THEORETICAL -METHODOLOGICAL REVIEW OF THE GENERAL EDUCATION MANAGEMENT MODELS

MKHITAR GASPARYAN

Postgraduate student of the Department of Management, Armenian State University of Economics

mkhitargasparyan98@gmail.com

DOI: 10.54503/2579-2903-2025.1-135

Abstract

Management of the general education system is a theoretical and practical area of social sciences aimed at developing a strategy for the education system, planning and monitoring educational processes, identifying current management tasks, and solving them effectively. Management of general education has become an integral part of the educational system as a whole since the organization and implementation of educational processes are impossible without the use of management mechanisms and skills. Moreover, the area of general education management has become a kind of link between the academic needs of society and the strategic goals of the state. Therefore, management of the general education system is not only an area of theoretical knowledge but also has great practical and social significance.

Along with the achievements of scientific thought in the field of general education management, it should be noted that the rapid development of modern societies requires periodic revision of theoretical management models and their compliance with the current educational needs of society. Modern social demands and expectations regarding the educational system dictate the need to develop criteria for selecting a management model. Today, such issues have already emerged in the field of general education management, of which the following issues are of particular importance:

- the presence of various management models in practice and the absence of their theoretical description;
 - formal choice of management models for educational systems;
- contradictions between multiple changes in the education system and the lack of theoretically sound models for managing these changes.

To formulate theoretical and practical recommendations aimed at solving of current problems in the area of general education management there were investigated trends of management models formed and their essential characteristics. The objectives of this study include describing the main characteristics of social connections that form configurations of relationships between general schools and society and constructing a typology of management models that dominate modern schools of various countries. These objectives were formed based on qualitative data obtained during a comparative study of international experience in the field of general education management.

Keywords: General education management, management models, educational holding, consortium, claster.

ՀԱՆՐԱԿՐԹՈՒԹՅԱՆ ՈԼՈՐՏՈՒՄ ԿԱՌԱՎԱՐՄԱՆ ՄՈԴԵԼՆԵՐԻ ՏԵՍԱ-ՄԵԹՈԴԱԲԱՆԱԿԱՆ ՎԵՐԼՈՒԾՈՒԹՅՈՒՆ

ԱՌԻԹՈՆ ԺՈՐՈՒՈՐՈՐ ԱՐԱՐԵՐԻ

Հայաստանի պետական տնտեսագիտական համալսարանի կառավարման ամբիոնի հայցորդ
mkhitargasparyan98@gmail.com

Համառոտագիր

Հանրակրթության ոլորտի կառավարումը սոցիալական գիտությունների տեսական և գործնական ոլորտ է, որն ուղղված է կրթական համակարգի ռազմավարության մշակմանը, կրթական գործընթացների պլանավորմանն ու մոնիթորինգին, ընթացիկ կառավարման խնդիրների բացահայտմանը և դրանց արդյունավետ լուծմանը։ Հանրակրթության ոլորտի կառավարումը դարձել է կրթական համակարգի անբաժանելի մասը, քանի որ կրթական գործընթացների կազմակերպումն ու իրականացումն անհնար է առանց կառավարման մեխանիզմների և հմտությունների կիրառման։ Ավելին, հանրակրթության կառավարման ոլորտը դարձել է հասարակության կրթական կարիքների և պետության ռազմավարական նպատակների միջև կապող օղակը, ուստի՝ հանրակրթության ոլորտի կառավարումը ոչ միայն տեսական գիտելիքի ձևավորման ոլորտ է, այլն ունի գործնական և սոցիալական մեծ նշանակություն։

Հանրակրթության կառավարման ոլորտում գիտական մտքի ձեռքբերումներին զուգընթաց պետք է նշել, որ ժամանակակից հասարակությունների արագ զարգացումը պահանջում է տեսական կառավարման մոդելների պարբերական վերանայում և համապատասխանեցում հասարակության ներկայիս կրթական կարիքներին։ Կառավարման մոդելի ընտրության չափանիշների մշակման անհրաժեշտությունը պայամանվորված է կրթական համակարգի վերաբերյալ ժամանակակից սոցիալական պահանջներով և սպասելիքներով։ Հանրակրթության կառավարման ոլորտում այսօր արդեն իսկ ի հայտ են եկել այնպիսի խնդիրներ, որոնցից առանձնահատուկ կարևորություն են ներկայացնում հետևյալ խնդիրները.

- պրակտիկայում կառավարման տարբեր մոդելների առկայությունը և դրանց տեսական հիմնավորման բացակայությունը,
- կրթական համակարգերի կառավարման մոդելների ֆորմալ ընտ– րությունը,
- հակասությունները կրթական համակարգում բազմաթիվ փոփոխութ– յունների և այդ փոփոխությունները կառավարելու նպատակով մոդելների

տեսամեթոդական հիմնավորվածության բացակայության միջև։

Հանրակրթության կառավարման ոլորտում առկա խնդիրների լուծմանն ուղղված տեսական և գործնական առաջարկությունների ձևակերպման համար ուսումնասիրվել են կառավարման մոդելների ձևավորման միտումները և դրանց էական բնութագրերը։ Այս հետազոտության նպատակներից ներառում են սոցիալական կապերի հիմնական բնութագրերի նկարագրությունը, որոնք կազմում են հանրակրթական դպրոցների և հասարակության միջև փոխհարաբերությունների հիմնական կոնֆիգուրացիաները, և տարբեր երկրների ժամանակակից դպրոցներում գերիշխող կառավարման մոդելների տիպաբանության կառուցումը։ Այս նպատակները ձևավորվել են հանրակրթության կառավարման ոլորտում միջազգային փորձի համեմատական ուսումնասիրության արդյունքում ձեռք բերված որակական տվյալների հիման վրա։

Բանալի բառեր՝ Հանրակրթության ոլորտի կառավարում, կառավարման մոդելներ, կրթական հոլդինգ, կոնսորցիում, կլաստեր։

Introduction

Education reforms affect all aspects of the functioning of the schools. The success of the educational changes carried out by the state depends on many factors, among which the management system of educational organizations is of particular importance. Researchers note that the essence of the educational reforms of recent years is to delegate the right to resolve many issues related to the functioning of the school to the level of the school itself. As a result, it is expected to increase the responsibility of the school administration for achieving the educational result and at the same time provide it with a certain degree of independence. So, school management systems are at the center of attention of researchers and experts analyzing social-administrative, economic, and managerial changes and their effectiveness in the field of education. When talking about school management, we usually mean directors who make decisions on various issues of school functioning: from educational to administrative, economic, financial, and managerial. The sustainability and activity success of each educational institution depends on the level of involvement of the principal and his employee team in the management of the educational process. The model of management of an educational institution is a tool that helps to see what issues the director delegates to his team, what issues he reserves for himself, and what areas of activity are a priority when drawing up the management profile of the school.

A modern school sets itself the task of ensuring the quality of education. If previously the development of programs for the transformation of the education system took place based on forecasts of managers and/or expert assessments, now the most popular proposals are those based on the analysis of consumer demand, societal contextual factors, monitoring data on the effectiveness of educational programs, the conditions for their implementation, etc.

The management model is a complex tool, the optimal combination of elements of which will allow to effectively solve management problems. The management model should reflect not only the educational needs of the school but also the real needs of the development of society and correspond to the economic,

social, and cultural-historical environment in which it is applied.

The management model of the educational system is a structural and functional organization of activities aimed at achieving goals within the framework of the management strategy of all levels of the education system.

Literature Review

For a long time, starting in the mid– 20^{th} century, the dominant idea was to manage a school by analogy with an industrial enterprise (Pont et al., 2008). Following this, the role of the school director was defined as a figure who is responsible for the results of the school's functioning. For various reasons, this model of management – "principalship" – turns out to be inadequate for modern society. Researchers, initiators of reforms, experts, and the principals themselves note that managing a school alone is becoming not only ineffective but also impossible. The principalship model is being replaced by another understanding of the essence of school management – the leadership model. In this case, the director not only shares responsibility for the development of the school with other subjects of the educational process but also grants them authority and a certain degree of freedom in decision–making (Mikelsone et al., 2023; Mbangula & Albert, 2022).

Over the past decades, researchers have attempted to classify the existing models of school management. As a result, a description of various types of leadership appeared: pedagogical, transactional, transformational, distributed, etc. The managerial mechanisms underlying this or that type of leadership allowed researchers to describe various models of organizational management. Thus, Bossert et al. (1982) presented an instructional management model for organizing the general educational system. This model was based on teachers' attitudes to the school principal from the standpoint of instructional functions' effectiveness. Thompson and Glase (2018) analyzed the main principles of the situational leadership model of P. Hersey and K. Blanchard and emphasized the necessity of changing the managerial functions of the school directors. Ramasamy and Ramaswamy (2017) criticized the change management model of John Kotter and expanded the area of change management tools from small enterprises to an educational sphere as well. Liden et al. (2008) presented the servant leadership management model with multidimensional assessment tools and configured the perspectives to understand contemporary management models in general education. According to Hallinger et al. (2013), it was established that pedagogical leadership (practices aimed at managing the educational process) is the key factor influencing the effectiveness of the school. The lack of a conceptual framework for pedagogical leadership served as an impetus for the development of the Principal Instructional Management Rating Scale (PIMRS) instrument, which is used for measuring the level of the principal's involvement in the management of the educational process.

Today, researchers noted that the Bossert et al. (1982) model emphasizes the personal characteristics of the principal while the conceptual model of F. Hallinger focuses on management practices, which made it possible to form a management profile of the principal and his team.

In a broad sense, a "model" is an analog (image, description, diagram, plan,

etc.) of any object, process, or phenomenon. As noted by Uddin and Hossain (2015), the dynamics of management typology link with the Taylor idea that a management model is not an invention, but an evolution. It is formed over a long period, it should not be "alien", but only "native", organic, and corresponding to the culture, traditions, and spirit of the people of the country in which this model is instilled (Nebieridze, 2023). The management model is understood as a theoretical and methodological concept that constructs the management system, the area of its influence on the management object, and the mechanisms of adaptation to the external social environment. The purpose of modeling management in general, and modeling general education management in particular, is to achieve the goals set for the educational institution, as well as to form the prospects for the development of educational programs and the growth of social significance. It includes the basic principles of management, strategic vision, target settings and tasks, jointly developed values, the structure and order of interaction of its elements, organizational culture, analytical monitoring, and control over the situation, which in general constitutes the motivational policy of the educational institution.

By generalizing the management models discussed above, we can formulate a typology of the main management models in the general education sector: According to this, the management key tool consists of the following factors:

- pedagogical (directly aimed at managing the educational process) factors, which ensure the management of the learning and teaching process,
- meta-pedagogical (indirect factors influencing the educational process) factors, which consider to management of educational results and their assessment, and ensure a sustainable perspective of school development as well,
- managerial (controlling tools necessary for the conduction of the educational process as a whole) factors, such as the definition of school aims and key tasks, cooperation with state and social institutions, and constructing of interschool relationships, personnel policy, and communication.

Thus, the dynamics of general education management modeling start with the paradigm of single decision–making. As noted in the OECD report (Pont et al., 2008), this modeling concept has methodological ties with the industrial epoch of societies' development. Like an industrial enterprise, the school had to produce an educational product under the director's single control. In this case, the director was responsible for higher education management bodies. An organizational hierarchy was built within the school, at the top of which was the director.

The development of management models led to a change in the video-methodological paradigm. The managerial functions of the school principal begin to include the pedagogical-professional component. The principal ceases to be a mere administrator, but, along with this, carries out teaching and professional guidance functions. This transformation of the management model, although it brought significant changes to the management system of a public institution, nevertheless contributed to the fact that school management became more complicated, and management mechanisms continued to remain only at the administrative

level. Researchers characterize this position of the principal as the position of an educational leader.

Further development of management models led to the methodology of distributed leadership in school management, which is opposed to the concept of centralized leadership (Hallinger, 2013). Attempts are being made to overcome the perception of the school as a hierarchical structure, which is characteristic of other models. The vision of vertical management was replaced by the principles of cooperation and mutual control at the horizontal level. In the case of the idea of distributed leadership, the principle of collegiality of management is introduced, which already implies a variety of management tools and greater opportunities for improving the quality of education than before. Based on the above–mentioned methodological approaches to the organizing general education process, clusters are born, which designate models of managing the educational process in the school we can present through the following model types.

- An operational model that is characterized by the delineation of the functions of the founder and the school director. The founder's functions include developing a single policy and management strategy for all schools. Along with this, the functions of the school's director are limited to the operational or executive level. That is, the director acts as an operator, monitoring signals from above, and controls their implementation by deputies. His area of attention is the implementation of the founder's strategic goals, that is, ensuring the implementation of management functions (Sutomo et al., 2023).
- The contract model is a management model that is characterized by contractual relations between executive authorities and school principals. The functions of the director are mainly limited to the administrative area of management, while the structure of school management is more complex, consisting of various independent structures. These management structures may differ from each other, as they provide for the solution of various problems. The functions of the school director are characterized by the role of an intermediary between government bodies and intra–school structures. This management model is effective if each of the structures has sufficient resources to solve the tasks set. Ensuring the effectiveness of the contract management model is determined by the high executive discipline of persons included in different levels of the multistage management system. The advantage of the contract management model is the flexibility of management schemes, and the ability to quickly restructure when changing the overall management strategy.
- The leadership model assumes the presence of a leader in the school responsible for the organization of management, which is mainly the school principal. This model provides for greater independence of the school principal, who has the right to conduct an independent management strategy. The leadership model in management is characterized by the fact that the director acts according to his internal value guidelines. A school headed by a leading director develops well in a competitive environment, and actively contacts with external structures, seeing them as a resource for development. The risk of such a management system is, first of all, the loss of controllability associated with the lack of a clear

centralized power structure in the field of general education management (Good, 2008; Sutomo et al., 2023).

– The team model is a model of school management through the teamwork of the director and his team. The model consists of organizing intra–school clusters divided into different management functions. The main management function of the director is working with the development strategy and forecast of the school's development. The effectiveness of this model is determined by the assessment of the director's function in implementing innovations. According to this management model, the director promotes cooperation between teachers in developing new teaching methods. As a result, the changes taking place in these schools are qualitatively significant.

At present, various authors (Thompson & Glase, 2018; Pont et al., 2008; Mbangula & Albert, 2022) highlight the following main elements (criteria) for al types of management models:

- management structure;
- functions:
- · goals and values;
- strategies;
- development

Methods

The research methods are comparative analysis, logical and historical approaches, modeling (Hallinger & Chen, 2013). Management models such as the educational holding model, educational consortium, cluster, program–target model, and network model were considered.

Results

By comparing the trends in the development of scientific thought regarding modern management models in the general education sector, we have compiled schematic images of the models presented below.

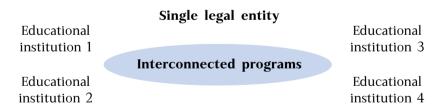


Figure 1. Educational holding model

The educational holding model goes beyond the management of a single educational institution. The idea of an educational holding is to create an interconnected integrated management system, implying the integration of educational institutions to combine resources to achieve greater efficiency. It is system integration, in turn, that allows for the efficient use of material, technical, personnel, and other resources.



Figure 2. Educational consortium model

The educational consortium model is a joint project of several individual educational organizations to strengthen their academic and intellectual base, improve the quality of the educational process, and provide improved support to students (Long et al., 2013).

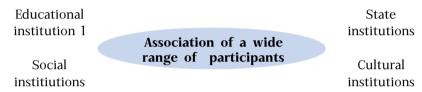


Figure 3. Educational cluster model

Cluster – an association of several homogeneous elements, which can be considered as an independent unit with certain properties; more flexible than networks (Ali & Ansari, 2023; Chikoko, 2007).

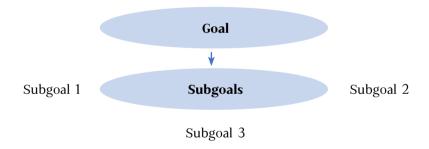


Figure 4. Educational program-target model

The program–target model is a set of methods in which the goals of the plan are linked to resources using programs. They represent the application of a systems approach and are based on the formulation of economic development goals, their division into subgoals of a more detailed nature, and the identification of resources necessary for their coordinated implementation (Muller, 2001; Bizin, 2023).

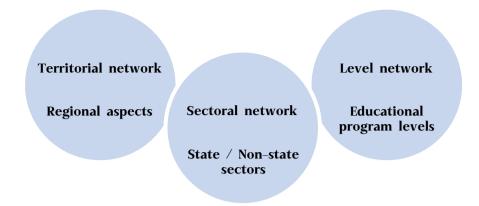


Figure 5. Educational network model

The network model is an integrated system capable of concentrating resources to meet the diverse educational needs of the population and ensure the development of the economy and social sphere. The following general principle of effective functioning of the education management system can be identified: the purpose of the educational network is to coordinate, satisfy, and accelerate the formation of demand for educational services and graduates within the framework of the specified requirements for the quality of education (including state educational standards), institutional restrictions and existing resource provision in territorial, sectoral and level aspects (McMeekin, 2003).

Discussion

The "educational holding" management model represents a form of organization of educational systems as a union of organizationally integrated educational institutions implementing a set of interconnected programs of various levels (Figure 1). The educational holding model has a higher degree of organizational integration and interconnection of the programs being implemented than in the case of the network management model (Bossert et al., 1982).

When creating an educational holding, the integration of educational institutions is carried out within one department, when the reorganized educational institutions are subordinate to a single founder. The application of the educational holding model at the level of general education is possible under the auspices of the ministry responsible for organizing the educational process.

At the same time, the application of the educational holding model requires a deep analysis of the possibility of organizing a holding, and the feasibility and effectiveness of the main educational goals set for the general education system. To apply the educational holding model, it is necessary to take into account the possible organizational, financial, and personnel risks associated with this management model. The idea of creating educational holdings was brought from the business sphere, where a holding association is understood as the integration

of various enterprises to create large–scale production aimed at implementing innovative programs. Accordingly, an educational holding can be considered an association of various educational institutions to create a common educational space. From a methodological point of view, the educational holding model implies the creation of a common database on various issues, such as:

- creation of a common database to exchange experience in conducting innovative educational programs;
 - holding joint educational events;
 - coordinated educational policy for covering personnel needs
- the possibility of large-scale use of resources in the implementation of educational programs;
 - increasing the mobility of teachers and pupils,
 - common electronic library funds.

The educational consortium differs slightly from the educational holding model in the mechanism of managing integrated educational institutions. When implementing the educational holding model, it is necessary to have a single legal entity, and management innovations apply to all educational institutions that make up a single educational holding.

In the practice of managing general education, it is also necessary to distinguish between the concepts of "educational consortium" and "educational cluster", which represent different forms of organizing cooperation in the field of education. Thus, an educational cluster is a wider territorial network uniting educational institutions, enterprises, organizations, and government agencies for joint work on educational goals and development of the region. A cluster can include both educational institutions and enterprises, research centers, cultural institutions, and other organizations working in the educational sphere.

Thus, the main difference lies in the level of coordination and territorial organization of cooperation. An educational consortium is a narrower format of cooperation, focused on cooperation between educational institutions, while an educational cluster includes a wider range of participants and covers various aspects of education in a society. Strategic management is a model for transition from crisis management to various types of corporate management; it links multidirectional goals, and diverse resources within the boundaries of one flow of activity, and instead of coercion and violence, moves to cooperation and understanding (Kamara et al., 2024).

Conclusion

The fact that management models of schools belonging to each of the clusters are not divided into "good" or "bad", since there are no bad or good management models. Because the quality of management of an educational organization is determined by its effectiveness, which, in turn, should be adequate to the situation in which the school is, its resources, etc., as well as the tasks facing the school management. That is, a good manager chooses a change strategy and a management model that will allow, having coordinated the interests of all subjects of the educational process, to achieve the tasks set for the school. If the

obtained results are supplemented by cases of successful management practices of schools in each cluster, then management decisions can be made by users taking into account their experience, which should help novice school managers who are in similar conditions. Cases will help the director and his team determine priorities in the organization's development program.

To build management models, it is necessary to analyze in detail the decision–making process of school principals and the circle of agents with whom they interact. To build a theoretical and practical perspective for creating an optimal management model in the field of general education, the results of the study are presented in the form of the following recommendations and proposals:

- monitor the structure of the internal environment of the school, based on regional features, sectoral differences in state/non-state schools, and the level of educational programs used;
- conduct a comparative analysis of formal and informal forms of management of general education institutions;
- conduct a pilot study on the application of the above-studied management models among schools that differ by the structure of the internal environment;
- describe each model quantitatively and thereby answer the question of which model dominates in the regions under study or in the country as a whole, how these models are related to the reforms being carried out, the legislative framework, and dominant management practices. Analyze each of the constructed types from the socio-economic, management, and educational points of view to understand in detail the nature of certain management decisions and explain why this particular model was implemented.

References

- Ali, S., Ansari, A. N. (2023). Policy Analysis: School Clustering Policy. Institute for Educational Development, https://ecommons.aku.edu/cgi/viewcontent.cgi?article=1346 &context=pakistan ied pdck
- Bizin, S.V. (2023). Application of a Program-Targeted Approach in the Organization and Management of Leisure Activities of Children and Adolescents in the Region. Journal of Economics, Entrepreneurship and Law, 13(8), 3117–3136. 10.18334/epp.13.8.118611
- 3. Bossert, S., Dawyer, D., Rowan, B., Lee, G. (1982). The Instructional Management Role of the Principal. Educational Administration Quarterly, 18 (3), 34–64.
- Chikoko, V. (2007). The School Cluster System as an Innovation: Perceptions of Zimbabwean Teachers and School Heads. Africa Education Review, 4(1), 42–57. https://doi.org/10.1080/18146620701412142
- 5. Good, T. L. (2008). In the Midst of Comprehensive School Reform: Principals' Perspectives. Teachers College Record: The Voice of Scholarship in Education, 110(11), 2341–2360. http://dx.doi.org/10.1177/016146810811001104.
- 6. Hallinger, P. Chen, Chia-Wen. (2013). Assessing the Measurement Properties of the Principal Instructional Management Rating Scale A Meta-Analysis of Reliability Studies. Educational Administration Quarterly, 49, 272–309. 10.1177/0013161X12468149
- 7. Hallinger, P., Wang, W. C., Chen, C. W. (2013). Assessing the Measurement Properties of the Principal Instructional Management Rating Scale. A Meta–Analysis of Reliability Studies. Educational Administration Quarterly, 49(2), 272 –309.
- 8. Kamara, Y., Rahida, F. G., Wusu K. W., Koroma, Ch. (2024). Application of Strategic

- Management in Educational Organizations, Global Scientific and Academic Research Journal of Education and literature, 2(7), 01–11.
- 9. Liden, R. C., Wayne, S. J., Zhao, H., Henderson, D. (2008). Servant Leadership: Development of a Multidimensional Measure and Multi-Level Assessment. The Leadership Quarterly, 19, 161–177. http://dx.doi.org/10.1016/j.leaqua.2008.01.006
- 10. Long, J., White, P., Moran, W. (2013). The Teaching and Learning Consortium: a Field Based Model for Preservice Teacher Education. https://www.researchgate.net/ publication/228805614_The_Teaching_and_Learning_Consortium_a_field_based_model_ for preservice teacher education
- 11. Mbangula, D.K., Albert, I. (2022). Effectiveness of Principals' Roles on School Performance: Perspective of School Principal–Ship. Research Journal of Education, 81, 1–10. http://dx.doi.org/10.32861/rje.81.1.10
- McMeekin, R. (2003). Networks of Schools. Education Policy Analysis Archives, 11(16), 1–22. 10.14507/epaa.v11n16.2003. https://www.researchgate.net/publication/49610143_ Networks of schools
- 13. Miķelsone, I., Grava, J., Lāsma Latsone, L. (2023). A School Principal as a Change Leader in Eduvation. Education. Innovation. Diversity,2(7), 53–63. http://dx.doi.org/10.17770/eid2023.2.7352
- 14. Muller, D. (2001). Target Setting in School Education. A Discussion Paper, https://wcedonline.westerncape.gov.za/documents/PlanningStrat/ArticlesforLeaders/PlanEducation/EduTargetSetting-in-SchoolEducation.pdf
- 15. Nebieridze, K. (2023). Innovative School Leadership Aspects. Journal of Legal Studies, 31(45), 17–37. http://dx.doi.org/10.2478/jles-2023-0002.
- 16. Pont, N., Nusche, D., Moorman, H. (2008). Improving School Leadership. Policy and Practice. Organisation for Economic Co–operation and Development (OESD), 1, https://www.pall.asn.au/wp-content/uploads/2015/09/2-Improving-School-Leadership_OECD-Report 2008.pdf
- Ramasamy, R., Ramaswamy, K. (2017). A Critical Analysis of John P. Kotter's Change Management Framework. Asian Journal of Research in Business Economics and Management, 7, 181–203. 10.5958/2249–7307.2017.00106.2
- 18. Sutomo, S., Masduki A. M., Heni, R. (2023). Strengthening Professionalism of School Principals Through Integrity, Communication Skills, and Teamwork.AL-ISHLAH: Jurnal Pendidikan,15(4), 4650–4661. http://dx.doi.org/10.35445/alishlah.v15i4.4428.
- 19. Thompson, G., Glase, L. (2018). Situational Leadership Theory: a Test From a Leader-Follower Congruence Approach. Leadership & Organization Development Journal, 39, 574–591. 10.1108/LODJ-01-2018-0050
- Uddin, N., Hossain, F.. (2015). Evolution of Modern Management through Taylorism: An Adjustment of Scientific Management Comprising Behavioral Science. Procedia Computer Science, 62, 578–584. 10.1016/j.procs.2015.08.537

The article has been submitted for publication: 08.01.2025 <ոդվածը ներկայացվել է տպագրության. 08.01.2025

> The article is sent for review: 19.02.2025 <ոդվածն ուղարկվել է գրախոսության. 19.02.2025

> The article is accepted for publication: 31.03.2025 <กฤปุ่นอัน ทุนกาเนปุโก t เกษุเมลุกกบุอานน์. 31.03.2025