

TECHNOLOGIES OF PEDAGOGICAL EXCELLENCE UNDER THE CONDITIONS OF DIGITAL REALITY

TECNOLOGIAS DE EXCELÊNCIA PEDAGÓGICA SOB AS CONDIÇÕES DA REALIDADE DIGITAL

TECNOLOGÍAS DE EXCELENCIA PEDAGÓGICA BAJO LAS CONDICIONES DE REALIDAD DIGITAL

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ABSTRACT: The object of the study is pedagogical excellence as “the teacher’s ability to engage students in collaborative learning activities to achieve planned developmental, upbringing, and learning outcomes” in the face of new challenges and risks. The study aims to formulate substantial requirements for pedagogical excellence in the conditions of the formation of a new educational environment. In a changing world, pedagogical excellence involves a combination of several techniques and technologies that contribute to the formation of a new image of the creative leader of the pedagogical process, which combines both the classical teacher, a methodologist, a speaker, a manager, and an organizer of time and space of the educational continuum around the student, who is actively involved in the process of receiving and actively acquiring knowledge.

KEYWORDS: Teacher effectiveness. Educational space. Risks and challenges of time. Knowledge and information.

RESUMO: *O objeto do estudo é a excelência pedagógica como “a capacidade do professor de envolver os alunos em atividades de aprendizagem colaborativa para alcançar resultados planejados de desenvolvimento, educação e aprendizagem” diante de novos desafios e riscos. O estudo visa formular requisitos substanciais para a excelência pedagógica nas condições de formação de um novo ambiente educacional. Em um mundo em mudança, a excelência pedagógica envolve uma combinação de uma série de técnicas e tecnologias que contribuem para a formação de uma nova imagem do líder criativo do processo pedagógico, que combina tanto o professor clássico, um metodólogo, um palestrante, um gestor, e um organizador de tempo e espaço do continuum educacional em torno do aluno, que está ativamente envolvido no processo de receber e adquirir ativamente o conhecimento.*

PALAVRAS-CHAVE: *Efetividade docente. Espaço educacional. Riscos e desafios do tempo. Conhecimento e informação.*

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RESUMEN: El objeto del estudio es la excelencia pedagógica como “la capacidad del docente para involucrar a los estudiantes en actividades de aprendizaje colaborativo para lograr resultados planificados de desarrollo, crianza y aprendizaje” frente a nuevos desafíos y riesgos. El estudio tiene como objetivo formular requisitos sustanciales para la excelencia pedagógica en las condiciones de formación de un nuevo entorno educativo. En un mundo cambiante, la excelencia pedagógica implica una combinación de una serie de técnicas y tecnologías que contribuyen a la formación de una nueva imagen del líder creativo del proceso pedagógico, que combina tanto el maestro clásico, un metodólogo, un orador, un gerente, y un organizador de tiempo y espacio del continuo educativo en torno al alumno, que participa activamente en el proceso de recepción y adquisición activa de conocimientos.

PALABRAS CLAVE: Eficacia docente. Espacio educativo. Riesgos y desafíos del tiempo. Saberes e información.

Introduction

Under the conditions of digital reality, there is an active transformation of the educational space and, in accordance with the challenges of the time, new technologies of pedagogical excellence are in demand. At the end of the last century, Alvin Toffler argued that “in the twenty-first century, the most important of all raw materials will be knowledge” (TOFFLER, 2003, p. 398). Reality confirms the foresight of the famous thinker. Today, one of the most quoted commodities in which people are willing to invest money, time, and resources is knowledge. The dynamic changes in the contemporary educational environment are due to the development of digital technologies, which are reshaping all traditional notions of people about the boundaries of knowledge and education. The younger generations, children and adolescents, differ from the older ones because they live in a time of not only great opportunities but also a great responsibility. Every era provides its opportunities and responsibilities. It was not so easy to go from the habit of speaking orally to mastering written language. The written speech provided the opportunity to share information as an item – first, in the form of handwritten and, later, printed texts. Modern technologies have simplified this process down to a single command-click. Every time, changes in the technologies of storing and transferring knowledge put on a person the burden of responsibility for the correspondence of the written to reality. The culture of speech changes the style of communicative interaction, which, overall, shapes a new format of social and cultural space.

Given the overarching information boom, it becomes important to equip the next generations with instruction on how to use the resources of the information space. Yet the problem lies in the fact that there is no such instruction, and even if it were created, it would be useless. The emphasis should be put on bringing up a conscious subject whose level of

moral and spiritual culture would match the level of technology at their disposal. Naturally, this responsibility belongs to the family and school. By mere “may/may not” directives, it is impossible to create a healthy information environment. A professional approach can be expected of the school and teachers, whose excellence may become a solid guarantee of the spiritual and moral health of the next generations.

Dialectical ascent of modern communicative space into the communicative environment is made possible in the presence of new transformational processes in the systems of education and upbringing. The flagships of this process are teachers, professors, educators, research scientists, some of whom develop theoretical and methodological foundations of pedagogical activity, while others implement the theories in practice. The discourse about the essence of pedagogical excellence in the context of new challenges and risks is very relevant.

Research problem. In our view, the problem lies in the redundancy and accessibility of information creating the illusion of the mastery of knowledge. However, information and knowledge are two different concepts. Information is found in our surroundings, in a certain objectively existing space, and just like space, it has physical characteristics. Knowledge is a socio-cultural value, knowledge has a subjective nature because each time it is someone else’s knowledge: Socrates’ or F. Nietzsche’s, Ptolemy’s or N. Copernicus’, J. Newton’s or A. Einstein’s.

Materials and Methods

Subject of research. The subject of the study is pedagogical excellence as “the teacher’s ability to engage students in collaborative learning activities to achieve planned developmental, upbringing, and learning outcomes” (BAGRAMYAN; SAKHARCHUK; VOLYA, 2020) in the context of new challenges and risks.

Goal and objectives of the study. The study aims to formulate substantial requirements for pedagogical excellence in the conditions of the formation of a new educational environment. To achieve this goal, it is necessary to solve the following objectives: to analyze the challenges and risks of our time, to consider professional excellence as one of the factors of the organization of knowledge economy, to determine the current state of the problems of pedagogical excellence in the schools of the region.

The methods employed in the study include dialectical analysis, which allows discovering the logic of the emergence and development of the abilities of pedagogical

excellence; the phenomenological method used to study pedagogical excellence as an independent phenomenon, which has a number of features; the general logical methods of analysis and synthesis used in constructing a sociological portrait of the understanding of pedagogical excellence by teachers of secondary general education schools in the Chechen Republic, Russia.

Results

In his lecture “Transformation of man in the global world of digital culture,” the prominent Russian philosopher V.V. Mironov (2020) reflects on the main challenges of modernity. Whereas in the era of the dominance of the ideas of anthropology, man was seen as the crown of creation setting the goals for the entire development of existence, technocratism, having torn man out of the biological world, has turned him into a certain suprabiological being, which Mironov defines as a Super Man – Homo Sapientissimus. At the heart of the challenges of modernity lies the problem of the development of modern forms of communication and one of the threats to the spiritual foundations of mankind can be considered the culture of information selection (BETILMERZAEVA, 2020), which we view in its relationship with the concept of “knowledge”.

A modern person experiences risks of ontological and epistemological nature. The ontological risks stem from the displacement of reality by imitation, and the epistemological risks arise from the problem of the transformation of our ideas about truth, the methods of establishing it, and the methods of verifying it.

Reality shows that the transformation of the world and human beings goes far beyond our commonsense perceptions. V.V. Mironov (2020) notes that

the higher the level of technology of production and all human activity, the higher the level of development of society and of man himself in their interaction with nature, the new civilization, and the new humanistic culture, proceeding from the fact that man in itself is the end of social development.

The transformation of an individual of the digital age is extremely rationally explored by A.V. Kurpatov (2020) who believes that the problem of the challenges of modernity is defined by changes in the format and volume of consumed information, the decentralization of society and the disappearance of vertical social connections, changes in the ways of communication, and the overall hedonistic orientation and the inability to construct the model of the future. Kurpatov (2020) defines the risks of an individual in the digital age by reduced

quality of intellectual labor; reduced quality of education, which involves people losing the ability to learn; lower emotional intelligence, digital autism, increased digital addiction; a drop in motivation, a hope for easy success, a lack of tolerance for failure. A warning can be heard in the words of D. Dennett: “What’s wrong with turning over the drudgery of thought to such high-tech marvels? Nothing, so long as ... we somehow manage to keep our own cognitive skills from atrophying” (KURPATOV, 2020).

According to A.V. Kurpatov (2020), there is no solution to these problems yet. Various approaches are being developed by Sberbank NeuroLab, including mindfulness (identifying the significance of information), digital hygiene (norms of digital consumption), and effective sociality (creating methods of social contact that allow one to think systematically and deeply).

The discussion of the problem of spiritual security amid contemporary technological metamorphosis should produce new approaches to solving problems and avoiding the risks of the transforming reality. Spirituality as a special form of human expression in individuals has gone a long way of formation and adjustment in the context of social and cultural trials. Each era has its own physical and spiritual face. In the processes of evolutionary development, periods of revolutionary leaps have always been a shock for contemporaries. So, it was in the period when the hunter-gatherer culture was replaced by the one of agriculture and when the culture of farming evolved into the culture of machine production. The level of economic development drives the development of human society in one direction or another. Today, machines are transitioning into a new phase of their existence. While in the past, production was characterized by a lot of physical labor involving a large part of the workforce, the development of intelligent technology is replacing humans with cost-efficient machine labor. Today the machine is more than a means of labor, it displaces individuals from many spheres as a subject of labor. Under these conditions, the advantage of humans is not their physical strength but their education, the production of knowledge.

German education researcher Andreas Schleicher notes that “today, it is worth remembering that the development of a modern ‘knowledge economy’ reflects a larger transition from an economy based on land, labor, and capital to one in which the main components of production are information and knowledge” (SCHLEICHER, 2006). For A. Schleicher, it is obvious that the challenge of the time is that knowledge and education become the key capital to improve both the economic and social spheres of society.

“Knowledge economy” as a policy of successful existence of modern society requires investment in the form of both material support and human capital. In this sense, pedagogical

excellence is a vital element in the professional development of a teacher of a general educational institution. In numerous studies, some researchers consider pedagogical excellence “as a property, features of the teacher’s personality, others – as knowledge, abilities, and skills, some combine both together, some view it in some cases as a quality of personality and in others – as the level of professional activity etc.” (MARDAKHAEV, 2020, p. 60). Pedagogical excellence is conditioned by the level of a specialist’s professional preparedness, which covers both professional competencies and personal potential.

The problem of pedagogical excellence was posed by the outstanding teachers of the past centuries – K.D. Ushinskii, A.S. Makarenko, and V.A. Sukhomlinskii. The requirements for the qualitative component of pedagogical excellence are revealed in the analysis of the concept of “upbringing”. K.D. Ushinskii presents an original interpretation of upbringing, noting that this concept refers not only to a person but to any living organism. Accordingly, the process of upbringing should be conditioned by the opportunity to develop “any organism by means of food peculiar to it, material or spiritual” (USHINSKII, 1950). In this vein, pedagogical excellence can be interpreted as the teacher’s ability to select a method of upbringing that is appropriate to the nature of the child. In the Russian language, the term “upbringing” (“vospitanie”) is etymologically derived from the word “nourishment” (“pitanie”), “food” (“pishcha”). To bring up means to nourish the growing generation with the necessary spiritual nutrition. Of relevance appears to be the argument of A.S. Makarenko that “there is a need to develop a method of education and be able to subordinate it to the educational goals of the school” (MAKARENKO, 2018, p. 18). That is, the necessary mechanisms of implementation of pedagogical activity should correspond to the ultimate goal. With respect to teaching, V.A. Sukhomlinskii states that the object of a teacher’s attention is the most complex, priceless, precious being – a human being, and a child’s future depends on a teacher’s skill, on their mastery of the art of teaching and educating (SUKHOMLINSKII, 1981, p. 1).

Researchers note (ANDROSHCHUK; ANDROSHCHUK, 2020) that “a substantial contribution to the study of theoretical and methodological foundations underlying the development of pedagogical excellence” is made by Ukrainian scientist Ivan Ziasiu, who “founded this line of research and a course on pedagogical excellence in higher education institutions that train teachers”. I. A. Ziasiu (1997) defines pedagogical excellence as “a set of properties of a teacher’s personality necessary for a high level of professional activity”.

In the newest times of digital technology and high-speed Internet, it is necessary to educate individuals to meet the increasing demand for intellectual creativity and spiritual

security. Time dictates its own requirements for the teacher of the future. Higher education institutions of pedagogy tasked with training the teacher of the future should pursue the goal of bringing up a free individual capable of active functioning and full self-realization, with the aim of changing the lives of their students for the better (KUZMINSKYY, 2013).

Discussion

Findings. The current assessment of the state of the problem of pedagogical excellence by schoolteachers is identified through a sociological study. The sample of the study includes 100 teachers from secondary educational institutions of the Chechen Republic, Russia. Of them, 37.5% have more than 5 years of work experience at school, 25% have from 1 to 2 years of work experience, 12.5% – from 2 to 3, 3 to 4, and 4 to 5 years, each. 82.5% of the surveyed teachers have higher pedagogical education, 17.5% have higher education outside of pedagogy. 62.5% of the teachers do not have a qualification category, 25% have the highest category, 12.5 % have the first category. 85% of the teachers participating in the survey are women, 15% are men. The age distribution is as follows: 50% – from 20 to 25 years old, 25% – over 35 years old, 12.5% – from 26 to 30 years old and 31 to 35 years old. The questionnaire consists of 15 questions.

Question 1, “Can pedagogical excellence be defined as a professional quality of a teacher’s personality?”, suggests that the professional community of teachers does view pedagogical excellence as the art of teaching as a professional quality of a teacher’s personality.

Question 2 aims to find out whether the teachers draw a distinction between pedagogical excellence and pedagogical technologies. In this section, the respondents offer their interpretations of the correspondence of these concepts. Some of the teachers believe that pedagogical excellence belongs to professional qualities, whereas pedagogical technologies are the means allowing to demonstrate pedagogical excellence, the mechanisms of realizing and displaying pedagogical excellence. Others suggest that pedagogical excellence is a personal quality of a teacher gained with experience and pedagogical technologies refer to the methods of teaching. Another position expressed is that perfect mastery of pedagogical technologies is evidence of pedagogical excellence.

In question 3, the main criteria suggested as determining the pedagogical excellence of a modern teacher are creativity and competence, communication skills, teamwork skills, activity, openness, productivity, and creative work. In terms of the orientation of work, a

master-teacher is distinguished by expediency as objective coordination of the set goals with the expected results that need to be productive in nature, an indicator of this coordination being students' moral level and knowledge of the subject. A master-teacher utilizes optimal innovative technologies for the effective organization of the educational space.

Several respondents suggest the criteria for teacher excellence may include: the ability to feel the emotional state of students, humanity, the ability to self-reflection, knowledge of the subject and the ability to present it to students, effectiveness, and a scientific and creative approach.

In answering question 4 about the relationship of the concepts of “technology” and “excellence” in pedagogical activity, the teachers concur that technology is a means, a tool, and mastery is the ability to use technology gracefully, but most often – a personal quality of the individual.

In question 5 on the differences of innovative teaching from the traditional, the respondents note that innovative teaching implies “teaching to learn”, that is, it aims at developing students' ability to learn, meaning that innovative learning is primarily the ability of students to find the necessary information on their own. Innovative developmental learning implies the following: 1) it is based on the zone of proximal development; 2) the student acts as a subject of their own learning activity; 3) it is aimed at mastering the ways of cognition as the ultimate goal of learning; 4) it develops theoretical thinking and theoretical manner of cognition. Traditional teaching: 1) is based on the principle of accessibility; 2) involves the student functioning as an object of pedagogical activity; 3) focuses on mastering a certain amount of knowledge; 4) develops everyday thinking, the empirical way of learning; 5) students learn private methods by solving concrete and practical problems; 6) the end result is the development of an individual human capable of executive activity.

Question 6 offers to choose the most demanded levels of pedagogical excellence of a modern teacher from the proposed options: the reproductive level (the teacher is able to reproduce to others what they know themselves as they know it); the adaptive level (the teacher is able to not only transmit information but to transform it in accordance with the peculiarities of the object they are dealing with); the locally modeling level (the teacher is able to not only transmit and transform information but to model the system of knowledge on specific issues); the systematically modeling level (the teacher is able to model the system of activities that form the system of knowledge on their subject). 62.5% of the respondents give preference to the third option – a locally modeling teacher able to not only transmit and transform information but also to model the system of knowledge on specific issues. 37.5% of

the teachers choose the adaptive teacher capable of both transmitting information and transforming it in with respect to the specifics of the object they are dealing with. Nevertheless, we argue that the modern teacher needs to offer systemically modeling knowledge on their subject.

Question 7 uncovers the main challenges of our time from the teachers' perspective. The top three challenges are as follows: 87.5% of the respondents believe that one of the important challenges of our time is to ensure positive socialization and learning success of every child; 75% consider as a major challenge the tasks of creating the open space of education and ensuring the socialization of children (supporting all types of education outside the school); 50% point to the need to provide a new quality of educational results – meta-disciplinary competence, positive social attitudes. The second three are the challenges due to the individualization of education: the creation of conditions allowing to work for the satisfaction of individual educational needs of students and for their possible educational result through the choice of methods, techniques, and pace of learning – 37.5%; the need for cooperation, combining the resources of different structures to achieve results – 25%; 12.5% pointed the challenges of the new system of evaluation of educational results and the demand for the school to function as a social lift.

Question 8 focuses on various deficits faced by modern teachers in their professional activity. Lack of time is cited as a significant deficit by 50% of the teachers. 37.5% note the lack of understanding on the part of parents. 25% of the respondents note experiencing a lack of understanding on the part of school administration, lack of meta-subject competencies, and the lack of ability to plan their work and distribute resources. 12.5% of the teachers, i.e., every 8th teacher, experience deficits in students' understanding, peer support, the ability to establish cooperation with children and parents, in organizing student motivation, in creating problem-based and exploratory educational cases, in organizing cooperation among students, in organizing self- and mutual control of students, and in developing the creative abilities of students.

None of the respondents face deficits such as the lack of experience in working with children, lack of subject knowledge, lack of ability to build cooperation with colleagues, lack of ability to defend their point of view, lack of ability to set goals for the lesson, and so on.

Question 9 asks the respondents to choose the most important characteristics of the professional development of a teacher. 50% of the survey participants believe that professional development primarily requires improving skills in the subject area and mastering new pedagogical competencies. The options of mastering new activities through

participation in projects and research groups, participating in and winning professional competitions, and obtaining a higher qualification category are selected by 37.5% of the respondents, each. For 25 % of the respondents, the professional development of a teacher is driven by the mastery of new methods, exchange of experience. 12.5% note the relevance of the implementation of ideas, projects; holding a position/status in a public organization. Not included in the significant types of professional development are the occupation of a higher position and the recognition of achievements in the professional pedagogical community.

Question 10 asked the study participants to note the importance of mastering each of the proposed pedagogical skills in modern conditions. The results show the most in-demand skills being the abilities to assess students' knowledge of the subject and skills and to organize students' work with texts within the subject area. The second block of skills includes showing students the practical application of the subject knowledge, the ability to develop the content of lessons with the deepening of the subject content, the ability to develop the content of lessons in accordance with the logic of the subject.

In question 11, 75% of the teachers indicate that they have gained the aforementioned skills through self-study, 50% report they learned them at the university, 37.5% learned from experienced teachers, 25% – at advanced training courses, 12.5 % – at various educational seminars.

In question 12 regarding the advantages of the teachers' job, the respondents indicate that, first and foremost, the advantages of working at a school include the job being interesting and diverse (75%), children's respect (62.5%), respect from colleagues (37.5%), stability and certainty (37.5%), and good relationships with parents (25%).

Conclusion

The performed analysis of the concept of “pedagogical excellence”, as well as the results of the sociological survey, inspire a conclusion that pedagogical excellence needs to be comprehended in a new way in the conditions of the formation of a new educational environment. Initially, pedagogical excellence implied a specialist combining in themselves a natural gift in the specialty and accumulated empirical knowledge. In a changing world, pedagogical excellence involves a combination of several techniques and technologies that contribute to the formation of a new image of the creative leader of the educational process, in which coexist both a classical teacher, a methodologist, a speaker, a manager, and an

organizer of the time and space of the educational continuum around the student, who is actively involved in the process of receiving and actively acquiring knowledge.

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REFERENCES

ANDROSHCHUK, I.; ANDROSHCHUK, I. Factors in developing pedagogical excellence in future teachers. **Professional Pedagogics**, v. 2, n. 21, pp. 29-34, 2020. DOI: <https://doi.org/10.32835/2707-3092.2020.21.29-34>

BAGRAMYAN, E.; SAKHARCHUK, E.; VOLYA, E. Pedagogical excellence in the focus of research at Russian universities. **SHS Web of Conferences, EDP Sciences**, v. 87, 2020.

BETILMERZAEVA, M. M. Riski i vyzovy dukhovnoi bezopasnosti v epokhu tsifrovoi realnosti [Risks and challenges of moral security in the era of digital reality]. *In: ANNUAL INTERNATIONAL CORRESPONDENCE SCIENTIFIC AND PRACTICAL CONFERENCE, 2020. Proceedings* [...]. 2020. v. 1, p. 55-63. Theme: Private Educational Institution of Higher Education "Academy IIUEPS".

KURPATOV, A. **Transformatsiia cheloveka v tsifrovuiu epokhu** [Transformation of man in the digital age]. YouTube, 2020. Available: <https://www.youtube.com/watch?v=4AsP4VjoR44>. Access: 10 May 2021.

KUZMINSKY, A. On the development of pedagogical excellence: prerequisites and preconditions. **American Journal of Educational Research**, v. 1, n. 11, pp. 456-463, 2013.

MAKARENKO, A. S. **Metodika vospitatelnoi raboty**: Izbrannye trudy [Methods of educational work: Selected works]. Moscow, 2018.

MARDAKHAEV, L. V. Pedagogicheskoe masterstvo sotsialnogo pedagoga, ego sushchnost i sodержanie [Pedagogical skill of a social pedagogue, its essence and content]. **CITISE**, n. 2, p. 58-70, 2020.

MIRONOV, V. V. **Transformatsiia cheloveka v globalnom mire tsifrovoi kultury** [Transformation of man in the global world of digital culture]. 2020. Available: <https://expert.msu.ru/transform>. Access: 10 May 2021.

SCHLEICHER, A. **The economics of knowledge**: why education is key for europe's success. Policy brief. The Lisbon Council, 2006. Available: <https://vo.hse.ru/data/2010/12/31/1208183650/p28.pdf>. Access: 10 May 2021.

SUKHOMLINSKII, V. A. **Sto sovetov uchiteliu** [One hundred tips for the teacher]. Udmurtia, 1981.

TOFFLER, A. **Metamorfozy vlasti** [Metamorphosis of Power]. Moscow: “AST Publishers” LLC, 2003.

USHINSKII, K. D. **Chelovek kak premed vospitaniia**: Opyt pedagogicheskoi antropologii [Individual as the object of upbringing: The experience of pedagogical anthropology]. Moscow: Akademiya, 1950.

ZIASIUN, I. A. **Pedagogichna maisternist** [Pedagogical excellence]. Kyiv: Vishcha shkola, 1997.

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