MANAGING PROFESSIONAL (VOCATIONAL) EDUCATION SCHOOLS AS PROJECT-ORIENTED ORGANIZATIONS

Zoya Ryabova

Dr. h. of Pedagogy, Professor g.n.s. Laboratory of Foreign Systems of Vocational Education and Training of the Institute of vocational education and training of the National academy of educational sciences of Ukraine

Abstract.

Relevance determined by the need to reorient the management system of vocational educational institutions on a project basis in order to ensure the quality of educational services, sustainable development of educational institutions and its social transformation by forming a project mental model of subjectsof vocational education.

Purpose: to describe the essence of the management of the vocational educational institution as a project-oriented organization and to reveal the characteristics of the process of using knowledge management technology for the staff professional development.

Methods: to determine and summarize the results of scientific research and formulate the essence of the main study definitions of the analysis theoretical methods, synthesis, classification and systematization are used.

Results: the essence of management of vocational educational institution as a project-oriented organization is substantiated. The content of management of such an institution is determined through the description of the set of management functions from the standpoint of project management. The organization of the process of providing educational services through the implementation of short– and long-term projects is described, it will contribute to the formation of the project mental model of its participants. It is revealed that the management processes of a modern vocational educational institution are based on the concept of human capital development as the main resource that provides it with the necessary competitive advantages in the markets of educational services and labor and, in general, ensures the success of its life. It was found that the usage of knowledge management technology, which is based on the essence of the definition of "knowledge of the organization", is effective for the development of educational staff.

Conclusions: it is proved that the management of vocational educational institution as a project-oriented organization will meet the needs of the state economy in skilled and competitive workers, which will contribute to the development of human capital.

Keywords: management of educational institution, project-oriented organization, project management, project mental model, knowledge management.

Introduction. Core role in the implementation of the key task of the educational system play the vocational educational institutions in relation to the growth of personality through the formation of the need for lifelong learning. In this regard, there is a question of ensuring the quality of educational services and the formation of consumers' attitude to education as a social value. The relevance of this is enhanced by the fact that the conditions in which the activities of these institutions are market. A characteristic feature of which is that they are based on the regular exchange transactions between producers of goods (services) and consumers. And, in the case of free access to the market, both producers and consumers, the exchange takes place in a competitive environment. Given the above, we
emphasize that the educational services market and
the labor market, which employs institutions of
vocational educational institution, are developing
against competition. In order to have a leading
position in these markets, institutions need to focus,
take into account and respond in a timely manner to
constant changes in both internal and external
environment and ensure the restructuring strategy for
further development of the institution.

**Sources of research.** The issues of management
of an educational institution were considered in detail
in the scientific investigations of such scientists as
T. Borova, L. Danylenko, G. Yelnikova, G. Kravchenko, O. Marmaza, G. Poliakova,
O. Pochueva, V. Oliynyk, Z. Riabova, T. Sorochan,
G. Tymoshko, T. Khlebnikova, E. Khrykov and
others. The conceptual aspects of project management
and the usage of its technology in the management
of educational institutions were considered in the
studies of such authors as S. Bushuiev, M. Gryneva,
L. Nozdrina, E. Matvyshyn, T. Makhnia, V. Morozov, L. Olihiria, L. Ponomarenko, O. Polotay,
F. Freich, V. Yashchuk. The technology of knowledge
management is described in the works of such authors
as L. Batenko, A. Gaponenko, O. Grebeshkova,
P. Drucker, O. Kondur, A. Nalyvaiko, G. Ostrovskaia,
O. Pankrukhin and others.

In the works of scientists, the essential
components of the management of an educational
institution are thoroughly described and the
mechanisms of effective management of the system
of providing educational services are revealed. At the
same time, in our opinion, today it is relevant and
absolutely necessary to build the educational
institution's activities on a project basis in general
and vocational in particular. This involves the process
organization of providing educational services
through the implementation of short– and long-term
projects, which will contribute to the formation of
the project mental model of its participants. This
determines the formulation of the article purpose,
which is to describe the essence of the vocational
educational institution as a project-oriented
organization and to disclose the characteristics of
the process of the usage knowledge management
technology for the professional staff development.

**Methods.** The research used theoretical methods
of analysis, synthesis, classification and
systematization, which were used to determine the
essence of the studied phenomena and generalize the
results of scientific research and formulate the
essence of the main study definitions.

**Results and discussion.** It was determined that the
management of vocational educational
institution comply with the general theory of
management during the research (Yelnikova, 1999, p.
205). Based on the work of scientists and analyzing
the governing documents, it can be noted that the
vocational educational institution, in essence, is a
socio-pedagogical system (Yelnikova, Borova and
Riabova, 2017). Management of such a system comply
with the general theory of management in general and
social systems in particular. In general, the social
system is understood as a holistic unity, the main
element of which is people, their interactions,
relationships and connections (Dictionary, 2005,
Wikipedia). These connections, interactions and
relationships are stable and reproduce in the historical
process, based on the joint activities of people, passing
through the generation. Any social system has a
structure (from the Latin – structura – structure,
location, order), which means the way of the
subsystmes interconnection, components, elements of
the system that interact in it and ensure its integrity
(Gaponenko, 2008). A necessary property of any social
system is management. This is due to the systemic
nature of the social system, the social nature of work,
the need for people to communicate in the process of
work and life, the exchange of their material and
spiritual activity's products. There is the definition
like "social management", which means the impact on
the social system in order to organize it, preserve the
quality, specificity, improvement and development.
Social management differs from management in
technical and biological systems in that the subject of
management influences the object by defining the goals
of activity, which are decomposed into less global and
provide for their acceptance by the object of
management (Yelnikova, 1999).

In terms of content, the management system of
the vocational educational institution is a process of
objectively informing the subjects and objects of
management about the state of functioning of all life
systems of the institution. The main task of this
information is that in case of deviation of the vital
signs of the institution from the planned to take the
necessary corrective measures to correct them
(Riabova, 2013). This is what ensures the openness
and transparency of the management system and
facilitates the adoption of the necessary decision to
predict the further development of the educational
institution. Thus, the management system of the
vocational educational institution in the capacity of
the socio-pedagogical system is aimed at maintaining
its current state and at the same time to transfer it to
the qualitatively new state – a state of constant
development that ensures the institution as an open
system. Thus, management ensures the roll-out aimed
at maintaining and restoring the lost balance, which
occurred due to a certain impact on the system (both
externally and internally). Basically, the roll-out of these processes occurs through the adoption of certain management decisions.

The effectiveness of management decisions depends entirely on the effectiveness of the tracking mechanism, accounting and management of current changes, independent determination of customer satisfaction and the formation of requests. Figure 1 shows the essential components of the management of socio-pedagogical systems in general and the vocational educational institution in particular (Yelnikova, 1999). We emphasize that in general and in the management of vocational educational institution the core position in the management of socio-pedagogical systems is to obtain information about the internal state of the managed system and the nature of the external influences; making the necessary and timely management.

In analyzing the Figure 1, we note that the management of vocational educational institution as a socio-pedagogical system is a process that involves a certain influence of the subject of management on the object of management, based on this impact is the sequence of certain actions (functions). That is, the management process is characterized by the corresponding functions (from the Latin – functio – acting), which means the relationship of two (groups) of objects, where changes in one are accompanied by changes in the other.

We support the position that management is cyclical, so management functions are combined into a management cycle (Borova et al. 2019). The management cycle, according to the dictionary, is a complete set of periodic, successive stages (components) of the management process. The components of the process are: obtaining information by the control subsystem (subject of management): its processing in order to make a decision; transfer of the decision for implementation; implementation control (Dictionary, 2005).

The management cycle in the vocational educational institution we will understand as a set of interacting, successively changing each other, subordinate to one goal management functions (analysis, planning, organization, control, regulation), the complex implementation of which ensures successful management.

The management cycle begins with the analysis of the received information on a condition of activity of educational institution. We support G. Yelnikova's point of view that this sequence is a management process' stage. This is due to the fact that they are based on the computer science, cybernetics, tectology, including decision theory and feedback theory (Yelnikova, 1999; 2017). The implementation of these stages of the management process will certainly ensure the effectiveness of the interaction of the social system elements and will contribute to the programmed result of its activities.

It is the fact that the vocational educational institution is an open, dynamic socio-pedagogical system and provides for the free exchange of information of its management structure (subject of management) with the internal and external environment, for the current adjustment of its functioning and development. The degree of openness depends on mutual trust and the degree of psychological protection of the management subject and the object. Reducing the degree of psychological protection increases mutual trust and the degree of openness, which helps to reconcile the purposes of the interacting groups and cooperate to achieve the planned purpose (Yelnikova, Borova and Riabova, 2017).

Fig. 1. The essential components of the management of the vocational educational institution
We have to consider the features of the management of vocational educational institution as a project-oriented organization. Note that the purpose of vocational educational institution is the formation and development of professional personal competencies necessary for professional activity in a particular profession in the field, ensuring its competitiveness in the labor market and mobility and career prospects throughout life. According to the Law of Ukraine "On Education", an educational institution is a legal entity of public or private law, the main activity of which is educational activity. In accordance with Article 17 of the Law of Ukraine "On Vocational Education", avocational educational institution – is an educational institution that meets the needs of citizens in vocational education, mastery of working professions, specialties, qualification in accordance with their interests, abilities, health (Law of Ukraine). The normative documents define more than 17 types of vocational educational institutions. The main task of vocational educational institution is the training, retraining and advanced training of persons at the expense of state and / or local budgets, as well as agreements with enterprises, institutions, organizations, individuals and / or legal entities. In addition, it should be noted that the procedure, conditions, forms and features of vocational education are determined by a special law. The subjects of vocational educational institution are applicants for education (pupils, students, listeners) of the vocational educational institution. It is noted that the management of the vocational educational institution is carried out by its head, his appointment, powers are also defined at the legislative level. The main task of the head is to provide conditions for the functioning and development of the institution, to promote the provision of citizens of Ukraine, including persons with special educational needs, as well as foreigners and stateless persons staying in Ukraine legally, the right to obtain vocational education in accordance with their vocations, interests and abilities, retraining and advanced training. In connection with the analysis, there is a task to describe the peculiarities of the functioning of vocational education in the context of globalization challenges and reform processes in education (Laws of Ukraine).

Given the challenges of today, we note that to ensure a positive reputation of the institution in the market of educational services, it is necessary to introduce project management technology in the management system of the institution. An analysis of scientific sources shows that today's challenges require the education system created for the intellectual development of human capital, which is used by the highest factor of competitiveness. We emphasize that for educational institutions, including vocational educational institutions, the usage of project management technology is the key to successful positioning in the market of educational services and the labor market. Summarizing the results of the analysis of scientific sources, we understand a project-oriented organization as an organization in which its main activity is built as a project. That is, the leading characteristic of the project-oriented organization is a clear definition of the purpose of activity and orientation on result in the certain period of time in the conditions of limited resource maintenance. A comparison of traditional and project-oriented organization is given in Table 1.

Based on the above, we can provide the following interpretation: the vocational educational institution as a project-oriented organization is an organization whose educational activities are based on the implementation of both short-term and long-term projects, the implementation of which aims to ensure the quality of educational services, constant development of educational institutions and its social transformation.

The main tasks of the management of vocational educational institution as a project-oriented organization are:

1. The predominant focus on the accumulation of the team intellectual potential and the application of knowledge management in the management of the institution.

Table 1
Comparative characteristics of traditional organization and project-oriented organization

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Traditional organization</th>
<th>Project-oriented organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose</td>
<td>System-forming, SMART-analysis is possible</td>
<td>System-forming, SMART-analysis is mandatory</td>
</tr>
<tr>
<td>Activity</td>
<td>Procedural</td>
<td>Projected</td>
</tr>
<tr>
<td>Result</td>
<td>Planned, Intended</td>
<td>Planned, Unique</td>
</tr>
</tbody>
</table>
2. Paying special attention to such positions in management as: information and personnel, which allows you to build effective relationships between organizations.

3. The need to form a worker with a new mental model, the most important characteristics of which are determined by the level of the personal growth and a wide range of common qualities and needs of participants in educational and industrial interaction.

4. Orientation of the strategic purpose of the vocational educational institution not only to improve the professional staff potential, but also to form the ability of employees to innovate, creation, efficiency drive. That is, creating conditions for innovative development of the institution.

5. Information nature of the activity of the vocational educational institution as a project-oriented organization, for which information is both a resource and a commodity. Formation of informational culture of educational institution.

Consider the technology that was mentioned above. Namely: knowledge management technology in the management of the vocational educational institution as a project-oriented organization (Oliynyk, 2009; Kondur, 2018; Ostrovskaja, 2019).

The human resources is the leading factor in ensuring the success of any organization in general and the vocational educational institution in particular (Gaponenko and Pankrukhin, 2008; Wikipedia). We emphasize that in economic theory, the concept of "human resources" is used as a factor in the economic development of the organization and it means employees (specialists) of this organization with the level of their professional competence and ability to improve it. Thus, the development of the organization has a linear dependence on the development of professional competence of its employees. This involves the creation of a team of qualified and competent professionals, which can be done with the help of knowledge management technology – (from the English – knowledge management). Knowledge management is an integral part of the management of any organization, including educational institutions. Knowledge management technology is a system of actions related to the formation of new knowledge, their storage, usage and dissemination in the organization (Drucker, 2014; National Standard of Ukraine; Nalyvaiko ed., 2014). It is a process that ensures the preservation, distribution and usage of the intellectual capital (intellectual assets) of the organization, which is necessary to ensure its success, efficiency and productivity. The main goal of knowledge management is to create competitive advantages of the organization, which is associated with the development of intellectual potential of the organization and the introduction of innovations (Kondur, 2018; Ostrovskaja, 2019). This must include staff training. That is, the formation of a professional team of specialists of an educational institution consists in their constant training and improvement of professional competence.

We emphasize that the management processes of a modern vocational educational institution are based on the concept of human capital development as the main resource that provides it with the necessary competitive advantages in the markets of educational services and labor and ensures the success of its life in general. Consider the concept of "knowledge of the organization." The National Standard of Ukraine states that it means the "knowledge specific to the organization; they are usually acquired through experience". Basically, it's an information that is used and exchanged to achieve the goals of the organization. The basis of the knowledge of the organization is internal resources (intellectual property; knowledge gained through experience; lessons learned from failed and successful projects; acquisition and sharing of undocumented knowledge and experience; results of improvements in processes, products and services); external resources (standards; scientific community; conferences; obtaining knowledge from customers or external suppliers).

The key position of the technology is to stimulate the professional development of educational institution's employees through their continuous training to update the skills of organizing interaction with students and protect their intellectual achievements. A necessary condition for the effective usage of knowledge management is a creative approach and the usage of emotional and value experience of participants in the educational process. In order to implement this, a creative approach is used and a climate is created that will promote an open positive exchange of professional experiences and promotes learning from their own experience and the experience of colleagues. And the experience can be both positive and negative. The content of the knowledge of the organization management technology is clearly shown in Figure 2.

Ensuring the competitiveness of vocational educational institution is facilitated by strategies for the effective formation and usage of knowledge, which aim to: increase the efficiency of the organization's resources, implement innovations and ensure the quality of products and services. In addition, one of the tasks of using any strategy is to reduce the risks of unused intellectual assets. This ensures the development of human capital of the vocational educational institution and contributes to obtaining a favorable position in the markets of labor
and educational services. Figure 3 clearly shows the essence of the organizational culture of the vocational educational institution through the development of professional competence of the collective (Otych et al., 2018).

So it can be stated that the management of the development of vocational educational institution as a project-oriented organization will be successful in determining the state of the environment: external (PEST-analysis) and internal (SWOT-analysis) environment of the educational institution; study of the demand and educational needs of consumers of services provided by the institution; taking into account the requests of stakeholders regarding the activities of the educational institution; analysis of the feasibility of existing and planning of future services (development and formation of new educational programs, introduction of updated disciplines, planning of special courses, electives that form a new range of educational services, etc.); training planning and support for the development of professional competence of teachers to ensure the quality of educational services provided by the institution; tracking the state of competitiveness of the institution in the market, etc. (Lukyanova, 2009; Riabova et al., 2017). To ensure the activity of the vocational educational institution as a project-oriented organization, it is necessary to carry out purposeful management. Let's explain the specified process. There are four generally accepted stages of project management, namely: preparation for the project activity of the institution vocational educational institution; planning of project activity of the vocational educational institution; implementation of project activity of the vocational educational institution; completion of project activity of the vocational educational institution.

The determining factors in building the activities of the institution as a project-oriented organization are defined: terms, resources and quality standards (Fig. 4). In addition, the leading factor is the usage of knowledge management technology.

Knowledge management technology of the vocational educational institution

Fig. 2. The structure of knowledge management technology of vocational educational institution

Fig. 3. Hierarchy of organizational culture of the vocational educational institution

Fig. 4. Determinants of building the activities of the vocational educational institution as a project-oriented organization

Social transformation of vocational educational institution is a global process of certain transformations, as a result of which quantitative and qualitative parameters of the institution change to form a project mental model of participants of the educational process that ensures intellectual development of human capital.
Management of a vocational educational institution as a project-oriented organization involves the implementation of project activities, which have the following features: the presence of a goal or purpose that can be expressed in words or written down; stages – projects can be long-term, but cannot be infinite; resources – financial, labor, material or information. The usage of project management technology gives the uniqueness to management. It becomes a project activity. Its difference from the traditional, which is process-oriented, is that: in the traditional you can study the implementation of operations once and then repeat them each time, and in activities organized as a project management actions will be different each time. Such activities are innovative. The usage of project management technology requires constant updating of the content of activities, the usage of additional knowledge, skills and tools to meet or exceed the needs and desires of stakeholders (customers) of the project (Newton, 2008).

The most important factor in the development of an educational institution as a project-oriented organization is the timely receipt of information about development prospects. The sources of development of an educational institution are: the creation of an educational program, which includes a description of the educational services complex provided by the vocational educational institution; knowledge of the features of the market of educational services and the labor market and taking into account these features during the planning activities; realistic goal-setting and definition of both strategic goals and goals of activity, which are reflected in terms of survival, development of vocational educational institution (SMART technology); usage of technology that describes the internal state of the educational institution, indicating its strengths and weaknesses (SWOT-analysis); usage of technology that analyzes external influences on the activities of the vocational educational institution (SWOT-analysis); creation of a motivation system in the educational institution, which is focused on the professional growth of participants of the educational process (including the usage of knowledge management technology); creation of the internal concept of the institution: organizational culture of the vocational educational institution: meeting the needs and requests of participants in the educational process, the image of the institution, its reputation, infrastructure; development of the external concept of the institution (presentation activities: brand and status of the institution, its departmental affiliation and position in the ranking of vocational educational institutions of the region, country).

Conclusions. It is well known that the education system will develop in the necessary direction only when there is demand and supply for its educational services (products) and it will focus on the current needs of educational services users and the state of their satisfaction. This approach to the organization of the educational institution's life is provided by project management, which is a technology that guarantees the intellectual development of the younger generation today.

Management of a vocational educational institution as a project-oriented organization will ensure that the needs of the state economy are met by skilled and competitive workers in the labor market, which will contribute to the development of human capital in the country.

The disclosure of the essence of risk management in project activities in general and the description of the process of social risk management in the project management of the development of vocational educational institution are the further relevant scientific studies.

List of references

Бусел, В. Т., ред., 2005. Великий плюсманий словник сучасної української мови. К.: Ірпінь: ВТФ "Перун"
Друкер, Пітер Ф., 2004. Інтуїційний менеджмент. Переклад з англійської. М.: Іздательський дом "Вильямс”.
Сльникова, Г. В., 1999. Наукові основи розвитку управління загальною середньою освітою в регіоні. Монографія. К.: ДАККО.
Управління закладом професійної (професійно-технічної) освіти як проектно-орієнтованою організацією

Зоя Рябова

dоктор педагогічних наук, професор г.н.с. лабораторії зарубіжних систем професійної освіти і навчання Інституту професійно-технічної освіти НАПН України

Реферат.

Актуальність: визначається необхідністю переорієнтації системи управління закладом професійної (професійно-технічної) освіти на проектну основу з метою забезпечення якості надання освітніх послуг, сталого розвитку закладу освіти та його соціального трансформування шляхом формування проектного типу мислення у суб’єктів професійної (професійно-технічної) освіти.

Мета: описати сутність управління закладом професійної (професійно-технічної) освіти як проектно-орієнтованої організації та охарактеризувати процес використання технології менеджменту знань для професійного розвитку персоналу закладу.

Методи: теоретичні методи аналізу, синтезу, класифікації та систематизації використано для визначення та узагальнення результатів наукових розвідок й формулювання основних дефініцій дослідження.

Результати: обґрунтовано сутність управління закладом професійної (професійно-технічної) освіти як проектно-орієнтованої організації. Визначено зміст управління таким закладом через описання сукупності управлінських функцій з позицій проектного менеджменту. Описано організацію процесу надання освітніх послуг через реалізацію коротко- та довготривалих проектів, що сприяє формуванню проектного типу мислення його учасників. Розкрито, що процеси управління сучасним закладом професійної (професійно-технічної) освіти в своїй основі мають концепцію розвитку людського капіталу, як основного ресурсу, що забезпечує йому необхідні конкурентні переваги на ринках освітніх послуг та праці й, взагалі, забезпечує успішність його життєдіяльність. З’ясовано, що для розвитку персоналу закладу освіти дієвим є використання технології менеджменту знань, в основі якої покладено сутність дефініції “знання організації”.

Висновки: доведено, що управління закладом професійної (професійно-технічної) освіти як проектно-орієнтованої організації забезпечить реалізацію задоволення потреб економіки держави у кваліфікованих і конкурентоспроможних на ринку праці робітників, що сприятиме розвитку людського капіталу країни.

Ключові слова: управління закладом освіти, проектно-орієнтована організація, проектний менеджмент, проектний тип мислення, менеджмент знань.

Received: 10 May 2020
Accept: 12 June 2020