

TRANSFORMATIONAL LEARNING OF TEACHERS: AN ANALYSIS OF THE EFFECTIVENESS

APRENDIZAGEM TRANSFORMACIONAL DE PROFESSORES: UMA ANÁLISE DA EFICÁCIA

APRENDIZAJE TRANSFORMACIONAL DE DOCENTES: UN ANÁLISIS DE LA EFICACIA

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ABSTRACT: The authors of the article consider transformational education as a formation of sustainable professional development. Its appearance is associated with attempts to resolve many crises states of society, which indicate the destructive phenomena of any society, regardless of its socio-economic formation and political model of social development. Many scientists recognize that a more sustainable model of human development can be achieved through education. However, the classical learning model, which has shown its effectiveness in the past centuries, is now experiencing powerful pressure from modern information technologies. This article introduces readers to its main and universal theoretical and research positions. Since the practice of implementing transformational learning can vary not only depending on the conceptual approaches, but also the basic cultural features of the country implementing it. The article describes the results of transformational professional development of teachers in Russia and Kazakhstan, proving its effectiveness.

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KEYWORDS: Transformational education. Sustainable professional development. Learning model.

RESUMO: Os autores do artigo consideram a educação transformacional como uma formação para o desenvolvimento profissional sustentável. Seu surgimento está associado às tentativas de resolução de muitos estados de crise da sociedade, que indicam fenômenos destrutivos em qualquer sociedade, independentemente de sua formação socioeconômica e modelo político de desenvolvimento social. Muitos cientistas reconhecem que um modelo mais sustentável de desenvolvimento humano pode ser alcançado por meio da educação. No entanto, o modelo clássico de aprendizagem, que mostrou sua eficácia nos séculos passados, agora sofre uma forte pressão das modernas tecnologias da informação. Este artigo apresenta aos leitores suas principais e universais posições teóricas e de pesquisa. Uma vez que a prática de implementar a aprendizagem transformacional pode variar não apenas dependendo das abordagens conceituais, mas também das características culturais básicas do país que a implementa. O artigo descreve os resultados do desenvolvimento profissional transformacional de professores na Rússia e no Cazaquistão, comprovando sua eficácia.

PALAVRAS-CHAVE: Educação transformacional. Desenvolvimento profissional sustentável. Modelo de aprendizagem.

RESUMEN: Los autores del artículo consideran la educación transformacional como una formación de desarrollo profesional sostenible. Su aparición está asociada con los intentos de resolver muchos estados de crisis de la sociedad, que indican los fenómenos destructivos de cualquier sociedad, independientemente de su formación socioeconómica y modelo político de desarrollo social. Muchos científicos reconocen que se puede lograr un modelo más sostenible de desarrollo humano a través de la educación. Sin embargo, el modelo de aprendizaje clásico, que ha demostrado su eficacia en los últimos siglos, ahora está experimentando una fuerte presión por parte de las modernas tecnologías de la información. Este artículo introduce a los lectores a sus posiciones teóricas y de investigación principales y universales. Dado que la práctica de implementar el aprendizaje transformacional puede variar no solo según los enfoques conceptuales, sino también las características culturales básicas del país que lo implementa. El artículo describe los resultados del desarrollo profesional transformador de los docentes en Rusia y Kazajstán, demostrando su eficacia.

PALABRAS CLAVE: Educación transformacional. Desarrollo profesional sostenible. Modelo de aprendizaje.

Introduction

None of the teachers will be able to deny the changes in education caused by the "interference" of digital technologies in educational activities (ABYLKASSYMOVA; POPEY- OOL; SHISHOV, 2019; KURBAKOVA *et al.*, 2020). If earlier the problem of the quality of education was of interest only to some countries, then in the modern digital era almost everybody is talking about it (ABYLKASSYMOVA; KALNEI; SHISHOV, 2018).

For the first time, transformational learning was mentioned in the framework of the Mezirow study in the 70s of the twentieth century (MEZIROW, 1981;1991), which analyzes the experience of teaching women who returned to education after a break. Since that time, a large number of studies have been conducted that identify institutional, social and cultural changes in the lives of individuals, social groups and society as a whole. Therefore, adult learning with a profound understanding of its processes were called transformative.

The concept of transformative learning gained particular popularity at the end of the XX and at the beginning of the XXI century, in association with the mention in government regulations (ACHIEVE, 2013; BOEHNER, 2001; U.S. DEPARTMENT OF EDUCATION, 2009). To implement the program, the parameters of a "highly effective teacher" were set, whose students demonstrate an increase in academic performance during the academic year, and the educational organization improves the indicators from year to year.

Many studies have shown that there is a correlation between the effectiveness of teaching and academic performance at the university (KINZER; TAFT, 2012). In other words, teachers "revised" their own experience (ABYLKASSYMOVA *et al.*, 2018) and learning strategy, as their students acquire their knowledge in a qualitatively new educational environment (DARLING-HAMMOND; MCLAUGHLIN, 2011). Teachers needed pedagogical support for the "transfer" of new knowledge into practice. In other words, new knowledge is not always transformed into the practice of educational activities due to the many social and cultural conditions in which teachers conduct educational activities. Consequently, the potential for professional development was lost due to many (not always depending on the teacher) circumstances, since the educational environment carries a lot of "conditions" that have influence on the academic performance of students (IVANOVA *et al.*, 2019).

High-quality professional development of a teacher is both the courage to challenge the existing practice of educational activities, and the ability to overcome psychological and social problems of education in modern conditions of digitalization (ARALOVA *et al.*, 2019). The teacher is forced to consider both the social attitude to learning in his region, and the experience of previous generations, and the need to implement the acquired knowledge in practice of real life (VERMUNT *et al.*, 2019). Therefore, only serious changes in pedagogical practice can solve "ingrained" educational problems (DEDE, 2006). And such a concept is being developed "in the theory of transformative learning".

Materials and methods

The efficiency assessment was carried out based on the Moscow State University of Technologies and Management named after K. G. Razumovsky, the Russian International Academy of Tourism, the Abai Kazakh National Pedagogical University and the Academy of Social Management of the Moscow Region. There were 4 approaches to assessing the quality of teachers' professional development results: assessment of the level of knowledge at the beginning and at the end of the professional development course (evaluation of the degree of mastery of professional knowledge was carried out, teachers and students participated, classical forms of examination and testing were used); assessment of the acquired skills in real situations of pedagogical practice (assessment was carried out by the head of the student six months after training, it was assumed that the knowledge was already used in practice); assessment of changes in the parameters of the organization's activity under the influence of teacher training (it is worth recognizing that today there are no convincing methods of complex analysis that unambiguously link the degree of influence of training on the parameters of the organization's activity, therefore, an assessment of the results of training and the requirements of the functioning and development of the organization was carried out; an economic assessment of the feasibility of teacher training for the growth of additional income was also considered, but after fruitless attempts to detect correlations, it was decided to abandon this approach.

As the main idea of the teacher training courses, "Transformational Training" was used, which explains the nature of pedagogical activity from two positions (in relation to areas of training): 1) as a learning tool for acquiring new skills and abilities to solve certain socio-technological problems; 2) as a structure of communicative interactions, for the implementation of socially significant "meanings of being", that is, ideals and moral feelings ("love", "justice", "independence", "work", "purposefulness", "democracy of public relations and the distribution of social benefits") (MEZIROV, 1981). In other words, the theory of transformational learning analyzes the change in the cognitive structures of teachers' thinking through the prism of transformation (i.e., improvement) of professional activity. But the most complete analysis should include all the rich experience of interaction not only with students, but also with the local social environment, directly or indirectly affecting the educational activities of students and their academic progress.

Teacher training syllabus portfolios were created not to form clear professional competencies, but to change the established type of thinking and behavior. We understood

that the effectiveness of such a program is difficult to measure. The results of training are manifested in the long term, affect the behavior and thinking patterns of people. Considering this circumstance, we used indirect methods: the special tests that students passed before and after professional development; monitoring the behavior of teachers in the teaching process; observation of the reaction of students and schoolchildren in the learning process, who were taught by teachers who passed advanced training; assessment of the effectiveness of the advanced training course by the students themselves using a questionnaire or using some open discussion.

Results and discussion

The results of the input control showed the following: 1) lack of understanding of the importance of identifying and analyzing the teacher's existing pedagogical problems in an average of 83 % of respondents; 2) lack of understanding that in order to solve their own pedagogical problems, it is necessary to change their pedagogical qualifications – 78 %; 3) lack of skill and desire to analyze the quality of the taught courses – 73 %; 4) lack of desire to apply in their practice the knowledge and experience acquired at advanced training courses – 69 %. It had to be stated that the overwhelming number of teachers consider the main cause of pedagogical problems to be the lack of motivation for learning among students, they do not see the importance of their own professional development. Teachers have a stable stereotype: the motivation of students and schoolchildren to study does not associate with the qualification of the teacher.

Evaluation of changes were carried out in stages, formulated in (MEZIROW, 1981):

(1) have learned the definition of a specific disorienting dilemma: 83 % (according to estimates of the courses of improvement of professional skill); 78 % showed the observation of the behavior of teachers in the teaching process; 65 % showed observation of the reaction of the students in the learning process, which trained teachers completed advanced training;

(2) mastered self-analysis of their own actions and experiences to work with feelings of guilt or shame – 56%, 51%, 45%, respectively;

(3) mastered the critical assessment of existing theoretical assumptions - 66%, 65%, 58%, respectively;

(4) 48%, 45%, 41% percent of learners respectively, were able to comprehend and accept (partially or completely) the need for changes;

(5) we studied the options of professional (role-playing) actions and relationships - 75%, 70%, 63%, respectively;

(6) they learned how to form a system (courses) of actions - 64%, 62%, 56%, respectively;

(7) acquired knowledge and skills for the implementation of professional plans - 82%, 77%, 72%, respectively;

(8) mastered the skill of working out new professional roles - 74%, 69%, 67%, respectively;

(9) formed new competencies of professional activity - 53%, 51%, 48%, respectively;

(10) integrated new competencies and skills of professional activity into the existing educational environment - 48%, 45%, 38%, respectively.

The conducted questionnaire survey of the acquired content of the refresher course in transformative education showed a level of assimilation of 90-95%. However, the authors concluded that this indicator does not correlate with changes in professional behavior.

Teachers believe that the courses help them to better understand the nature and technologies of learning. They allow them to model the educational process based on the abilities of students. They also give a huge experience of communicating with other teachers, build a system of professional interactions to resolve certain problematic situations. Many received moral and psychological support from colleagues. This contributes to the development of a sense of community and enriches the experience of teachers.

The vast majority (up to 80%) of teachers who participated in transformational training were surprised, shocked and confused by new ideas and other professional experience. Emotional "embarrassment" helped them to master new information and learn new educational technologies (both social and technological). The number of topics related to the feeling of disorientation ranged from understanding the material equipment of the educational process that creates inequality in the educational environment, to clarifying the circumstances of cyber bullying among students, and to opposing their own ideas about distance learning. Each of these disorienting dilemmas has led teachers to a new understanding of the educational process, to a new perception and to changes in practice. According to the authors, it is precisely such professional development that can cast doubt on the past experience of professional activity that is understood as transformational learning.

Conclusions

In the course of our work, we concluded that the model of transformational learning should be based not on classical (lecture and seminar) classes, but on discussion forums and group work, during which teachers share their experience and analytical approaches in the form of alternative points of view on the existing practice of professional activity.

During the training courses for teachers, the organizers of the course should be concerned about the perception of teachers of the ideas of transformation of professional activity, as well as their impact on the practice of learning activities in an educational organization. The data is collected after the courses are conducted through the analysis of accounting documents, surveys and interviews.

Our experience shows that transformational learning has a significant impact not only on the professional development of teachers, but also on the design of classes, focused on a more in-depth interaction of the teacher with students and an adequate assessment of the results of activities.

The key research position is the "study" of the educational process and the meanings that teachers, students and their parents attribute to the educational situation. The task of the scientific supervisor of the advanced training course is to help teachers participating in transformational training successfully integrate classical and innovative educational technologies. And his evaluation studies are based on collegially established methods of collecting information, where teachers are full-fledged participants in it.

During the training, the researcher, as well as the teacher himself, must answer several questions: (1) did the teacher realize the disorienting dilemma; (2) did the teacher comprehend the critical self-assessment of his unconscious assumptions; (3) did the development of the discourse occur in the work on the dilemma; (4) whether the teacher has developed self-reflection of the processes of his interaction with students; (5) whether the teacher has developed a plan for the implementation of the developed ideas and acquired level of comprehensiveness; (6) whether the teacher was able to change the practice of students' educational activities, if not, why. The results of work on the received answers (in the form of surveys, curricula and reporting documentation) allows the organizers of transformational training to improve themselves in their professional activities. Since the successful academic performance of students can be influenced by many factors that are not always reflected: these are natural, random and (or) situationally repeating circumstances.

REFERENCES

ABYLKASSYMOVA, A. E. *et al.* Development of public consciousness in pedagogical education in Russia and Kazakhstan. *In: Psychology and Education - ICPE 2018: International Conference on Psychology and Education. "The European Proceedings of Social & Behavioural Sciences EpSBS"*. London, UK: ISO London Limited, 2018. ISBN: 978-1-80296-048-8. p. 1–8.

ABYLKASSYMOVA, A. E.; KALNEI, V. A.; SHISHOV, S. E. Formation of public consciousness, spiritual and moral culture of students in the system of continuous pedagogical education. *Journal of History Culture and Art Research*, v. 7, n. 1, p. 26–33, 2018. DOI: <http://dx.doi.org/10.7596/taksad.v7i1.1460>

ABYLKASSYMOVA, A. E.; POPEY-OOL, S. K.; SHISHOV, S. E. On the theory of personal identification in the system of continuous pedagogical education (analysis of foreign experience). *Bulletin of National Academy of Sciences of the Republic of Kazakhstan*, v. 3, n. 379, p. 186-197, 2019.

ACHIEVE. **Final next generation science standards released.** 9 Apr. 2013. Available: <https://www.achieve.org/next-generation-science-standards-released>. Access: 10 May 2021.

ARALOVA, E. V. *et al.* Current youth policy in the cultural and spiritual continuum of Russia. *Dilemas contemporáneos: Educación, Política y Valores*, v. 7, n. 1, p. 118, 2019.

BOEHNER, J. A. No child left behind act of 2001. Rept. 107-63. *In: Report of the Committee on Education and the Workforce House of Representatives.* Washington D.C.: US Government Printing Office, 2001.

DARLING-HAMMOND, L.; MCLAUGHLIN, M. W. Policies that support professional development in an era of reform. *Phi Delta Kappan*, v. 92, n. 6, p. 81-92, 2011.

DEDE, C. (Ed.). **Online professional development for teachers: emerging models and methods.** Cambridge, MA: Harvard Education Press, 2006.

IVANOVA, O. M. *et al.* Social institutes in the system of person's socialization in present-day Russia. *Dilemas contemporáneos: Educación, Política y Valores*, v. 7, n. S10, p. 69, 2019.

KINZER, C.; TAFT, L. What's best for our students? Outcomes are the driving force at one high-achieving elementary school. *Journal of Staff Development*, v. 33, n. 5, p. 18-20, 2012.

KURBAKOVA, S. N. *et al.* Information technologies in education: Application of stream technologies. *Revista Inclusiones*, v. 7, no. S4-6, p. 265-278, 2020.

MEZIROW, J. A critical theory of adult learning and education. *Adult Education Quarterly*, v. 32, n. 1, p. 3-34, 1981.

MEZIROW, J. Transformation theory and cultural context: A reply to Clark and Wilson. *Adult Education Quarterly*, v. 41, n. 3, p.188-192, 1991.

U.S. DEPARTMENT OF EDUCATION. **Race to the top program: Executive summary.** Washington, D.C., 2009. Available:

<https://cis.msjs.edu/courses/evoc/639/Resources/RaceToTheTopExecutiveSummary.pdf>.
Access: 10 May 2021.

VERMUNT, J. D. *et al.* The impact of lesson study professional development on the quality of teacher learning. **Teaching and Teacher Education**, v. 81, n. 1, p. 61-73, 2019.
<https://doi.org/10.1016/j.tate.2019.02.009>

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