

THE USE OF COMMUNICATION TECHNOLOGIES IN HIGHER EDUCATION

EL USO DE LAS TECNOLOGÍAS DE LA COMUNICACIÓN EN LA EDUCACIÓN SUPERIOR



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ABSTRACT

The methodological basis of the article is formed by the provisions of the personal approach to education, which actualizes the subject-subject nature of the relationships between all participants, appealing to the value, semantic, and emotional aspects of their communication; the subject-activity approach, in which the subject, as a "constitutive" characteristic of personality, its new quality is manifested in an actively selective, proactively responsible, and transformative attitude, and is formed in the process of creating pedagogical conditions for self-regulation and self-development; the dialogical approach, which establishes the communicative nature of the content and results of education; the competence approach in education, orienting higher education toward developing graduates' skills for reflection and effective action in new, uncertain, and extreme situations, overcoming personal deformation and depersonalization; and the acmeological approach, which allows us to consider the person as a subject in their desire for the highest professional and personal achievements. Pedagogical conditions for developing university students' communicative self-efficacy have been designed and implemented. Based on the above, it can be concluded that the research conducted complements pedagogical science in the field of

theoretical and applied study of the problem of developing university students' communicative self-efficacy. This work is only one of the possible solutions. Further research can be conducted to identify other conditions and factors that contribute to the development of university students' communicative self-efficacy.

Keywords:

Education, communicative, creating pedagogical conditions, innovation, system.

RESUMEN

La base metodológica del artículo está formada por las disposiciones del enfoque personal en la educación, actualizando la naturaleza sujeto-sujeto de las relaciones de todos los participantes, apelando a los aspectos valorativos, semánticos y emocionales de su comunicación; el enfoque sujeto-actividad, en el que el sujeto como característica "constitutiva" de la personalidad, su nueva calidad se manifiesta en una actitud activamente selectiva, proactivamente responsable y transformadora y se forma en el proceso de creación de condiciones pedagógicas para la autorregulación y el autodesarrollo; el enfoque dialógico, que establece la naturaleza comunicativa del contenido y los resultados de la educación; el enfoque de



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competencias en la educación, orientando la educación superior hacia el desarrollo de las habilidades de los graduados para la reflexión, la acción efectiva en situaciones nuevas, inciertas y extremas, superando la deformación personal y la despersonalización, el enfoque acmeológico, que nos permite considerar a la persona como sujeto en su deseo de los más altos logros profesionales y personales. Se han diseñado e implementado las condiciones pedagógicas para la formación de la autoeficacia comunicativa de los estudiantes universitarios. Con base en lo anterior, se puede concluir que la investigación realizada complementa la ciencia pedagógica en el campo del estudio teórico y aplicado del problema de la formación de la autoeficacia comunicativa de los estudiantes universitarios. Este trabajo es sólo una de las posibles soluciones. Se pueden realizar más investigaciones para identificar otras condiciones y factores que contribuyen a la formación de la autoeficacia comunicativa de los estudiantes universitarios.

Palabras clave:

Educación, comunicativa, creación de condiciones pedagógicas, innovación, sistema.

INTRODUCTION

In modern conditions of uncertainty, variability, increased conflict, metaqualities (self skills) are especially in demand, helping a person to successfully function in society, understand themselves, regulate their state, be a subject of activity and communication. It should be noted that self skills are among the qualities that are especially valued by employers, and university teachers understand the need to develop them in students. This is reflected in both professional and educational standards of higher education.

In this regard, the problem of creating conditions for self-organization and self-determination of students, their understanding of their capabilities, building an individual educational program, demonstrating independent proactive actions, searching for external and internal resources to increase the success of self-realization is becoming increasingly relevant in pedagogy (Habermas, 1992). Formulating and emphasizing the problem of a person's readiness for continuous self-development through self-analysis, self-trust, understanding their deficiencies and capabilities, ideas about their own effectiveness in activities and communication require a special approach to organizing the educational process at a university. The study of educational standards of higher education from the point of view of the formed competencies allows us to conclude that among both universal and general professional and professional competencies of students there

are those that in an explicit or contextual format imply communicative competence (Giddens, 1991). One of the important characteristics of communicative competence is the student's subjective idea of his competence in the field of professional and educational communication, that is, communicative self-efficacy. This meta-quality is manifested in the conviction of one's own effectiveness, is formed on the basis of awareness and reflection of one's own success in communication and obtaining one's own communicative experience, predetermines a person's communicative readiness for effective actions, first of all, in a situation of uncertainty. At the same time, in the real educational practice of universities, the subjective position of students in the communication process, expressed in self-confidence, motivation for high-quality communication, awareness of their potential, readiness to act effectively in a situation of uncertainty, reaction to success and failure, is not sufficiently taken into account.

The results of the analysis of modern psychological and pedagogical research indicate a significant increase in interest in the problem of self-efficacy, both in general and in professional (Bers & Smith, 1991; Harvey et al., 2006; Douglass et al., 2012; Creswell, 2014; Chesnut et al., 2018).

However, most works deal with the general self-efficacy of a person. The phenomenon of communicative self-efficacy is studied fragmentarily, most often in the context of applied psychological research. In particular, some aspects of communicative self-efficacy of students in the humanities, in the field of engineering, medical education, in connection with the use of information technology are considered (Lin et al., 2016ab; Liu et al., 2018; Lin et al., 2020; Lin, 2021).

Thus, there is a significant deficit of research related to the identification, creation and implementation of pedagogical conditions for the formation of communicative self-efficacy as a meta-quality characterizing universal, general professional and professional competencies.

The concept of "self-efficacy" is understood as a person's perception of their ability to successfully act in existing situations. It is based on the principle of mutual determination of personal factors, behavioral activity and the environment and is articulated as a person's confidence in their ability to manage events that affect life (Žižek, 1989). The scientist and his followers formulated the properties of self-efficacy, identified the sources of its formation and showed that self-efficacy affects various motivational characteristics, such as the choice of goals, persistence in achieving them, emotions, and coping with difficulties.

The subject of self-efficacy research in the field of education is issues related to its diagnosis in students, the

study of its influence on academic achievements, goal setting, career development, and overall performance (Habermas, 1981; Nicometo et al., 2010; Hodis & Hodis, 2015; Hodis et al., 2015; Hodis & Hodis, 2022).

Analysis of the theory and practice of education in the context of the formation of communicative self-efficacy of university students allows us to identify a number of contradictions between:

the state and society's focus on effective communicative training of university graduates, which is reflected in the requirements of educational standards, and insufficient attention to the problem of self-efficacy as an indicator of a new quality of communication;

the existence of well-founded theoretical provisions in the field of psychology and pedagogy of subjectivity and insufficient development of pedagogical conditions for the formation of communicative self-efficacy as a manifestation of the subjective position of students in communication;

the presence of personal opportunities for self-realization in students and insufficient orientation of the educational process towards the formation of skills for adequate assessment of communicative situations, effective action in order to obtain a positive result, confidence in one's own abilities and self-confidence in communication.

The object of the article: the educational process at the university.

The subject of the article: pedagogical conditions for the formation of communicative self-efficacy of university students.

The purpose of the article: to identify and theoretically substantiate the pedagogical conditions for the formation of communicative self-efficacy of university students.

The hypothesis lies in the assumption that the formation of communicative self-efficacy of university students will be effective if:

at the theoretical level, the essence and content of the concept of "communicative self-efficacy of university students" are clarified, a model for the formation of communicative self-efficacy of university students is developed, the pedagogical meaning of the formation of this meta-quality in the educational process of the university is specified, pedagogical conditions for the formation of communicative self-efficacy of university students are substantiated, criteria and levels of studying its manifestation are developed;

at the practical level, pedagogical conditions are developed and implemented in the educational process of the

university: actualization of the communicative potential of the content of humanitarian disciplines; enrichment of students' communicative experience through the organization of situational learning in the classroom; inclusion of students in communication-oriented types of educational and industrial practices of varying degrees of psycho-emotional stress.

MATERIALS AND METHODS

The methodological basis of the article is formed by the provisions of the personal approach in education, actualizing the subject-subject nature of the relations of all participants, appeal to the value-semantic and emotional aspects of their communication; the subject-activity approach, in which the subject as a "constitutive" characteristic of the personality, its new quality is manifested in an actively selective, proactively responsible and transformative attitude and is formed in the process of creating pedagogical conditions for self-regulation and self-development; the dialogical approach, setting the communicative nature of the content and results of education; the competence approach in education, orienting higher education towards the development of graduates' abilities for reflection, effective action in new, uncertain, extreme situations, overcoming personal deformation and depersonalization, the acmeological approach, which allows us to consider a person as a subject in his or her desire for the highest professional and personal achievements.

Methods of pedagogical research: general theoretical – analysis of psychological and pedagogical, scientific and methodological, reference and encyclopedic literature, regulatory documentation on the topic of the research; interpretation, comparison, hypothesis generation, pedagogical modeling; empirical – study and generalization of pedagogical experience, pedagogical observation, conversation, analysis of students' activities, self-assessment, mutual assessment, expert assessment, diagnostics of the level of formation of communicative self-efficacy of students; questionnaires, testing, survey; statistical – descriptive statistics, Fisher's F-test, Student's t-test and Fisher's angular transformation (φ^* – criterion).

Possibilities of Forming Communicative Self-Efficacy of Students in the Educational Process of a University The concept of "educational process in a university" is considered, the possibilities of organizing the educational process in a modern university based on a competence-based approach are revealed, the emphasis is placed on the need to develop metacompetences or self-skills associated with the self-efficacy of an individual. Considering, first of all, the communicative training of university students in the context of forming their communicative competence and communicative self-efficacy, the author draws attention to the need to design content guidelines taking into

account the specifics of the future professional activity of students, which is specified in educational standards, professional standards and professions, primarily psychograms. Based on the interdisciplinary analysis, the general characteristics of communicative self-efficacy in relation to the personality of a university student, sources and mechanisms of communicative self-efficacy formation were identified, and a conclusion was made that in the process of its formation in students, emphasis should be placed on mastering communicative strategies, updating and developing their reflective abilities; on deepening their understanding of their communicative abilities and capabilities; on increasing self-confidence; on strengthening realistic self-esteem and positive self-attitude of students to their communicative abilities; on selecting the content and forms of work related to the performance of more difficult, non-standard tasks, with the desire to complete what was started to the end, and in case of failure, to rethink their actions with a focus on the result. As a result, the author defined the pedagogical meaning of the formation of communicative self-efficacy in students, which consists in identifying and creating pedagogical conditions that contribute to: orienting students towards communicative self-efficacy and accepting it as an important meta-quality; strengthening students' confidence in achieving a positive result in various communicative situations by enriching their communicative experience; demonstrating confident, flexible communicative behavior focused on a positive result in various situations, including in situations of uncertainty.

To assess the level of formation of communicative self-efficacy of university students in accordance with the identified criteria, pedagogical diagnostics (survey, observation, self-assessment, mutual assessment and expert assessment) as well as additional standardized methods were used.

As a result of identifying the methodological and theoretical prerequisites for the formation of communicative self-efficacy of university students, a model of this process was developed. The model allows for a structural and meaningful examination of this process: it reflects the phases of formation of communicative self-efficacy, the pedagogical conditions corresponding to them and has an indication of the criteria associated with them; it includes information on the levels of manifestation of communicative self-efficacy, which should change under the influence of specially created pedagogical conditions in the process of various communicative practices of students.

Actualization of the communicative potential of the content of humanitarian disciplines presents the trajectory of the implementation of the pedagogical condition for the formation of communicative self-efficacy of students, corresponding to the first phase of the cycle of this process

- the «orientation» phase. It includes several interrelated areas of work: organizing the information of students about communicative self-efficacy; studying the formation of communicative self-efficacy of students; including students in communicative tests in order to expand and deepen the knowledge and skills of students in the field of professional and business communication. The work carried out at this stage is aimed at activating the cognitive and reflective actions of students in the context of the meta-quality under consideration, namely: understanding by students the essence of communicative self-efficacy in general and their own level of communicative self-efficacy; updating students' ideas about the proper, reference communicative behavior of a specialist in their chosen profession in various situations and students' understanding of their communicative goals and abilities; gaining insight into the most optimal communication strategies, tactics and awareness of the effectiveness/inefficiency of communication actions of both one's own and other people.

The main form of work is defined as professionally oriented tasks of a communicative nature related to the formation of practical communication skills of students, necessary for them both in future professional activity and in everyday life. Their main task is not so much to receive an answer as to acquire new knowledge: a method, a way of solution, a technique, with possible transfer to other similar situations, the formation of personal qualities necessary for a highly professional competitive specialist («Self-presentation», «Interaction in emergency situations», «At the international exhibition of fire and rescue equipment and technologies», «Saving people is the dignity of the brave», «Business documentation: resume», «Volunteering is a step to a profession» and others). The main types of such tasks are identified, an algorithm for working with them is formulated, methodological guidelines for teachers on the design of such tasks are developed and published. For a more successful orientation of students to communicative self-efficacy in the classroom of humanitarian disciplines, the following forms and methods of work are actively used: a conversation with elements of discussion, creation of algorithms, preparation of a message, a speech in front of an audience; discussion, commenting on speeches; development of criteria for effective monologue/dialogue statements; construction of rules, preparation of recommendations; work in pairs, groups; mutual checking and mutual assessment, self-assessment, preparation of a self-observation diary.

Communicative self-efficacy of university students as a meta-quality reflects conscious possession of productive communicative strategies and tactics, confidence in their own abilities to implement them and achieve a constructive result, and ensures effective and flexible

communicative behavior in various situations. Formation of communicative self-efficacy of university students is an organized pedagogical process, presented in the phases: «orientation», «enrichment», «activation», and consisting of identifying and creating pedagogical conditions: «actualization of the communicative potential of the content of humanitarian disciplines», aiming students at a conscious understanding of their communicative characteristics, comparing them with proper professional communicative behavior, acquiring knowledge about effective communicative strategies and mastering ideas about communicative competence and self-efficacy; «enrichment of the communicative experience of students through the organization of situational learning in the classroom», which contributes to the expansion of their professional communicative repertoire, their acceptance of communicative self-efficacy as an important goal-quality; «inclusion of students in communicatively-oriented types of educational and industrial practices of varying degrees of psycho-emotional stress», which means independent, confident manifestation of effective communicative behavior of students in a situation of risk and uncertainty. The following serve as criteria for the formation of communicative self-efficacy of university students: cognitive-reflexive - involves students' awareness of their communicative characteristics and their comparison with the required ones, their understanding of the essence of communicative self-efficacy; emotional-value – involves the emergence of students' attitudes towards communicative self-efficacy as an important goal-quality, their focus on effective communicative behavior and the aim of improving their communicative competence and communicative self-efficacy in professional activities; creative-activity – reflects the expansion of experience in the field of professional and educational interaction, the acquisition of confidence and the manifestation of flexibility of communicative behavior in various situations, including in a situation of uncertainty. Levels of manifestation of communicative self-efficacy of university students: unstable-reproductive, situational-productive, stable-productive.

The effectiveness of the process of forming communicative self-efficacy in university students is ensured by interconnected pedagogical conditions that contribute to the expansion of students' understanding of communicative self-efficacy as an important meta-quality; strengthening students' confidence in achieving a positive result in various communicative situations by enriching their communicative experience; the manifestation of confident, flexible, effective communicative behavior in situations of psycho-emotional stress, significant uncertainty, which is confirmed by methods of mathematical statistics.

The judgment on the essence and content of the concept of «communicative self-efficacy of university students»,

which is understood as a meta-quality of the individual in the sense of manifestation of his/her subjectivity, as a «constitutive» characteristic of the communicative competence of the individual. Communicative self-efficacy is associated with the individual's understanding of his/her characteristics and capabilities, with self-confidence, with conscious possession of productive communicative strategies and tactics, confidence in one's own capabilities to implement and achieve a constructive result in various situations, primarily in situations of uncertainty and psycho-emotional stress. The pedagogical meaning of the formation of communicative self-efficacy as a stage-by-stage organized pedagogical process is specified, which consists in creating pedagogical conditions that contribute to: orientation of students towards communicative self-efficacy and acceptance of it as an important meta-quality; strengthening the confidence of students in achieving a positive result in various communicative situations by enriching their communicative experience; manifestation of confident, flexible communicative behavior focused on a positive result in various situations, including situations of uncertainty.

An assessment and diagnostic toolkit for studying the development of communicative self-efficacy has been developed and applied: the criteria for studying the development of communicative self-efficacy of university students are disclosed:

cognitive-reflexive, emotional-value, creative-activity; a characteristic of the levels of development of communicative self-efficacy of university students is presented: stably productive, unstable-productive, unstable-reproductive.

The pedagogical conditions for the development of communicative self-efficacy, developed taking into account the model, are theoretically substantiated and tested: actualization of the communicative potential of the content of humanitarian disciplines; enrichment of the communicative experience of students through the organization of situational learning in the classroom; inclusion of students in communicatively oriented types of educational and industrial practices of varying degrees of psycho-emotional stress. Based on the above, it can be concluded that the conducted research complements pedagogical science in the field of theoretical and applied study of the problem of forming communicative self-efficacy of university students. This work is only one of the possible solutions. Further research can be devoted to identifying other conditions and factors that contribute to the formation of communicative self-efficacy of university students.

CONCLUSIONS

It is substantiated that communicative self-efficacy of university students is a meta-quality of personality, reflecting

conscious possession of productive communicative strategies and tactics, confidence in their own capabilities for their implementation and achievement of a constructive result, ensuring effective and flexible communicative behavior in various situations.

The substantive characteristics of communicative self-efficacy of university students are revealed, including cognitive-reflexive, emotional-value, creative-activity assessment criteria. A set of levels of manifestation of the formation of communicative self-efficacy is determined as stably productive, situationally productive, unstable-reproductive.

The process of formation of communicative self-efficacy is characterized, presented by the phases: "orientation", aiming students at a conscious understanding of their communicative characteristics, at mastering the concepts of communicative competence and self-efficacy; "enrichment" of the communicative experience of students, which helps to strengthen their confidence in achieving a positive result in various communicative situations, including in situations of uncertainty; "activation" of manifestations of communicative self-efficacy of students through their conscious participation in various communicative-oriented practices, implying independent, confident, flexible, effective communicative behavior.

A structural and functional model has been developed that ensures the prospects and success of the implementation of theoretically substantiated pedagogical conditions for the formation of communicative self-efficacy of university students.

The theoretical significance of the study is as follows:

A refined concept of "communicative self-efficacy of university students" has been introduced into the scientific apparatus in the context of implementing the subject-activity approach in education.

Pedagogical conditions for the formation of communicative self-efficacy as a meta-quality of university students, ensuring their effective communicative behavior, have been theoretically substantiated.

The possibilities of the subject-activity approach in the communicative training of university students as the implementation of the idea of forming self-efficacy, which is a manifestation of subjectivity in communication, have been revealed.

It has been determined that the peculiarity of the functional and structural model of forming communicative self-efficacy as a meta-quality is that pedagogical conditions represent a step-by-step process of orienting university students to conscious understanding, enrichment of their own communicative experience and the development of confident, flexible, effective communicative behavior.

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