

Methodology of Contract Managers' Project Competency Formation in CPE

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ABSTRACT

The paper defines and systematizes the key methods, which influence the results of continuing professional education (further referred to as "CPE") implementation and quality control of CPE process. All this will allow providing coaches, tutors, business consultants, contract managers and professionals with an effective tool to identify and improve project competency of contract managers (contract officers, specialists in procurement further referred to as "contract managers"). The key method used is a logical modeling, which allows to examine the problem of project competency formation as a purposeful and conscious process of forming professional skills of contract managers. The following approaches were also used: statistical and heuristic techniques, such as questionnaires, interviews of representative groups of contract managers. The authors introduce a study on key points in formation of project competency of contract managers at different levels: as a specialist in procurement and expert in procurement, according to professional standards, adopted by the Ministry of Labour of the Russian Federation № 625n and № 626n of 10.09.2015. The authors give some recommendations on project competency formation of contract managers, taking into consideration competency-based and business oriented training. The mentioned above approach in CPE, in authors's opinion, contributes to the efficient development of competencies (competency clusters) of contract managers according to the expectations and interests of employers on the labour market. Aspects of project competency and stages of formation of such competency are considered from several perspectives. In order to cover above-mentioned issues the specially developed questionnaire was suggested by authors. The authors used a systematic literature review approach, starts with literature review, problems identification, selection process, assess, synthesize and write down the ideas proposed, and then make conclusions.

KEYWORDS

Contract manager; continuing professional education;
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Introduction

Nowadays, the quality of educational services has received considerable attention, that is, beyond doubt, a sign of vested interest of our society in managing educational process at a high-level standard in order to train professionals with all necessary skills and in-depth knowledge of the chosen sphere of activity. The CPE program of contract managers as specialists who should take special training is a specific sphere of business training conducted according to the federal law of the Russian Federation 05.04.2013 № 44-FZ "On contract system in the sphere of procurement of goods and services for federal and municipal needs" and departmental acts and guidelines. This institution has its origin in foreign practice (US and Europe), where it has long existed and is referred to as «contract manager», «contract officer», «contracting officer» (Edler & Yeow, 2016; Loosemore, 2016; Dufek, 2015; Arts & Faith-Ell, 2012). Thus, the institution of the contract manager is not unique only to the Russian reality, therefore, the results of this study can be implemented in the educational process in the preparation of such specialists in other countries.

Modern realities in the education system requires theoretical understanding and identifying pedagogical conditions that would ensure the formation of practice-oriented competencies of contract managers in the process of professional education and practice (Averina, Pecherskaya & Polyakova, 2015). Meanwhile, analysis of pedagogical activity of tutors shows that only a few of them can properly control the results of the educational process, to determine the factors and means of its successful implementation, assess the extent and effectiveness of its implementation, to identify problems and difficulties to make the appropriate adjustments (Kovacs & Pato, 2014; Zhang, 2013; Guerrero & De los Ríos, 2012; Spagnolo, 2012; Heinrich, 2012; Gibbs, 1998).

In addition, due to the recent introduction of Russian training programs for contract managers as CPE (from 2013 only), the lack of systematic analysis of professional competencies and, in particular, project competency formation of contract managers, in domestic and foreign academic literature should be mentioned.

First of all, attention is drawn to a wide range of methodological issues related to the preparation of contract managers. These include the following: not developed or weakly developed system of "feed-back" between the lecturer (tutor) and trainees (contract managers), the inadequacy of presented to contract managers learning material to practical aspects of professional duties and responsibilities (rapid obsolescence of didactic material, the lack of communication theoretical developments with the realities of procurement activities in the modern high-tech conditions), the absence of an explicit model of practice-training due to the novelty and a wide range of competencies of contract manager (Averina & Pecherskaya, 2016). In this regard, attention is drawn to the model of project competency of contract managers positively proven in practice of CPE programs implementation and approved in the course of educational activity of the authors. To sum up, the authors of this article analyze the methods of formation of project competency of contract managers and hypothesize about the effectiveness of its application in order to train contract managers at the high-quality level (which does not exclude its use for other groups of professions), and in order to control the quality of the educational process.

To solve the above-mentioned problems the authors conducted a longitudinal study on a representative sample of contract managers as trainees of training courses in the field of procurement.

Special attention is given to innovative technologies, which proved to be effective in approaching the methodological problems in the course of authors' work as lecturers at the university and as tutors on business training programs of contract managers.

The authors believe that this study will be useful in the development of techniques relevant programs of additional vocational training of contract managers, both in Russia and abroad.

Materials and Methods

Methods

During the research the following methods were used: theoretical (analysis, synthesis, concretization, generalization, analogy method, modeling); diagnostic (questionnaires, interviews; method of tasks and assignments, case study); empirical (the study of experience of educational institutions, regulatory and instructional documents, pedagogical supervision); experimental (establishing, forming, control experiments); methods of mathematical statistics.

Experimental research base

Experimental research base was located in FGBOU VO "Samara State Economic University".

Stages of research

The study was conducted in three phases:

— at the first stage the authors carried out a theoretical analysis of the existing methodological approaches in psychological and educational scientific literature, as well as the theory and methodology of educational research; there had been highlighted the problem, the purpose and methods of research, the plan of experimental research had been introduced;

— at the second phase of the project the authors suggest a technique of contract managers' competency formation; enrolled in programs of CPE in the field of procurement, to identify and justify the complex of pedagogical conditions, resulting in effective formation of project competency; for that matter authors conducted experimental work, analyzed, tested and refined the findings obtained in the course of experimental work;

— at the third stage of experimental work the theoretical and practical conclusions were clarified and completed, the results were compiled and systematized.

Results

Structure and essence of the model

The authors consider the process of formation of competency of contract managers through structuring of the constituent elements of professional competence (competence cluster), typical for specialists in procurement, contract managers:

— working with the information (data collection and analysis (e.g., in order to draw up schedules, planning supply chains), preparation of the documentation for bidding and tenders, decision-making, including the coordination of financial resources and instruments);

— budgeting (accomplishing procurement procedures);

— achieving results (checking quality of the goods, works and services, control and management of the procurement process, monitoring and audit of procurement process);

— interacting with people (attestation and monitoring professional development of workers, the interaction with the party of contract and of procurement procedures).

According to a longitudinal study, carried out by the authors in the course of their practical work as tutors in professional training of contract managers on "Contract system in the procurement of goods, works and services for state and municipal needs" program, taught on the basis of federal innovation platform of "Samara State Economic University" during 2014-2015, there is evidence that the most important skills for the contract managers are considered to be: evaluating procurement bids participants, ability to maintain effective execution of contracts, good skills in IT (Averina & Pecherskaya, 2016). Based on the structure, stipulated by the regulations governing the competence of contract managers and the corresponding range of professional duties, the structure of contract managers' competencies could be schematically represented as follows (Figure 1).

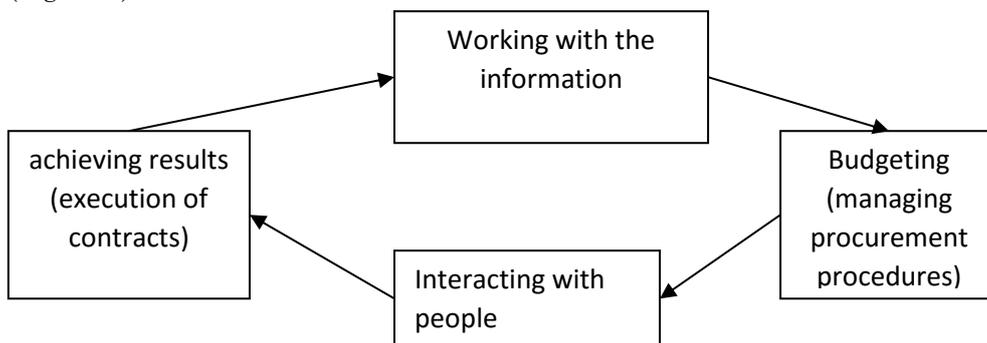


Figure 1. Structure of contract managers' competencies as a cyclic system (Averina & Pecherskaya, 2016)

The model presented above is the basis for the development of methods of project competency of contract managers.

Based on the competencies, provided by the model above, the authors identify basic theoretical issues of project-based learning of contract managers, such as:

the construction of the educational process not in the logic of the discipline, but in the logic of procurement, which has personal meaning for the contract manager as a trainee, which increases the level of motivation in the assimilation of the knowledge gained; individual pace of the project learning provides the output of each trainee at his own level of development; an integrated approach

to the development of projects, leading to the balanced development of the basic personal and professional functions of trainees – contract managers.

It is especially important to emphasize that deep, conscious assimilation of basic knowledge in the approach proposed by the authors is provided by the universal use in various situations, simulating reality. All the above goals and objectives of the project learning method is achieved through the use of active learning methods, subdivided by the authors on simulated (or imitated) and non-simulated (non-imitated). The simulation regards to game and non-game methods of training, such as: case studies, business games, problem-business games, trainings and others. Problematic lectures, problem seminars, panel discussions, "round tables", training and others refer to non-simulated method of learning.

Stages of implementation

The introduction of this model suggests the following stages of experimental work:

- definition of the initial level of project competency formation of contract managers using the testing methods, survey, observation and introspection, statistical processing of survey results;
- development and implementation of scientific and methodological support, contributing to the successful functioning of the structural-functional model of project competency formation;
- determination of the level and identifying the dynamics of project competency formation of contract managers.

Experimental stage

Total research was covered by 167 trainees on the program of CPE in the field of procurement - contract managers. On the basis of expert assessments, analysis of regulatory documents, project competency levels have been identified:

1. The basic level - basic knowledge of the main aspects of procurement, characterized by low professional activity.
2. Intermediate - increased knowledge of contractual control, the acquisition of tactical and communicative qualities (creativity, ability to act and make responsible decisions in unusual and uncertain situations, critical thinking, self-management activities, formulation and analysis of problems, etc.).
3. High level - contract managers possess a wide arsenal of methods of mathematical and economic analysis, have good practical skills in the analysis of procurement chains and are able to take high-quality solutions, to evaluate financial assets and companies in general, are able to find effective solutions for the implementation of procurement and organizing activities at the stage of execution of contracts.

Analysis of the results of the input (at the initial stage of training) diagnostic survey conducted by surveying and testing, led authors to the conclusion that about one-third of trainees (32%) had an average level of formation of project competency. The use of combined methods - questioning and testing – were chosen due to the fact that the survey involved a subjective respondent's position in relation to his existing level of competences and their

range during questioning, while testing allows to obtain data on third-party evaluation of the previously mentioned indicators, which contributes to the objectification of the input control of competence level.

Implementation stage

Within the course of the program of CPE in the field of procurement modules containing lesson formats were introduced as follows (arranged in descending order):

- problem lectures,
- problem seminars,
- case studies,
- panel discussions,
- "round tables",
- business games.

Monitoring of educational phases on each module included diagnosis, analysis of the success of the implementation of training stages (modules) and timely correction of the structural components of the modules.

Educational activity in the monitoring mode and the training session using the project-learning technique allow to implement a quality approach to the educational process. Obtaining timely information on the occurrence of each stage of the educational process allows tutors to analyze how tasks developed at different stages of the educational process, consistent with the objectives, and how they are focused on the verification of knowledge and level of skills in accordance with their castings on reproductive and productive levels. In the event of deviations it allows tutors make adjustments quickly and to improve the quality of educational process in a short period of time. The ability to design training sessions on the subject of a monitoring system to determine the location of each session in order to address common goals and objectives of training, organize the effective interaction with the trainees provided the achievement of high quality education.

Monitoring activities formed successfully in its implementation by all subjects of the educational process. During the joint analysis and evaluation of the work performed by both the tutor and by the trainee, both conducted a discussion of difficulties, gave substantial and detailed description of learning outcomes, analyzed strengths and weaknesses of the work performed. It allows tutors to relate his assessment of the achievements of trainees with their self-esteem and, therefore, make adjustments to it in time. All of the above-mentioned helped to successfully implement in the structure of educational process the "feed-back" system.

Post - implementation stage

At this stage of the experiment the authors aimed to determine the level of formation of project competency of contract managers and to identify the dynamics of formation of project competency in the experimental work performed by the method of diagnostic cuts with the same procedures as the experimental stage. Figure 2 shows the results of the audience distribution by ranges of project competency development.

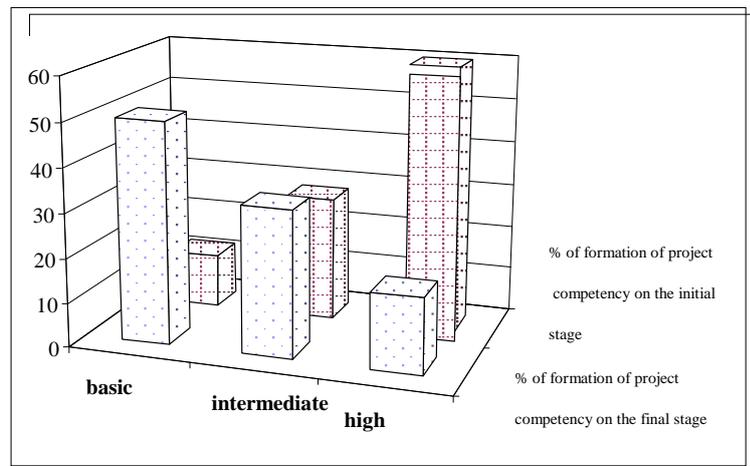


Figure 2. Results of evaluation of level of contract managers' project competency formation on the initial and final stage of the study (Averina, Pecherskaya & Polyakova, 2015)

At the initial stage of training, only 32% of contract managers had an average level of formation of project competency, that is more significant level of professional qualities, while 16% have a higher level of formation of project competency. At the final stage of training 60% of trainees have a higher level of formation of design competence, whereas 11% of contract managers have the base level of formation of such competency. Analysis of the dynamics of formation of professional competence in the experimental group gives reason to believe that the implementation of the developed model of formation of project competency makes it possible to significantly improve the efficiency of the process of formation of professional competence of contract managers.

Experimental accuracy had been ensured by the fact that the initial characteristics of the groups under study were similar. This is proved by the data ascertaining experiment, during which it was found out that contract managers had virtually the same starting performance by the level of knowledge and development of monitoring actions. In addition, the results of our research on a representative sample – contract managers as trainees on refresher courses of "Contract system in the procurement of goods, works and services for state and municipal needs" on the basis of federal innovation platform FGBOU VO "Samara State Economic University" in 2014-2015 showed, that the new employees of companies who have been studied the above-mentioned course, at rates faster got accustomed to their professional duties and more effectively took on responsibilities, since such contract managers had mastered their knowledge in the field of operation of the contract system, they also possess practical skills in the field of procurement, they know the actual models of procurement management and ready to solve specific practical problems in their field of activity.

Discussions

The study of national scientific literature allows to ascertain the absence of specific studies on the problem of formation of contract managers' project competency, according to the problems of actual practice. However, the general

issues of the organization of studying in high school using project-learning techniques are mentioned in the works of M.V.Clarin (1997), I.U.Malkova (2005), T.M.Scheglova (2013). To the relation of project activities and competence of the expert, practice-building approach to teaching are devoted research works of U.V.Sarkisyan (2011), V.N.Vvedensky & T.S.Donnikova (2014).

The foreign research works, for example, B.Barron (1998), R.K.Sawyer (2006), T.Markham (2011), M.Tisch et al. (2013), J.Enke, K. Kraft & J.Metternich(2015) and others emphasize that the project-learning method allows to organically integrate knowledge from different areas of learning in the solution of a problem and makes it possible to apply this knowledge in practice. There also observations on a level of positive impact on the motivational sphere and the meaning of it to the development of cognitive abilities and creativity.

In this study, the authors discuss the project methodology in a wider context as a trend in education, and in CPE, in particular, which is based on concepts such as project (material effect), project technology (the process of the training during the project). Thus, the project is presented as a method of purposeful activities within a flexible tutor-led, focused on the solution of the problem and aimed to obtain concrete results in the form of material and / or ideal product. Obtaining timely information on the course of the learning process, made possible in the framework of formation of project competency of the trainee (contract manager), it allows tutor to quickly make adjustments if deviations occur. Thus, the use of such technique of formation of project competency makes it possible to promptly intervene in the mechanisms, patterns of the educational process, and leads to increased efficiency of that. Based on the study of theoretical and methodological, technological and methodological foundations of the implementation of additional professional education (CPE), training model of contract managers is considered by authors through a set of motivational, informative, technological units and, moreover, diagnostic unit, correction and control. Particular attention in the training structure in the system of CPE, according to the authors, should be given to diagnostics, monitoring and correction, based on the determination of the effectiveness of the process of development of professional competencies.

Conclusion

The authors propose to organize the educational process of CPE on the basis of systematic, project-based and business oriented training to the components of professional competence (clusters of competencies), it is characteristic for contract managers. This approach, in authors' opinion, contributes to the optimum integration of the interests of employers and employees (contract managers).

On this basis, at first, the authors consider it appropriate in the course of CPE to implement personality-developing technology, which allows integrate different fields of knowledge and disciplines and which involves the development of professional competencies of contract managers, as well as the design of

learning technologies in order to learn the skills of working in a team with the distribution of functions and responsibilities between the parties.

It is also considered by authors as a second key issue in formation of project competency, to determine the quality, expertise and individual style of each of the party, taking into account the implementation of problem-oriented approach based on the acquisition and development of professional competencies of contract managers, forming the expert ability to independently apply acquired knowledge and skills in specific circumstances, and the ability to self-education and self-development of contract managers.

In the course of the study there were detected some new questions and problems, which require further research and their decision, such as success drivers of CPE at different stages of it and developing a methodology to assess potential transformation of project competency of highly experienced and low experienced contract managers.

The authors suppose the necessity of continuing research aimed at developing methods of formation of contract managers' project competency in the system of CPE and business training, as a whole, and aimed at handling the processes of effective implementation of quality control of business training based on the proposed in this article model.

Recommendations

The main provisions and conclusions of the research can be used for the purpose of improving the methodological basis of educational decisions of professors, coaches, tutors, who tend to comply with requirements in the new conditions of professional education, for other specialists in CPE, who interested in quality monitoring of CPE.

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