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Pedagogical Discourse in Higher Professional Education of the Future

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Abstract: Scientific discourse in the pedagogical sphere implies coverage of the activity of all subjects of the educational space. Scientific exploration aims to coordinate the positions of education applicants, teachers, and representatives of the administrative cluster possible in the organization of a comprehensive pedagogical discourse. The task of the article is to develop effective theoretical-methodological and practically oriented guidelines, which will become a reference point for the construction of higher professional education of the future. The methodological arsenal for conducting this type of research served as general scientific, educational-pedagogical, and philosophical methods. The key issues shaping the agenda of pedagogical discourse on the prospects of education are the definition of short-term pedagogical innovations and long-term strategies for the development of higher professional education. A promising area of research is the correlation between the potential of the educational environment and the potential of socio-cultural space. Thus, pedagogical discourse is called to implement synergetic models of educational development. Despite the conservatism of education, the

present and, even more so, the future of this sphere requires innovative transformations. Scientific-technological and humanitarian-informational progress allows updating education and forecasting its development based on further transformations. Higher vocational education is in dire need of constant updating of the pedagogical discourse because the abilities and skills acquired (acquired) by future professionals immediately turn into indicators of professionalism, which is a determining factor in the competitive environment of the modern world. Flexibility, mobility, multidisciplinary, openness, accessibility, efficiency - are the attitudes that guide the construction of future education perspectives and meet the principles of dynamism in this sphere of social activity.

Keywords: educational perspectives, educational strategies, education, higher education, pedagogy, educational development.

Introduction

Pedagogical discourse is relatively a concept because didactic, educational, or educational-organizational elements are quite difficult to position in the traditional scientific dimension. The reason for the complexity of considering pedagogical problems lies in the contradictions between the target element, the content, and the format of the educational environment. Education by its socio-cultural nature is much more complex than the same science. Panke and Stephens (2018) anticipate the future granting of a new status to pedagogical tools that will be used for the reflection on civic engagement.

Research Problem

The popular and effective methodological dimension of pragmatism, which has overwhelmed contemporary sociocultural space, cannot become dominant in the educational sphere. The pragmatic approach can be effective only if it highlights and emphasizes one of the components of the worldview paradigm: ontological or anthropological. The uniqueness of education is in the combination of the two dimensions and the impossibility of their imbalance. Such ideas serve as reference points when considering issues related to such a definition as the education of the future.

Research Focus

In general, every area of social activity has its own history, realities of the present, and prospects for the future. Education is no exception in this structure and the issue of development in the educational system occupies one of the important places. Transformations in education have two tasks:

- organization of the educational process with an appropriate level of interaction with the achievement of other spheres of social activity;
- formation of educational potential, which will be able to be realized in the short and long term.

Research Aim and Research Questions

The purpose of scientific exploration is to correlate the interests of all subjects of educational space in the pedagogical discourse about the future of higher professional education. The tasks of scientific and pedagogical exploration of educational perspectives have theoretical (learning content) and practical (learning format) dimensions.

Research Methodology

General Background

The methodology that allows us to investigate the concepts related to the education of the future is based on the philosophical-scientific methodology. The very notion of pedagogical discourse implies the active application of the dialectical method. At the same time, the processes of coordinating the components of the educational environment require attracting the currently relevant synergetic methodological paradigm.

Among the general scientific methods, we shall highlight forecasting and modeling, since thanks to them there is a direct opportunity to project potential models of education of the future. Analysis (both comparative and structural) provides classification and systematization of the main clusters of the educational system for further work on their transformation in the future.

It should be noted the relevance of special pedagogical methods, which help to form a theoretical basis for further predictive activity. First of all, pedagogical observation is important, the generalized results of which are the basis for planning transformations in education. Conducting pedagogical experiments allows you to test the potential of pedagogical activity in practice. The use of innovative pedagogical methods, in particular, design thinking (Beligatamulla et al., 2019) and pedagogical design, is interesting for discussing future education (Yashchuk et. al., 2021).

Sample / Participants / Group

The participants of the study are all stakeholders of the educational space: applicants for education, teachers, and educational departments and institutions. The education of the future requires taking into account the interests of all subjects of the educational system in the formation of development strategies.

Literature review

Ways of developing the educational field or models of education of the future have always been thoroughly covered in the scientific literature. When we discuss the education of the future from today's perspective, it is worth taking a critical look at the scientific studies of fifty years ago that dealt with the prospects of education. Those models that were innovative in the recent past have already lost their promise and are either already being implemented in current educational standards or have remained potentially attractive but unrealizable.

Therefore, the scientific findings on future education can be structured into two segments of relevance:

- research papers that have been published in recent years that deal with strategic innovations in the education industry;

- current research studies that look at the prospects of educational development actually online.
- Directly ways to reform higher professional education have been explored in Nordkvelle et. al. (2019). Specific proposals for the prospects of higher professional education in the context of professional specialization offer:
 - innovative techniques in the cluster of physical education and health care are found in Maksymchuk et. al. (2018);
 - the education of the future is inextricably linked with technology, the digital world (Langset et al., 2018), social media (Luo et al., 2020) and engineering Fayolle et al. (2021);
 - the pedagogical cluster of vocational education in a futuristic dimension is explored by Minett-Smith and Davis (2020).

Harrison et al. (2021) explore the education of the future as a site for human resource management. The development of specialized vocational education programs that focus on future trends is highlighted in Snow and Coker (2020). The future development of higher education is associated with a new pedagogical status in a multicultural environment (Parkhouse et al., 2019). Higher education becomes a platform for implementing the principles of sustainable development goals, outlining the dilemma between the systemic and personal dimensions (Dlouhá et al., 2019), as well as the role of educational transformations (Leal Filho et al., 2018).

A crucial aspect to consider in the perspective of pedagogical discourse is the assessment of the functioning of the higher education system in the conditions of socio-cultural instability, particularly during periods of pandemic restrictions (Murphy, 2020).

A promising direction in pedagogical discourse involves synergistic approaches to the interaction of various knowledge domains, including social and technical dimensions (Matthews, 2021). The methodological foundation of synergy lies in transdisciplinary principles (Tejedor et al., 2018).

In the short-term perspective, a separate issue for higher education arises in the aspect of argumentation for choosing the format of educational activities, a consequence of the dynamism of the scientific paradigm (Henderson et al., 2018). Overall, the question of the evidence and justification of knowledge is a systemic educational problem that begins as early as secondary education (Osborne et al., 2019). Meanwhile, Ergas and Hadar (2019) caution against losing the principles of academic integrity in the context of transformations in this sphere.

Tran and Phuong Vu (2018) highlight the issue of mobility for participants in the higher education system, which will inevitably arise in the context of the increasing intensity of societal progress.

Research Results

Research results, research results, research results, research results, research results, research results, research results.

In the formation of future educational strategies, special attention should be paid to such segments as: dynamism, inherent in the development of all aspects of an educational activity (see Tab. 1).

Table 1

Elements of the dynamism of the education of the future

efficiency	quality of education
openness	globalization and integration of the educational system
accessibility	digitalization of education
multidisciplinarity	synergetic model in education
flexibility	interaction of hard-skills & soft-skills
mobility	diversity of educational formats

Source: authors' own development

Aspects of multidisciplinarity are interesting for the study of the pedagogical discourse on the education of the future. In particular, the moments of integration of humanities concepts into natural science or technical disciplines are relevant. In addition, technologization and digitalization change the principle of humanism in education, giving it a more human-centered status. The principle of transitivity (Kuswoyo & Rido, 2019) ensures the practical realization of transdisciplinarity in education. For example, when linguistic concepts are integrated into engineering and technology education and unify the terminological cluster of this field of education. Or. the reverse process, when elements of digitalization provide a change of familiar communication forms to innovative digital or virtual formats. "Introducing interdisciplinarity into the higher education curriculum allows students to develop competence in synthesizing and applying knowledge and skills across many disciplines to solve problems and find solutions that would not be possible if only one disciplinary lens were used" (Ashby & Exter, 2019).

Above all, transdisciplinarity is relevant to technology programs in higher professional education, where there is a non-alternative need for competency (Tejedor et al., 2018). The sustainability of education can be ensured by a high level of knowledge, skills, and competencies. The old system, based entirely on hard-skills, which were supplemented by educational and organizational elements, has already lost its relevance.

The current development of the sociocultural space requires a new model of skills and competencies for higher professional education applicants. When we consider the future prospects of this sphere of education development, we should note the change in the actualization of the balance of knowledge, skills, and abilities that a higher professional education applicant acquires (see Fig. 1).

Figure 1

Reorienting the ratio of skills in the education of the future



Source: authors' own development

An important element of the pedagogical discourse that addresses educational perspectives is the outcome of the learning process. The acquisition of a specialty is not only a formal acquisition of skills and competencies by the applicant and the corresponding acquisition of the corresponding status. Considering the education of the future, the socio-economic component should be taken into account, the manifestation of which are such aspects as: the demand for professions, employment, competitiveness. A model of learning integrated into work is proposed (Kornelakis & Petrakaki, 2020). Thus, the educational strategy acquires a practically oriented dimension.

Significant attention in educational strategies focuses on issues of educational quality (Prakash, 2018). The modern worldview paradigm is based on pragmatic principles based on efficiency. Consequently, the educational model, first and foremost, must ensure proper outcomes. The world economy and other spheres of social activity are gradually shifting from quantitative aspects to qualitative ones in the process of achieving results (Børte et al., 2020). The education of the future must also support this trend and function according to the principles of efficiency. The preparation of a competitive and highly professional specialist while minimizing the costs of education is the goal of the educational strategies of the future.

The future of socio-cultural space is seen in the further development of information and communication technologies, which will extend their influence on the organization of processes in all areas of society. In the education of the future, digital pedagogy will no longer be an auxiliary or alternative status but will take a dominant place in the educational system.

“Proceeding from the fact that the pedagogy of higher education is the place of practice of human resource development, the characteristics of substantive, digital pedagogy in higher education and its alignment with established theories and concepts of human resource development are considered. Pedagogical opportunities arising from digital resistance and HRD processes contributing to changing approaches to academic practice in higher education are examined. A discussion of the relationship between HRD and academic practice is developed and suggestions for HRD processes to support rapid pedagogical change are made. The goal of digital pedagogy is to achieve the equivalent of a ten-year digital learning strategy in just a few months” (Anderson, 2020).

The globalization processes that have characterized sociocultural development in recent decades bring this trend as a fundamental factor for planning educational strategies. Globalization in education involves more than the blurring of boundaries between national, ethnic, or religious factors affecting education. Above all. A unified model of the educational system is being formed that will be relevant

abroad. This process is supercomplex and, at the same time, has no alternative. The openness of education acts as one of the ways to promote understanding in the civilizational dimension. Economic or political integration, reinforced by cultural and educational interaction, is perhaps the only way to further the development of human civilization and to avoid global contradictions and catastrophes. The concept of neoliberalism (Mayo, 2019) is actively implemented in the pedagogical discourse of the twentieth century, which is intended to support integration trends in education and ensure the openness of education.

The realities of today have radically changed the organization of the educational process. In particular, the COVID-19 pandemic has brought the problem of educational accessibility to the forefront. The education system was faced with the need to change the format of the educational process. Consequently, if earlier the education of the future was associated mainly with the planning of educational content, then now the form of learning also requires inclusion in the system plans for the development of education. Distance and digital virtual learning are becoming priority elements in the educational space. A study by Perera et al. (2020) indicates that blended learning is the most sought-after format among students. This means introducing the issue of learning format into the pedagogical discourse on the education of the future as a priority.

Discussion

The practice-oriented concept is the dominant component of the future education paradigm (Diachok et al., 2020). The professional qualities of specialists must meet the requirements of time and the realities of the socio-cultural environment. Therefore, the socialization of education is a systemic element in the planning of educational strategies. When developing educational programs, it is necessary to take into account the specifics of the environment in which the knowledge and skills of the future specialist will be realized. This approach is typical for short-term educational systems. The working curricula of higher professional education are increasingly acquiring signs of dynamism and can be changed and improved in the course of the educational process. Consequently, the pedagogical discourse on characterizing students' skills and abilities is not permanent but undergoes constant updating.

The question of the appropriateness of individual professional specializations is strategic and can be planned in the long term. In this variation of pedagogical discourse, in addition to the educational segment, social, economic, political, cultural dimensions are acquired.

One of the priority studies in the pedagogical discourse on the education of the future is the employment of future professionals (Barrie & Pizzica, 2019). This is particularly relevant to the higher vocational education system, which trains highly specialized professionals who can implement their skills in a relatively small competitive environment. Therefore, educational strategies should take into account analytical data on the demand for individual professions or specializations to avoid overloading the labor market with highly specialized specialists. The education of the future should be guided by the principles of efficiency, based on statistical data on employment, the productivity of specialists, career opportunities (Zajac et al., 2018). Consequently, the format: education for education must give way to the model: education for sociocultural space.

An important element in educational trend planning is the development of pedagogical culture principles (Nind & Lewthwaite, 2018). This approach will reinvigorate teacher collaboration. Student

and administrator in the educational system. Pedagogical culture allows the formation of priority clusters in the organizational and teaching-methodological aspects of the educational system. A promising direction in the organization of the educational system is the agency theory, which is a theoretical platform for reconciling the roles of government, educational institutions, intermediaries to enhance the functioning of the education system (Urbanek, 2020).

Since the pedagogical discourse concerns all stakeholders of the educational process, quite a few contradictions related to human dimensionality arise. One of the key aspects of the formation of educational strategy is the professionalism of the teacher as a carrier of knowledge. Teaching culture (Englund et al., 2018) provides for the training of mentors, not only carriers of knowledge but also consultants on the realities of socio-cultural life. Therefore, when planning new educational strategies, the role of the teacher is no longer limited to the pedagogical dimension but extends to aspects of socialization and digitalization. In this context, the role of modern and promising communication systems, in particular social media and social networks, is increasing (Mazurek et al., 2019). Many changes are expected in the education of the future and for applicants. Actually, the process of transformation is already gaining momentum, as education is already losing its conservative status, experiencing more and more innovations both in the organization of learning and directly in the educational and methodological dimension of pedagogy.

The changing model of teacher-student interaction is also becoming an important aspect of planning educational strategies. The format of the teacher as a non-alternative mentor is no longer the dominant model for the education of the future. Contemporary pedagogical discourse projects a complete reorientation of the teacher's role into an advisory one in the future. Furthermore, the instructor and the student must take an active approach to learning, where interpersonal communication is replaced by professional discourse between them (Wood et al., 2018).

The teacher-centered learning process is traditional and unpromising. Attempts to introduce a student-centered model, which are now being actively implemented, are also quite controversial. Therefore, the higher professional education of the future must be guided by the principles of self-organization and synergetic dimensions of interaction.

New guidelines for the education of the future are also provided for the administrative cluster of higher professional education institutions. Educational departments and administrations, in addition to performing their basic functions of organizing the educational process, must operate under the conditions of sociocultural trends. Many indicators that form accreditation levels of educational institutions' success, which include both purely educational components and socially-oriented ones (Rybinski, 2020), are being highlighted.

All elements of dynamism are already being actively implemented in modern educational systems. However, so far they still act as innovative transformations of the educational industry. It is clear that in some time these components will be positioned as fundamental elements of education. At the same time, analyzing the vectors of pedagogical discourse, we can predict the development of the dynamism dimension in education. This means the emergence of new innovative projects in higher professional education. The question is, can we predict these projects, and is it worth making such predictions? The experience of modern transformations in education demonstrates the need not in the accuracy of forecasting changes in education, but in the readiness for changes in any of their manifestations.

An important point in shaping the education of the future is the correlation of the principles of openness and innovativeness (Lee, 2021). Education is the sphere in which innovations cannot be implemented immediately and to the fullest extent. The reason for this is the conservatism of the educational space and the constancy of the educational and methodological arsenal. Any changes in education are evolutionary, always going through stages of testing and approval. If in previous cultural and historical eras education had enough time for steady, measured progress, then in the modern world changes happen online. Of course, the educational system, which focuses on the orderly and systematic organization of processes, is not able to respond to such transformations. The only way to implement the transformation is to actualize the human-measurable potential. When changes are primarily aimed at education applicants and teachers, their further integration into the educational process is accelerated.

Conclusions and Implications

Thus, the pedagogical discourse on higher professional education of the future requires the development of forward-looking planning strategies. The implementation of the education of the future is possible in both long-term educational strategies and short-term educational development planning. Since the priority feature of educational development in the future is dynamism, modern scientific-pedagogical discourse should take into account the following attitudes in educational development: efficiency, openness, accessibility, multidisciplinary, flexibility, mobility.

Consequently, the development of theoretical and methodological principles and practice-oriented models of educational organization, which have prospects for implementation in the future, is relevant now. Pedagogical discourse is designed to ensure the coordination of interests of all stakeholders of the educational environment. Thus, both existential and axiological dimensions of education are formed. The education of the future should be focused on innovation and development in civilizational advancement, while not neglecting the value principles traditional for the socio-cultural space.

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