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378.8**TEACHERS' PROFESSIONAL SELF-DEVELOPMENT OF
VOCATIONAL TRAINING IN A DIGITAL EDUCATIONAL
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Abstract. The rapid dynamics of digitalization of the vocational education system requires a teacher not only with no experience, but also active professional development. The purpose of the article is based on the analysis of domestic and foreign studies and pedagogical practice to diagnose the professional teachers' self-development of vocational training at the stage of active implementation of the digital learning format during the pandemic. The leading method of research is a questionnaire: the set of methods includes a questionnaire for assessing the level of readiness of a teacher for development by V.I. Zvereva, N.V. Nemova. A non-standard questionnaire adapted for teachers of vocational training and an author's questionnaire that allows an analysis of factors contributing to and hindering the professional development of respondents. The diagnostic results show a high level of professional activity of teachers in the "pre-digital" period and in the conditions of the digital educational format. However, there are significant differences in the assessment of the factors of professional self-development among teachers in the conditions of the classical system of education and at the stage of active implementation of the digital format of education. The novelty of the research lies in the study and subsequent analysis of the factors contributing to and hindering the professional self-development of teachers. The practical significance is due to the possibility of using the author's questionnaire for empirical studies of the professional development of teachers of vocational education.

Keywords: digitalization, development, professional self-development, professional education, professional training.

Introduction. Globalization, digitalization and other objective processes affect not only the country's economy, but also the education system. There is an increasing need for young personnel, mobile, labile, able to independently carry out their own professional development. To train such specialists, first of all, it is necessary to attract teachers with a high level of professional skill, who are ready to constantly develop themselves, implement new educational solutions. The requirements for a teacher of professional training are also constantly increasing at the directive level – standards are becoming more complicated, new competencies are emerging.

The transition to a new educational format due to the pandemic also sets new requirements for the professional potential of a teacher. There are a number of objective difficulties that hinder the traditional organization of the educational process: an increasing share of independent work and control of all its participants, the need for constant retention of students' attention, distorted feedback, the inability to use group dynamics, etc. All these difficulties require intensive development of personal and professional qualities of the teacher.

The question of external and internal factors that stimulate or hinder the professional self-development of a teacher remains open. It is known that in some countries participation in professional development is mandatory, in others it is voluntary (Kosareckij, Barannikov & Belikov, 2019). However, administrative incentives may cause formal fulfillment of program requirements. At the same time, there will be no internal motivation for personal and professional self-development. According to experts, there are two possible behavioral strategies with external stimulation: active resistance, rejection of the situation, ignoring new conditions or active search for new forms of self-organization, development of necessary competencies (Savva, 2021). Therefore, it can be assumed that the most effective way of professional self-development of teachers is to stimulate their internal motivation.

The thesis has sufficient evidence presented in domestic and foreign psychological and pedagogical research. Self-development as a human need was considered in detail in the works of foreign psychologists A.H. Maslow, A. Bandura, J. Rotter. G.W. Allport formulated the idea of determinism of behavior from self-knowledge and the level of self-development.

The fundamental ideas are personal and professional development as the basis for achieving professional "akme" in the works of A.S. Anisimov, A.A. Bodalev, A.A. Derkach, V.G. Zazikin, N.V. Kuzmina. The researchers focused on interdisciplinary connections and integration approaches in the study of the problems of personal self-development.

The issue of professional self-development is considered directly in the works of R.A. Sabirova (Sabirova, 2009), D.A. Leontiev, A.A. Lebedeva, A.A. Kostenko (Leont'ev, Lebedeva & Kostenko, 2017), N.S. Gluhanyuk (Gluhanyuk, 2005), V.N. Petrova, N.V. Kozlova (Petrova & Kozlova, 2018), etc.

Modern research (Suchodoletz, Larsen & Hamre, 2018) confirms that the professional self-development of teachers is largely determined by a number of factors: interest in work, the example of colleagues, the growth of responsibility, as well as the state of inertia / activity.

According to empirical studies by N.V. Zolotykh, A.V. Chernyaeva, T.S. Shevchenko, Cirocki, B.S. Kasumova, H.L. Nal'gieva (Zolotykh et al., 2019; Cirocki, 2019; Kasumova & Nal'gieva, 2021), internal factors, namely the interests and motivation of teachers, are crucial for professional development and self-development.

According to M. Tschannen-Moran (Tschannen-Moran & Woolfolk, 2001), the sources of professional self-development are the collective exchange of information through the professional community, indirect experience (observing the successful work of another person) and personal experience of mastery.

R. Prenger, C.L. Poortman, A. Handelzalts (Prenger, Poortman, Handelzalts, 2019) confirm that participation in online professional communities seems to be a promising strategy for the professional development of teachers.

Modern foreign studies of professional development of teachers are increasingly focusing on informal professional self-development taking place outside the educational organization (Lantz-Andersson, Lundin, Selwyn, 2018); Luo, Freeman & Stefaniak, 2020). Representatives of the American (Dede, Ketelhut, Whitehouse, Breit & McCloskey, 2009) and British (Trust, Krutka & Carpenter, 2016) scientific schools equally believe that this approach contributes to more sustainable professional self-development, becomes the basis for its continuity.

The understanding of professional self-development of a teacher as a form of socialization in professional thinking and practice can be considered the most accurate (Richards, 2008). According to R. Sancar, D. Atal, D. Deryakulu, A. Cirocki, T.S. Farrell (Sancar et al., 2021), it lasts continuously – from the beginning of professional activity to its end. Thus, professional self-

development is not a one-time action, but rather a developing process of professional self-disclosure, reflection and growth.

The analysis of domestic and foreign sources, pedagogical practice allows us to propose a definition of professional self-development as a process of continuous personal and professional improvement of teachers, influenced by external and internal factors.

The logic of the development of the modern educational situation caused by the change of the training format, the transition to digital technologies, initiates the search for new conditions for professional self-development of teachers.

Taking this into account, the aim of the study is to diagnose the professional self-development of teachers of vocational training in a digital educational format.

Research objectives:

- empirical study of the level of professional self-development of teachers of vocational training in the conditions of the classical fixed-term education system and at the stage of active implementation of the digital learning format (the period of the COVID-19 pandemic);
- comparative analysis of professional self-development of teachers in the conditions of traditional and digital educational formats.

The hypothesis of the study consisted in the assumption that there are differences in the level of professional self-development of teachers, as well as stimulating and hindering factors.

The results of the study can serve as a basis for further research of professional self-development of teachers of vocational training in the situation of active digitalization of the education system in Russia and in the world as a whole.

<p style="text-align: center;">Dear colleagues! Your opinion as a professional is important to us. Evaluate the possibilities of a teacher for professional self-development and the factors that stimulate and hinder this process.</p> <p style="text-align: center;">When answering the questionnaire questions, please put a score near each number: 2 - if this statement fully corresponds to your opinion, 1 - partially matches 0 - does not match.</p>		
Factors hindering the development and self-development of a teacher :		
1.	Own inertia.	
2.	Disappointment due to previous failures.	
3.	Lack of support and assistance in this matter from managers.	
4.	The hostility of others (envy, jealousy, etc.) who perceive changes and the desire for new things poorly in you.	
5.	Inadequate feedback from team members and management, i.e. lack of objective information about yourself.	
6.	State of health.	
7.	Lack of time.	
8.	Limited resources, straitened life circumstances.	
Stimulating factors:		
1.	Training courses.	
2.	Example and influence of colleagues.	
3.	Example and influence of managers.	
4.	Participation in informal professional communities.	
5.	Novelty of activity, working conditions and the possibility of experimentation	
6.	Self-education.	
7.	Interest in work.	
8.	Increasing responsibility.	

Picture 1. Assessment of factors of professional self-development of teachers' professional education (questionnaire)

Methodology. The methodology for diagnosing the level of self-development and professional and pedagogical activity by L. N. Berezhnova is based on the understanding that self-development is characterized by the desire to develop, the presence of personality traits that contribute to self-development, and the possibility of self-realization in professional activities (L. N. Berezhnova, E. I. Rogov, 2018). To organize an empirical study, a questionnaire was chosen to assess the level of readiness of a teacher for development (V.I. Zvereva, N.V. Nemova), adapted for teachers of professional educational organizations (it has a level approach and allows to differentiate respondents by levels of ability to professional self-development) (Zvereva, 2018). A

questionnaire has also been developed to analyze the factors contributing to and hindering the professional growth of teachers. The statements of the questionnaire allow us to assess the impact of various factors on the readiness for professional self-development of teachers of vocational training. The questionnaire is presented below (Pic. 1).

To diagnose the professional self-development of teachers of vocational training, professional educational organizations of secondary vocational education (SVE) and a structural subdivision of the Volgograd State Agrarian University - the Institute of Continuing Education, implementing SVE programs, were selected as an experimental base.

80 teachers of the Volgograd College of Mechanical Engineering and Communications, Volgograd College of Railway Transport and Communications (Volgograd), Kuzbass College of Architecture, Construction and Digital Technologies (Novokuznetsk, Kemerovo Region) were selected as an experimental group, 78 teachers of the Institute of Continuing Education of VolGAU, Volgograd Energy College (Volgograd), Armavir College of Management and Information Technologies (Armavir, Krasnodar region) were selected as a control group. As a control group, teachers of general education and professional disciplines of these colleges were considered who took part in the study of the professional and pedagogical competence of teachers of secondary vocational education, conducted in 2018-2019, in the conditions of the classical educational format (Maksyutova, 2020).

The experimental group included teachers who implemented training courses at the stage of active implementation of the digital learning format (the COVID-19 pandemic period from April 2019 to January 2021).

Results. The diagnostic results of the control group show a high level of professional activity of teachers: 88% of college teachers strive for self-development, only 12% of respondents are at an uncomplicated stage of pedagogical development. It is noteworthy that there are no teachers with stopped self-development.

Despite the high readiness of teachers for professional self-development, there is little activity of teachers in the digitalization of the educational process (Maksyutova, 2019). To identify the causes of this discrepancy and pedagogical passivity of teachers, an analysis of factors contributing to and hindering their professional self-development was carried out.

The most significant stimulating factors, according to teachers, are: the opportunity to study at advanced training courses, interest, novelty of activity, influence of colleagues. The results obtained are partly explained by the empirical data of I.B. Avakyan (Avakyan, 2020) on the existence of a direct relationship between the level of self-development and the socio-psychological climate in the team.

The diagnostic results are presented in Table 1.

Table 1.
Factors stimulating professional self-development of teachers (in points)

<i>Factor</i>	<i>Average value</i>
Training courses	2,3
Example and influence of colleagues	2,1
Example and influence of managers	1,6
Participation in informal professional communities	0,9
Novelty of the activity	1,8
Self-education classes	1,8
Interest in work	2,8
Increasing responsibility	0,9

Diagnostics of restraining factors showed their high importance for teachers. At the same time, the majority of teachers (63.9% of teachers) note their own high passivity, which hinders professional development. At the same time, teachers are significantly less likely to admit that lack of time, lack of support, frustration over previous failures, limited resources, straitened circumstances, health and life circumstances hinder their professional development (Table 2).

Factors impeding the professional development of teachers (in points)

<i>Factor</i>	<i>Average value</i>
Own inertia	2,6
Disappointment due to previous failures	2,2
Lack of support and assistance in this matter from managers	2,1
Hostility of others (envy, jealousy, etc.)	1,4
Inadequate feedback from team members and management	1,2
Health status	2,3
Lack of time	2,2
Limited resources, straitened circumstances	2,5

Thus, teachers of the vocational education system recognize that the main limiting factor in professional development is their own personal characteristics and motives. With regard to the stimulating factors of professional growth, this situation repeats itself: the interest in work and the possibility of experimentation are significant. Consequently, teachers note the great importance of internal factors that hinder and stimulate their professional growth. The diagnostic results of the experimental group also show a high level of professional activity of teachers. A high level of ability for professional self-development was noted among 92% of respondents, the average – 8%. More significant differences were identified in the process of assessing the stimulating and hindering factors of professional development. The teachers of the experimental group, forced to quickly switch to the digital format of education in the last two years, assess the importance of self-development incentives as follows: participation in informal professional communities (2.6 points) and self-education (2.6 points) becomes the most significant. The respondents attributed limited resources (2.8 points) and their own inertia (2.6 points) to the factors hindering professional self-development. These data are sufficient to talk about differences in the assessment of factors of professional self-development among teachers in the conditions of the classical fixed-term education system and at the stage of active implementation of the digital learning format (the period of the COVID-19 pandemic). A comparative analysis of the level of professional self-development of teachers in the conditions of traditional and digital educational formats shows not only high results in both groups, but also a change in the values of factors for professional growth towards greater independence and internal resources. Thus, the hypothesis of the study was confirmed – there are differences in the level of professional self-development of teachers, as well as stimulating and hindering factors.

Discussion. A large-scale empirical study of teachers' professional development conducted by the Norwegian Center for Scientific Education in April 2021 (berit, Sonja & Mork, 2021) also confirms that there are a number of obstacles/incentives for their professional regression or growth. The most significant factors for professional development were called: the possibility of access to external sources of information, self-education and novelty of activity. Teachers attributed the lack of time and the complexity of resources to the obstacles. It is noteworthy that the stimulating factors are both external and internal resources. Whereas the difficulties of professional development, according to teachers, are due solely to external factors.

Conclusion. For the purpose of professional self-development, a teacher should take part in various types of professional activities: to carry out innovative developments of educational and extracurricular activities, to improve the educational process by including new technologies and resources, to participate in creative search together with other representatives of the pedagogical community, to create and develop author's elective classes, i.e., he should develop constantly and comprehensively.

References

- Avakyan, I. B. (2020). Striving for self-development as a factor of innovative readiness of university teachers. *Obrazovanie i samorazvitie – Education and self-development*, 2, 88-102. (In Russ).
- Gluhan'yuk, N. S. (2005). *Psychology of teacher professionalization*. Ekaterinburg: RGGPU. (In Russ).

- Zvereva, L.G. (2018). Information competence of the teacher. *Colloquium-journal*, 11-5 (22), 29-31. (In Russ).
- Kasumova, B. S., Nal'gieva, H. L. (2021). Professional development and self-education of a teacher. *Sovremennyyj uchenyj- A modern scientist*, 1, 67-69. (In Russ).
- Kosareckij, S.G., Barannikov, K.A., Belikov, A.A. (2019). *Russian school: the beginning of the XXI century*. Moscow: Higher School of Economics. (In Russ).
- Leont'ev, D. A., Lebedeva, A. A., Kostenko, V. YU. (2017). Trajectories of personal development: Reconstruction of L.S. Vygotsky's Views. *Voprosy obrazovaniya- Education issues*, 2, 98-112. <https://doi.org/10.17323/1814-9545-2017-2-98-112>
- Maksyutova, N. N. (2019). Research of information-pedagogical competence for teachers of secondary vocational education. *Vestnik Orenburgskogo gosudarstvennogo pedagogicheskogo universiteta. Elektronnyj nauchnyj zhurnal-Bulletin of the Orenburg State Pedagogical University. Electronic scientific journal*, 1 (29), 223-241. <https://doi.org/10.32516/2303-9922.2019.29.19>
- Maksyutova, N. N. (2020). Development of information-pedagogical competence for SVO teachers in the conditions of an educational organization. *Primo Aspectu*, 1 (41), 76-83.
- Petrova, V. N., Kozlova, N. V. (2018) Professional development in a changing world: the strategy of life fulfillment. *Sibirskij psihologicheskij zhurnal- Siberian Psychological Journal*, 70, 59-74. <https://doi.org/10.17223/17267080/70/5>
- Sabirova, R. A. (2009). Optimization of professional self-development of a teacher as a psychological and pedagogical phenomenon. *Obrazovanie i samorazvitie- Education and self-development*, 3 (13), 31-37. (In Russ).
- Savva, N. V. (2021). The influence of autocompetence on the professional self-development of a teacher in modern conditions of distance education. *Grani poznaniya-Facets of Cognition*, 1 (72), 23-31. (In Russ).
- Berit, S., Sonja, H., Mork, M. (2021). Taking 21st century skills from vision to classroom: What teachers highlight as supportive professional development in the light of new demands from educational reforms. *Teaching and Teacher Education*, 100, 103286. <https://doi.org/10.1016/j.tate.2021.103286>
- Cirocki, T. S. (2019). Professional development of secondary school EFL teachers: Voices from Indonesia. *System*, 85, 102-111. <https://doi.org/10.1016/j.system.2019.102111>
- Dede, C., Ketelhut, D. J., Whitehouse, P., Breit, L., McCloskey, E. M. (2009). A research agenda for online teacher professional development. *Journal of Teacher Education*, 60 (1), 8-19. <https://doi.org/10.1177/0022487108327554>
- Lantz-Andersson, A., Lundin, M., Selwyn, N. (2018). Twenty years of online teacher communities: A systematic review of formally-organized and informally-developed professional learning groups. *Teaching and Teacher Education*, 75, 302-315. <https://doi.org/10.1016/j.tate.2018.07.008>
- Luo, T., Freeman, C., Stefaniak, J. (2020). «Like, comment, and share» – professional development through social media in higher education: A systematic review. *Educational Technology Research & Development*, 68 (4), 1659-1683. (In Russ).
- Prenger, R., Poortman, C. L., Handelzalts, A. (2019). The effects of networked professional learning communities. *Journal of Teacher Education*, 70 (5), 441-452. <https://doi.org/10.1177/0022487117753574>
- Richards, J. C. (2008). Second language teacher education. *RELC Journal*, 39, 158-177.
- Rogov, E. I. (2018). *Nastol'naya kniga prakticheskogo psihologa. Rabota psihologa so vzroslymi. Korrektsionnye priemy i uprazhneniya [Handbook of a practical psychologist. Work of a psychologist with adults. Corrective techniques and exercises]: praktich. posobie. Part 2*. Moscow: Yurait. (In Russ).
- Sancar, R., Atal, D., Deryakulu, D. (2021). A new framework for teachers' professional development. *Teaching and Teacher Education*, 101, 103305. <https://doi.org/10.1016/j.tate.2021.103305>
- Suchodoletz, F. M., Larsen, J. R., Hamre, B. K. (2018). Personal and contextual factors associated with growth in preschool teachers' self-efficacy beliefs during a longitudinal professional development study. *Teaching and Teacher Education*, 75, 278-289. (In Russ).

Trust, T., Krutka, D. G., Carpenter, J. P. (2016). «Together we are better»: Professional learning networks for teachers. *Computers & Education*, 102, 15-34. (In Russ).

Tschannen-Moran, M., Woolfolk, H. A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805. [https://doi.org/10.1016/S0742-051X\(01\)00](https://doi.org/10.1016/S0742-051X(01)00)

Zolotykh, N. V., Chernyaeva, A. V., Shevchenko, T. U. (2019). Network support for personnel training: evaluation component. *IOP Conference Series: Materials Science and Engineering*, 483, 1-8. (In Russ).

ПРОФЕССИОНАЛЬНОЕ САМОРАЗВИТИЕ ПЕДАГОГОВ В УСЛОВИЯХ ЦИФРОВОГО ОБРАЗОВАТЕЛЬНОГО ФОРМАТА

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Аннотация. Стремительная динамика цифровизации системы профессионального образования требует от педагога не только трансляции имеющего опыта, но и активного профессионального развития. Цель статьи – на основе анализа отечественных и зарубежных исследований и педагогической практики провести диагностику профессионального саморазвития педагогов профессионального обучения этапе активного внедрения цифрового формата обучения в период пандемии. Ведущим методом исследования является анкетирование: в комплект методик включен опросник оценки уровня готовности педагога к развитию В.И. Зверевой, Н.В. Немовой, адаптированный для педагогов профессионального обучения и авторская анкета, позволяющая провести анализ факторов, способствующих и препятствующих профессиональному развитию респондентов. Результаты диагностики показывают высокий уровень профессиональной активности педагогов в «доцифровой» период и в условиях цифрового образовательного формата. Однако имеются значимые различия в оценке факторов профессионального саморазвития у педагогов в условиях классической урочной системы образования и на этапе активного внедрения цифрового формата обучения. Новизна исследования заключается в исследовании и последующем анализе факторов, способствующих и препятствующих профессиональному саморазвитию педагогов. Практическая значимость обусловлена возможностью использования авторской анкеты для эмпирических исследований профессионального развития преподавателей профессионального образования.

Ключевые слова: цифровизация, развитие, профессиональное саморазвитие, профессиональное образование, профессиональное обучение.