special axiological course-training for the development and change of professional value orientations of teachers of its implementation in the system of postgraduate education, a comparative analysis of professional value orientations of teachers before and after the training in the experimental and control groups were conducted. Indicators of the level of the development of cognitive component included teachers’ knowledge on professional values and awareness of their own professional values. Indicators of the level of the development of emotional-evaluative component included teachers’ acceptance of their own professional values, their humanistic orientation, job satisfaction and positive attitude to professional work. Indicators of the level of the development of behavioral component included: implementation of professional values in professional activities and stability of demonstration of professional and value beliefs in daily professional activities and behavior. The analysis of the results of the formative experiment, which demonstrated statistically significant changes in the levels of the development of cognitive, emotional-evaluative and behavioral composition of professional value orientations of the
teachers has been presented. The absence of statistically significant correlations between the level of development of professional value orientations of teachers and the subjects’ age, gender, school types and duration of work at school has been revealed that confirms influence of special course-training on the change of teachers’ professional value orientations and proved its effectiveness.

It has been concluded that the conditions of the changes in professional value orientations of teachers are organizational-methodical (inclusion of knowledge on pedagogical axiology into the professional training of teachers, a harmonious combination of subjective and objective aims of teachers’ training, usage of interactive learning, etc.) and psychological (actualization of existing professional values of teachers; involvement of reflection, self-evaluation of own values, emotional experience, emotional evaluation; sharing experience regarding of the professional value orientations during teacher’s work, etc.).

The effectiveness of introduction of the special axiological course-training in training programs for teachers has been confirmed. The possibility of the development and change of professional value orientations of teachers by the means of using special axiological course-training in the system of postgraduate pedagogical education has been established.

The prospects for further research have been defined: the study of readiness of lecturers’ system of postgraduate pedagogic education to develop and change teachers’ professional value orientations.