Headmaster's Competencies in Management Area: Evaluating the Significance Level of Managerial Competencies in Lithuanian Comprehensive Schools

Lina Bairašauskienė

Lithuanian University of Educational Sciences, Faculty of Social Education, Department of Economics and Entrepreneurship Development

Abstract

The aim of the article is to present the insights of carried survey on evaluating the level of significance of managerial competencies in comprehensive schools in Lithuania. The approach that head teachers' managerial competency highly influences the process of education and is one of the most important factors ensuring efficiency of school activities such as educational policy and strategic planning, educational process, management of human, material and financial resources has been followed. Researcher self-made questionnaire for expert evaluation was used to measure competency components. In the paper the author presents main results of one part of the research related to school leader's competencies in management area, which was divided into five spheres: strategic institution management, teaching and learning process administration, managing human resource development, ensuring and managing structure, processes and resources of institution, strategic partnership and collaboration. Each of the spheres comprises different items – competences a successful headmaster should dispose. The significance, specified as the most important, was assessed by ranking procedure. The Kendall coefficient of concordance has been used to assess the agreement among raters for every ranked question. The results revealed that the most significant head teachers' competencies which highly influence the results of school activity areas are the abilities to form the strategic direction and implement effective staff policy, strengthen the attitude of school community that each student can reach a success in the learning process, organize conducive conditions for professional staff development, administer property and allocations, collaborate with parents, foster-parents or guardians.

Keywords: school effectiveness, school management, managerial competencies.

Introduction

World globalization process, integration of Lithuania in the space of EU raise new requirements for schools and headmasters. Managerial professionalism has become the most relevant nowadays problem. It is one of the most important conditions determining school and efficiency of its activities. Today the headmaster must be a professional in key managerial activity areas: educational policy and strategic planning, educational process, management of human, material and financial resources and etc. As supreme leader the headmaster should be able to manage all elements of the school, dividing the time well in school management, both for its own tasks as well as for the school as a whole, teaching and learning activities can be carried out efficiently and effectively (Supriadi & Yusof, 2015). In a new paradigm of educational management, principals should at least be able to play the role of educator, manager, administrator, supervisor, leader, innovator and motivator. In other words, school management made by the headmaster is based on the areas of the school administration, the administration of curriculum and teaching, student affairs, management, facilities and infrastructure, finance, and relationship with other schools.

The quality of school leaders is one of the basic factors influencing the quality of teaching and learning process at each level of the system of education as well as each kind of a school. Moreover it has impact on the staff's initiative, activity and cooperation and public relations of the school institutions (Bitterova, Haškova & Pisoňová, 2014). Headmasters are an important factor in enhancement of educational quality of schools. Realization of educational purposes, strategies and programs likewise accurate reaction towards needs of education addressees is not possible without knowledgeable, skillful and innovative educational managers (Ghorchian & Mahmoudi, 2005).

The term *competency* is used to describe a set of behaviors that reflects a uniform combination of knowledge, skill, abilities and motivations and is related to performance in an organizational role (Karami, 2008). Competencies in education create an environment that develops empowerment, responsiveness and evaluation. Acquiring the competencies could be through talent, experience or training performance. Woodruffe (1993) has accomplished several studies about managers' competencies. He revealed that competency is applied for effectiveness at work and determined nine major competencies for managers and represented many secondary subsets for each one. Boyatzis (2011) determine competency as a set of related but different sets of behavior organized around an underlying construct called the *intent*.

Effectiveness is a goal of management that focuses on outcomes, objectives and targets are expected. Therefore, effectiveness is a measure that states the extent to which goals, objectives in terms of quantity, quality, and time have been reached. The effective school is a school that shows the correspondence between the results achieved with the expected results (Manan, 2014). Consequently, school administration must be efficient and effective. Managerial competencies are essential in achieving the goals of school effectiveness.

In this context the problem of the research has arisen – how the level of significance of headmasters' managerial competencies is evaluated and what influence it makes on the results of school activities.

The objectives of the research are the following:

- to assess the significance level of headmasters' managerial competencies in comprehensive schools;
- to evaluate the importance of headmasters' managerial competencies on the results of school activities.

Research Methodology

The paper applied the methods of analysis, synthesis, expert analysis and evaluation (ranking), and questionnaire survey to assess headmasters' managerial competencies.

Formation of a group of experts. The aim of organizing a group of experts is to gather experts representing the field of education. Expert sampling involves the assembling of a sample of persons with known or demonstrable experience and expertise in some area (Žydžiūnaitė, 2017). A special competency-based performance criterion was applied for the selection of experts. The attention was paid to experts' job experience in the field of education (Ministry of Education, National Agency for School Evaluation, Professional Competence development Institute).

Ritchie et al. (2003), suggest that within qualitative research the sample size is usually small primarily because phenomena only need to appear once to be part of the analytical map. After a while there is a point of diminishing return when increasing the sample size no longer contributes to new evidence. Diminishing return is a problem that occurs depending on the type of data being collected. Crabtree & DiCicco-Bloom (2006) refer to this process of diminishing return as data saturation and a signal that the data collection process is now complete or near completion. In the view of Guest et al. (2006) data saturation can occur within the first twelve interviews and after that very few new phenomena are likely to emerge. In the view of Gonzalez (2009) when undertaking research that is reliant on a phenomenological approach, the sample size is usually driven by the need to uncover all the main variants within the approach, he suggests that within conditions such as this, small survey samples of less than twenty are common. Regarding the results of many studies, the optimal size of expert group is between 8 and 10 (Bitinas et al., 2008, 105).

As a result, 11 experts were selected from academic educational field and public institutions (work experience of the experts – 15-20 years). The Snowball Sampling Method (hereafter, SSM) was used to sample the respondents. The method is suggested in the literature as a useful in a variety of research populations. This is a technique for finding research subjects where one subject gives the researcher the name of another, who in turn provides the name of a third, and so on (Cohen & Arieli, 2011). In this method, the sample group grows like a rolling snowball. Most of the cases in which SSM has been used are characterized by less than optimal research conditions where other methodologies are not applicable. The field of education can be examined only by the experts who are familiar with the case in practice. This is the reason for applying SSM in this research environment, as it is the only effective method and the deciding factor whether research can be conducted.

Questionnaire survey of the experts was conducted individually. At first, experts were given individual questionnaires prepared in respect of each competency sphere with enclosed guidelines. The guidelines stipulated a task given for the

experts – to rank the components of each competency according of its effects on the successful school activities results. In addition, the guidelines contained a scaling of relative significance of criteria (Саати, 1993).

Compatibility of experts' opinions. The compatibility of opinions is determined by the coefficient of concordance which is calculated on the basis of the ranking of compared criteria. The dispersal coefficient of concordance was defined by M. Kendall (1970). The coefficient on Kendall concordance *W* has been estimated for every ranked question. The result of expert evaluation is the matrix $E = \|e_{ij}\|$ *(i = 1, …, m; j = 1, …, r)*, where *m* is the number of compared criteria (components of the competency), and *r* is the number of experts.

The idea of the coefficient is linked to the number of ranks of each criterion e_i with regard to all experts:

$$e_i = \sum_{j=1}^{r} r_{ij}\ (i = 1, …, m).$$

(1)

To be precise, to the variation of dimensions e_i from the total mean $\bar{e}$ by the total sum of squares *S* (the analogue of dispersion)

$$S = \sum_{i=1}^{m} (e_i - \bar{e})^2.$$

(2)

The total mean value $\bar{e}$ is calculated according to the formula:

$$\bar{e} = \frac{\sum_{i=1}^{m} e_i}{m} = \frac{\sum_{i=1}^{m} \sum_{j=1}^{r} e_i}{m}.$$

(3)

If *S* is a real amount of squares calculated in accordance with the formula (2), the concordance coefficient *W* is calculated in accordance with the following formula (Kendall, 1970):

$$W = \frac{12S}{r^2 m(m^2 - 1)}.$$

(4)

If the opinions of experts are harmonized, the value of the concordance coefficient *W* is close to 1, whereas, if the assessment differs considerably, the value of *W* is close to 0.

Kendall (1970) proved that if the number of objects m > 7, the significance of the concordance coefficient may be determined using the criterion χ^2:

$$\chi^2 = Wr(m - 1) = \frac{12S}{rm(m + 1)}.$$

(5)

A random value is distributed according to the distribution χ^2 with the degree of freedom *v = m – 1.* The number of freedom degree *v* of distribution χ^2 does not depend on the number of experts *r* because it is used to measure the difference

between the total number of ranking only. The critical value χ^2_{kr} is determined according to the level of importance α (in the research used value 0,05) chosen from the tabale of the distribution χ^2 with the degree of freedom $v = m - 1$. If the value of χ^2 calculated according to the formula (5) is higher than χ^2_{kr}, then the evaluations of the experts are coordinated (Podvezko, 2005).

Research Results

The results revealed that the most significant head teachers' competencies which highly influence the results of school activity areas are the abilities to form strategic direction and implement effective staff policy, strengthen the attitude of school community that each student can reach a success in the learning process, administer property and allocations, collaborate with parents, foster-parents or guardians.

The ranking method was applied to assess the significance level of headmasters' managerial competencies in Lithuanian comprehensive schools and to determine its influence on the successful educational process. The components of management sphere have been devided into 5 competency blocks: competency of strategic management of educational institution, competency of managing educational and learning process, competency of organizing conducive conditions for professional staff development, competency of administring institution's structure, processes and resources, competency of institutional partnership and collaboration.

Competency of strategic management of educational institution is determined by headmasters' knowlegde and abilities to form the vision and mission of a school, to promote every member of the organisation to engage for the mission, establish and maintain the culture of collaboration and obeisance. The most significant component of this competency has been stated the ability to form the strategic direction of an istitution (see Figure 1). The second and third components according to the level of significance have been stated ability to form institution's favourable learning culture which is closely related to strategic objectives and adopt, and implement school activities improvement solutions. It shows that a school principal should follow the main set strategic objectives in all the spheres of his/ her professional activities, in order to ensure cohesive implementation of educational process, as wel as observing common philosophy, culture and values of a school. It is also essential for the headmaster to monitor the areas of school activity, applying the obtained results for its improvement. As a less significant component has been ranked the ability to form efficient public relations. The ability to account perspectively for institution's activities has been identified as the least significant, with the mindset of stiff legal regulation of accountability procedures (*W*=0,607, the opinions of the experts are harmonized).

Figure 1. Evaluation of the components of *strategic management of educational institution competency*
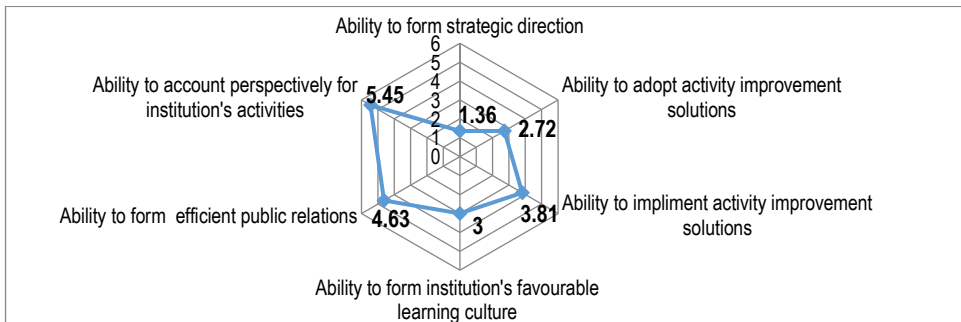

Competency of managing educational and learning process is associated with headmasters' knowledge, abilities, standpoint, values and other personal qualities which are obligatory for planning, organizing and monitoring efficient learning and teaching process. The most significant component of the competency has been revealed the ability to strengthen the attitude towards success of every student (see Figure 2). As a very significant competency component – the ability to implement strategies ensuring students' progress along with the community – has been identified. Less important are the ability to strive for the application of appropriate methods in order to achieve the best results and the ability to organize supervision of students' achievements and progress. According to the experts, the ability to promote active participation in an educational process, both teachers and students, is less significant because it has slender impact on the school activity results (*W*=0,509, the opinions of the experts are harmonized).

Figure 2. Evaluation of the components of educational and learning process management competency
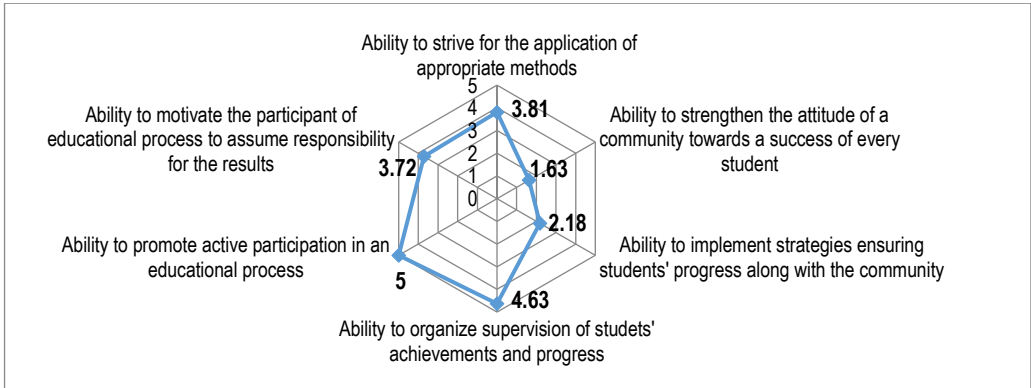

Evaluating the components of *organizing conducive conditions for professional staff development competency* the ability to to establish proper conditions for staff's competency growth has been emphasized as the main assumption to ensure teachers' professional development (see Figure 3). The ability to incorporate school community into pedagogic staff training has also been indentified of high importance. This grounds the statement that creating congenial conditions for staff's professional development should be complemented with the involvement of the school community into this process. High level of significance was provided for the striving to spread teachers' acquired competencies within the institution as well as motivating to become reflective practicians. The ability to incorporate social partners into pedagogic staff training is less significant, though is essential in creating the model of learning organization (*W*=0,579, the opinions of the experts are harmonized).

Figure 3. Evaluation of the components of organizing conducive conditions for professional staff development competency
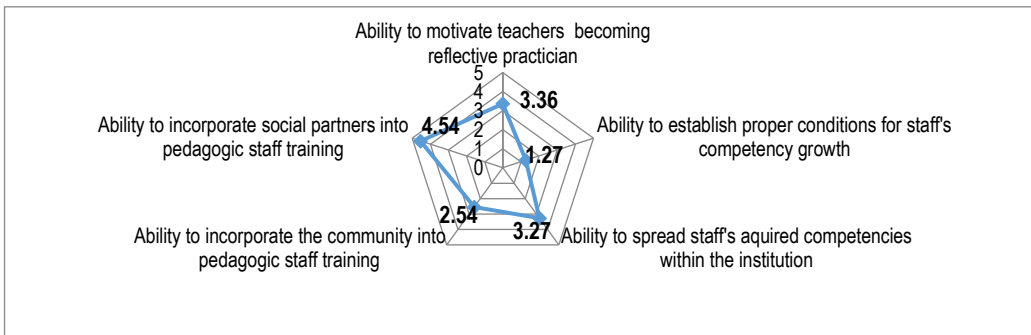

Competency of administring institution's structure, processes and resources is concurrent with the efficiency of school activities. As the most significant component of this competency ability to implement effective staff policy ensuring qualitative education has been stated (see Figure 4). The ability to apply contemporary management methods has been given a high level of importance. Less significat are the abilities to estimate necessary resources ang giving priorities of their distribution. In the experts' opinion, the least important component to successful teaching and learning process is the ability to administer and account for the resources according to legal regulations. (*W*=0,510, the opinions of the experts are harmonized).

Figure 4. Evaluation of the components of administring institution's structure, processes and resources competency
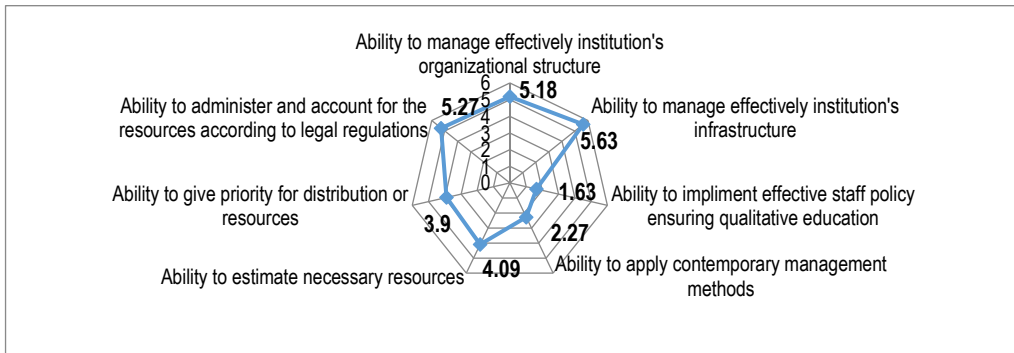
Competency of institutional partnership and collaboration is related with ability to communicate and collaborate with multifarious subjects of social environment. The most significant and having the higest impact on school efficacy component has been identified the ability to encourage initiatives contributing to the perfection of education process (see Figure 5). The experts excluded the ability to collaborate with parents, foster parents and guardians and as one of the most influential on community's buildup and development of collaboration grounded relationship with each member of the school community. The ability to integrate institution's culture into the learning process has also been given a high level of significance. According to experts, less significant are the abilities to have and maintain partnership relations with other educational institutions, and share efficient experience (*W*=0,745, the opinions of the experts are harmonized).

Figure 5. Evaluation of the components of institutional partnership and collaboration competency
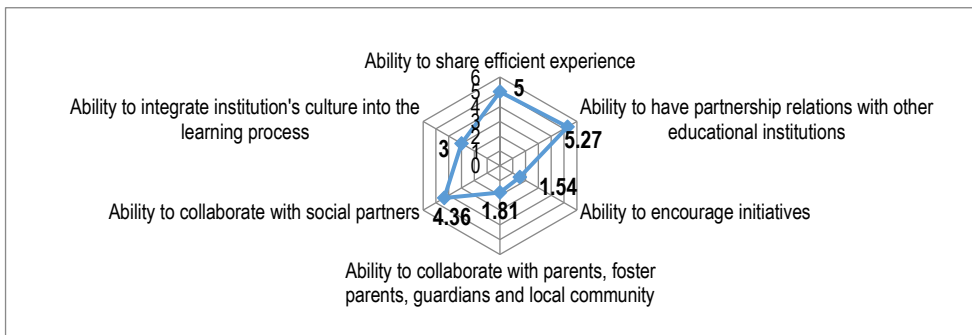
In general, evaluating the level of significance of headmasters' managerial competencies is purposeful because the competencies are the abilities which express headmasters' multifunctionalism, establish conditions for community collaboration, constant perfection and learning, and achieve intended goals and objectives by implementing the policy and strategy of the school. Moreover, in the process of education alternation the listed competencies are essential in creating learning organization whose every member is highly important and assumes the responsibility of school efficacy.

Conclusions

The importance of headmasters' managerial competencies on school efficacy and efficiency is developed after an objective assessment of its competency components is carried out. For this, techniquess which allow the level of significance to be objectively evaluated and decisions to be made, which would ensure the best results of headmasters' performance, are required.

A headmaster's managerial competency is a complex phenomenon. To assess it in a quantitative manner, a hierarchical structure of the competency components was developed. In order to evaluate the level of significance of headmasters'

managerial competencies multi–criteria evaluation method was used. The Kendall coefficient of concordance was used to assess the agreement among the experts' opinions for every ranked question. The estimated coefficient showed that in all cases the the opinions of the respondets' were harmonized.

The results of the research revealed that the most significant headmasters' competencies which highly influence the results of school activity areas are the abilities: to form the strategic direction and implement effective staff policy that ensure cohesive teaching and learning process; to strengthen the attitude of school community that each student can reach a success in the learning process which is of high importance in achieving one of the main educative goals – progress of every student; organize conducive conditions for professional staff development; to administer property and allocations; and to collaborate with parents, foster-parents or guardians. The listed headmasters' competencies components are the most important and have the highest influence on forming institution's strategic direction and establishing responsible learning organization.

References

[1] Bitinas, B., Rupšienė, L., Žydžiūnaitė, V. (2008). *Kokybinių tyrimų metodologija: Vadovėlis vadybos ir administravimo studentams*. Klaipėda: S. Jokužio leidykla.

[1] Bitterova, M., Haškova, A., Pisonova, M. (2014). School Leader's Competences in Management Area. *Procedia-Social and Behavioral Sciences*, *149*, 114-118. http://dx.doi.org/10.1016/j.sbspro.2014.08170

[2] Boyatzis, R. E. (2011). Managerial and Leadership Competencies: A Behavioral Approach to Emotional, Social and Cognitive Intelligence. *Vision, 15 (2)*, 91-100.

[3] Саати, Т. Л. (1993). *Принятие решений. Метод анализа иерархий*. Москва: Радио и связъ.

[4] Cohen, N., Arieli, T. (2011). Field Research in Conflict Environments: Methodological Challenges and Snowball Sampling. *Journal of Peace Research, 48(4),* 426-435.

[5] Crabtree, B. F. & DiCicco-Bloom, B. (2006). The qualitative research interview. *Medical Education*, *40*(4), 314–318.

[6] Creswell, J. W. (2011). Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research. (Fourth). Pearson.

[7] Ghorchian, N. & Mahmoudi, A. H. (2005). Compiling Performance Standards of Educational Headmasters in Middle School and Presenting a Suitable Model. *Educational Innovations, 8(3),* 107-132.

[8] Gonzalez, C. (2009). Conceptions of, and Approaches to, Teaching Online: A Study of Lecturers Teaching Postgraduate Distance Courses. *Higher Education*, *57*(3), 299–314. http://dx.doi.org/10.2307/40269124

[9] Guest, G., Bunce, A., & Johnson, L. (2006). How Many Interviews Are Enough?: An Experiment with Data Saturation and Variability. *Field Methods*, *18*(1), 59–82. http://dx.doi.org/10.1177/1525822X05279903

[10] Karami, M. (2008). Managers' Training with Competency Model. *Tadbir, 17,* 24-25.

[11] Kendall, M. G. (1970). *Rank Correlation Methods*. London: Griffin.

[12] Legard, R., Keegan, J. & Ward, K. (2003). In-depth interviews. In J. Ritchie & J. Lewis (Eds.). *Qualitative research practice: A guide for social science students and researchers*,138–169.

[13] Manan, M. B. (2014). Leadership Characteristics of Excellent Headmaster. *Journal of Education and Practice,* 5(23), 120-124. http://www.iiste.org/Journals/index.php/ JEP/article/view/15229/15596

[14] Podvezko, V. (2005). Ekspertų įverčių suderinamumas. *Ūkio technologinis ir ekonominis vystymas, 11(2)*, 101-107. http://www.tede.vgtu.lt

[15] Supriadi, E., Yusof, A. R. B. (2015). Relationship Between Instructional Leadership of Headmaster and Wrk Discipline and Work Motivationand Academic Achievement in Primary School at Special Areas of Central Jakarta. *Journal of Education and Learning, 4(3)*, 123-134. http://www.ccsenet.org/journal/index.php/jel/article/view/52089

[16] Woodruffe, C. (1993). What is Meant by a Competency? *Leadership & Organisation Development Journal,14(1)*, 29-36.

[17] Žydžiūnaitė, V. (2017). Kokybiniai tyrimai: principai ir metodai: vadovėlis socialinių mokslų studijų programų studentams. Vilnius: Vaga.