Modern integration processes influence on educator's professional growth

Influencia de los procesos modernos de integración en formación profesional del pedagogo

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ABSTRACT:
The paper reveals the problem areas of professional activity that impede the effective growth of their competencies. On the basis of the conducted studies, the directions for teachers professional growth's accompany have been determined, the structure of the competences model of the qualification improvement system has been proposed, the diagnostic toolkit for assessing the level of teachers professional growth has been presented, the methodical aspects have been disclosed to develop individual educational route for each teacher have been revealed, contributing to constant personal growth and professional self-development.

Keywords system of additional professional education, competences model, complex of approaches, integration processes, professional improvement, educational route.

1. Introduction
At all political, economic, socio-cultural changes, the education system remains a sphere of

RESUMEN:
En el artículo están detectadas las zonas problemáticas de la actividad profesional que impidan el aumento eficiente de sus competencias. Con base en las investigaciones realizadas han sido determinadas las líneas del acompañamiento de la formación profesional de pedagogos, ha sido ofrecida la estructura del modelo de competencias del sistema de capacitación profesional, ha sido mostrado el instrumental diagnóstico de evaluación del nivel de la formación profesional de pedagogos, han sido revelados los aspectos metodológicos del planeamiento de la ruta educativa individual para cada pedagogo, que facilita el desarrollo profesional y personal continuo.

Palabras clave: sistema de la capacitación profesional adicional, modelo de competencias, totalidad de enfoques, procesos de integración, perfeccionamiento profesional, ruta educativa.
close attention and study for the purpose of determining the basic positions that are important for the formation of an "intellectually-creative personality who freely orients in various fields of knowledge and culture" (Alekseeva, 2010). Achievement of education qualitative level in modern conditions of integration processes influence strengthening requires a significant modernization of teachers training at all levels: in college, university, as well as in the process of professional qualification improvement.

The main state documents underscore the need to modernize Russian adult education, as "additional vocational education is aimed at satisfying educational and professional needs, professional development of a person, ensuring his qualifications matching the changing conditions of professional activity and the social environment (Egorova, 2009; Tsiulina, 2015).

Obviously, the existing system of pedagogical workers’ professional qualification improvement is rather conservative in the ways of organization, academic in content, has a corporate-sector nature and does not meet the needs of modern society. Among the reasons that hamper the modernization of advanced training system, the researchers call it dependence on the vertical hierarchy, alienation from the institutions of science (Zmeyev, 2009; Bolshanina, 2016).

The main goal of additional professional education is the unity of tasks, principles and internal fullness of the learning process, in which the professional development of teachers acquires the qualities of integrity and continuity, the aware interrelation of knowledge and practical skills, communicative culture and competence in a specific subject area. (Skvortsov, 2010; Elagina, Grevtseva & Nemudraya, 2011). Socio-economic and political reforms and transformations taking place in the country in recent years make it a priority to form a socially active person with a high intellectual and creative potential, which is possible only with the implementation of profound changes in the content of education (Kamalova & Zakirova, 2014; Lisitzina et al., 2015; Masalimova & Nigmatov, 2015; Shaidullina et al., 2015a,b,c; Zaripova et al., 2015; Khuziakhmetov & Nasibullo, 2016; Khuziakhmetov & Gabdrakhmanova, 2016; Olesina & Stukalova, 2017; Kong, Kayumova & Zakirova, 2017; Kurbanov et al., 2017).

But the system modernization is impossible without constructive study of past centuries' great educators heritage, their ideas, conceptual provisions, which in their content are the theoretical foundation for the education development, in particular, the professional one. Consideration of vocational education historical aspects makes it possible to highlight the most striking stages, to show the role of certain individuals who influenced the choice of this or that educational strategy.

From the middle of the twentieth century, adult education is most often seen as an element of continuing education, as a "poly-functional stage of lifelong education integrated system, which plays an important role in adapting to a market economy" (Gershunsky, 1994).

It is obvious that the education reform in modern conditions requires a new methodological approach, and integration is put forward as a core idea in the content foundation and this process formation. It is significant that integration has become a key concept that characterizes the events of the 20th end and the 21st centuries beginning which were taking place in all areas of world civilization development. Integration implies a complex system of phenomena and processes that take place in the political, cultural, economic and other spheres (Puzankova & Bochkova, 2009). Integration has application in almost all areas and branches of human life; integration is a side of the development process, associated with the unification of previously heterogeneous parts and elements.

Theoretical generalization of the most important provisions on integration has become the basis for the competences model development for additional professional education of teachers in the integration processes context. The importance of the competence approach is connected with the fact that modern requirements to the level of teachers' professional development imply not only the availability of knowledge and skills on the subject, but also the possession of a whole complex of psychological and pedagogical approaches and techniques.

Scientists have singled out the methodological foundations for using integration principle in
pedagogy and created a concept in which the idea of the teacher leading role in child development was affirmed, the positions of the system approach to pedagogical phenomena, the theoretical positions of the interrelationship between the processes of education and development were defined. Based on these provisions, we can conclude that integration in pedagogy is a complex, multilevel concept that can be considered in such forms as:

- form of interrelation of different components within the same area;
- integrity expression form of education content’s all components;
- the combining form of the learning process interrelated components.

Integrative approach in education in practice implements the integration principle in each segment of the learning process, which ensures the integrity and systematic nature of the pedagogical process.

It is obvious that the integration implementation into the educational process structure is impossible without changes in the education system itself, without education modern effective methods and forms introduction.

In our study, the educator professional growth is understood as a long, multi-stage dynamic process based on the structured interaction of such components as competence-based, personality-oriented, system-activities-based and axiological. The importance of mastering knowledge and skills not only in a specific subject area, but also in the areas of information technology, communication, management, goal setting and activity planning is stressed.

The focus on increasing the specialists’ competencies requires the reform of additional vocational education and fundamental changes in all pedagogical approaches to adult learning. Such reform, first of all, should concern not only the basic goals of education, but also the leading means of pedagogical communication. (Skakun, 2008; Larionova, 2007; Akulina & Shmeleva, 2008; Zhgenti, 2015)

An important advantage considered in the study is distance education of adults, which allows combining learning and professional activities. For some categories of people who do not have the opportunity to get education in a traditional way, but aspiring to learn, distance learning is the only possibility within the modern educational system. Evaluation of the distance learning system shows that it is cheaper at the expense of more effective use of training areas and technical training facilities (Shcherbinin & Malinina, 2014; Vlasova, Kirilova & Masalimova, 2015).

2. Research Methodology

At the present time, disputes between psychologists and educators on the definition of the teacher’s professional competencies, which presuppose the totality of knowledge, abilities and skills required in the modern world do not stop. The scientists attention is constantly focused on the issues of professional competencies, their close study has been relevant for many years.

Modern researchers in the field of pedagogy theory, such as V.A. Adolf note that the level of mastering the main types of training in the pedagogical education obtaining influences decisively on the increase in the level of such general professional competencies as psychological, pedagogical, social, methodical, communicative (Kovalevich & Adolf, 2009). Subsequently, the competences obtained will provide comfortable conditions for effective work in the educational process.

The determination of the actions sequence for professional and pedagogical competencies development becomes the basis from which they are repelled in the qualified teacher training who is able to find a solution to the tasks posed (Zimnyaya, 2006). This sequence includes several components:

- theoretical component - the development of uniform requirements for the teacher professional pedagogical activity, the study of psychological and pedagogical training content;
- content component - the study of the education content, aimed at the formation of student personal...
competencies;
the resultant component - the development of criteria for assessing the formation professional and educational competencies. (Vvedensky, 2003) The approaches analysis to professional development in the study shows that the variety of theoretical and practical components, knowledge and possession that are necessary for a modern teacher for successful result-oriented work, must be comprehended throughout the entire work period, regardless of service experience and duration. But this requires a significant increase in the education system flexibility, switching to fundamentally new approaches that provide the desired educational trajectory.

Thus, it is possible to outline the model of a modern educator who is capable of using the educational environment for the student's personality growth and the process formation of his individual attitude to professional activity, highlighting the following basic qualities:

- a specialist with a professional pedagogical education, good theoretical training in the field of pedagogy and psychology, capable of applying modern methods of diagnosing students' achievements;
- a person who is ready for interaction and communication, both with colleagues, and with students and parents;
- a creative personality with research thinking and the ability to organize research activities of students;
- a mentor able to distinguish the students interests, and, including them in various activities, motivate for further improvement.

Possessing the above qualities, the teacher should strive to reach heights in his profession, be the organizer of his pupils’ activities, to advise them throughout the time of mutual cooperation, which is the modern approach’s important component to training and which contributes to the achievement of the goals set for it. Such an approach will stimulate students' interest in the education received, the desire jointly to think and seek solutions to problems, motivate them to spiritual growth.

2.1. Experimental research base

The experiment was attended by teachers undergoing upgrading courses on the Methodic Center basis, teachers and educators of the Academy and the School of Watercolor named after Sergey Andriyaka. The teachers from the State Budgetary Educational Institution the School No. 1357 "On Bratislavskaya" were included, teachers and students of the State Budgetary Petrozavodsk Educational Institution of the Republic of Karelia "Petrozavodsk College of Music named after. K.E. Rautio». 376 teachers and 137 students took part in the ascertaining stage of the experiment. In the interviews course, documentation studies, pedagogical observation, it was found that most are not ready to master modern innovative educational technologies and integrate new technologies with existing traditions.

2.2. Stages of research

1. The preparatory stage (2011-2012) included the study and analysis of domestic and foreign psycho-pedagogical, scientific-methodical, philosophical, sociological literature on the additional vocational education development and modernization, government documents; the initial research data were developed; pedagogical experience at various levels was generalized. The result of this stage was the assumption on the need to develop an approach for improving the teachers’ competencies in the context of integration processes.

2. The organizational stage (2013-2016) included work on the study's experimental substantiation; carrying out, processing and generalization of the ascertaining experimental data; the theoretical and methodological principles clarification and teachers professional development components definition; the teachers professional development growth system’s existing technologies studying; the identification of effective pedagogical conditions for their implementation in practice. At this stage, 3 experimental groups were formed, in which 184
teachers were included; the results were summarized and systematized. Diagnostics and correction were carried out on the basis of a comparative analysis of pedagogical models introduction in various educational institutions. Particular attention was paid to the evaluation criteria development; the requirements to the pedagogical situations organization in the process of teachers upgrading courses have been clarified.

3. The final stage (2016-2017) included the implementation of pedagogical directions' set for the teachers professional development growth in the context of integration processes: approbation of the developed didactic maintenance and diagnostics methods of teachers’ professional readiness level; pedagogical observation on the progress in mastering the competences by teachers of experimental groups; the research results analysis and teachers personal and professional changes dynamics who participated in the experiment.

4. Generalizing stage (2017-2018) included generalization, systematization and interpretation of the obtained data on the pedagogical models implementation in the system of teachers’ additional professional education in conditions of integrative processes.

At the initial stage of the experiment, a primary questionnaire was conducted to determine the teachers age category (Table 1), their gender identity (Table 2), and the specification of the duration of pedagogical experience (Table 3).

<table>
<thead>
<tr>
<th>Age category</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>from 20 to 25 years-</td>
<td>134</td>
</tr>
<tr>
<td>from 26 to 35 years old</td>
<td>181</td>
</tr>
<tr>
<td>from 36 years and above</td>
<td>98</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Female Educators</th>
<th>Male Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>362</td>
<td>51</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Experience in teaching activities</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>from 1 to 4 years</td>
<td>57</td>
</tr>
<tr>
<td>from 5 to 10 years</td>
<td>93</td>
</tr>
<tr>
<td>from 11 years and above</td>
<td>34</td>
</tr>
</tbody>
</table>
The level of young teachers’ theoretical training in the field of psychology and pedagogy was distributed as follows: rather low (52%), medium (40%), and high (8%).

The experimental groups were formed on the basis of interaction activity with teachers (Table 4):

<table>
<thead>
<tr>
<th>Groups</th>
<th>Number of participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality-oriented</td>
<td>87</td>
</tr>
<tr>
<td>Mixed type</td>
<td>59</td>
</tr>
<tr>
<td>Remote</td>
<td>38</td>
</tr>
</tbody>
</table>

1. The first group, personality-oriented, is the teachers, whose interaction was held on a permanent basis in various forms - personally, in a group, remotely;

2. The second group, of a mixed type, is teachers who attend meetings, seminars, round tables and teacher's rooms on average once every three months. In the rest of the time, consultations were conducted using remote technologies (skype, hangouts) personally and in a group;

3. The third group, remote, is teachers, whose communication was distant due to the remoteness of the place.

As diagnostic methods in the experimental groups, theoretical simulation, questioning and pedagogical observation, monitoring, analysis and statistical generalization of the experimental results obtained were used (Lefrançois, 2007).

With the purpose of studying the modern teacher personality and activity, the necessity to construct a professiogram - the ideal model of a teacher, describing universal and professionally significant qualities and skills - was identified. The structure of professionally significant qualities and skills of the teacher’s personality is considered by one of the prominent specialists in the field of the age and pedagogical psychology - VA. Krutetsky (1980), who highlights among them:

- the worldview of the individual;
- positive attitude to pedagogical activity;
- pedagogical abilities;
- professional and pedagogical knowledge, abilities and skills.

Thus, the professiogram is a set of psychophysiological, physical, scientific and theoretical professionally conditioned requirements for the teacher, necessary for determining the teacher's professional readiness for pedagogical activity.

3. Results

Proceeding from the received knowledge and observations, we constructed a professiogram (table 5), which is a system description of the pedagogical, social, psychological and other requirements necessary for the formation of a modern highly professional teacher, and offered a competence - based approach to teacher qualification upgrading.

<table>
<thead>
<tr>
<th>Teacher's professionally significant qualities</th>
<th>Personality qualities of a teacher</th>
</tr>
</thead>
</table>

Table 4

Experimental research groups

Table 5

Professiogram
For the purpose of measuring the level of competence in the teachers’ professional activity, the personal questionnaire of R. Cattel was used; to determine the level of communicability, the test of V.F. Ryakhovsky was applied.

**Table 6**
The level of communicability in the experimental groups at the initial stage (by interaction groups)

<table>
<thead>
<tr>
<th>The level of communicability</th>
<th>Groups participating in the experiment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Personality-oriented</td>
</tr>
<tr>
<td>high</td>
<td>9</td>
</tr>
<tr>
<td>average</td>
<td>53</td>
</tr>
<tr>
<td>low</td>
<td>25</td>
</tr>
</tbody>
</table>

Based on the results of a questionnaire conducted among the experiment participants, 11% of the respondents on the question about the teacher profession conscious choice answered that they chose pedagogy as an opportunity to continue studying their favorite subject; 33% of respondents were attracted by the public importance of the teacher profession significance, and only 19% of respondents noted that the choice was made consciously and caused by the desire to engage in pedagogy, share their knowledge and skills with students.

According to the survey’s results, such problems of teacher training and improvement were revealed as:

- lack of methodological literature (68% of listeners);
- inaccessibility or lack of free access to modern technologies (46%);
- the monotony of the teaching such disciplines as pedagogy and psychology (53%);
absence of creative individual and group projects (78%);
- the incompetence of upgrading courses teachers and their incompatibility with the listeners demands (62%).

It is significant that, in spite of the above figures, only 28% of the polled teachers consider themselves insufficiently competent in their knowledge and skills, experience uncertainty when communicating with students, parents and even colleagues.

The study determined that it is integrative learning that makes it possible to make the educational process of teachers’ professional growth more flexible, dynamic and taking into account the participants psychological and personal characteristics in this process. Involving teachers in the educational process, increasing the motivation for self-development positively affects the growth of teachers’ professional skills (Rogers, 1994). Encouraging the participants of courses to interpersonal interaction in group work transfers the process of qualification improvement to a qualitatively new level. The general trend of the educator’s professional growth of the new format, who is able to empathize, to create meanings and project them into future professional activity should be based on the approaches of system-activity, personality-orientation, axiology and competence (Stukalova & Alekseeva, 2017).

As the study showed, raising the level of training and stimulating motivation for self-development and self-realization in the educator specialty can be most effectively carried out within the framework of a flexible cluster system for pedagogical staff qualification improving, which also takes into account the integration opportunities and meets social development modern demands. Cluster system is systematization in the learning process and division into certain semantic groups, stimulating the intellectual development of the collective each member.

In this study, clusters are identified such as:
- \textit{distance courses}: individual and group forms;
- \textit{individual consultations}: cycles of classes and consultations on private professional issues;
- \textit{mixed forms of study}: the organization of full-time courses and extramural studies.

Generalization and interpretation of pedagogical experience results allowed simulating the process of vocational training, which stimulates the pedagogical personnel professional growth.

The \textit{initial stage} of raising the level of pedagogical activity is, therefore, associated with an increase in the level of mastering many competencies required for the teacher - these are the basic competences for mastering the theory, the development of motivation for self-development, and the mastery of pedagogical communication and self-presentation skills. (Albach & Peterson, 2007). In addition, at this stage the teacher finds the most appropriate and acceptable ways of self-realization in the profession, seeks self-assertion ways in pedagogical practice, etc.

The \textit{creative stage} is characterized by an increase in the level of the teacher creative development, the search for and development of new technologies, techniques, methods, tasks that optimize the educational process at lessons on specific disciplines. At this stage, there is a significant enrichment of pedagogical experience; increasing of communicative competence level and professional skill of the teacher. In addition, this stage is associated with the development of teachers independent research activities, the organization of which takes into account the psychological characteristics of teachers, and the proposed research topics are feasible and personally significant.

The result of the research was the competence model of the teacher systemic professional development in the context of integration processes, presented in Fig.1

Pedagogical conditions for its implementation included:
- the study of institutions functioning peculiarities on the basis of the documentation analysis, including the Charter, teachers' and management survey, which allows identifying teaching problem
areas and teachers requesting to increase certain competencies; conducting interviews, motivational activities with teachers (in this case, the potential of the personality-oriented approach was used);

- the choice of groups to connect them to certain clusters, reflecting the participants willingness to serious informal work to improve professional competencies;
- creation and realization of the remote additional materials that allow participants independently to master a wide range of topics and issues of the modern educational process;
- Monitoring (by slices) of mastering the material, including the teachers willingness to introduce it into the practice of their own work;
- the supervision organization (including individual consultations - both remote and direct meetings) to study the impact of knowledge and skills obtained during the qualification improvement on the education quality, the processes of overcoming professional burnout and the level of pedagogical interaction in the team.

Figure 1
Competencies model of educators' additional professional education under conditions of integration processes
As a result of the work, the main criteria were identified, which allow to determine the level of professional skills.

It is appropriate to consider in detail the analysis of teachers’ professional development...
dynamics participated in the experimental work on the implementation of the competencies model on the basis of the developed criteria system

**Motivation-valuable** criterion is the desire to succeed in professional activity, understanding the importance of self-education and self-development, constant professional growth and adaptation to changing conditions.

<table>
<thead>
<tr>
<th>GROUPS</th>
<th>CONTROL SLICES</th>
<th>Initial HL</th>
<th>Intermediate HL</th>
<th>Final HL</th>
<th>Initial AL</th>
<th>Intermediate AL</th>
<th>Final AL</th>
<th>Initial LL</th>
<th>Intermediate LL</th>
<th>Final LL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality-oriented</td>
<td></td>
<td>19</td>
<td>36</td>
<td>45</td>
<td>32</td>
<td>43</td>
<td>25</td>
<td>44</td>
<td>49</td>
<td>7</td>
</tr>
<tr>
<td>Mixed type</td>
<td></td>
<td>27</td>
<td>33</td>
<td>40</td>
<td>31</td>
<td>39</td>
<td>30</td>
<td>39</td>
<td>46</td>
<td>15</td>
</tr>
<tr>
<td>Remote</td>
<td></td>
<td>19</td>
<td>32</td>
<td>49</td>
<td>23</td>
<td>34</td>
<td>43</td>
<td>32</td>
<td>57</td>
<td>11</td>
</tr>
</tbody>
</table>

*Conventions:* HL - a high level of scientific and theoretical training, AL - average level, LL - low level.

Studying the dynamics of teachers professional development on the basis of the "Motivation-valuable" criterion proved that with a constant interaction with teachers, analysis and adjustment, a higher result is achieved in the personality-oriented group (from 19% in the initial slice and up to 44% in the final slice).

As most teachers emphasized, as a result of individual and joint work, an understanding of pedagogical work importance and a clear vision of their work goals were achieved.

The **activities-based and communicative** criterion describes the awareness of communicative skills importance, the analysis of professional behavior. This criterion also presupposes readiness for self-actualization and disclosure of oneself in the profession.
The personality criterion reflects the totality of personality qualities (reflexivity, self-regulation, empathy, creativity, openness, communicative competence, subjectivity, mobility) required for teachers to carry out successful professional activity in the context of education modernization.

The "Personality-oriented" criterion reflects the most complex area of professional growth and requires significant efforts of the teacher in professional development. This indicates the need to include more practice-oriented trainings, business games and other modern forms of professional development, in particular, aimed at mastering a high level of pedagogical culture.
Thus, monitoring of the professional growth dynamics made it possible to identify effective factors for the competences model implementation developed in the study:

- emphasis on the most complex aspects and problem areas of professional development;
- the breadth and detail nature of each criterion’s manifestations, which allows creating pedagogical situations, participation in which forms the necessary skill;
- interaction of all components that reveal the professionally significant qualities and competencies of the teacher.

4. Conclusions

In general, we can conclude that the didactic provision of teachers’ professional development in the context of integration processes includes:

a) a criteria system for assessing the psychological and pedagogical skills level - the professiogram of a modern teacher;
b) passport of the teacher's professional competencies;
c) questionnaires that determine the level of teachers professional training, their vision of opportunities and areas of professional growth;
d) recommendations for the introduction of pedagogical communication active and modern forms (round tables, "pedagogical lounges", etc.), including remote, webinars, as well as forms of training based on proprietary software (Skype and hangout conferences, etc.);
e) a set of materials for conducting distance training courses for teachers’ qualification improvement in the areas of mastering the legislative framework and normative documents in the field of education; psychological and pedagogical accompaniment; development of teachers communicative culture; innovative pedagogical approaches to education.

The diagnostic toolkit created and tested in practice allows us productively and purposefully to disclose the capabilities of teachers' professional development competences model in the context of integration processes.

As a result of the study, the Competences model with the designated goals and objectives, components and directions of implementation was presented.

According to the results of the study, the professiogram was recognized as a sufficiently effective criteria system for assessing the level of psychological and pedagogical skills possession; comments and wishes were made to the content of the professiogram in the direction of strengthening the qualities reflecting the high level of educators.
In conclusion, it should be emphasized that the didactic provision and diagnostic toolkit created allow the productive and purposeful revealing the possibilities of various directions complex for accompanying the professional development of teachers and the implementation of competences model developed in the study.

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