COMMUNICATION IN PROJECT ACTIVITIES OF THE TEACHING STAFF IN VOCATIONAL EDUCATION INSTITUTIONS

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Abstract.

Relevance. Project communication aims to ensure constant interaction among the teaching staff of vocational education institutions during the implementation of project objectives. Project management communication presupposes that all project participants are aware of the requirements and progress of step-wise execution of tasks within a project. Project activities ensure communication by implementing the functions and principles of project interaction.

Purpose. To describe modern approaches to the organisation of communication in project activities of the teaching staff at vocational education institutions.

Methods. Theoretical analysis in order to explore the research problems in the scientific literature and the status of project communication at vocational education institutions and to define research avenues; comparison in order to investigate different scientific approaches to resolving the problem; analysis and synthesis in order to justify the functions of communication and forms of project interaction.

Results. Communication in project activities of the teaching staff at vocational education institutions plays an important role, especially in coordination and project interaction. Communication in project activities takes the forms of project interaction, namely: functional, social, legal, administrative, associative, territorial, forced, dependent and tangent. The quality of project outcomes is affected by conflicts that may arise during the interaction among project participants and managers concerning the following issues: work schedule, financing, workload distribution, project management, technical (technological) support, task priority, distribution of resources, overload of project participants, etc. Project communication is based on the consideration of the following principles of project management: transparency of the project throughout its lifecycle; cooperation in the project environment (functional, social, legal, associative, territorial, tangent, hierarchical, etc.); project parties’ responsibility for the quality of their work.

Conclusions. Communication in project activities of the teaching staff at vocational education institutions is ensured by project participants along with the parties involved and stakeholders. The success of a project depends on the competence of its managers and their expertise: technical knowledge, critical thinking, communicative skills, ability to cooperate, teamwork and project coordination skills, experience of resource management, personal qualities, etc.

Keywords: project activities; interaction; communication principles; communication; teaching staff; vocational (vocational and technical) education institutions.

Introduction: Communicative interaction between participants aimed to ensure successful execution of project tasks plays an important role in the organisation of project activities. Thus, project communication does not only concern the development of an action plan, but it also involves constant interaction between the teaching staff of vocational education institutions and the parties involved, including stakeholders. The function of communication in project management presupposes that all communication parties are aware of project requirements and progress. Participants, or beneficiaries, must be informed, directly or indirectly, about the ways and forms of project interaction.

Sources. The theoretical background of research on project communication of the teaching staff at vocational education institutions includes
works by Ukrainian and foreign scholars: O. Borodienko, V. Radkevych, Z. Riabova, N. Kulalaieva, M. Korets, P. Klish, A. Vysotskyi, N. Petrenko, L. Kustrich, M. Homeniuk, H. Osowska and others.

The aim of the article is to justify modern approaches to the organisation of communication in the project activities of the teaching staff at vocational education institutions.

Methods: theoretical analysis and overview of scientific literature in order to explore the status of the research problem and define research avenues; comparison in order to investigate different scientific approaches to resolving the problem; analysis and synthesis in order to justify communicative competence.

Results and discussion. Team communication is crucial for project activities. Each research task directs the team to perform actions (what needs to be done, when and how), in other words it is instructions for actions. Therefore, project aims must be communicated to project participants clearly and consequently. The aims must be realistic and attainable. A reasonable approach to communication needs to be adopted in project activities.

A considerable part of communication duties is vested on project managers. For this purpose, they need to possess:

- technical knowledge (results of the cognition of technical and technological environment and its adequate reflection in the human’s consciousness in the form of ideas, concepts, judgements, and theories. Technical knowledge includes: knowledge of basic technical and technological concepts: engineering, technology, technological process, technological culture, technical aesthetics, technical and technological environment, etc.; concept of technosphere; concept of engineering and technology as a result of human’s intellectual and professional activity; knowledge of the key tendencies of engineering development and prospective technologies in the material sphere; concept of the relation and mutual development of the engineering, natural and mathematical domains of knowledge; understanding of the positive and negative impact of engineering and technology on humans and general rules of safe transformation; knowledge of the basic economic principles of engineering and technologies [1, p. 161-162]);
- critical thinking (a system of judgements used to analyse objects and events and produce justified conclusions, which allows people to formulate justified judgements and interpretations and correctly apply the obtained results to situations and problems [2, p.222]);
- communicative skills (integrated personal quality covering certain communication methods and techniques using which partners enter communicative situations, establish and maintain contacts and purposeful relations and achieve goals [3, p.17]);
- ability to cooperate (the ability of two or more members of a project team to work together to achieve project aims);
- coordination skills (coordinating the actions of team members or subdivisions as is necessary to achieve aims and direct individual efforts towards attaining a common goal [4]);
- teamwork skills (a group of people structured according to project activities with each member mutually complementing other members in project activities);
- experience of resource management (one of the main subsystems of project management, which includes planning, procurement, supplies, distribution, accounting, and control of resources. The notion of “resource” in project management methodology is interpreted as everything that a project possesses, including labour force, financial, material and technical resources of the project team, time (duration, deadlines), information, knowledge, and technologies [5]);
- leadership (an essential component of manager’s activity, his/her purposeful influence on the behaviour of individuals or an entire workgroup; the tools of this influence include the manager’s communicative skills and personal qualities corresponding to the group’s external and internal needs [6, p. 369-370]. In other words, it is the ability to influence individuals and project teams motivating them to work for the achievement of previously set aims.

Communication networks must be open throughout the project’s lifecycle in order to ensure successful project communication. In addition to internal communication, proper external communication networks must be created (arranged, consulted) for project team members. In this regard, project managers must possess:

- optimism about the project and avoid openly criticising project outcomes both with project contractors and persons not involved in the project;
- a positive attitude and constructive encouragement of project contractors for the successful execution of important project tasks;
- the ability to use communication matrix as an element of motivating responsibility;
- the ability to simplify the multi-channel communication interface, which enables project
contracts to directly approach project managers with propositions;

– the ability to define and use internal and external project communications;

– the ability to prevent or resolve organisational conflicts within project teams;

– the ability to encourage formal and informal relations within the project.

It should be noted that collaboration among project participants is necessary for project cooperation. It must be clearly presented as it is not sufficient just to express one’s consent to participate in the project. Nowadays, it cannot be a guarantee of full-fledged cooperation. Project participants and beneficiaries must be convinced of the advantages of the project. For this, they need to meet, communicate and discuss positive and negative project outcomes. Some factors that impact cooperation in the project environment include project participants’ needs, availability of resources, availability of the project budget, previous experience of project activities, occurrence of conflicts and lack of stable organisational support. A structured approach to communication must seek cooperation by taking into account the following factors: use of joint efforts; precedents for future projects; consequences of the lack of cooperation; the critical role of cooperation in project success; organisational influence of cooperation; establishing project deadlines; awards and bonuses for successful project activities.

Most of the projects fail due to the lack of cooperation between its participants as compared to other project factors. In order to ensure and preserve the cooperation of project participants, it is necessary to elicit the first positive reaction to the project in the process of communication. In this respect, the most positive aspects of the project can be ensured by communication. In project management, there are different types of cooperation, including functional cooperation. It is cooperation driven by functional relations between two groups of project participants. They can require respective functions that can be executed only by collaboration; social cooperation. It is cooperation based on social relations between two groups. Social relations mostly motivate cooperation that can be useful for carrying out project activities; legal cooperation. This type of cooperation is imposed by certain authoritative requirements. In this case, project participants have no choice but to cooperate; administrative cooperation. It is cooperation driven by administrative requirements that are necessary for two project groups to work together towards a common goal; associative cooperation. This type of cooperation can also be called collegial. The level of this cooperation depends on the association between two groups; territorial cooperation. This is cooperation based on geographical proximity. If two groups are close to each other, they are bound to work together; dependent cooperation. This cooperation is due to the fact that one project group depends on the other group within an important project activity. This dependency is usually bilateral. One group depends on the other for some results, while the second group depends on the first one for other results; forced cooperation. In this type of cooperation, “external agents” must be involved to stimulate cooperation between two project groups. It applies to situations when two groups have no common ground for cooperation; tangent cooperation. It is cooperation with direct partners of approximately the same age. Based on tangent cooperation, project participants can be easily motivated to work as the existing tangent relations create an environment that contributes to project cooperation; vertical (hierarchical) cooperation. It means cooperation that follows the hierarchical structure of the project. For example, subordinates expect cooperation with their immediate superiors; commitment. Cooperation is based on the support of project ideas. Project participants are willing to assume responsibility, they readily and actively spend time on the project. The provision of resources (financial, productive) is one of the ways for the managers to express their commitment to the project and its team.

In the case of simultaneous implementation of several projects, relative priorities must be set for all project teams at the vocational education institution. Ensuring cooperation in most of the projects involves: establishing attainable project aims; clear-cut description of the necessary project activities; integration of project activity priorities with the existing priorities; elimination of fear of losing one’s job due to industrialisation; avoidance and elimination of potential sources of conflict; adoption of the “open door” policy to resolve project participants’ complaints; elimination of scepticism, promotion of project benefits, etc.

Coordination plays an important role in the project management at vocational education institutions and is part of the project pyramid (communication, cooperation and coordination). Thus, after the functions of communication and cooperation have been successfully initiated, the efforts of project contractors must be coordinated with each other, with the overall objective of the project activity and with the project aim in general.

In this respect, it seems reasonable to design a project responsibility diagram. The diagram must
be designed using a responsibility chart, which is a matrix consisting of columns and rows including information about activities and contractors. The cells in the matrix are filled with codes (abbreviations) denoting the roles of responsibility for each project activity. The matrix helps to avoid neglecting important communication requirements and responsibilities within the project team. It also helps resolve the following questions (Who deals with what kind of work? How long will it take? Who must inform whom and on what matters? Whose approval is required for particular actions? Who is responsible for what results? What staff changes/transfers are necessary? What kind of support is required from whom and when? Who will regulate conflict resolution, etc.) (Table 1).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Project executive</th>
<th>Project manager</th>
<th>Project contractors</th>
<th>Reporting specialist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action coordination</td>
<td>OK</td>
<td>OK, TK, ZI, MM, SK, DC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action plan</td>
<td>OK</td>
<td>BA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task execution</td>
<td>TK, ZI, MM, SK, DC</td>
<td>OK</td>
<td>BA</td>
<td></td>
</tr>
<tr>
<td>Project budget</td>
<td>АЛ</td>
<td>OK</td>
<td>TK, ZI, MM, SK, DC</td>
<td>BA</td>
</tr>
<tr>
<td>Plan approval</td>
<td>АЛ</td>
<td>OK</td>
<td>BA</td>
<td></td>
</tr>
</tbody>
</table>

(* AL, OK, TK, MM, etc. in the table are conditional reductions of performers)

It should be noted that there are conflicts in any project activities, which are due to different views on the development, execution, financing, etc. of actions within project tasks. It is also important to take into account the human factor as conflicts can be intentional and unintentional. Their occurrence creates obstacles to achieving maximum benefits from the project. The combination of communication, cooperation and coordination helps avoid conflicts in project activities. Thus, open and direct communication between project participants, collaboration, and continuous coordination of project activities have a positive influence on successful completion of project tasks. It is proposed to focus on several sources of conflicts. For example, the scheduling conflict. Conflicts may arise due to improper scheduling or sequencing of project activities. It is especially common in projects with a large number of project tasks or with two mutually dependent groups of contractors. Improper distribution of time for particular project actions cause discrepancies in project schedules (an example is the activity of international teams, when the start of work at 9 a.m. makes it impossible to collaborate with other project contractors due to different time zones in other countries). Project coordination can help avoid conflicts related to the scheduling of project tasks.

The financial conflict is no less important as the project cost may be unacceptable for the customers or end users. It will lead to the conflict of interests within the project. Even if the initial cost of the project was acceptable, lack of control over expenses in the process of execution and implementation of project outcomes may lead to a conflict. It is due to improper allocation of the budget and lack of research on the financial justification of particular expenses. Communication and coordination can help avoid most of the negative consequences of conflicts related to expenses. If there are no clear requirements to key features of the project in general and project contractors and teams (groups), there will arise conflicts related to the efficiency of individual project contractors and teams (groups). Lack of clear-cut effectiveness (success) standards of project activities make each person assess their activities based on subjective judgements, which do not usually correspond to the collective opinion. Effectiveness (success) standards must be introduced in order to properly assess work and monitor the project progress.

To avoid the management conflict, there must be a bilateral union between the managers and the project team, which suggests that the managers should understand the team’s needs and requirements as well as the managers’ requirements. If no such compromise can be achieved, project management conflicts will arise. Lack of multilateral interaction can cause strikes and labour violations that lead to unachieved project aims. Communication, cooperation and coordination of project participants help create a favourable environment for an internal dialogue between the managers and project contractors.

If the technical component of the project activities is unproductive, the technical conflict may
occur in the project. It is particularly relevant to industrial projects because project actions greatly depend on the technological component. It should be noted that lack of thorough research on the technical justification of the project will cause internal problems and a failure. Before starting a project, all the necessary resources, including computer equipment must be identified and the level of project contractor’s informational culture must be determined for them to be able to carry out project activities.

Another type of conflicts is the priority conflict. It may arise when improperly set project aims are used within the entire project. In other words, it means that a value pyramid of project activities from primary to secondary ones has not been built. Thus, lack of a clearly defined sequence of project activities may force each project participant to set their own objectives that run counter the project aim. Lack of coordination of project aims among its contractors is another potential source of priority conflicts. To avoid this, it is necessary to build effective bi- or multilateral communication between the executives, managers, and project contractors. It should be noted that communication helps resolve priority conflicts at all project levels.

In each project, there are problems with resource distribution, which is the main source of conflict in project management. There arises the so-called “competition for resources”, including personnel, tools, equipment, software, etc. Wrong and unequal distribution of resources leads to unsatisfied contractors and other project participants and sometimes disputes between project participants. To avoid this, it is necessary to discuss all project actions and the amount of resources required for the implementation at the beginning of the project. Besides, it is necessary to have approximately ~10-20% of reserves for force majeure situations.

Internal policy is important in project activities and demonstrates the distribution of project responsibilities among the executives, managers, and contractors. It should be mentioned that project responsibilities in the project must be clearly divided by internal project control so that none of the project participants could abuse their position. We shall note the incongruencies that may arise when project participants may gain some preferences unavailable to other participants as a result of personal relations with the executives. Such project contractors may be involved in a larger number of project activities regardless of their actual (low) or non-existent project experience (authority). To avoid this, it is necessary, before the beginning of the project, to specify project contractors, managers and list of works to be executed by people with respective education, certificates and skills. It will help to determine a distinct project leader.

A common problem in project activities is the personal conflict. The larger the project the more different people take part in it. It also increases the size of the management team required to continue successful work. It may cause internal competition when project contractors, managers, and executives are trying to reach understanding. To resolve this situation, it is necessary to indicate the spheres of interest and the fields of work assigned for execution. Thus, communication and distributed cooperation contribute to a decrease in conflict situations during project execution.

The communicative function suggests familiarisation of all people involved with project requirements. In this respect, project contractors and stakeholders must be expressly informed of the following: project scope; expected staff contribution for successful project completion; expected project cost in terms of human efforts and materials; project advantages; project implementation plan; possible adverse consequences of the project in case of its failure; alternatives, if any, for achieving the project aim; potential direct and indirect benefits of the project both for the organisation and individuals, etc. Taking into account the above guidelines concerning internal communication, the risk of wrong interpretation will be minimized within the project system. Precise communication contributes to understanding between the managers and project contractors, which increases the potential of cooperation. Communicative approval of resource spending on the project improves communication, cooperation and coordination. It positively affects the achievement of project effectiveness.

In the process of communication, such concepts as “monitoring” and “control” are used that are unreasonable in the context of modern project activity. In the traditional understanding, “monitoring” and “control” were common, but modern working environment requires a loyal rather than strict approach, which is accompanied by authoritative control. Morphologically, the word “control” elicits a negative attitude in the person who executes control. For this reason, the terminologically neutral concept of project “tracing” or “reporting” is used in internal communication. Taking this into consideration, communication in project activities must become a basis for corrective control. In fact, initiative and preventive communication can help reduce the need for strict control over project team members.
Conclusions. In summary, project communication is crucial for the organisation of project activities of the teaching staff at vocational education institutions, in particular with regard to coordination and project interaction. In project communication, the forms of expressing project objectives are important as they influence the quality of relations among the teaching staff at vocational education institutions. They can be structurally divided into functional, social, legal, administrative, associative, territorial, forced, dependent and tangent. Thus, project communication is implemented vertically or horizontally. At the same time, it should be noted that different conflict situations may arise during project communication in connection with work scheduling, financing, load distribution, project management, technical (technological) support, task priorities, distribution of resources, overload of project participants, etc.

The principles of successful project communication include project transparency throughout its lifecycle; cooperation in the project environment (functional, social, legal, associative, territorial, tangent, hierarchical, etc.); project contractors’ responsibility for the quality of their work.

List of references


Корець, М. С., 2007. Теорія і практика технічної підготовки вчителів трудового навчання. Доктор наук. Національний педагогічний університет ім. М. П. Драгоманову, м. Київ.

Кліш, П. та Хомяк, А., 2017. Комунікативні вміння й навички як важлива складова професіоналізму педагога. Педагогічний пошук, 3, с. 15-17.

Корець, М. С., 2007. Теорія і практика технічної підготовки вчителів трудового навчання. Доктор наук. Національний педагогічний університет ім. М. П. Драгоманову, м. Київ.


Петренко, Н., Кустріч, Л., та Гоменюк, М. 2015. Управління проектами. Київ: Центр учбової літератури.

Пометун, О., Гупан, Н., 2019 Таксономія Б. Блума і розвиток критичного мислення школярів на уроках історії. Український педагогічний журнал, 3, с. 50-58.

Радкевич, О., 2017. Професійний розвиток викладачів і тренерів закладів професійної освіти в країнах Європейського Союзу. Науковий вісник Інституту професійно-технічної освіти НАПН України, 14, с.133-139.

Translated & Transliterated


Klish, P. ta Khomiak, A., 2017. Komunikatyvni vminnia y navychky yak vazhlyva skladova profesionalizmu pedahoha [Communicative skills as an important component of teacher professionalism]. Pedahohichnyi poshuk [Pedagogical search], 3, s. 15-17, [in Ukrainian].


Pometun, O., Hupan, N., 2019 Taksonomiia B. Bluma i rozvytok krytychnoho mysliennia shkoliariv na urokakh istorii [B. Bloom's taxonomy and the development of students' critical thinking in history lessons]. Ukrainskyi pedahohichnyi zhurnal [Ukrainian pedagogical journal], 3, s. 50-58.


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Комунікація в проєктній діяльності педагогічних працівників закладів професійної освіти

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Реферат.
Актуальність. Проєкта комунікація спрямовується на здійснення постійної взаємодії педагогічних працівників закладів професійної освіти під час реалізації завдань проектів. Комунікація в управлінні проектною діяльністю передбачає усвідомлення всіма учасниками проектної діяльності вимог та прогресу поетапного виконання проектних завдань. Проєктна діяльність передбачає забезпечення комунікації шляхом реалізації функцій та принципів проектної взаємодії.
Мета. Розкрити сучасні підходи до організації комунікації в проектній діяльності педагогічних працівників закладів професійної освіти
Методи. Теоретичний аналіз – для з’ясування проблеми дослідження у науковій літературі та стану проектної комунікації в закладах професійної освіти, визначення напрямів наукового пошуку; порівняння – з метою вивчення різних наукових підходів щодо розв’язання проблеми; аналіз і синтез – для обґрунтування функцій комунікації та форм вираження проектної взаємодії.
Результати. Комунікація в проектній діяльності педагогічних працівників закладів професійної освіти посідає важливе місце особливо в частині координації та проектної взаємодії. Комунікація в проектній діяльності реалізується через форми вираження проектної взаємодії, а саме: функціональну, соціальну, юридичну, адміністративну, асоціативну, територіальну, нав'язану, залежну та дотичну. На якості результатів проектної діяльності позначаються конфліктні ситуації, що виникають під час взаємодії учасників і керівників проекту: розклад роботи, фінансування, розподіл навантаження, проектне управління, технічне (технологічне) залучення, пріоритетність виконання, розподіл ресурсів, надмірне навантаження учасників проекту тощо. Проектна комунікація ґрунтується на врахуванні положень таких принципів організації проектної діяльності: відкритість проекту упродовж усього життєвого циклу; співпраця (кооперація) в проектному середовищі (функціональна, соціальна, юридична, асоціативна, територіальна, дотична, ієрархічна тощо); відповідальність проектних виконавців за якість виконання завдань.
Висновки. Комунікація в проектній діяльності педагогічних працівників закладів професійної освіти забезпечується учасниками проекту спільно із заінтересованими сторонами та стейкхолдерами. Успіх проекту залежить від компетентності їх керівників та наявності в них: технічних знань, критичного мислення, комунікативних навичок, здатності до співпраці, навичок роботи в команді та координації виконання проектних завдань, досвіду управління ресурсами, лідерських якостей та ін.
Ключові слова: проектна діяльність; взаємодія; принципи комунікації; комунікація; педагогічні працівники; заклади професійної (професійно-технічної) освіти.