

The Ways of Psychological and Pedagogical Barriers Overcoming between Teachers and Students during COVID-19 Pandemic

Hennadii Khudov^{1*}, Valentina Tyurina², Yuliia Ovod³, Marharyta Kozyr⁴, Anna Chala⁵, Irina Khizhnyak⁶

¹Department of Radar Troops Tactic, Ivan Kozhedub Kharkiv National Air Force University, Kharkiv, Ukraine

²Department of Sociology and Psychology, Kharkiv National University of Internal Affairs, Kharkiv, Ukraine

³Department of Psychology and Pedagogics, Khmelnytsky National University, Khmelnytsky, Ukraine

⁴Department of Theory and History of Pedagogy, Borys Hrinchenko Kyiv University, Kyiv, Ukraine

⁵Department of Ukrainian Linguistics, Literature and Teaching Methods, Municipal Establishment "Kharkiv Humanitarian-Pedagogical Academy" of the Kharkiv Regional Council, Kharkiv, Ukraine

⁶Department of Mathematical and Software Automated Control Systems, Ivan Kozhedub Kharkiv National Air Force University, Kharkiv, Ukraine

Corresponding Author: Hennadii Khudov

E-mail: scopus.sv@gmail.com

ABSTRACT

The COVID-19 pandemic has affected teaching and learning around the world. As a result, schools and higher learning institutions use the e-learning platform to replace face-to-face teaching and learning. E-learning presents new challenges when compared to a traditional classroom because students are separated from their instructor by a computer screen. It has been established that the psychological and pedagogical barrier is an obstacle arising for a teacher in the process of his professional activity, which reduces its effectiveness. The main psychological and pedagogical barriers are highlighted, which are combined into groups: due to the personal and professional qualities of the teacher; caused by the physical and psychological characteristics of the student himself; determined by the specifics of the subject of interaction; caused by unfavorable factors of the social and material environment in which educational interaction takes place. An in-depth analysis of typical barriers that potentially arise between a teacher and students makes it possible to determine ways to overcome them. A psychological portrait of a personality that potentially creates barriers in interpersonal interaction is outlined. The paper proposes the ways of overcoming psychological and educational barriers between teachers and students during the COVID-19 pandemic.

Keywords: COVID-19, pandemic, teacher, student, psychological and pedagogical barrier, overcoming, e-learning.

Correspondence:

Hennadii Khudov

Department of Radar Troops Tactic, Ivan Kozhedub Kharkiv National Air Force University, Kharkiv, Ukraine

Email: scopus.sv@gmail.com

INTRODUCTION

During the early detection of COVID-19, China was the first country to mandate school closures, which involved more than 200 million students [1]- [2]. This decision was followed by Japan that announced the closure of schools starting February 27, 2020, while Malaysia from March 18, 2020 [1]. Meanwhile, Mongolia, Bahrain, Iraq, San Mongolia closed all schools by the end of February 2020 and many countries in March 2020 [2]. The decision on the closure of schools and education institutions significantly impacted teachers and students. The move towards online education may be challenging for teachers and students in different subjects, such as computer programming, introduction to database management system, network system, web development, operating system, management information system [3]-[12], engineering [13]-[33], physical training [34]-[36], medicine [37]-[39] and others.

As a result, schools and higher learning institutions use the e-learning platform to replace face-to-face teaching and learning [40]. Online learning presents new challenges when compared to a traditional classroom because students are separated from their instructor by a computer screen.

Practice shows that the modern goals of vocational education can be effectively implemented by teachers who own the means of developing methodological documentation, innovative pedagogical technologies that

have a high level of methodological competence. Currently, many university teachers experience significant difficulties in modeling and designing the educational process, taking into account the requirements of innovative technologies for e-learning. Obstacles to student engagement to e-learning can break down into three areas: social, administrative, and motivational. Looking at student engagement barriers in this way made them seem easier to overcome. The information technology for decision support to overcome barriers in e-learning human-computer interaction consists of the ways to overcome barriers to student engagement online e-learning

PROBLEM ANALYSIS

A barrier is a mental state that manifests itself as inadequate passivity and interferes with the performance of certain actions [41]. This is an internal obstacle of a psychological nature – reluctance, fear, insecurity, which prevents a person from successfully performing work. Barriers in pedagogical activity can be considered as subjectively perceived by a person states of experiencing a stop or a break in activity, a collision with an obstacle, the inability to move to the next link of activity. Psychological and pedagogical barriers are the main factor that hinders or reduces the effective implementation of pedagogical activities [41]. In order to

be able to timely notice psychological and pedagogical barriers, constructively eliminate them, and even better - anticipate, the teacher must know the reasons that can lead to their occurrence, as well as the ways, techniques and methods of overcoming psychological and pedagogical barriers in the process of interaction teachers and students.

A deep analysis of typical barriers that potentially arise between a teacher and students makes it possible to determine the ways and means of overcoming them, and, consequently, to harmonize the socio-psychological climate in modern higher educational institutions. In this case, the teacher and the student are the main subjects of educational interaction.

For the timely identification of real psychological and pedagogical barriers in their interpersonal contact, it is necessary to clearly define the content space of possible barriers in their communication and divide them into conditional groups [41]. The next task is to identify the most correct and effective ways to minimize and overcome psychological and pedagogical barriers.

The paper [42] presents examines the design of an e-learning environments that design and foster a sense of community among the learners. The social presence is described as "the ability of participants to project their characteristics into the community, thereby presenting themselves to the other participants as real people". It concentrates on setting a secure, trustful context that raises collaboration and teamwork.

The paper [43] presents online learning management systems, which is also known as virtual learning system, exist such as Google Classroom (in G-Suite) provided by Google, Moodle, Edsby, Blackboard, Docebo and institution's learning management systems. All of these learning management systems are well-known and used by many institutions around the world. The challenge for governments, education institutions and teachers is to seek the right learning management systems that fits the students' needs.

The paper [44] presents tools and rubrics for e-learning tool evaluation that consists of seven categories as presented in Table 1. In this research, not all of the criteria in the rubric was used to evaluate the Google Classroom e-learning tools such as the Teaching Presence.

The paper [45] presents cloud technologies for e-learning. Cloud technologies are beginning to be actively used by educational institutions in the organization of project activities. Using clouds, electronic personal accounts are built for project participants (teachers and students), and thematic forums are created for information exchange. Participants can solve various issues both in the absence of the teacher, and under his guidance.

The advantages of cloud services are that they allow you to manage large infrastructures and provide services to different groups of users within a single cloud [45]. The following features are also available in the cloud [45]:

- the payment is made only for the service that is necessary.
- the cloud computing allows you to save on purchasing, maintaining, and upgrading software and hardware.
- clouds are scalable, fault-tolerant, and provide proper security, the software is maintained and updated by the service provider.
- the access to cloud data from any point where there is Internet access.

Table 1: Rubric for e-learning tool evaluation [44]

Category	Criteria
Functionality	<ul style="list-style-type: none"> - scale. - ease of using. - tech support / help availability. - hypermediality
Accessibility	<ul style="list-style-type: none"> - accessibility standards. - user-focused participation. - required equipment. - cost of using
Technical	<ul style="list-style-type: none"> - integration/embedding within a learning management system. - desktop/laptop operating systems. - browser. - additional downloads
Mobile Design	<ul style="list-style-type: none"> - access. - functionality. - offline access
Privacy, Data Protection, and Rights	<ul style="list-style-type: none"> - sign up/sign in. - data privacy and ownership. - archiving, saving, and exporting data
Social Presence	<ul style="list-style-type: none"> - collaboration. - user accountability. - diffusion
Teaching Presence	<ul style="list-style-type: none"> - facilitation. - customization. - learning analytics
Cognitive Presence	<ul style="list-style-type: none"> - enhancement of cognitive task(s). - higher-order thinking. - metacognitive engagement

Using the capabilities of cloud computing in the work of higher education institutions will not only structure information and make it available at any time for all participants of the educational process, but also organize the operational collaboration of students at a distance from each other [45]. But in the papers [40]-[45] the ways of overcome psychological and educational barriers between teachers and students during Covid-19 pandemic is not presented.

The purpose of the paper is to propose the ways of overcoming psychological and educational barriers between teachers and students during Covid-19 pandemic.

MAIN TEXT

Figure 1 shows us cloud technologies in e-learning [45]. E-learning services (Google Groups, Google Apps, Microsoft Live@edu) provided by various cloud systems. You can work with documents from any device that supports working on the Internet. E-learning services are free of charge, so they gain a certain advantage. Students and teachers use a variety of devices in their work: laptops, smartphones, tablets. E-learning services are supported by different devices, so it is a public and universal information technology in the educational environment.

Psychological and educational barriers that arise in the process of interaction between teachers and students can be divided into the following main groups [41].

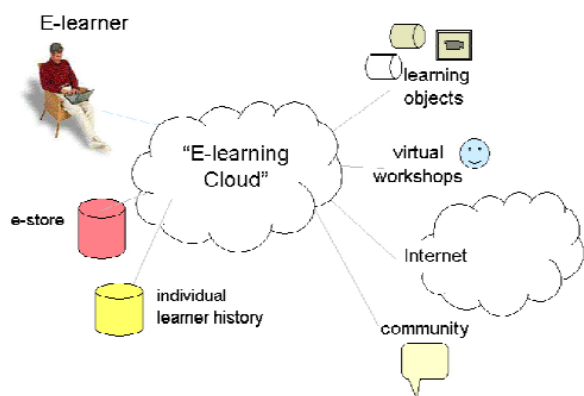


Figure 1 – E-learning using cloud technologies [45]

1. Psychological and educational barriers, which are due to the personal and professional qualities of the teacher. These are subjective obstacles that are based on the personal qualities of the teacher himself. Examples of such barriers are the fear of a group of students, fear of committing a pedagogical mistake, previous negative experience, lack of managerial ability, liberal or authoritarian style of interaction, formal-categorical communication, instructive tone, lack of sense of humor, ineffective system of rewards and punishments, excessive criticism, inconsistent demands, humiliation or ridicule of the student and his achievements, low personal level of culture and education, and more.

2. Psychological and educational barriers, which are caused by the physical and psychological characteristics of the student himself. These are subjective obstacles that are based on the personality of the student. Examples of such barriers are inability to work in a team, inadequate self-esteem, ignorance of established norms, lack of self-control and self-regulation skills, negative attitudes, fear, excessive individualism or conformism, apathy, negative character traits, hyperactivity, emotional or physical exhaustion, obsessive behavior, low intellectual development and more.

3. Psychological and educational barriers, which are determined by the specifics of the subject of interaction, that is, educational content. These are objective obstacles that are directly related to the production activity of the teacher and do not depend on him. Examples of such barriers are the excessive volume of educational material, the objective substantive complexity of the educational material, the illogical structure and the same type of information presentation, timeliness, distrust of information sources, and more.

4. Psychological and educational barriers that are caused by unfavorable factors of the social and / or material environment in which educational interaction takes place. These are objective obstacles that are associated with the living conditions of the teacher and student. Examples of such barriers are rivalry, lack of identification with the team, rejection or ignorance of the student by the environment, competitive direction of interaction, negative microclimate in the team, imposition of labels, conflicts, ethnic and mental barriers, sanitary and hygienic conditions, etc.

The emergence of such psychological and pedagogical barriers is caused by the following factors:

- mental characteristics and personal relationships of partners to each other.
- the complexity and content of the topic of discussion.

- the scale and nature of a specific problem situation.
- means and tools of mental activity.

Psychological and pedagogical barriers that arise in the process of interaction between teachers and students are largely determined by the style of pedagogical communication. The style of pedagogical communication reflects the general and pedagogical culture of the teacher and his professionalism.

The generally accepted classification of styles of pedagogical communication is the division into authoritarian (based on the dominant position of the teacher, who does not allow to show initiative and independence), democratic (based on mutual understanding and cooperation) and liberal or conniving (based on minimal aspiration).

There are other approaches to the classification of styles of pedagogical communication. So, L.B. Itelson, based the classification of styles of pedagogical communication on those educational forces on which the teacher relies in his activities and identified a number of intermediate styles between authoritarian and democratic [41]. Namely, emotional, business, directing, demanding, prompting, compelling.

If the assessment of the authoritarian and democratic styles of pedagogical communication is unambiguous, then in relation to the intermediate styles one should proceed from the fact that educational forces are entirely dependent on the personality of the teacher.

V.A. Kalik identifies the following styles of pedagogical communication [41]:

- highly professional communication based on passion for joint creative activities - based on the high professional knowledge of the teacher.
- communication based on a friendly disposition - provides for a passion for a common cause, where the teacher is a mentor.
- communication-distance - communication that is based on life experience, age and authority.
- communication-flirting - communication, which is characteristic of inexperienced teachers who want to gain false authority. It is a manifestation of liberalism, undemandingness;
- communication-intimidation - communication that combines a negative attitude towards students and authoritarianism in the ways of organizing activities, is a sign of pedagogical failure.

The most productive for all participants in the pedagogical process is the style of communication based on passion for joint creative search. All the proposed options for communication styles can be reduced to two main types, namely dialogical and monologic.

The analyzed styles of pedagogical communication are essential features of the models of teacher-student interaction:

- the model of "non-interference" - the coexistence of the teacher side by side, not together.
- educational and disciplinary model of interaction - activities based on their own example, students are required to strictly adhere to the rules and strict discipline.
- a personality-oriented model of interaction - joint activity, cooperation between a teacher and students, the teacher is an assistant and advisor.

Figure 2 shows the dynamic model of barriers in e-learning.

The dynamic model and styles of pedagogical communication generate the following models of teacher behavior in communicating with students:

- dictatorial model "Mont Blanc" - no personal interaction with students, pedagogical functions are reduced to an informational message.
- the non-contact model "China Wall" is non-contact, there is a weak feedback. Lack of desire to cooperate with one of the parties, the informational nature of the presentation of the material, condescending attitude towards students, the teacher's emphasis on his status are the main barriers to communication.
- the model of selective differentiated attention "Locator" - based on selective relationships with trainees. A teacher in communication is focused only on a part of the audience, for example, talented or, on the contrary, weak students. He concentrates his attention only on them, considers them to be indicators by which they are guided in the mood of the whole team.
- the hyporeflex model "Teterev" - the teacher is focused in communication on himself, leads mainly a monologue. While talking, he hears only himself, he does not react to the listeners.
- the hyperreflex model "Hamlet" is the opposite of the previous one, that is, the teacher is mainly concerned with how students perceive the material, and to a lesser extent already with the content side of interaction.
- model of inflexible response "Robot" - the teacher's relationship with students is built according to a rigid program, where the goals and objectives of the lesson are clearly maintained.
- authoritarian model "I myself" - the entire educational process is focused on the teacher; he is the main and only actor.
- model of active interaction "Soyuz" - the teacher is constantly in dialogue with students, encourages initiative, quickly notices changes in the psychological climate of the group, flexibly reacts to these changes.

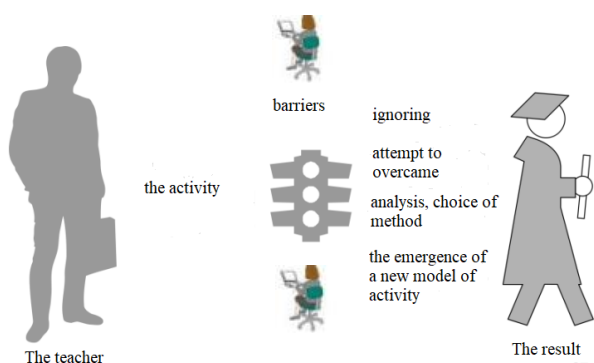


Figure 2 – The dynamic model of barriers in e-learning

Pedagogical communication implies the following possible communication positions between a teacher and a student: position of indifference; position of superiority; position of humiliation; position of parity.

Let's distinguish four phases of interpersonal interaction, at each of which any of the considered psychological barriers can potentially arise: phase of mutual directionality; phase of mutual reflection; phase of mutual information; the phase of interconnection.

Having considered the possible positions of communication between the teacher and students, the psychological and pedagogical barriers that arise in the process of interaction between them, it is possible to describe the image of the subject, which will have

qualities that provoke complex interaction. These are envy, egocentrism, narcissism, suspicion, vanity, jealousy, a high level of frustration of interpersonal relationships, and so on. Violation of the process of interaction between the teacher and students can also be associated with a person's desire to humiliate another, oppress his interests, suppress him and, as a result, have power over him. As a result, such a subject manifest an aggressive style of communication, which manifests itself in the form of intimidation and submission of another person, endless violent competition with her like "you or me".

Comparing the subjective indicators of such problematic interaction with the structural components of communication - content (communication) and form (interaction) - the following aspects of communication can be distinguished:

- perceptual - the process of perceiving and understanding each other, which is characterized by the inability to delve into the states of the environment, the inability to see the world through the eyes of another person, the presence of stereotypes of perception of others, the curvature of the partner's personality traits, the predominance of the evaluative component in the understanding of the other person, inadequacy of the reproduction of the content and representations of influences;
- emotional - the process of perceiving and understanding each other, which is characterized by the predominance of the egocentric orientation of the emotional side; modesty in participation and perception, inadequacy of perception of the emotional state of others, the desire to receive only positive emotions during communication, hostile and suspicious attitude towards others;
- communicative - the process of perceiving and understanding each other, which is characterized by the inability to choose an adequate form of communication, low potential for communicative impact, the use of incorrect forms of address, inconsistency in the expression of speech behavior, lack of expression and the presence of pauses in speech;
- interactive - the process of perceiving and understanding each other, which is characterized by the inability to maintain contact, the desire to speak more than to listen, the imposition and inability to argue their own opinion, the simulation of disagreement in order to misinform the partner.

Knowledge of the content of psychological and pedagogical barriers, styles of pedagogical communication, models of teacher's behavior in communicating with students, possible positions of communication and having considered the sides of communication, one can choose the most correct ways to minimize psychological and pedagogical barriers and ways to overcome them.

The teacher has at least four strategies for conducting a dialogue, which are best used in turn, while being guided by the structure of the act. It is a strategy of understanding, persuasion, cooperation and authority. However, the use of force or pressure is not permissible.

At the same time, the techniques of suggestion, influence, imitation, empathy, jokes, successfully selected by the teacher in the process of direct dialogue, play a large role in establishing positively emotional and trusting relationships.

Also, the main way to overcome psychological and pedagogical barriers for teachers of higher educational

institutions is to gain experience in pedagogical work, increase the general culture, personal indicators and the intellectual level of the teacher, develop the components of social intelligence within the framework of active social and psychological training.

In addition to this, in order to overcome psychological and pedagogical barriers, the teacher must master the techniques and techniques of interpersonal influence, namely:

- to study the techniques, strategies and rules of constructive communication - that is, to speak as equals, in the language of a partner, actively listen to him, establish feedback, use the rules of professional etiquette, use a generalized "we" instead of a single "I", demonstrate community;

- to master verbal and non-verbal means of influence, such as the optical-kinetic system of influence, para- and extralinguistic features of speech.

- use techniques for leveling emotional tension in interpersonal interaction - verbalizing the emotional state, providing an opportunity to speak out, not using denial, starting any answers with affirmative words, emphasizing the productivity of the partner's idea.

- adhere to the rules of incentive information - timeliness of information receipt, avoidance of information load.

- to operate with manipulative techniques of social influence - self-presentation, polite request, comment.

- to form personal authority.

- use strategies for creating an emotional situation of influence - use the principle of consistency and norms of responsibilities, mutual exchange.

CONCLUSION

Thus, the psychological and pedagogical barrier is an obstacle that arises for a teacher in the process of his professional activity, which reduces its effectiveness. The main psychological and pedagogical barriers are highlighted, which are combined into groups: due to the personal and professional qualities of the teacher; caused by the physical and psychological characteristics of the student himself; determined by the specifics of the subject of interaction; caused by unfavorable factors of the social and / and material environment in which educational interaction takes place. An in-depth analysis of typical barriers that potentially arise between a teacher and students makes it possible to determine ways to overcome them. A psychological portrait of a personality that potentially creates barriers in interpersonal interaction is outlined. The main ways, techniques and methods of overcoming psychological and pedagogical barriers in the process of interaction between teachers and students are determined.

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