Characteristics of the Process of Culture Development Project Activities (Culture of Social Engineering) at the Future Bachelors of Social Work

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Abstract

In modern Russia professional activity productivity of social work specialist depends largely on his abilities and skills in the field of social design. University graduate`s (social work bachelor`s) high level of professional-project activity culture can be regarded as one of the necessary conditions of successful labour market adaptation of young specialists in social sphere institutions. The article discusses various aspects of future social work bachelors` vocational project activity culture formation process during the study period at university.

Development in social work bachelors the culture of vocational project activity is one of important normative standardized characteristics of their professionalism. Today a social work specialist in addition to possession of a wealth of interdisciplinary knowledge is required skills in terms of understanding social reality with further appropriate actions to its positive, constructive perspective transformation. This requirement necessitates the formation of culture of vocational project activities of future bachelors of social work.

Keywords: social work, professional culture, students` social projects, future social workbachelors training (or social work education).

1. Introduction

In the document "Basic directions of the Russian Federation Government activity for the period until 2018 (approved by the Prime Minister of the Russian Federation 31.01.2013)" it is noted that for sustainable operation of a new model of Russian society`s economic and social development it is necessary to improve social services quality, and accessibility for various

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categories of citizens to meet their social needs fully and effectively, social and cultural interests of people. To achieve this we should implement social projects and programs focused on social problems prevention and solution, corresponding current and future citizens’ demands in the field of social services quality improving, satisfying needs of different population groups to protect their rights, and support social initiatives.

In modern Russia professional activity nature of a social work specialist (a specialist in social services sphere) requires qualified solutions of a number of problems directly related to project activities: from the design process to optimize own labor activity to new types of social services design, new models, ways of interaction with client systems, new technologies of social service management and its structural units.

Types of social work specialist’s project activities (we should note that the position "social work specialist" in Russia can be given to University graduates with "social work bachelor" degree) due to a combination of job functions, which are recorded in the document "Professional standards for social work specialist" (approved by the Russian Federation Ministry of labour and social protection, 22 October 2013 №571н). For example, in this document it is indicated that generalized employment function of a social work specialist is "planning, organization and control over social services implementation and social support measures" (labour function code – 6). This labour function according to the content of "Professional standard of a social work specialist" is specified in the following private functions:

- forecasting and projection (italics are the authors’ ) of social service implementation process, volume and quality of rendered social services, social support measures (private function code B/01.7),
- organization of the department activity (experts group) on social services implementation (private function code B/02.7),
- social service quality and effectiveness control and social support providing (private function code B/03.7),
- proposals preparation on social assistance and social services development (private function code B/04.7).

In fact, in the above named list of a social work specialist functions there is consistency of social design in process implementation.

In the Federal state educational standards of higher professional education in the direction of training "Social work" (bachelor) it is postulated that a student in during University training should be prepared to implement the following types of professional activity: social and technological activities, organizational and management, research, commitment to implement socio-project activities.

The presented material necessitates forming of professional-project activity culture of a social work bachelor (SWB) at University.

2. Literature Review

Content and technologies of social work as a special kind of sociological ("helping") professional activity have significantly modified together with socio-economic, socio-political, information technology, socio-psychological changes and other aspects of modern Russian society life the, and, as a consequence, this entailed the need for changes in the sphere of informative-technological basis of social work specialists’ vocational training process in undergraduate and graduate programs for bachelors and masters in "Social work" field.

Since the beginning of XXI century in Russian system of higher education (because of Russia’s Bologna process joining) has been steady (and by the second decade of the twenty-first century has been) shifted from "knowledge" educational paradigm to "competence". However, over the past two decades the interest of researchers and practitioners, and representatives of professional communities to the problem of cultural approach implementation in higher education in the process of personnel vocational education in social sphere has not been decreased.

The literature analysis on the problem of formation of vocational project activity culture of a social work bachelor at University showed that there is a sufficiently solid theoretical and methodological foundation for its further development. For example, in the writings of several scholars (Barker et al., 1971; Basov, 2010; Bocharova 1999; Grigoriev, 2009; Firsov, 1998; Reamer,
In works of group of researchers (Agronina, Nikitina, 2011; Cameron, Este, 2008; Koprowska, 2010; Kulichenko, 1997; Lishman, 2009; Medvedeva, 1999; Nikitina et al., 2015; Pozdnyakov, 2007; Welbourne et al., 2007) different parts (essential components) of professional culture of a social work specialists were investigated (in particular, professional communication, ethical and psychological-pedagogical culture of a social worker, gerontology, professional legal culture of a social work specialist, management and research culture of a social work specialist), and also methods (technologies) of these types of culture formation in the period of future social work bachelor`s professional training at University were identified (Anderson, 2002; Postlethwait, 2012; Valeyeva et al., 2016; Wilks, Spivey, 2010; Zakharshchik, 2006; Zhdanova, 2013).

Almost in all analyzed during the research scientific works on problems of cultural approach implementation during social work bachelors training in higher education it is noted that in the period of university education in varying degrees (depending on many factors, including individual characteristics of a student) the following invariant components of future young specialist`s professional culture develop:

- motivational-value component of professional culture (includes, in particular, understanding by a future specialist the importance, social value of high quality of his work, etc.),
- intellectual (or professional-educational) component, which reflects the presence of knowledge system required for a conditional "standard of a professional", development of basic legal, ethical and other norms that regulate professional activity of a specialist;
- active part of professional culture, which manifests itself in skills, competencies, readiness and abilities of a young specialist on a daily basis in a real working environment adequately realize their mastered system of professional actions, technologies, etc., following the required norms, rules.

For scientific understanding of this article the methodology of social planning (Kruchkov, 1998; Kurbatov, 2000; Toschenko, 1996), theories of development and implementation of social projects (Aleksieva, 1996; Lukov, 2007; Safronova, 2007) were relevant.

The works of scientists (Chechel, 1998; Krylov et al., 2015; Matyas, 2011; Simonenko, 2003) describe theoretical and methodological foundations of project-based studying and professional training processes and systems design.

3. Methods and Data

The article presents some results of a long-term (2002–2016) experimental work of the authors on formation of professional-project activity culture of future social work bachelors as teachers, supervisors, volunteer and student scientific associations of social work faculty, Russian State Social University (RSSU).

At various stages of the experimental work 385 full-time students (aged 17 to 22 years) and 513 correspondence course students (aged from 25 to 45 years) in Social work field (undergraduate); 68 professors; 96 social work professionals and 57 representatives of administration of RGSU practical bases took part (the bases were Social Centers for Population, Centers of social assistance to families and children, Socio-gerontological centers, social shelters, orphanages, Centers of employment, etc.).

During the experimental work on the issue of the article a complex of methods were used: theoretical methods (analysis, including normative-legal documents` analysis, curricula and syllabus, practices programs, modeling, systematization, classification); experimental methods (interviewing, observation, questionnaire survey, pedagogical experiment, testing, content analysis, method of delayed control, etc.); mathematical methods of experimental work data processing (Welch criterion, Fishercriterion, etc.).

4. Results

4.1. Essence of culture of vocational project work of a social work bachelor

Modern labor market makes high and varied demands on the content, functional purpose of culture of professional activity of social services specialists.

Professional culture of social work specialists is a socio-cultural phenomenon (a special social and cultural phenomenon), which reflects quality and condition of a particular society as a whole
(for example, quality of spiritual, moral, legal, ethno-confessional, tolerant, social, psychological, and other components of social life), and qualitative state of interrelated professional groups (professional associations of social, medical, law enforcement, and other services specialists), and qualitative state of professional education system in social sphere, which should integrate modern science achievements in fields of anthropological, sociological, culturological, psychological and pedagogical and other scientific industries, developments in modern technologies of socio-professional activity.

Undertaken by the authors in the research process multivariate analysis of quite extensive array of theoretical and empirical material allowed to formulate the following definition: culture of professional and project work of a social work bachelor is a personal entity, which integrates motivational and volitional, cognitive, eclectic (from lat. syncretismus – continuous, united), activity-operational, reflexive-acmeological components, reflects the degree of mastering by an expert system of individually kind of methods, techniques, technologies for development and implementation of socially-oriented project, daily is manifested in professional tasks solution.

To identify the totality of professionally important skills, which constitute substantial procedural basis of culture of vocational project work of a social work bachelor (SWB), job description analysis of social work specialists was conducted; qualification requirements and regulations governing these specialists’ professional activities were studied. Also interviews with practitioners and representatives of social security institutions administration, social support, and social welfare of population were held; teachers of universities, institutes of advanced training of social work specialists were surveyed and interviewed. As a result theoretical and empirical data were obtained. Based on the analysis of these data following necessary professional skills of SWB, which constitute a substantial procedural basis of cultural existence of vocational project activities:

- analytical and marketing skills (these are skills to implement comprehensive and multifaceted analysis of current problems in the processes of providing various social services to the population, problems in informational support of social practices and concrete problems of life of a community of people, actual or potential categories of social services clients; ability to conduct market research in social sphere);
- system informational skills (these are skills on basis of modern computer and information technologies usage, specialized software for mathematical working of data to carry out multivariate, cluster analysis of gathered at different stages of project work, theoretical and empirical material);
- prognostic-modeling skills (these are skills to apply adequately to existing source data, the analysis of specific social situations, methods of prognostics, skills of social processes and systems modeling);
- professional-legal skills (these are skills with a glance at specific characteristics of a particular social project to justify a regulatory framework for its implementation; skills (if necessary) to develop legislation drafts, normative, legal, regulatory, guidance documents; ability to process project documentation);
- socio-economic skills (these are skills with a glance at specific characteristics of a particular social project to prepare a cost estimate of its implementation, skills to collaborate with economists-professionals to carry out business plan development, ability to apply fundraising technologies for funds bringing to social projects implementation);
- praxeologically-correcting skills (these are skills to analyze timely and accurately the real state of affairs at various stages of project activity, ability to apply specialized diagnostic techniques to determine deviations from defined standards of project implementation, ability to develop and implement quickly programs to adjust negative situations);
- assessment-expert skills (ability to apply in practice methods of social qualimetry, abilities to implement expert evaluation method, ability to conduct monitoring studies in social sphere).

The levels of manifestation of vocational project work culture of a social work bachelor are:

- singular-professional level (from lat. Singulus – single, one-dimensional); this level is characterized by the fact that SWB qualitatively develops and implements social projects, usually of the same kind;
- additive-professional level (from lat. Addere – to add, summarize; in philosophy "additive" – total, but does not form a unified wholeness); this level is characterized by the fact that SWB knows enough to competently and efficiently implement several types of social projects, however,
as a rule, there are separate "spaces" either in the level of legal training, or in economic or in general methodological readiness in project management field;
- professional-multiplicative level (from lat. multiplicative – increase, multiple); this level is characterized by the fact that SWB is fluent in interdisciplinary foundations of social design, is able to apply variable design technologies; professionally and personally is ready and able to implement social projects of various kinds.

4.2. Characteristic of formation procession university culture of vocational project work of a social work bachelor

The culture of professional and project work of a social work bachelor in its essential form has some specific features:

a) on the one hand, this culture requires individual and distinctive intellectual skills to understand cause-and-effect relationships that occur in social systems (processes, phenomena) when you change their parts, individually-creative abilities to produce (generate) original decisions of problem situations, creative ways of solving professional tasks that will be demanded in future and will be able to contribute to creation of new (improved) conditions of humanity social life,

b) on the other hand, this culture involves development of specialist`s competencies of social collaboration and team collaboration, formation of skills to interact with team of specialists (members of social planning team) in situations of varying degrees of ambiguity and complexity (and sometimes, it is hard and calculable risk), in terms of multidisciplinary (multifunctional) professional space.

This (above) means that for development of culture of vocational project work of social work bachelor during the period of university training, on the one hand, implementation of training process individualization (with the aim to adjust, develop for a particular student his "sinking down", underdeveloped structural components of a given culture), and, on the other hand, active usage of interactive group, training forms and technologies of professionally-oriented training (to develop skills of team work, skills of productive personal and business interaction in micro-group work).

The process of formation of culture of vocational project work of a social work bachelor in university was implemented by stages.

Explicative stage (from lat. Explication – an explanation, deployment) was that students were professionally oriented in modern social work demands as a special kind of professional activity in "man – man" system; future SWB mastered software-basic of interdisciplinary knowledge in the field of social planning, etc.

Quasi-professional stage (from quasi-professional – like, similar, approximate, i.e. simulation of professional activities) included during business games process development of scenario basis, different kinds of social projects software, first experiments on established projects realization in terms of volunteer work within student government, academic practices, etc.

Productive-professional stage involved reflection and self-analysis by students of the results of the implementation of social projects that they had developed in the conditions of specific social services lives, etc.

For the culture development of professional-project activity of social work bachelors technologies of critical thinking development, design technologies, case studies, contextual learning technologies, technologies based on application of methods of TIPS (theory of inventive problems solving), professionally-simulation gaming and training technologies were actively used. RSSU held annual contests of students` social projects with practitioners and employers involvement as juries. Also there was organized work of scientific students` society "Social planning in professional activity of social work specialists" as well as activity of students` volunteer center "Good act".

In the process of four-year study at university nearly each "Social work" bachelor took part in development and implementation of the following social projects:
- projects of socio-pedagogical profile (were implemented in orphanages sponsored by RSSU, social assistance Centers for families and children; in the Autonomous nonprofit organization "Russian family traditions");
- projects of social rehabilitation profile (were implemented by students in conjunction with social workers that deal with persons with disabilities and children left without parental care. In particular, students together with Department of ward ship specialists, guardianship and patronage of "Preobrazhensky" district, specialists of Centers of social assistance to family and
children "Khoroshevska" and "Vostochnoe Degunino" implemented a project on a remote additional education for children with disabilities "School of a young Moscow scientist", "School of a young designer", "School of a young psychologist", etc.;
- projects of social law profile (in particular, a project on creation on the basis of RSSU a legal advisory center, and similar centers like "Legal assistance" were created in a number of territorial centers of population social servicing);
- projects of socio-medical profile (were implemented by students in collaboration with specialists in social work who, in their professional activity interact with healthcare institutions, provide socio-medical services; in particular, in state institution "Scientific-practical center of medical-social rehabilitation of disabled named after L.I. Shvetsova" a project "You can do everything" aimed at social adaptation of people with disabilities was implemented);
- socio-economic projects (for example, on the basis of City resource center of family support and child welfare "Otradnoe" Association of mutual help for large families was created etc.);
- projects of socio-psychological profile (trainings to enhance professional self-determination of children's homes pupils, trainings for socially-pedagogical culture of guardians development, trainings on development the skills of adaptation in labor collective for young professionals, etc.).

All of the above socially-oriented projects were developed, prepared and implemented according to the following stages.

1. Preparatory work for "synecticsession" or "brainstorming". The participants of this "session" are social work faculty students (fields of study "Social work", "Psychological and pedagogical education", "Organization of work with youth"), volunteer students of information technology faculty, and volunteer students of psychology and law faculties, members of volunteer center (social services) "Good act".

In the process of preparation for these "synectic sessions" students previously mastered in the classroom at discipline "Theory and methods of social work" (this discipline is studied by all students of RSSU, all courses of training in variable part of the curriculum), at training courses at "Culture of professional and project work of social work specialists" (for specialty "Social work"), "Culture of professional planning activity of social sphere specialists" (courses of training "Psychology pedagogic education", "Organization of work with young people") at seminar-training "Bases of theory of inventive problem solving (TIPS) and social planning" the following theoretical and methodological positions:

a) application of TIPS ideas of G.S. Altshuller in social planning practice, in particular, students mastered the rules of finding and formulation of ideal final result (IFR), the basic positions of "Code of problems solver" (including resolution of difficult life situations problems);
b) algorithmic stages of social planning;
c) they studied the basics of fundraising, psychology of creativity, creativity, the foundations of social innovation; theoretical and applied bases of forecasting, designing and modeling in social, socio-pedagogical work.

Also many students from the "synectic sessions" took an active part in work of regularly organized at Social work faculty "roundtables" on such topics as "Specificity of planning activity and planning principles in youth environment", "Features of socio-oriented planning in professional activity of pedagogic-psychology specialists", "Social forecasting, planning and professional activity of social work specialist: theory and practice interaction", "Social projects: from idea to implementation". In the process of conducting these "round tables" in quite vivid discussions representatives of professors, lecturers of RSSU, students and invited practitioners, graduates of the University the following issues were discussed:

- possibility and necessity of social planning technologies application in youth problems solution, while organizing cultural leisure, sports and recreation, vocational guidance work with students;
- features of socially-oriented planning in the field of social gerontology (peculiarities of projects’ implementation in Socio-gerontological centers);
- mechanisms for social planning implementation and social partnership development in the field of youth employment promotion and professional realization of young specialists;
- features of social planning in legal services sphere (legal help) to different groups of population (usage of Internet technologies in the process of social projects implementation with human rights, legal advisory focus);
possibility and necessity of social planning technologies application in promoting social adaptation of orphanages graduates;
- specifics of social planning in the field of inclusive education;
- role and importance of marketing technologies in social project development and implementation;
- social planning and business planning: theory and practice relationship;
- social planning and development of social partnership in youth environment;
- historical aspects of formation and development of social planning: what historical-cultural (social-engineering) experience is relevant today, what experiences can be revived and adapted to modern conditions?
- role and importance of expert assessments in modern social forecasting and planning;
- methods of assessing of reality (feasibility) of a social project in conditions of various types and kinds social services; technologies, methods and techniques of evaluating actual and potential risks;
- mechanisms, technologies (methods and techniques) of project activities implementation in social work practice;
- role and importance of monitoring technologies during social project`s development and implementation;
- modern variable models of expertise in social forecasting and designing.

2. "Brainstorm" conducting to discuss specific socially-oriented tasks (for example: a) tasks regularly on Saturdays on the basis of RSSU by volunteer students and professors to hold "University Saturdays" for pupils, students of colleges to identify and further support talented children, promote professional self-determination of students, create conditions for productive and positive personal interactions of students with disabilities with other members of "University Saturdays" in inclusive environment, etc.; b) organization of distant forms of realization of developing education programs for 10–16 years old children with disabilities using modern information technologies (the children are attached to territorial Centers of social assistance to families and children); c) in sponsored mental asylum implement the program (pre-designed on the basis of "marketplace of ideas") socio-pedagogical support of skills development of young disabled people (age 18–26 years old with mild mental retardation) social adaptation, who will be alumni of this boarding school, etc.).

As a result of analysis of proposed problematic social situation for members of the project group the essence of the problem "distilled", and solution of it will be their upcoming project; they formulate working title of the project, outline its themes. Then at this stage, the project team analyzes existing domestic and foreign experience of solving similar social problems, as well as analyzes available information, if there had been any similar projects in the area of chosen topic. In the end, at this stage, after discussion, (organized by a special technique in technologies of moderation style, and filled out expert sheets, etc.) they formulate final idea (priority plan), goals and objectives of this social project, justify (estimate) feasibility of its implementation.

3. Development of substantive content of project documentation for a pre-defined structural plan. A clear prescription of the project`s management process. They define procedure of events conducting, measures implementation, corrective profile. Possible risks are discussed.

4. Hypothetical (mental) application of the project (self-test), predictive application of the developed criteria and indicators for evaluation of the project results. Experts` evaluation of the project. Updating of the project. Making a reasoned decision about usage of the project.

5. Implementation of the project.

6. Conducting analytical and evaluative sessions.

One of the organizational-pedagogical factors influencing the process of culture development of professional-project activity of social work bachelors is effective operation of students` government, which pay special attention to youth social projects implementation (including, those in framework of volunteer work of students).

4. Discussion: assessment of process effectiveness of culture of professional and project activity formation in social work bachelors

Efficiency of process of formation at university of culture of vocational and project work of social work bachelor we analyzed in a retrospective perspective, i.e. comparing the levels of this
culture development among graduates (full-time and correspondence forms of training) in the field of training "Social work" (bachelor) in different years (2011 graduates, 2012 graduates, 2013, 2014, 2015, 2016 graduates). Thus, during the experiment all students of RSSU (Moscow) in the field of training "Social work" in the period of study were able to master the content of such educational disciplines as "Forecasting, planning and modeling in social work", "Project activity in social services", "Project activities of social work specialists", "Basics of social creativity", "Theory of creativity and social innovation", "Social monitoring system", "Fundraising in social services", "Management of humanitarian projects" optional author’s course "Culture of professional and project work of social work specialists" developed by us substantive and methodological support, to participate in social students’ projects volunteering using our developed recommendations and technologies, take place in different practices on programs created with our participation and involved performance by trainees a cycle of specialized tasks that focused on formation and development of culture of vocational and project work of SWB.

Thus, it is possible to say that in our research we have created the so-called "conventional" control group (CG) they are graduates of 2011 in the field of training "Social work" full-time and correspondence forms of training, and experimental group (EG) they are graduates of 2016 in the field of training "Social work" full-time and correspondence forms of education. We emphasize that in the first year students of the CG and the EG (full-time and correspondence forms of training) study at about the same level and it was slightly different for individual indicators. Also in the first year the level of awareness of students of the EG and the CG on content and structural components of professional culture-project work of social work bachelor (according to some polls, interviews, questionnaires) was approximately the same. Therefore, we can consider correct to analyze the effectiveness of the process of formation of culture of vocational project work of social work bachelor at university in retrospective aspect (context).

At graduates of the CG (they are graduate SWB of 2011, n=38 full-time form of studies; n=69 – correspondence forms of studies) and graduates of the EG (they are graduate SWB of 2016, n=34 – full-time form of studies; n=77 – correspondence forms of studies) expert group (10 persons) identified as numerical values on a 10-point scale, the indicators reflecting the formation of professional skills of SWB, which constitute a substantial procedural basis of culture, his professional-project activities (tables 1 and 2).

The group of experts included: 3 head of social service centers for population (the centers for 15 years have been bases for practice of RSSU), 3 social work practitioner with experience of about 15 years (who had positive experience of development and realization of own social projects and oversaw volunteer activities, and internships for RSSU students on the basis of social institutions in which they worked); 2 teachers of universities (who teach relevant, professional-applied disciplines for future SWB and had experience in management and implementation of students’ social projects), 2 university graduates (former participants of our experimental work, members of scientific students’ society for social planning, laureates of all-Russian students’ contest of social projects, social workers of social assistance Centers for families and children, Social-gerontological center).

The experts evaluated the formation of the above skills and in the process of students ` volunteering, and during periods of training and pre-diploma practice, and in the process of social projects protection at conference (before practice and prior volunteer work beginning for a specific social project implementation), and in the defense of term papers that had to do with issues of social planning, etc.

Assessment for each type of professional project skills was carried out on a 10-point scale, and consistency of the experts by definition of coefficient of concordance significance. For the case of the presence of associated rank calculation the formula is:

\[
W = \frac{12S}{m^2(n^3-n) - m \sum_{j=1}^m T_j} S = \sum_{i=1}^n \left( \frac{\sum_{j=1}^m R_{ij}}{n} \right)^2 T_j = \sum_{i=1}^k (t_i^3 - t_i)
\]
Here: \( m \) – number of experts, \( n \) – number of objects ranking, \( R_{ij} \) – the rank, \( i \) is the number of indistinguishable objects in each bunch, \( i = 1, n, \ j = 1, m \).

Statistic means \( \chi^2 = \frac{12S}{mn(n+1)-\sum_{j=1}^{m} T_j^2/n-1} \) let us to determine value: if \( \chi^2 > \chi_{sp}^2 = (\alpha;(n-1)) \) then null hypothesis of the coefficient of concordance is rejected.

The values of the coefficient of concordance, calculated for each type of skills ( 0.73 < \( W < 0.86 \), 270.1 < \( \chi^2 < 318.2 \) when \( \chi_{kp}^2(0.05;(38-1)) = 52.19 \) and 0.81 < \( W < 0.89 \), 299.1 < \( \chi^2 < 329.3 \) when \( \chi_{kp}^2(0.05;(34-1)) = 47.8 \) for full-time study, 0.76 < \( W < 0.88 \), 281.2 < \( \chi^2 < 325.6 \) when \( \chi_{kp}^2(0.05;(69-1)) = 88.25 \) and 0.83 < \( W < 0.92 \), 307.1 < \( \chi^2 < 340.4 \) when \( \chi_{kp}^2(0.05;(77-1)) = 97.35 \) for correspondence courses) allowed to consider the consistency of experts’ opinion is not accidental, and, therefore, a comprehensive assessment of formation of professional-project skills of social work bachelors largely true.

To study statistical significance of changes criterion of Welch, which is a powerful parametric test, was used. Distribution of relevant assessments of the bachelors’ could be considered close to normal, which was determined by the method of graphic Q-Q Plot.

**Table 1.** Results of the expert assessment of formation of professional and project skills of social work bachelor (RSSU graduates; correspondence courses form of training)

<table>
<thead>
<tr>
<th>Professional project skills</th>
<th>graduates 2011</th>
<th>graduates 2016</th>
<th>Possibility of equableness (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{x}_1 )</td>
<td>( \sigma_1 )</td>
<td>( \bar{x}_2 )</td>
</tr>
<tr>
<td>Analytical-marketing</td>
<td>6.35</td>
<td>1.86</td>
<td>7.17</td>
</tr>
<tr>
<td>System information</td>
<td>5.53</td>
<td>1.44</td>
<td>6.57</td>
</tr>
<tr>
<td>Professional-legal</td>
<td>6.37</td>
<td>1.48</td>
<td>7.72</td>
</tr>
<tr>
<td>Socio-economic</td>
<td>6.13</td>
<td>1.47</td>
<td>6.71</td>
</tr>
<tr>
<td>Prognostic-modeling</td>
<td>6.19</td>
<td>1.38</td>
<td>7.11</td>
</tr>
<tr>
<td>Praxeologically-correcting</td>
<td>5.74</td>
<td>1.34</td>
<td>6.91</td>
</tr>
<tr>
<td>Assessment-expert</td>
<td>6.01</td>
<td>1.27</td>
<td>7.03</td>
</tr>
</tbody>
</table>

**Table 2.** Results of the expert assessment of formation of professional and project skills of social work bachelors (RSSU graduates; full-time courses)

<table>
<thead>
<tr>
<th>Professional project skills</th>
<th>graduates 2011</th>
<th>graduates 2016</th>
<th>Possibility of equableness (p)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{x}_1 )</td>
<td>( \sigma_1 )</td>
<td>( \bar{x}_2 )</td>
</tr>
<tr>
<td>Analytical-marketing</td>
<td>6.35</td>
<td>1.12</td>
<td>7.33</td>
</tr>
<tr>
<td>System information</td>
<td>5.62</td>
<td>1.21</td>
<td>6.97</td>
</tr>
<tr>
<td>Professional-legal</td>
<td>5.84</td>
<td>1.28</td>
<td>7.09</td>
</tr>
<tr>
<td>Socio-economic</td>
<td>6.05</td>
<td>1.24</td>
<td>6.7</td>
</tr>
<tr>
<td>Prognostic-modeling</td>
<td>6.19</td>
<td>1.19</td>
<td>6.85</td>
</tr>
<tr>
<td>Praxeologically-correcting</td>
<td>5.7</td>
<td>1.33</td>
<td>6.18</td>
</tr>
<tr>
<td>Assessment-expert</td>
<td>5.54</td>
<td>1.21</td>
<td>7.29</td>
</tr>
</tbody>
</table>

**Fig. 1** and **Table 3** illustrate the evolution in the levels of formation of culture of professional project work of social work of bachelor according to the year of graduating from RSSU.
**Fig. 1.** Levels of formation of professional project activities culture of university graduates in the field of training "Social work" (bachelor)

**Table 3.** Data on quantitative (percentage) ratio in the levels of formation of professional project activities culture of university graduates in the field of training "Social work" (bachelor)

<table>
<thead>
<tr>
<th>Graduates</th>
<th>Levels</th>
<th>2011</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singular-professional level</td>
<td>20.7</td>
<td>13.1</td>
</tr>
<tr>
<td></td>
<td>Additive-professional level</td>
<td>66.9</td>
<td>57.8</td>
</tr>
<tr>
<td></td>
<td>Professional-multiplicative level</td>
<td>12.4</td>
<td>29.1</td>
</tr>
</tbody>
</table>

To identify the degree of dependency between two samples we used $\chi^2$-criterion for nominal characteristics (criterion of homogeneity $\chi^2$) to the data of Table 3. Statistics for this criterion:

$$\chi^2 = \sum_{i=1}^{r} \sum_{j=1}^{c} \frac{(a_{ij} - e_{ij})^2}{e_{ij}},$$

where:

- $a_{ij}$ – elements of the contingency table (built by the transpose of Table 3), $r = 2$ is the number of samples, $c = 3$, $e_{ij}$ is corresponding $a_{ij}$ expected frequency; number of degrees of freedom $(r-1)(c-1) = 2$.

The obtained meaning of probability of homogeneity of samples $p = 0.0477$ allowed us to assert that positive changes in the levels of development of this culture of RSSU graduates in 2011 and 2016 have substantial and statistically significant ($p <0.05$) difference.

As an indirect indicator of pedagogical experiment participants interest to the problem of formation of culture of vocational project activities of SWB will cite the following content analysis data: 16% of final qualification works (theses) of RSSU students in the field of training "Social work" (in the past 2011–2016) are devoted to problems of social planning, which is 8% higher than the previous years (2007–2011).
Deserve attention and delayed data control: 62% of graduates of the University in the field of training "Social work" (according to the survey conducted during the delayed control with former students of the CG and the EG) are systematically (regularly) use to solve tasks professional project skills, formed in the period of University training; 55% of graduates of the University in the field of training "Social work" (according to the survey conducted during the delayed control with administrators of social services) show a fairly high level of culture and vocational project activities, initiate ideas for implementation of social projects aimed at improving the quality of existing and creation of new kinds of social services for population.

5. Conclusion and Final Considerations

Development in social work bachelors the culture of vocational project activity is one of important normative standardized characteristics of their professionalism. Today a social work specialist in addition to possession of a wealth of interdisciplinary knowledge is required skills in terms of understanding social reality with further appropriate actions to its positive, constructive perspective transformation. This requirement necessitates the formation of culture of vocational project activities of future bachelors of social work.

Using the theory of sets of Euler ("Euler circles"), conventionally, the culture of professional and project work of social work bachelor is possible to be represented (depicted) in the form of intersection of the following circles denoting such types of professional culture of SWB as:
- professional legal culture of social work bachelor,
- informational analytical culture of social work bachelor,
- socio-economic culture of social work bachelor,
- communicative ethical culture of social work bachelor,
- professionally-predictive culture of social work bachelor,
- psycho-pedagogical culture of social work bachelor,
- organizational and managerial culture of social work bachelor,
- research culture of social work bachelor.

Such representation (in the form of intersection of Euler circles) of culture of vocational project work of social work bachelor allows you to:
- develop specialized diagnostic (assessment) procedures for identifying (determining) the level of development (formation) at a specific University student of each component (professional-legal, economic, analytical etc.);
- determine what exact "segment" of professional-project work of social work bachelor is necessary in focused (targeted) work with special tasks, techniques, and professionally-oriented technology to be further improved, developed ("improve").

Thus, it can be argued that culture of professional and project work of social work bachelor is a symbiosis (integrative set of) partial components (analytical-informational, normative-legal, socio-economic, organizational, managerial etc.) which complement and synergetic manifest themselves in practice of social work realities.

Efficiency of formation at the University of social work bachelors can be ensured if:
- professional project preparation of social work bachelor is based on interdisciplinary (research and integrative) relationships, both in classroom and extracurricular teaching and professional work, in educational research, scientific research activities of students and has the practice-oriented focus;
- informative-methodical support of this process fully reflects the regulatory qualification (standardized) requirements to professional culture of project work of social work specialists, takes into account the variety of possible places of employment of social institutions graduates;
- process of formation of social work bachelors is carried out in stages, using a variable set of technologies of professionally-oriented learning (design technology, case studies, training systems, etc.), provides psycho-pedagogical support of students' social projects implementation and creation at the University necessary conditions for mastering by social work bachelors the culture of professional and project work.

Further directions of development of the studied problems can be:
- development and implementation of methods, technologies enhance self-educational activity of students in theory and practice of social planning;
- integration of students‘ theoretical training on issues of social planning and activity of students during periods of practice to master professional project skills, abilities;
- specialized training for university teachers to implement purposeful and systematic work on the formation of culture of vocational project activities of future social work bachelors;
- identification of characteristics and specifics (it is possible that qualitative differences as well) content and methodology (technological) bases of process of formation in university culture of professional-project activities of social work bachelors, depending on the form of study (internal, correspondence, remote).

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References


