

Teachers' Self-Efficacy as a Factor of Improving University Management

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Abstract – The article provides theoretical justification for the need of increased attention to the problem of teachers' self-efficacy on the part of university managers. The problems faced by teachers during their professional activities are analyzed and identified using the conducted empirical research. The main problems and the fundamentally significant moments in developing management system and improving self-efficacy of teaching staff are pointed out. Potential psychological characteristics of subject during the conduct of self-assessment, which may distort the results, are indicated. In addition, an analysis of the available practical and theoretical groundwork for the further development of the management system and the development of self-efficacy of teaching staff is presented. Furthermore, the problem of competence, confidence, professional burnout and existing methods for determining the level of self-efficacy of subject is considered in the context of the work of managers with self-efficacy.

Keywords – *self-efficacy, management principles, professional competence, professional burnout, personnel administration system*

I. INTRODUCTION

Researchers, entrepreneurs, government, etc. often pay attention to the problems of regional development considering present stage of Russia's social and economic development. A solving strategy largely determines development of a country in general. In view of this, managerial actions play one of the important roles for the regional level to go up. In addition, the region development level and its further position in the system of labor distribution depend on the reaction of regional and state authorities to changes in the external and internal environment.

Among other things, the education system (federal state educational standards, methods, teaching methods, etc.) has undergone many transformations, as well as the management system of educational institutions. A large number of impact pathways aimed at improving the efficiency and effectiveness of the work of university teachers are successfully used and is

being improved. Universities have electronic systems for assessing the rating of faculty teaching staff, various kinds of meetings are held in departments and directorates, as well as other activities and types of control: refresher courses, masterclasses, seminars at university, regional and federal levels.

The relevance of the problem study of self-efficacy and the identification of the basic principles of the impact on university teachers is caused by a number of factors. Firstly, the competence and potential of the faculty (i.e. teachers) are considered as one of the most important indicators of the education prestige in general. In addition, the article contains educational compliance with the requirements of modernity, which in turn affects the quality of higher education and the interest of young people. Secondly, in the course of standardization of a number of life aspects, certain standards were developed for a number of social, industrial and other professions. However, due to their ambiguity and complexity, the pedagogical professions remained intact.

The *purpose of this study* is the identification of the main problems in university teachers' work at self-efficacy, as well as to highlight the basic principles of management.

II. HYPOTHESIS OF THE STUDY

Increase and stimulation of the university teachers' self-efficacy can be achieved with the help of a number of management principles.

III. RESULTS

There is a diverse choice of systems, methods for identifying and eliminating difficulties, interaction and personnel management at the present stage of sociology of management development. However, scientists have not systematized and have not developed a unified system for the formation of the model for improving the self-efficacy of

subject. Due to the fact that self-efficacy is at the junction of several sciences, it is impossible to analyze it from one position. Thus, the problem of increasing the self-efficacy of the faculty is one of the burning problems in management system.

There is a huge number of incentive systems, quality control of the fulfillment of various specialists' certain duties, internal and external ratings, etc. That directly affects the existing level and professional development of a teacher, his or her salary, and further promotion on the career ladder. According to the results of pedagogical and psychological research, the most effective part in work is the interest and motivation of a specialist. All of that is widely used and valued by managers and organizations.

Despite the above described fact, the problem of insufficiently high motivation of pedagogical staff still exists in society. It is obvious that the problem under consideration cannot be taken into account separately from the regional peculiarities and problems. Moreover, the close mutual influence of self-efficacy and socio-economic development of the region is clearly visible.

A huge number of scientific papers asserts that a significant part of the existing managerial deficiencies is eliminated and regulated by using this concept. However, scientists have a lot to explore in this area from the point of view of psychology, globalization, and technological progress.

The professional activity of managers is not inferior in complexity to any other professions; it consists of making interconnected optimal decisions in unpredictable conditions. In the course of the fulfillment of direct managerial duties, certain nuances arise that must be taken into account. This kind of difficulties in managerial work arises as a result of uncertainty in the large number of available decisions in the course of activity based on the "person-to-person" relationship. Overcoming such uncertainty is achieved through the use of management principles and mechanisms.

Initially, it should be noted that self-efficacy is a cognitive construct [1], which is mainly based on personal experience in performing any activity. That means that in the process of increasing workers' self-efficacy, personal and cognitive factors are mainly involved.

The term "self-efficacy" was introduced by Canadian scientist A. Bandura into scientific use. According to the researcher, that means "a person's beliefs in his abilities to manage the events affecting his life" and a peculiar style of thinking that regulates a person's targeted activity using cognitive, motivational, affective and physiological processes [2]. Its content has expanded with the passage of time. Some argue that the idea of one's own competence, rather than skills and abilities itself is a necessary motivational condition which determines human behavior and causes the degree of perseverance in craftsmanship. Later on, it helps to perform specific professional actions [3].

Like most of the current concepts, self-efficacy refers simultaneously to several sciences and fields: psychology, pedagogy, sociology, and management sciences. There is another psychological aspect that relates to professional activity and self-efficacy – confidence that is a specific and subjective concept. Confidence has much more emotional character in the

activity of a person in comparison with the other aspects. In this and many other features and relations of the concept scientific literature contains a large number of the points of view.

In addition, the Dunning-Kruger effect should be taken into account by managers while studying and evaluating employee's self-efficacy [4]. The probability of employees' biased and overestimated self-esteem causes the necessity in particular models of working with staff in this area.

Russian scientist Pantileev S.R. identifies separate concepts of self-attitude, which includes self-esteem and emotional-value attitude [5]. The first acts as an objective indicator of the adequacy of behavior and performance which is reflected in self-esteem, a sense of competence and, as a result, self-efficacy. The second, on the contrary, is the final product of experienced personal feelings and does not depend on external factors in practice.

Self-efficacy, in our understanding, is a high-quality factor of successful and effective study and work activity (as an evaluation component). It follows from the current trends in education and in management of educational institutions that the most of activity results depend on the ability to organize one's work day.

One of the most important components of the self-efficacy analysis in university teachers' work is the problem of its structure. In more detail, it represents a generalized aspect of activity, which includes several types of activity for all of them or is separate for each activity. Regarding this issue in the study of the concept invented by A. Bandura that contains the ideas about their effectiveness, which are not global dispositions, they depend on peculiarities of a particular situation changing according to the circumstances. The researcher believes that the presence of "a set of images of self-efficacy varies from one activity to another, from one level of complexity to another, and from one circumstance to another" [6]. Relying on these statements, the researcher is of the opinion that during personal effectiveness investigation it is necessary to rely on the results of questionnaires with self-efficacy scales for various activities rather than generalized ones [2].

A. Bandura identifies four resources of self-efficacy: person's own, social experience, social conviction and emotional raise [7]. Despite the fact that the concept is usually more attributed to psychology its scope extends and affects most of the social, economic, engineering and other humanitarian and technical activities.

The main strategic task managers and employees are interested in is the qualitative result of both sides' work, their own perception and awareness of significance, which directly contributes to the adequate setting of goals, in the process of achieving. That exact activity increases a level of confidence in teachers' own capabilities.

For all the time of the concept of foreign and Russian scientists' study various scales and ways to study the level of self-efficacy were published. There are four main sources of it in the science: 1) specific success perceived by an individual; 2) observation of another's experience; 3) verbal effects; 4) perceived emotional arousal.

Further studies have shown that self-efficacy should be viewed from a perspective of conviction [8], faith [9], abilities, capabilities [3], and so on. The problem of professional self-efficacy acquires a new serious aspect of a modern person's life. Thus, with the low self-efficacy both the results (qualitative and quantitative) and the emotional state of the subject suffer. As a consequence, risk of professional burnout is possible.

A scale of total self-efficacy was developed by German scientists R. Schwarzer and M. Jerusalem in 1981 [10]. Today methodology has been translated, adapted and used in 19 national versions. The test consists of 10 statements. In addition, a group of scientists presented two types of self-efficacy: professional and in the field of communication. The first one is a person's perception of their own knowledge, skills etc., accumulated over the entire period of work. The second one is a person's understanding of his or her own competence in communication and the confidence that he or she is a successful communicator, and will be able to solve emerging problems effectively.

The American group of scientists under the leadership of M. Scheer and J. Madduks identified the types of self-efficacy: in the field of activity and communication [11]. The first one is the employee's perception and confidence that he or she will be able to apply one's knowledge, skills, abilities, experience, developed earlier in a particular type of activity in the future and it will succeed. The second is a combination of a person's confidence that he or she can be a successful communicator who can constructively solve different tasks.

Diagnostics of teachers' self-efficacy is impossible without taking into account professional competence and existing competencies. These exact factors are able to influence on further determination of one's own effectiveness level in professional activity.

The scientific group conducted series of studies [12]–[14] aimed at determining the correlation of employee self-efficacy and managerial peculiarities in 2016. On the basis of the data obtained scientists proposed strategies and methods for personnel management in two ways: coping strategies and self-efficacy in the field of activity and coping strategies and self-efficacy in communication [15].

Since self-efficacy is more related to psychology, its highest level and goal is effective professional management, which is determined by high qualitative and quantitative indicators. The important point is independent work with the condition of encouragement after the person achieves some results, which are valuable for the organization.

Our research group conducted a sociological study aimed at studying the opinions of teachers regarding the problems they have with their professional activities in 2018, in the reference university of Belgorod region. According to the respondents, 30% of them successfully implement own capabilities and abilities in the university, 50% tend to an affirmative answer, but are not sure, and 20% tend to believe that their capabilities are not fully realized at the university.

Additionally, a question was also included to identify what prevents a person from realizing one's own professional capabilities and abilities if there is one. We found out that 10%

of respondents called low wages as the reason; 10% think that unsatisfactory working conditions are a hindrance; 10% of respondents named their own version; the lack of prospects for professional growth is a hinder for 20% of respondents, and the largest number - 40% - do not have the opportunity to work harder on improving their skills and educate themselves because of the lack of free time.

The data obtained allow us to conclude that the percentage of teachers who are dissatisfied with the results of their own professional activities or their value for management personnel is quite high. The problem touched upon in the study is directly related to the problem of self-efficacy.

Analysis of the data obtained as a result of empirical research suggests the need for increased attention of the organization management team to use the principles and methods of improving the self-efficacy of teachers. Taking into account existing teachers' problems in their professional activities based on the results of our research, we can conclude that there are also difficulties at the cognitive level – the capacity for self-organization, emotional and volitional aspects etc. in addition to important managerial personnel and economic problems.

Managers use special systems, principles, methods for personnel administration for the successful activity and development of the organization. Management principles which are common and at the same time basic requirements for personnel management are important for our study [16].

There is a number of important principles of education quality management in scientific literature [17] which can be partly used as a unit of personnel administration system. Russian scientist S.N. Fedotov speaks about some of them as an important thing for the heads of institutions [18].

Considering all existing and used methods and concepts for determining self-efficacy we conclude that depending on the goals pursued by the respondents or those who conduct the survey (employers) specific or general questionnaires should be used. However, they cannot rely only on one of these methods. Taking into account the features described above we can assume that teachers' self-efficacy will be increased by using several of the most important management principles. Let us designate the main ones that should be used in the managers' activity.

Humanism. We should not forget that profession of a leader relates to the type "person-person", i.e. they mainly deal with people who have personal problems, mental and physical features, and only after that they are subordinates, specialists, etc. Besides special baggage of knowledge, experience, the manager should also have competencies in their most complete composition. For example, modern specialists face a huge amount of work and extremely tight deadlines. This problem is one of many, in the field of education. In this case, it seems wrong and impossible for managers to tighten requirements for employees.

The principle of optimization. It is important to choose the best option in the management process. That means that this choice is the most optimal. The other ones are worse. Emerging

options for action are structured according to the principle of preferences, which play the role of optimality criteria.

The principle of alternativeness, which provides the availability of breeding options. These items are the key to successful personnel management. Taking into account the specifics of modern university teachers' activity, which consists of the diversity of areas, multifunctionality (scientific, pedagogical, corporate, educational and methodological, administrative components), competent use of personnel management principles and techniques plays an important role in the development and functioning of an educational organization.

The principle of consistency. In pursuit of the quality of work performed the problems with personnel management emerge. For this reason, negative features are highlighted [16]:

- growth of the bureaucratic apparatus and the intensification of paper and document circulation;
- fragmentation of managerial functions into smaller ones and an increase in the burden of administrative workers and the number of employees and teachers employed in the routine duties;
- distortion of information (both direct and reverse) within the controlled contour.

We must point out that scientists still agree with the idea that indisputable indicator is its direct connection with the activities carried out by man on the basis of analyzed scientific ideas about self-efficacy of individual. In view of this, student's self-efficacy is on the same level with professionals as to their importance in the socio-economic development of the region. Thus, this concept is updated and should be considered from a new angle and in terms of the latest technologies and systems offered by society and science. Globalization, technical and technological breakthroughs, vectors of social, economic and political relations etc. are very important for the innovative management methods in the universities.

Taking into consideration problems and specificity described above we should mention the research which was conducted among students at the Siberian Fire and Rescue Academy. Its aim was to determine their understanding, attitude and later to form a list of personal qualities with this concept in mind. Among positive features, the majority of students singled out ones such as: determination, perseverance, composure, criticality, self-confidence, activity, efficiency, efficiency, goodwill, diligence, assiduity, integrity, confidence, aspiration, self-control, self-discipline, self-control. Respondents also included impede individual self-efficacy: carelessness, shyness, suspiciousness, apathy, lack of initiative, timidity, inertia, weakness, weak character, decadence, anxiety, indolence, indifference, laxity [18] in the list of the qualities.

IV. CONCLUSION

The fact can be noted that some of the difficulties and aspects of the subordinates' work managers are not aware and cannot solve or be influenced in a timely and effective manner by the results of conducted and analyzed studies. In addition to the principles of management, science and methodology, there

are many significant different or advanced options for the effective management of an educational institution.

The use of the described principles is key in the work of managers with subordinates. Despite the numerous published methodological and scientific literature on this issue, practice shows a picture of ignoring recommendations.

Thus, the time coming to update the system, which "reanimates" self-efficacy not only based on financial bases, but also on other public interests. During the analysis of scientific literature and the actual state of society and the region's economy development, it turned out that the material basis is undoubtedly the foundation, but the self-efficacy of specialists and the younger generation represented by teachers and students is no less valuable in this matter.

Acknowledgements

The work has been conducted within the framework of the Program of flagship university development on the base of the Belgorod State Technological University named after V.G. Shukhov

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