COLLABORATIVE ENVIRONMENT AS A FACTOR IN THE FORMATION OF THE PROJECT ACTIVITY OF BACHELORS

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Abstract: The article analyzes the collaborative environment as the basis for the formation of the project activities. The novelty of this problem is that at present traditional education is undergoing great changes, due to the fact that Kazakhstani education is entering a new stage, which means that new methods are needed in the education system. Today not only the teacher but also the student needs to apply innovative methods, one of which is project activity. As is known for the world pedagogy of the 21st century, the transition to such models of education is typical, which puts students in an active position, and this is facilitated by the collaborative environment. The purpose of the article is to justify the collaborative medium as the basis for the formation of project activities.

Keywords: innovation, personality, collaboration, collaborative environment, competence, project activities.

1 Introduction

The twenty-first century is an age of innovative technologies that requires changes in the functions of the teacher of higher education. Previously, the main function of the teacher was a transfer of the finished experience to students, but now this function has changed, that is, the basis of education is the process of teaching students how to obtain knowledge that leads to the acquisition of new social roles and statuses. Similarly, in the process of education, the student develops those professional skills that enable him to become an element of the economic sphere of society's activity. As a result, students become independent, responsible, self-motivated, with developed critical thinking. Students can freely communicate with each other and in the future become competent in various areas of life, and thus, be in demand. Hence, the main goal of the teacher is the formation of such student's personality, which consists of the following competencies:

- correctly state their thoughts;
- culturally defend their point of view;
- express yourself in various activities;
- be responsible and take responsibility for actions;
- to communicate with surrounding people;
- objective self-esteem - reflection.

Outlined competencies are formed when using the collaborative environment in teaching since the center of the learning process is a student, his cognitive and creative activity.

The use of the concept of "collaborative environment" in the higher school of Kazakhstan is associated with the transformation of the education system, which began in 2010.

2 Materials and Methods

In the practice of modern vocational education, there is a tangible gap between the dynamic processes in society and the quality of training of specialists at the university. The prevailing nature of subject teaching at the university leads to the fact that students' knowledge is often scattered, is too theoretical, resulting in difficulty for university graduates to apply their knowledge in practice and to carry out organizational, managerial, and design activities. As a result of such educational activity, the deep inner layers of the personality are not affected, the education obtained with such training does not give the desired results.

Therefore, higher education cannot be limited to supplying its students with only a stock of knowledge in certain subjects for a distant future, for their future professional activity. In the organization of educational work for the formation of a socially successful student personality, it is necessary to consider not only special and professional interests but also personal-social ones. From the standpoint of implementing humanistic principles, the interests of the student should be for the university not only controlling, corrective factors but to a certain extent also guiding reference point for the formation of a socially successful personality. (1-2)

The collaborative environment has creative potential and has an effective impact on the personal and professional development of the future teacher. In such an environment, the student feels that he is a subject of collective activity, an active participant in professional and pedagogical intercourse, he is aware of his importance and personal value in the team.

The peculiarities of creating a collaborative environment are closely related to the theory of team development, developed and experimentally proven by A.S. Makarenko. The essence of the given theory lies in the fact that the formation and personality development is due to the peculiarities of the organization of the system of mutual relations with other people in a team, upbringing of a personality "through a collective", "in a collective" and "for a collective".

Although in pedagogical theory there are contradictory interpretations about the upbringing of the individual in a team, we believe that the given theory has a personality-centered, humanistic orientation, since it is through the use of the creative potential of the collective, the individual can be given an opportunity to open up his abilities and take place as an individual. This idea is expressed in the fundamental principle proposed by A.S. Makarenko as a principle of "respect and demand", that is, the teacher is required to be able to combine severity and respect for the individual, to harmonize relationships among members of the student group, to approve the rules of mutual responsibility and dependence. By expanding the basic functions of the collective as an organizational, educational, stimulating, A.S. Makarenko emphasizes that such signs are inherent only to a developed collective, and only a developed team can successfully fulfill their social functions. (3)

This means that in order to form a socially successful personality of a future teacher, the main guiding vector should be the creation of a collaborative learning environment that implies the need for favorable conditions for the disclosure of the potential possibilities of the individual, for introducing students to the features of professional and pedagogical communication.

The ability of the teacher to organize group, team, pair activities of students in the classroom. There are different types of distribution in groups. It is necessary to consider the following points:

- to work out the collaboration rules of group work together with the participants;
- groups must be of an exchangeable composition;
- to distribute different roles to each group;
- roles in groups must constantly change;
- compliance with the norms and requirements of professional ethics;
- the admission in the groups only constructive criticism.

The Pedagogical dictionary states, "Collaborative learning is an educational approach to teaching and learning that involves teamwork of groups of teachers or students in solving a particular problem, accomplishing a task or creating a project. As is known, project activity is understood as a student's educational, cognitive and research-creative activity. Collaborative learning is based on the idea that learning is a social activity, in its nature, in which participants communicate with each other, and the learning process is carried out through communication between students and teachers". (4) In the process of given type of training, it has an extreme influence on the motivation of students' education and positive regards

towards them, on the creation of favorable moral and psychological conditions for active learning. Thus, a qualitative attitude of the teacher to his subject is formed, efficiency, self-discipline in work, tact in relation to students, timely assistance in their studies, objectivity in assessing their success, endurance in difficult situations, which greatly influences the process of acquirement, encourages students to develop striving to imitate the positive example of the teacher. As a result, this significantly increases the educational effect of teaching. (5-6)

The concept of "collaboration" or "cooperation" is a joint activity (process) in any sphere, two or more people or organizations for the achievement of common goals with its knowledge sharing, learning, and consensus achievement. (4)

To the collaboration, and vice versa, carry crowdfunding, which in many ways is similar to the collaboration and is built on the same basic principles that are:

▪ emotional engagement of participants;
▪ awards receiving;
▪ the specific goal of the event that was chosen;
▪ trust;
▪ full transparency of fund-raising for project implementation;
▪ convenience.

As a rule, such a process requires the presence of a governing body, herewith the form of leadership can also be public by the cooperation of equal partners of the decentralized community. It is believed that the participants in the collaboration can get more opportunities to achieve success in a competitive environment with limited resources, and this is an urgent problem of today.

Collaborative (cooperative) learning is an approach in which training is built on close interaction between students, or between students and teachers. Participants in the process gain knowledge through an active cooperative search for information, discussion and understanding of meanings and the formation of projects. (7)

Thus, collaborative (cooperative) training, that is, "... learning in cooperation is the personal philosophy of the student and not just the method used in the classroom. In all cases when people are grouped together, cooperation involves a way of working... based on respect, recognition of the abilities and personal contribution of each member of the group", and this is precisely what happens in the formation of project activities that can begin with the first course and logically continue to the fourth year, which will be reflected in the student's graduation work. (8)

A theoretical analysis of the available literature on the actual problem indicates that, along with the pedagogical system, the discourse of the pedagogical environment, the pedagogical space of the educational environment, the collaborative environment are fundamental concepts relating to any pedagogical phenomena. (9-10) They settled into the part of scientific disposal relatively recently and are not yet available in pedagogical dictionaries and encyclopedias. The heuristic basis for their use was the intuition of the habitat that has taken shape in the biological sciences. The external environment, depending on the conditions existing in it, can support the vital activity of the organism or oppress it. In the same way, the conditions external to the pedagogical subject may be more or less favorable for learning activities, activate it or reduce its effectiveness. This determined the relevance of the study of the particular problem.

As is known, the principle of the consistency and collaborative environment are built around the goal of education. In our opinion, it is expedient to use the given concept in those cases when general questions of the organization of the pedagogical process of a higher school and the effectiveness of educational activity are examined on the basis of the trust of all participants in the pedagogical process of higher school.

Practical experience shows that the collaborative environment is an audience in which teachers understand the extent of their responsibility, unlimited only by the scope of the taught subject. The success of learning and teaching is in the creation of an atmosphere that allows the individual to feel free and safe in the learning process. Each student, coming to the audience, brings with him some of his own problems such as family, poorly prepared task for the lab practicals, tutorial. (11)

To create a benevolent atmosphere in class, for refocusing and attention concentrating, the necessary condition for each session should be a collaborative environment based on trust.

At the beginning of each lesson, it is necessary to create a positive emotional state of students. For this, the teacher, planning his lesson, develops a certain methodology of lecturing, conducting practical studies, laboratory practicals and tutorial based on the topic. So, practical studies can be held on the structure of the coaching session. It helps to include all participants in the learning process and make it conscious, motivated and exciting. At different stages, the teacher can use open-ended questions, active listening, positive support, while maintaining the principle of non-evaluation and evaluation. The training can include coaching techniques "Four questions of planning", "Shift point of view", "Supporting environment". Participants have the opportunity to work in small groups and in pairs, enriching their experience and forming a personal position.

Creating a trust-based environment is a large percentage of the success of the lesson. So, for example, using strategies of critical thinking, teachers involve students in group work, and the application of a dialogue learning strategy encourages students to actively discuss problematic issues and discussions about cause-effect relationships. It should also be noted that in a collaborative environment, students develop both socially and emotionally, that is, they have the opportunity to communicate with their peers, to defend and represent their ideas, to exchange opinions, to take an active part in the self- and peer-assessment.

Thanks to the collaborative learning environment, students develop mutual understanding, as indicated by V.R. Dauzhanova (12) by defining the advantages and disadvantages of the collaborative environment. So, to the advantages, she refers to the fact that in the classroom with the use of forms of cooperation, there is never a passive student. A big plus is acquired knowledge, which for each student is valuable and significant. (13)

Therefore, the main achievement of the collaborative environment is that students' eyes are glowing, they cease to be bored, they are constantly busy and gain knowledge independently. The surprise is replaced by expectation, it, in turn, generates a positive attitude to work. Each lesson includes assignments for individual work and for cooperative group work, there is more trust and positive on both sides. (14-15)

Group work is an important component in creating a collaborative environment in lectures, practical, laboratory practicals and tutorial. No less significant is the division into groups. With each teamwork, group membership must be different, this improves the team's cohesion and the possibility of each students' self-expression. As practice shows, working in a group, students support each other, strengthen and expand the acquired knowledge, develop thinking, imagination, the ability to make arrangement and come to a common solution of the delivered problem. (16-17)

Group work works productively when carrying out a project on a given topic. Students set goals, tasks and put forward their own hypotheses. You can work both in large groups and small.

The formation of social success is facilitated by the assembly of microgroups among students, in which, based on professional communication, each student is subject to different systems of relations such as teacher-group, teacher-microgroup, group-microgroup, microgroup-microgroup, microgroup-student, student-group, teacher-student, and others. (18-19)

Working in microgroups, students give each other comradely help, weak students feel friendly support, a healthy competitiveness is born between the groups, which encourages them to create a favorable psychological climate for the formation of successful activities. The role of the teacher in such cases is only coordinating, directing, advising and stimulating.

2.1. The effectiveness of collaborative learning

The collaborative learning is most effective when teaching groups with a predominance of experienced students who can share expertise with each other and with less experienced students.

▪ for the organization of group work on a project where it is necessary to go through the whole cycle of project preparation - from setting goals to achieving results;
▪ for solving semistructured problems, multivariable analysis, and in other cases when joint intellectual efforts of several (many) are needed to find a solution of the assigned task;
▪ for training communicative skills in the collective, observation and analysis of thematic models, identification of the possibility of creating project teams;
▪ for relaying of knowledge gained by participants in previous stages of training;
▪ when creating a learning environment, when you need to test a project before release. (20)

Evaluation of the effectiveness of collaborative learning is often subjective, due to the dependence on a large number of unpredictable factors:

▪ duration - in collaborative learning it is not always possible to set a time frame;
▪ complexities of assessment the amount of knowledge gained and the degree of their mastering;
▪ the elemental nature of training - the lack of a clear training program/scenario;
▪ subjective feedback - in form/content/emotional coloring. Often there are problems of psychological properties. For example, in some corporate cultures, it is difficult to openly evaluate students and the degree of their participation in the learning process, etc. (21)

2.2. Collaborative learning tools

Virtual collaborative spaces

1. Online collaborations:

▪ internal online collaborations (social media, Internet, blogs);
▪ special resources for online collaborations (educational and social platforms, web portals etc.).

2. "Live" collabotaions:

▪ conversations, discussions;
▪ brainstorm;
▪ project team.

Collaborative learning can be seen as a philosophy of interaction and a way of life where people are responsible for their actions, including training, and respect the opportunities and contributions of their partners. Collaborative learning is a way of learning in which a student learns in the course of interaction with peers. (22) The educational result of the individual work of the student to build their knowledge is supported by the activities of the group and the team. A student shares resources with a group uses group work to learn. The structure of activity is flexible and open, and the route of research both open and free. The teacher plays the role of an intermediary in learning, while the group acts as a source of information, motivation, as a means of self-help and mutual support, and as a special place of interaction for the collective building of knowledge. Within the framework of collaborative learning, there is no a priori distribution of roles, as in joint (cooperative) work.

Individuals gradually merge with a group that becomes a single whole and the potential of which is more than the sum of its parts, which often allows one to perform high-quality work. At the same time, there is both the responsibility of each for the common cause and the team as a whole. All group members maintain close and constant contact, each brings their own actions to the group, everyone can contribute to the work of other group members in order to increase productivity and thus join the principle of continuous improvement in the implementation of each task and the project as a whole. The interaction of the group members is continuous, and it is the coherence of the collective that helps in achieving the final goal. (23-24)

Often, when adult learners, sometimes teachers hear the term "collaborative learning," it is automatically associated with the negative context of working in a group, from which they were supposed to suffer in the school environment or in the workplace. They refer to their own, sometimes unpleasant, experiences, which causes a desire to abandon the concept of cooperation, which they regard as unrealizable or as an attempt to shift the burden of learning from teacher to student. In open distance learning, teachers must properly explain the advantages of collaborative work and the need to support each of its participants, especially in terms of motivational dynamics, where the external aspect is a necessary variable in building success. It should be taken note of some initial concerns of students since it represents an example of a misunderstanding of what has become a completely irreplaceable approach to the greatest viability of teaching and learning in digital networks. (25)

Principles. Collaborative learning can be based on the following principles:

▪ the results of joint work give mutual understanding, perhaps more than when working independently of each other;
▪ verbal and written interactions contribute to the best understanding;
▪ the ability to realize, through experience, the relationships that exist between social interaction and better understanding;
▪ some elements of this deep understanding are peculiar and unpredictable;
▪ participation is voluntary and should provide freedom, but at the same time, it should be strongly supported.

It seems that the collaborative learning regime requires a wider participation of stakeholders. For a group, this ability to develop their human capital is viewed by some as a sign of collective intelligence. According to Pierre Levy (26), the collective mind is the intelligence distributed throughout the world, because no one knows everything, but everyone knows something. Knowledge is present in man, and not in some transcendental entity that organizes its ever-wider distribution in society; therefore, a well-organized collective is the main human wealth, which is coordinated personally in real time. Here we need to refer to cyberspace as a tool to help and support the collective intelligence, allowing for large-scale connection, which leads to effective mobilization of skills. (26) The collective mind is nothing more than a theoretical or philosophical concept; it can underlie in a new, effective and efficient social organization based on skills, knowledge, and experience.

Collective mind contributes to the power of creative potential that exists in each of us, in contrast to the force of isolated, divided and weakened. In collaborative learning, the teacher/tutor/facilitator becomes a kind of distributor of scores that supports its musicians without playing itself. Its role is essential for coordinating and harmonization all participants, for collective and individual assessment, providing support, individual and group consultations, as well as for providing input to maintaining a friendly atmosphere, motivation, and developing team spirit. (17,27)

By interacting, the members of the group together contribute to the overall success by:

- providing and receiving support and assistance;
- sharing information and resources;
- providing and receiving feedback;
- arguing with the reasoning of others;
- intensifying efforts to achieve goals;
- sharing with each other their achievements;
- involving in interpersonal relationships;
- taking care to increase the efficiency of the group. (26)

In a face-to-face interaction situation, group dynamics can greatly affect educational outcomes. The same is true for distance learning when working together in an environment based on computer networks. Note similar characteristics with an additional effect on the interaction due to the distance and a particular anonymity. The more people get to know and establish friendly relations among themselves, the easier it will be to encourage them and to be promotive of the efforts of everyone to achieve a group goal. This leads to the development of interaction for success. Positivity helps to activate learning communities that contribute to success. (28-29)

If there is no cooperation within the group of students, only those who have a greater ability to self-education can successfully complete the full learning course to the end. Others interrupt him because they find themselves in a situation of failure. Therefore, collaboration/cooperation can be taken as a basic principle of the system. In this case, most of the training activities are carried out collectively and remotely, therefore, it must be supported by appropriate means, in addition, methodological and motivational support is needed: a clear definition of goals, community's excitement, intermediate and final synthesis, gap measurement.

3 Results and Discussion

Creating a collaborative environment, immersion in the subject helps students quickly accustomed to the lesson, to establish a contact with the partners of the group and when discussing, quickly work up and announce the goals and objectives of the lesson, which will motivate them to continue their work with deeper interest. Collaborative environment develops mutual understanding. Mutual understanding is that all participants in the training group have similar knowledge about the interaction process, similar views, suppositions, and assumptions, i.e. sharing the same ideas by the whole group. We assume that during the lessons there will be situations when you have to deviate from the planned material and answer questions that students consider most important for themselves at this stage of the lesson. This will require the teacher to have a deeper knowledge of the material. (30-32)

It is necessary to pay attention of teachers to:

- involvement in collaborative learning: the ability to critically reflect, react to the use of new approaches, compare with current practice, discuss their effectiveness and plan further use in their lessons.

For this purpose, an individual strategy is successfully applied - a class-group-audience, which allows teachers to:

- understand and master the skills to work on the updated methodology based on goal-setting, helicity, differentiation;
- discuss and share new ideas of education, new types of planning.

4 Conclusion

The theoretical analysis of the key concepts of the study of this problem allowed us to define the definition as follows, "Collaborative environment is a trust-based form of the organization of employment in which students work together, collectively constructing, producing new knowledge and linked together by the need to communicate with each other to solve the task set and the disclosure of their potential."

When creating a collaborative environment in the educational process, students' educational and cognitive motivation is increased; anxiety level, fear of being unsuccessful, incompetent in solving certain tasks are decreased; the study skills are higher in the group, the effectiveness of acquirement and actualization of knowledge, in the joint performance of the task.

Thus, the collaborative environment develops mutual understanding, that is, all participants in the group have the same knowledge about the process of interaction, similar views, suppositions and assumptions, that is, the whole group's understanding of the same ideas.

In this regard, the significance of the collaborative environment in higher education is manifested in the fact that:

- the student is much better at learning;
- can communicate with other members of the team;
- can correctly and logically show his knowledge.

Thereby, in the process of social contacts between students, an educational community is created that possesses certain knowledge and is ready to receive new knowledge in the process of communicating with each other, joint cognitive activities, which contributes to the successful formation of the student's personality.

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