Internal audit of school activities as a tool to manage the quality of education

Abstract
The article is devoted to the topical issue of education management as an internal audit of the school and the technology of its implementation. Since the concept of “audit” appeared in the field of education in Ukraine recently, and tools to assess the educational activities of an educational institution is not enough, this issue requires careful study. The aim of the work is to theoretically justify the importance and organizational principles of internal audit as a tool for managing the quality of education, as well as to propose the use of factor-criteria model for such an assessment. In accordance with the goal, the following research methods were used: a) theoretical: analysis and systematization of philosophical, pedagogical, psychological and educational management literature to define organizational and pedagogical principles of quality of education and educational activities and conceptual and categorical apparatus of the study; modeling to develop a factor-criteria model as a technology for evaluating educational activities of general secondary education; content-analysis of legislative, regulatory and methodological documentation to clarify the parameters, factors, and criteria for evaluating educational activities; b) empirical: observations, questionnaires, interviews, the method of expert evaluations to assess the educational activities of institutions of general secondary education.

The paper analyzes the scientific and pedagogical literature on the problem under study, which found that the problem of quality education for many centuries has been the subject of scientific discussions and searches of scientists: philosophers, economists, sociologists, educators. The study emphasizes that for a successful educational institution capable of providing a high level of quality education, it is essential to use tools and methods of quality assessment with clearly defined criteria, conducting an annual internal audit of its activities, which is seen as a process of data collection.

Value/originality. The necessity and importance of internal audit of school activities were determined; internal audit tools using qualimetric approach to educational activities in institutions of general secondary education were developed; understanding of the main evaluation parameters (parameters of the educational environment, parameters of assessment of teaching activities, parameters of assessment of student activities, parameters of assessment of management processes) was enhanced. The technology of tools for quantitative measurement of the quality of education in institutions of general secondary education has been further developed.

Practical implementation. Managers of institutions of general secondary education will be able to understand the importance and feasibility of internal assessment of the quality of education and use the factor-criteria model of the annual internal audit to ensure the continuous development of institutions of general secondary education and improve the level of educational services.

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1 Introduction
The study of the problem of quality management of education and educational activities is one of the most pressing problems of modern theory of education management. Its relevance is due to the needs of practice, primarily the need to ensure the competitiveness of graduates of institutions of general secondary education in the labor market. One of the influential factors in the search for competitive advantage is the quality of educational services provided at school. That is why ensuring the quality of education in institutions of general secondary education is a priority task at the present stage.
The system of educational activities of an educational institution is dynamic, so only continuous monitoring can ensure its improvement. Therefore, internal audit will be an effective tool in improving management.

The problem of the quality of education and educational activities of institutions of general secondary education, quality management of educational services in educational institutions is covered in the works of researchers in Ukraine and abroad and is presented in various aspects: philosophy of education (V. Andrushchenko, V. Kremen, etc.), professional and pedagogical research (V. Begey, E. Bereznyak, V. Bondar, G. Yelnikova, V. Zvereva, Y. Konarzhevsky, T. Lukina, M. Potashnyk, etc.), psychological and pedagogical research (G. Ball, T. Golubeva, N. Miklyaeva, L. Pozdynak, P. Tretyakov, L. Falyushina, R. Chumichova, etc.). Scientific achievements of foreign scientists indicate the relevance and versatility of the problem of quality management of educational institutions based on the activities of the teaching staff as a single team (J. Maxwell, E. Mayo, J. Trayson, etc.). These and other scholars emphasize that the issue of improving the quality of education and the quality of educational activities has become central to the reform of education in general and the search for new methods of managing educational institutions.

However, despite the diversity of approaches to the quality of educational activities of institutions of general secondary education, outside the sphere of scientific interest of researchers remains an assessment of educational activities, that is, internal audit in general and the technology tools for quantitative measurement of such activities as a tool to improve management. At the same time, the theories, which are the basis for solving the problem of evaluating the educational activity of institutions of general secondary education, do not provide a holistic view of the system of such evaluation in interaction with the management mechanisms that have not yet been developed in educational practice.

2 Managing the quality of school education

The problem of educational quality has been the subject of scholarly debate and research for centuries.

Some researchers argue that the quality of education can be interpreted as the level of satisfaction of participants in the educational process provided by educational institutions, or the degree of achievement of educational goals and objectives. The concept of "quality of education" includes the quality of training, the quality of financial and economic conditions, the quality of technology and the quality of educational management, that is, everything that affects the quality of the "product" of school, and the "product" of school is a graduate with an education of better or worse quality.

Thus, for all educational institutions the common indicators of the quality of education are:
- the level of social, mental, biological development of the individual;
- the level of students’ education;
- the level of formation of general academic skills and abilities;
- the level of students' upbringing; the level of life security, social adaptation (Marmaza, 2006).

Most scholars and practitioners in the field of education believe that the main problem of education reform is to improve its quality and, therefore, to understand what quality of education is, what determines it and how to improve the management of educational institutions that will provide quality educational services, what difficulties are encountered in measuring the quality of education.

Therefore, for the successful functioning of an educational institution capable of providing a high level of quality education, it is essential to use quality assessment tools and methods with clearly defined criteria, conducting an annual evaluation of its activities.

Section V "Quality assurance of education" of the Law of Ukraine "On Education" (05.09.2017) regulates the creation of quality assurance system of education at all levels in order to ensure the quality of education, strengthen public confidence in the system and educational institutions, educational authorities, continuous and consistent improvement of the quality of education, assist educational institutions and other actors in educational activities to improve the quality of education.

The concept of "audit" first appeared in a legislative document in the field of education. The State Educational Quality Service of Ukraine conducts institutional audits (external monitoring) in accordance with its criteria, i.e., assessment of the activities of institutions of general secondary education.

In accordance with paragraphs 1, 2 of Article 45 of the Law of Ukraine "On Education" institutional audit is a comprehensive external audit and evaluation of educational and management processes of educational institutions (except higher education institutions), which ensure its effective functioning and sustainable development (Law of Ukraine "On Education", 2017). The purpose of the institutional audit is to assess the quality of educational activities of an educational institution and to make recommendations on:
- improving the quality of educational activities of educational institutions and improving the internal quality assurance system of education;
- bringing educational and management processes in line with the requirements of the law, in particular, licensing conditions (Law of Ukraine "On Education", 2017).

However, institutional audits are usually conducted every ten years, and institutions of general secondary
education need to review their activities annually to improve the quality of the educational process.

It is the annual internal monitoring of the quality of education (internal audit, self-assessment), provided by paragraph 2 of Article 48 of the Law of Ukraine "On Education" and approved in the Regulations on internal quality control system of educational institutions can help determine the actual state of the various areas of work for further adjustment of the process and improve the quality of educational services. Thus, both external and internal audits can be conducted to ensure the quality of education in the educational institution.

The term "audit" is more commonly used in economics and is intended primarily to check accounting documents of financial and economic activities, but has recently been widely used in education.

According to E. Ahrens and J. K. Lobbeck, an audit is a process in which a competent, independent employee accumulates and evaluates evidence of quantifiable information relating to a particular business activity in order to determine and express an opinion on the extent to which that information meets established criteria (Ahrens, Lobbeck, 2001).

According to the author, if talking about the process of continuous improvement of the internal system of quality assurance, the concepts of internal monitoring, internal audit and self-evaluation become identical, identical, i.e. internal evaluation of school activities based on a thorough study of educational and managerial processes.

3 Organizational principles of internal audit

Studying the experience of European countries such as Austria, Great Britain, Norway, Denmark, Belgium, Sweden, Czech Republic, Lithuania, where the system of quality assessment of education has been successfully functioning for many years with its own periodicity and features, it is noted that in all countries the goal of education quality assessment is the same – to become better, to form and maintain a culture of quality education, based on transparency, innovation and partnership of participants in the educational process.

Self-assessment or internal audit in the above-mentioned countries, as well as in Ukraine, is conducted annually. A common feature for all is the lack of specific mechanisms for annual internal evaluation of the quality of education. Educational institutions themselves determine the goals, criteria, and methods of internal audits. However, if necessary, schools in Lithuania, Belgium and some other countries can ask for help or advice from educational experts.

When it comes to schools in Ukraine, an educational institution can also use its own self-assessment mechanism, taking into account the specifics of the institution, or an assessment mechanism used during an institutional audit. The institutional audit approach divides the components of the internal system into four areas: "1. Educational environment", "2. system of assessment of students' educational activity", "3. system of pedagogical activity", "4. system of managerial activity." They are characterized by appropriate requirements/rules, the implementation of which helps to ensure the quality of education and educational activities in the educational institution. The Pedagogical Council of the educational institution determines the mechanism of self-assessment and its periodicity.

For a qualitative and objective process of internal audit of educational activities of educational institutions, they must use (develop):
- criteria (ground for evaluation);
- indicators (indicators that reflect the state of the objects of observation, their qualitative or quantitative characteristics);
- methods of collecting relevant information for analysis and evaluation.

Various methods of information collection can be used for analysis and evaluation: questionnaires or individual interviews with participants in the educational process, focus group research, observations in the classroom and educational environment, internal monitoring, etc.

The results of the self-assessment are discussed with participants in the educational process. Experts in the field of school education and educational management may be involved in the discussion (e.g., to improve the material and technical base of the school, if necessary, and to allocate additional funds for teacher training). The publication of internal audit results demonstrates the school's transparency and openness to information. Using the results, the school administration can develop or adjust the institution's development strategy and annual work plan.

4 Factor-criteria model as an internal audit technology

The study surveyed principals (18 people) and teachers of general secondary education institutions (72 people) to ensure the quality of education and conduct internal audits of schools.

The survey revealed that the heads of educational institutions have difficulties in the process of internal audit of educational activities, namely: lack of a sample of internal audit; lack of sufficient knowledge and practical skills in developing an assessment model, conducting self-assessment process, determining the algorithm of self-assessment of the internal system of education quality assurance; educational work among teaching staff; processing of results; large number of criteria and indicators; collection of information; large amount of descriptive information according to the criteria; lack of time. Teachers are not fully familiar with the structure of
the internal quality assurance system of education; some institutions have taken as a basis the developed samples of documents on internal quality assurance systems of other educational institutions, without taking into account the features and conditions of their institution; there is a low level of involvement of stakeholders, primarily student government, students, parents in the evaluation of educational activities and the formation of an internal system to ensure the quality of education. 57% of the surveyed heads of general secondary education institutions did not conduct an internal audit of educational activities.

To address some of these difficulties, we present a variant of using the factor-criteria model as a technology for conducting internal audits of school activities.

L. Martynets notes that the qualimetric approach can be used to evaluate any activity (Martynets, 2017). After all, any qualitative phenomenon can be represented as a set of certain properties. That is, this approach cannot be implemented without decomposing complex, multicomponent phenomena on the basis of their components. In general, the qualimetric approach involves a quantitative description of the quality of objects or processes (quantitative assessment of quality) (Martynets, 2017).

According to researcher L. Martynets, the qualimetric model is most often used as a factor-criterion, which involves dividing an object into structural elements. This approach allows us to consider the object as a system, evaluating it not as a whole, but as a set of interrelated components (Martynets, 2017).

Currently, qualimetric principles of assessing the quality of education and educational activities of institutions of general secondary education is one of the least developed issues of theoretical and methodological support of education quality assessment.

The development of factor-criteria evaluation of educational activities of institutions of general secondary education can be carried out according to the algorithm defined in the work of G. Yelnikova and include the following steps (Yelnikova, 2008):

1) the main parameters are highlighted;
2) the set of factors necessary to achieve the specified parameters is determined;
3) criteria are defined that characterize the requirements for each factor;
4) the weight of parameters, factors, criteria is determined by the method of expert evaluation;
5) the model is made out in the form of the table.

Four parameters for evaluating the educational activities of an institution of general secondary education are considered: the educational environment; the system of evaluation of students’ educational activities; the system of pedagogical activities; the system of management activities, as well as relevant factors and criteria.

The parameter “educational environment” is disclosed by the following factors: comfortable and safe conditions; violence-free environment; developing and motivating environment; inclusive educational space. The parameter “student assessment system” has the following factors: open, transparent and clear assessment system; assessment monitoring; responsibility for learning outcomes; academic integrity of students. The parameter “pedagogical activity of the teaching staff of the educational institution” is determined by the following factors: planning the work of teachers; professional development of teachers; cooperation of teachers; academic integrity of teachers. The parameter “educational institution management processes” has the following factors: school strategy and planning; trust and transparency, ethics and academic integrity; personnel policy; anthropocentric philosophy. These factors are provided by the corresponding criteria.

5 Conclusions

The study emphasizes that for the successful functioning of an educational institution capable of providing a high level of quality education, it is essential to use tools and methods of quality assessment with clearly defined criteria, conducting an annual assessment of its activities.

An important result of the study is the developed research tool – a factor-criteria (qualimetric) model that determines the effectiveness of evaluation of educational activities of general secondary education institutions. This is a qualimetric model for assessing the parameters of educational activity. Based on the analysis of the regulatory framework, scientific and pedagogical sources and the method of expert evaluation, the parameters, factors and criteria for assessing educational activities are determined.

The parameters of assessment of educational activities are defined: the educational environment, the system of assessment of students, the pedagogical activities of pedagogical staff of educational institutions, the processes of management of educational institutions. These factors are provided by the relevant criteria, which are selected on the basis of the analysis of the regulatory and legal framework, scientific and pedagogical sources and the method of expert evaluation. Effectiveness is an indicator of high, sufficient, average and low levels of educational activity of general secondary education.

The advantage of the developed factor-criteria models is the holistic view of the evaluation process as a system of interrelated components.

Through regular internal audits, the school is able to:

- improve the quality of educational services and provide confidence in learning outcomes;
receive constant feedback from participants in the educational process on the quality of education, to respond to risks in a timely manner;
– continually improve the educational environment, student assessment system, educational activities, and management processes;
– ensure that the school is transparent and ready for change in the interests of the participants in the educational process.

Internal audit is a lever to improve the effectiveness and efficiency of educational activities of institutions of general secondary education. The reliability and validity of expert opinions largely depend on the effectiveness of assessment technology. The structure of the audit should take into account systemic and operational approaches, contain a technological cycle of procedures and be aimed at making management decisions to transfer schools from the mode of functioning to the mode of development or obtain a new quality state of educational activities of institutions of general secondary education.

The study does not cover all aspects of the problem of evaluation of educational activities in general secondary education institutions. The subject of further research could be: training of managers and teachers to prepare them for the process of evaluation of educational activities in an educational institution; comparative analysis of foreign and domestic practices of creating an internal system of quality assurance in education; comparative analysis of the results of the study at the final stage.

References