Management competence of the personnel reserve as a condition of the university's leadership in the world market

Olga Petrova
Rector's Office
Lobachevsky State University of Nizhny Novgorod
Prospekt Gagarina 23, 603950 Nizhny Novgorod
Russian Federation
e-mail: opet@unn.ru

Natalia Bureeva
Office of personnel management
Lobachevsky State University of Nizhny Novgorod
Prospekt Gagarina 23, 603950 Nizhny Novgorod
Russian Federation
e-mail: bureeva@unn.ru

Svetlana Sokolovskaia
Department of personnel management
Lobachevsky State University of Nizhny Novgorod
Prospekt Gagarina 23, 603950 Nizhny Novgorod
Russian Federation
e-mail: kuzminasv2013@inbox.ru

Abstract Ensuring of the leading position of Russian universities in the global market of educational services and research programs is a priority for the Government of Russian Federation. Among the key risks of the project there are the conservatism of the management system, the organizational structure and culture of universities and, as a result, an increase in the time taken to reach the indicator targets of the Project of improving the competitiveness of Russian leading universities among the world's leading scientific and educational centres. The opportunities connected with the development and implementation of retraining and advanced training programs for young and promising managers, the creation of a personnel reserve of university management staff for achieving of the leading position of an educational organization serve as risk prevention measures. Based on the analysis of psychological and economic literature, by management competence authors mean education that involves leadership qualities and professional competencies, gaining of which is necessary for a manager to be effective. The article presents the results of the empirical study, obtained during the diagnostics of the participants of the competition for the building of the personnel reserve team of the National Research University managerial personnel. The regulations of the competitive procedure, defining the formal requirements for participants (age up to 40 years; higher professional education; work experience at the university for at least 1 year), made it possible to form a group of management reserve. The final assessment indicators reflect the results of a psychological and psychophysiological integrated survey of the personnel reserve group, including the rating of candidates and the degree of manifestation of professional and personal components of the management competence.

1 Introduction

Providing a leading position for leading Russian universities in the global market of educational services and research programs is a priority for the Government of the Russian Federation (Government of the Russian Federation 2012). Among the key risks of the project there are the conservatism of the management system, the organizational structure and culture of universities and, as a result, an increase in the time taken to reach the target values of the Project indicators for increasing the competitiveness of leading Russian universities among the world's leading scientific and educational centres (Program 5-100). Risk prevention measures are the opportunities associated with the creation of a modern university personnel management system, including an algorithm for assessing the quality of personnel; development of a key personnel motivation system; the formation and maintenance of a personnel reserve of university management, its training and promotion (Petrova et al. 2014). The development and implementation of retraining and advanced training programs for young and promising university staff, the creation of a managerial personnel reserve designed to ensure that the university
achieves leadership positions in the educational services market (Huisman et al. 2002; Petrova 2012; Avralev et al. 2013; Sung and Choi 2014). The listed opportunities are used in the implementation of the project for working with the personnel reserve of the management staff of the Lobachevsky State University of Nizhni Novgorod (UNN).

The goal of the project: the creation of an integrated system of work with active, talented young employees, which includes psychological selection; training aimed at the development of leadership qualities and managerial competencies; career promotion of the personnel reserve members for achieving the maximum level of employee involvement in the university's innovation activities, designed to increase its attractiveness:

- for Russian and foreign talented students;
- for employers from high-tech sectors of the economy;
- for foreign universities interested in collaborations and joint research, increasing of publication activity at the world level.

Achieving this goal leads to the strengthening of the leadership position of the university in the world ratings, as a result, it increases the competitiveness of the university among the world's leading scientific and educational centres (Mohrman and Baker 2008).

The expected result of the project is building of an active, qualified, creative team of employees interested in changes, sharing the values of an innovative university, ready to support changes and promoting its development, capable and ready for implementing effective leadership. The long-term effect is the development of the personnel potential of the university, the creation of conditions and motivation for effective work, increase of creative activity and stimulation of the professional and career growth of teachers and researchers. In general, the objectives of work with management reserve:

1. Development of motivation system of the personnel reserve members at various levels, building individual development trajectories, a map of activities for the inclusion of members of the personnel reserve in the process of solving the tasks of increasing the competitiveness of UNN on the global stage.
2. Diagnostics and selection of candidates who submitted applications for participation in the competition for inclusion in the staff reserve of the UNN management team.
3. Development and organization of training programs for candidates of various levels. The work with the management reserve of the university was carried out in few stages:

1. Diagnostic
The following tasks were solved at this stage:
- Identification of the necessary competencies of an effective manager - a leader, capable of leading the university in development; competency mapping;
- Selection of diagnostic tools;
- Diagnostics and selection of candidates who applied for participation in the competition for inclusion in the UNN management reserve.

2. Formative
The main task of the formative stage was the development of an educational program for developing leadership skills and management competencies, as well as a system of motivation for members of the management reserve at various levels, building individual development trajectories.

3. Reflexive
The task of this stage was to assess and analyse the achieved results of the work, to develop measures for the inclusion of members of the personnel reserve in the innovative activity of the university.

### 2 Diagnostics of leadership skills development of university management reserve members

As a result of solving the problems of the diagnostic stage, the following competences of a university manager were highlighted (Loshkareva et al. 2017):

- Collaboration (as a critical skill that must be built into different aspects of work and training), leadership skills;
- Thinking: critical, problem-oriented, systemic, cooperative-creative, manifested in particular in the ability to plan activities;
Creative skills;
Work in interdisciplinary environments + knowledge of the emerging “universal language of concepts”, including the ability to delegate authority and responsibilities among members of the working team;
 Literacy of the 21st century: understanding of global problems, skills in managing one’s health, understanding the principles of society’s work, ability to take care of the environment, financial literacy, etc.;
 Information technology and media skills, including programming and informational hygiene;
 Flexibility and adaptability;
 Ability to learn, unlearn and relearn during life;
 Responsibility in work (including ethics of interaction with other members of society and the work ethic of human-centred services);
 Empathy and emotional intelligence, including communication skills and abilities.

In order to determine the diagnostic tools, more than 30 different methods were analysed and studied. As a result, three were used:

1. Questionnaire "Management roles" (Bazarov et al. 2014). The questionnaire identifies attitudes to management roles: manager, organizer, administrator, chief;
2. Test for assessing leadership qualities (Fetiskin et al. 2002);
3. Specially designed cases for assessing leadership skills, communication skills, planning skills, delegating authorities, assigning responsibilities between members of the working team, and organizing one’s own activities and one’s staff skills.

For the selection of candidates for the UNN management reserve group, there was developed and used a technology, which includes two stages: primary selection and secondary selection. The following methods were used during the primary selection:

1) analysis of bibliographic data;
2) content analysis of a motivation letter for participation in the personnel reserve group.

As a result of the first selection stage, 36 candidates were allowed to participate in the competitive selection procedure. The secondary selection was carried out using previously cited methods and was aimed at identifying the level of development of management competencies. The selection criteria were following:

1. Questionnaire "Management roles" - dominated by the management position;
2. Leadership test: a score of 26 (a high level of leadership development);
3. Case “Do everything in time, do not forget anything”: response options 6,4,5 (the candidate knows how to plan and organize his working day, correctly prioritizes his work, has the skills to delegate authority, has time management skills);
4. Case “Searching the Lost Document”: response options 3 and (or) 4 (the candidate has a flexible mindset, can find a way out of the current situation, has a high level of communication skills);
5. Case “Struggle for Power”: response options 1 and (or) 2 (demonstrates the ability to organize teamwork, resolve a conflict situation in a team).

As a result of passing through the second selection stage, 15 candidates were chosen for the personnel reserve group. The rules of the competitive procedure, defining the formal requirements for participants (age up to 40 years; higher professional education; work experience at the university for at least 1 year), made it possible to form a group of management reserve.

3 Programs for developing management competencies and leadership skills

The first one was the formative stage. In accordance with the goals and objectives of the management reserve, the organization of training is built with an emphasis on development of the relevant competencies for this particular group, which were listed above.

An analysis of the advanced training and retraining programs available at UNN showed that the training for reservists, which is organized to develop all the required competencies, requires an integrated approach. The learning process was divided into two levels: the first was training on the university program “University management for increasing the competitiveness of the university”, the second was studying on the inter-university program “Leaders of changes for Global Universities” implemented by Moscow School of Management “Skolkovo”.


The program “University management for increasing the competitiveness of the university” aims at training managerial personnel reserve, encouraging participants to modernize the processes taking place at the university to increase the competitiveness of UNN in accordance with the objectives of the country's innovative development, as well as according to the needs of the labour market and the region. The structure of the program's organization and duration:

Introductory stage: a seminar aimed at immersing the participants in the atmosphere of higher education transformation taking into account global trends and the objectives of UNN development in the light of these trends.

Stage 1: 4 months: 7 modules, weekly training, including consultations on the implementation of project work, training for the development of leadership skills and management competencies.

The result of mastering the 1st stage of a program: presentation of the project of modernization in the field of education, scientific research and personnel management in the structural units where reservists work, before university executive staff.

Stage 2: next two months: the implementation of developed projects.

During the implementation of the 2nd stage of the program, the training of members of the management reserve continues. The training program at this stage includes expert lectures on certain aspects of the implemented projects, presentations of intermediate results of project implementation by the participants, as well as diagnostics of the dynamics of leadership skills development and implementation of training programs.

The result of the development of the 2nd stage of the program: presentation of the implementation results of university development projects to the wider public (teaching staff of UNN, the student community). There were the following learning formats:

- Academic blocks: they provide modern theory and concepts on program topics. Topics of leading professors and their courses are adapted to the goals and objectives of the program;
- Analysis of practices and successful cases of university development and project management in various areas of educational organizations: it provides an opportunity to maintain the program’s interactivity;
- Group project and work: ensures the interaction of all participants to share experiences and achieve practical results (projects);
- Active use of trainings: it gives an opportunity to activate and develop leadership organizing skills of reservists.

The program included work on the following modules and topics:

**Module 1. “University management: strategic management concepts”,** topics of discussion within this module are “Concept of strategic university management”, “Modern models of university management”, “Strategic management: business experience and the possibility of its adaptation to the university environment”;

**Module 2. “The program of university competitiveness rise: future trends”,** topics of discussion are “Innovations and progress: future trends”, “Universities in the division of labour”, “Development trends of educational systems: foresight education”;

**Module 3. “Creating projects in education and science to improve the competitiveness of the university”,** topics of discussion - "Postgraduate Studies as the third stage of higher education in the context of global development trends", "Internationalization as a tool for ensuring the international competitiveness of the university. Management of international projects", "The image of the university in the market of educational services", "Design as a method of management in the organization. The structure of the project activity. Project management";

**Module 4. "Project management staffing structure",** the topics of discussion - "Structure of personnel management at the university. The team as the main resource of the university development movement", “Breakthrough staffing: a new university management style”, “Models of intra-group interaction in the process of project activities”;

**Module 5. “Financial support of the project”,** topics of discussion - “Financial management in the structure of the university”, “Experience of preparing scientific grants: grants, programs, funding sources, publication activity”, “Basic principles of marketing. Psychology of advertising. The use of advertising in project activities. The financial side of the project. Risk assessment”;

**Module 6. "Teamwork for university development project design in the field of educational, research and personnel policy",** topics of discussion - “Analysis of the current situation: limitations and growth points of Russian universities”, “Determination of problem areas of educational, research and personnel policy of the university. Setting a goal for a university development project”, “Organizational study of the project. Personnel and financial support of the project”, "Work on the project promotion within the university and in the market of educational services”;

**Module 7. "Presentation of developed projects".**
The work on the projects was carried out in groups on the following topics: “The educational policy of the UNN as one of the leaders of educational services in Russia and in the world” (curator of project activities - Vice-Rector for academic work), “Research policy of UNN” (curator of project activities - Vice-Rector for research), “Personnel Policy” (the project manager - the head of the personnel department). Heads of relevant areas at the university level — Vice-rector for academic work, Vice-Rector for research and head of the personnel department — were involved as consultants for project work. In addition to practical assistance in the implementation of the project, the involvement of high-level managers is an opportunity to involve reservists in the real innovative activity of the university, and partly in the management of the university, thereby increasing the motivation and activity of members of the management reserve, opens up career opportunities.

The inter-university program “Leaders of change for global universities”, implemented by the Moscow School of Management "Skolkovo", was focused on training young management teams ready to engage in the development and implementation of university transformation projects of the 5-100 Program, training personnel reserve capable of continuing the course to world leadership in the rankings of world educational institutions and effective management of universities after stopping the increase in the international competitiveness of leading universities of Russian Federation in 2020 (Government of the Russian Federation 2012). The educational program was developed and implemented with the support of the Ministry of Education and Science of the Russian Federation as part of activities for country’s leading universities development and increase of their competitiveness among world educational centres. The evaluation criteria for the presented project presentations were:

- compliance of the presentation content with the main trends in the development of higher education in the world and in Russia;
- objectivity and heft of the description of the current situation in UNN and its place in view of the global trends in the development of higher education;
- clarity of identification of educational (research, personnel) policy of UNN problem areas;
- clarity of determining one's own position in relation to problem areas;
- presence of prospects for setting goals for project activities in the direction of the educational (research, personnel) policies of the university;
- presentation form: cohesiveness, brilliance, originality of the provided information, observance of the time limit for speeches, communicative, oratorical skills of the speaker.

The results show that the quality of project development by members of the managerial reserve has increased during the course of educational programs. Group project work on topics, relevant and useful for the development of the university, contributed to the development of reservists' ideas about the structure of the university, the types and forms of interactions between structural divisions, became the launching pad for the implementation of new ideas for the development of UNN. The practical value of the project work of the management reserve for the university was the implementation of initiated projects in the UNN, during which the reservists were able to act as managers and executors of the proposed innovation projects. During the development of educational programs, reservists began to possess management competencies, including the ability to:

- build university development strategies in accordance with the objectives of raising the leadership position of the university, on the domestic and world arena;
- develop and implement projects for the modernization of the educational, research, personnel policy of the university in accordance with the objectives of innovative development of the country, the region, as well as global trends;
- resolve problem situations that arise in real professional innovation and management activities, to organize the activities of a small group created for the implementation of a specific project.

4 Conclusions and implications

In general, the results of work with the management reserve are: First of all, the network community of managerial personnel reserve of various structural units of the UNN, implementing university modernization projects to improve the competitiveness of UNN in accordance with the objectives of the innovative development of the country, as well as the needs of the labour market and the region. Access to inter-university cooperation with Russian and foreign universities.

Second, there are projects of building a system of effective educational, scientific and administrative processes management.
Third, there is a general conceptual apparatus and knowledge base, including world best practices in the development and management of universities, development of management competencies and leadership qualities of the personnel reserve members.

Forth, there is a mastering the methods of project work that can be used by participants after the completion of the training program for the further development of university development projects. The final indicators for evaluating the conducted work reflect the results of an integrated approach to organizing work with members of the managerial personnel reserve, including motivation, diagnostics, selection, a program for developing managerial competencies and leadership skills of promising employees, their career growth. We believe that the described activities of working with the university’s managerial reserve contribute to the development of university’s innovation activities, as well as university’s movement towards leadership positions in the world-class educational services market.

References

Avralev NV, Efimova IN, Petrova OV (2013) Ratings as tools for promoting the global education services market. Initiatives of the 21st century 3:31-34

Bazarov TY, Bekov KA, Aksenova EA, Methods for evaluating management personnel of state and commercial structures, 1st edn. (IPK HS: Moscow, Russia, 2014), 112 p.

Fetiskin NP, Kozlov VV, Manuilov GM, Socio-psychological diagnosis of personal development and small groups, 1st edn. (Institute of Psychotherapy: Moscow, Russia, 2002), 362 p.

Government of the Russian Federation (2012) Order of the Government of the Russian Federation, October 29, 2012 No. 2006 p. “On approving an action plan for the development of leading universities, providing the increase in their competitiveness among the world’s leading scientific and educational centers”. https://www.5top100.ru/documents/regulations/672/. Accessed 11 March 2019

Huisman J, de Weert E, Bartelse J (2002) Academic careers from a European perspective: The declining desirability of the faculty position. The Journal of Higher Education 73(1):141-160. doi: 10.1080/00221546.2002.11777134

Loshkareva E, Luksha P, Ninenko I, Smagin I, Sudakov D (2017) Skills of the future: what you need to know and be able to do in the new complex world. https://worldskills.ru/assets/docs/media/WSdoklad_12_okt_rus.pdf. Accessed 15 April 2019

Mohrman K, Ma W, Baker D (2008) The research university in transition: The emerging global model. Higher education policy 21(1):5-27. doi: 10.1057/palgrave.hep.8300175

Petrova OV (2012) Principles of management of scientific and pedagogical workers in the Lobachevsky State University of Nizhni Novgorod. FAN-SCIENCE6(9):50-51

Petrova OV, Grudzinsky AO, Bureeva NN (2014) Attraction and development of key university staff as a strategic objective of the program to improve the competitiveness of UNN them. N.I. Lobachevsky, social innovations in the development of labour relations and employment in the 21st century. Proceedings of the Scientific Conference at N.I. Lobachevsky University, pp. 17-28

Sung SY, Choi JN (2014) Do organizations spend wisely on employees? Effects of training and development investments on learning and innovation in organizations. Journal of Organizational Behavior 35(3):393-412. doi: 10.1002/job.1897