

**European Proceedings of Social and Behavioural Sciences EpSBS** 

www.europeanproceedings.com

DOI: 10.15405/epsbs.2020.11.03.111

# **DCCD 2020**

## Dialogue of Cultures - Culture of Dialogue: from Conflicting to Understanding

# APPRAISAL OF PROJECTS ON DIGITAL TRANSFORMATION IN EDUCATION: WAYS TO EFFICIENT DIALOGUE

Olga A. Fiofanova (a)\* \*Corresponding author

(a) Institute for Strategy of Education Development of the Russian Academy of Education, Moscow, Russia; Russian Academy of National Economy and Public Administration under the President of the Russian Federation, Moscow, Russia, fiofanova@mail.ru

#### Abstract

The features of the organization of expert dialogue in a digital environment are analyzed. The stages of moderation of the dialogue between participants in projects on digital transformation of education are analyzed. The specifics of the organization of dialogue culture on a digital portal for the examination of projects of regional teams of digital transformation of education are revealed. The purpose of the study is to identify the features of the organization of expert dialogue in a digital environment. The main research method presents a factor analysis method in identifying the principles of dialogue moderation in a digital environment. The results of the study reveal the features of the implementation of training programs for leaders in the digital transformation of education through project sessions and expert dialogue. The results of the study are of practical value for understanding the changes in the adult education model by introducing project-oriented education methods. The scientific novelty of the study is to develop a model of a digital portal for the examination of education transformation projects and the technology for organizing an expert dialogue. The research results enrich modern concepts: "The concept of dialogue of cultures", "The concept of digital education".

2357-1330 © 2020 Published by European Publisher.

Keywords: Dialogue in a digital educational environment, moderation of dialogue.



# 1. Introduction

In the context of the digital transformation of the socio-economic spheres of society and the education sector, in particular, with the aim of accelerating the training of specialists, specialized programs of professional development and advanced training of specialists in the field of education are organized. For management personnel in the field of education, such a program is implemented on the basis of the Russian Presidential Academy of National Economy and Public Administration at the Institute of Industrial Management ("Institute of Industrial Management …", n.d.). The program "Improving the management of regional education systems through the development of a digital educational environment" is implemented in the form of project sessions, when teams from Russian regions develop a project for the development of a digital educational environment relevant to a particular region.

As part of the support for projects of the program participants, a digital portal of expertise was created, as an advisory support for projects of regional teams of digital transformation of education. The digital portal was developed in the methodological framework of the dialogue of cultures: a dialogue between different professional cultures (traditional and project), a dialogue of status and professional positions, a dialogue between project developers and project experts, as well as potential users of the digital education transformation project — students, parents of students, representatives education management bodies, teachers.

### 2. Problem Statement

The problem of organizing the dialogue of participants in project sessions of the digital transformation of education is related to the fact that the specifics of organizing such a dialogue are related to the need to solve the following problems:

- development of methodological grounds for building a dialogue in the form of examination criteria for digital education transformation projects that are implemented by program participants in Russian regions;

- identification of the features of the organization of dialogue in the digital environment;

- a description of the technological stages of moderation of the dialogue between the design participants and those undergoing examination on the digital portal of project expertise.

# 3. Research Questions

Based on the problem, the following research questions are formulated:

- What are the methodological grounds for building a dialogue in the form of examination criteria for digital education transformation projects?

- What are the features of the organization of dialogue in the digital environment?

- What is the specificity of the technology for moderating the dialogue of participants in the design of digital transformation in the regions?

## 4. Purpose of the Study

The purpose of the research and scientific development is to explore the principles of dialogue moderation in a digital educational environment and to develop a conceptually sound model of an electronic portal for examining digital education transformation projects for program participants implemented at the Presidential Academy.

Research tasks are focused on 1) analysis of the implementation of the training program for leaders in the digital transformation of education based on project sessions; 2) analysis of the organization of expert dialogue on the implementation of projects of participants in the training program for leaders in the digital transformation of education on the project expertise portal; 3) analysis of the features of the organization of expert dialogue in a digital environment; 4) analysis of the examination criteria, which are the basis for constructing a dialogue with participants in project sessions; 5) analysis of the stages of moderation of the dialogue between participants in projects on digital transformation of education.

## 5. Research Methods

Methods of research and scientific development: a method for modeling the organizational principles of the electronic portal for the examination of projects for the digital transformation of education; factor analysis method in identifying the principles of dialogue moderation in a digital environment; methods of organizational and pedagogical design of electronic services of moderation of dialogue on the examination of projects of digital transformation of education.

The methodological basis of the work is the Concept of "Education Data-Management" (Fiofanova, 2020a; 2020b), the concept of digital education, the concept of project-oriented education, the concept of dialogue of cultures.

#### 6. Findings

The research results are related to the implementation of the training program for leaders in the digital transformation of education. In November 2019, the Presidential Academy launched the program "Improving the Efficiency of Management of Regional Education Systems through the Development of a Digital Educational Environment" as part of a project to introduce a targeted model of a digital educational environment in the context of the federal project "Digital Educational Environment" of the National the project of the Russian Federation "Education" ("Pasport federal'nogo proekta…", 2016). The program participants developed projects for the digital transformation of education for their implementation in the regions that received inter-budget transfers for the development of the information infrastructure of the digital economy ("Rasporyazhenie Pravitel'stva RF …", 2019).

According to the results of the final protection of projects, program participants actually implement projects in the regions (Pustovachenko, 2019). Participants present reflection of projects as an analytical case at the forum ("Big Data in Education...", 2020). Feedback on the program, project sessions, examination, dialogue moderation of discussion of projects, program participants post on regional sites ("Obrazovatel`naya programma ...", 2020; "Obuchenie regional`ny`x komand...", 2020; "Portal Programmy ...", 2020).

Projects developed by program participants are discussed together with experts in the form of a dialogue.

The grounds for building a dialogue in the digital environment are the criteria for the examination of projects for the digital transformation of education: 1) a description of the problem field; 2) the relevance of the problem being solved; 3) the relevance of the project initiative; 4) the novelty of the project initiative; 5) the potential of interregional cooperation.

Dialogue in digital communication is realized in three forms: chat, forum, blog. Chat consultations, expert forums and thematic blogs are being implemented on the digital portal for project appraisal of program participants.

Features of the organization of dialogue in the digital environment are related to the capabilities of Web 2: 0 digital services. Conceptually, organizationally and technologically, the development of Web 2: 0 services is presented in studies (Cormode & Krishnamurthy, 2008; Jarke & Breiter, 2019; Governor et al., 2019; Shuen, 2018).

The technological stages of moderation of the dialogue between design participants and undergoing examination on the digital portal for the examination of projects include: 1) setting up a criterion discussion of projects; 2) a dialogue about the logic of project steps; 3) a dialogue on how to achieve the planned results of projects; 4) dialogue on project performance indicators; 5) a dialogue about the project scalability (Emejulu & McGregor, 2016).

According to the results of the content analysis of the essays of the project participants, the digital portal for project appraisal and the possibility of dialogue with experts in the form of chats, forums, blogs effectively helped the participants of the Presidential Academy program to develop and implement projects for the digital transformation of education in the regions. Projects are connected conceptually with the ideas of creating a digital educational environment for the development of competencies of the 21st century, the development of regional electronic educational platforms, the theoretical basis of which was research.

Let us characterize the results of the analysis of the features of the organization of expert dialogue in a digital environment and the analysis of the criteria for the examination of projects for digital transformation of education, which are the basis for constructing a dialogue with participants in project sessions.

An expert dialogue should be built on the discussion with the participants of the project sessions that the project impact should take into account the potential impact of the results of digital transformation projects on the holistic development of the regional education system.

Expert dialogue is based on methods and techniques of analysis, forecasting, development of managerial decisions regarding projects of digital transformation of education.

In accordance with the recommendations of the Organization for Economic Co-operation and Development (OECD), the examination of innovative projects should be based on the following principles:

- the presence of an independent group of researchers acting as arbitrators in controversial situations based on the results of project reviews;

- the presence of added value of projects; activities - the creation of novelty in the regional education system through the implementation of the project;

- the availability of preliminary forecasting and planning of project results for the medium term, in order to be able to determine the estimated effectiveness of the project;

- the presence of systemic links of the future project with relevant planned activities for the development of regional educational systems;

- the availability of methods for comparing indicators laid down in an innovative project or obtained as a result of expert (certification) tests, with international and national requirements for the use of an object of examination of its compatibility with international achievements in terms of parameters.

Thus, expertise becomes a development resource for the participants of the project teams themselves through "feedback", reflection and communication about the results achieved, deficits and prospects of the innovative project. An expert is a carrier of the practice of humanitarian management and the development of human capital for project teams. Therefore, in the expert dialogue, the expert also analyzes the values, motives of the participants of the project groups and the justifications put forward by the project team for the need to implement the project of digital transformation of education in regional educational systems.

Expert opinion is the basis of management decisions on the development of education. In this understanding of expertise, the expert community becomes the conductor of managerial decisions on the development of education, relying on the "growth points" of educational systems - the practice of implementing projects.

According to the Leadership Architect methodology, management competencies of 26 project teams of regional educational systems are evaluated. Analysis of the dynamics of project, analytical, communicative, leadership competencies of project team members revealed a positive dynamics in the development of competencies compared with the periods before the start of the program and after the implementation of the program of project sessions and expert dialogues.

Work in the project team, analysis of the implementation of the innovative project with the participation of experts contribute to the development of managerial competencies and the coordination of team roles in the project team. Those, we can say that an innovative project is also an intensive form of professional development of project participants.

The expert activity in the field of education that accompanies design decisions makes it possible to realize the value of development. At the heart of expert activity as development management is the life cycle of transformative ideas.

Expert-analytical management with the participation of many actors based on dialogue, feedback on design decisions and analysis of scenarios for the possible implementation of projects is a more complex model of expert dialogue.

This kind of expert activity can become an institution of social change, their meaningful initiation and a balanced assessment of the consequences of the implementation of projects of digital transformation of education.

The expert dialogue is in the nature of expert forecasting of the changes that the digital education transformation project will entail. The expert dialogue is aimed at reflecting by the project team members the forecast of the expected changes in the digital transformation of education expected from the project. An expert dialogue on forecasting project results is carried out on the basis of the following technological steps: 1) reflection of the forecast, 2) analysis of retrospective information, internal and external conditions,

3) determination of the most probable options for the development of internal and external conditions, 4) examination of the forecast, 5) development of alternative options, 6) a priori and a posteriori assessment of the quality of the forecast of design changes, 7) analysis of implementation and adjustment of the forecast.

Forecast - a probabilistic judgment on the state of a phenomenon in the future, forecasting - a special study of the prospects for the development of objects, problems or situations, mainly with quantitative estimates and indicating specific terms for the change of this phenomenon. Forecasting is distinguished by a number of significant features related primarily to the probabilistic nature of social processes, which is explained by the participation as a subject of these processes of the person implementing the project.

Based on forecasts, foresight is carried out and management decisions are made on the implementation of projects. The purpose of forecasting is to obtain scientifically based options for development trends (changes) of a managed object (indicators of its condition) in time and space.

Expert dialogue should help project team members predict changes in educational systems related to project implementation.

According to the results of the implementation of the training program for leaders of digital transformation among program participants, according to the results of competency-based assessment and certification, the development of communicative competencies, cross-functional interaction competencies, analytical and prognostic competencies, facilitation and moderation competencies are noted.

In expert dialogs, in communications on digital education transformation projects, project team members learn:

- analyze data in the field of education and educational results of students through digital resources and services;

- develop organizational and pedagogical decisions based on the results of data analysis in the field of education for the implementation of projects for the digital transformation of education;

- design the interaction of participants in educational relations for the analysis of data on education and the planning of consolidated decisions on ways to improve the quality of education and manage the development of education;

- design proposals based on data analysis and identified relationships between education data, predict systemic project results;

- develop guidelines for employees of regional educational systems on the use of digital educational resources and services for the implementation of projects.

Participants in the training program for leaders of digital transformation later in their regional educational systems become when implementing projects on social positions in communications:

- integrators of opinions and positions of employees of the organization or members of the project team,

- informants of predicted changes;

- project communication moderators promoting project values.

The communicative discourse in the digital environment is changing, the subject of communication is communication based on data. Of greater importance is the process of building a digital communications

plan for the enterprise. For planning advertising campaigns use the SOSTAC system. The following process steps are highlighted in SOSTAC digital communications:

- Situation (situation) where are we now?
- Objectives where do we want to be?
- Strategy how do we get to this?
- Tactics (tactics) how exactly will we come to this?
- Actions what is the action plan?
- Control what are the indicators of goal achievement?

This is an important feature of building digital communications in the discussion and implementation of projects.

Personnel needs of the education sector are focused on the competencies of digital communication, digital management based on data, evidence-based management of educational development, evidence-based educational policy, the competencies of the analysis of educational data and the formation of effective organizational, pedagogical and managerial decisions based on this analysis.

In the development of the personnel potential of the education sector, the competencies for using digital tools for working with educational data and educational statistics using digital resources of electronic educational platforms, electronic databases of educational analytics and statistics, the competence of digital communications with the professional community based on data on the development of education are in demand.

In this regard, new competency-based training programs for teachers and heads of educational organizations, heads of regional executive authorities in the field of education, heads and experts of regional educational development institutions for successful and efficient implementation of the Digital School and Teacher of the Future federal projects are in demand. National project "Education".

The development trend of the educational industry includes digital communication competencies, digital examination competencies, digital tools tools for working with educational data and educational statistics using digital resources of electronic educational platforms, electronic databases of educational analytics and statistics, and the competence of informing the public about the results of the data.

## 7. Conclusion

Thus, the dialogue of participants in educational relations in the model of the structural structure of the traditional educational environment is transformed in the digital environment into a dialogue technologically and critically built, integrated into variable dialogue forms: chat, forum, blog. Thus, the dialogue on the digital platform for project appraisal creates an information and communication environment with distributed educational resources and a communicative infrastructure to support project communities.

The results of the study are of practical value for understanding the changes in the adult education model by introducing project-oriented education methods, digital educational services, as well as new forms of communication in project groups and expert dialogue into adult education. The scientific novelty of the study is to develop a model of a digital portal for the examination of projects for the transformation of education and technology for organizing an expert dialogue between project team members and

professional experts. The research results enrich modern educational concepts: "The concept of projectoriented education", "The concept of digital education", "The concept of dialogue of cultures".

#### Acknowledgments

The author thanks the Russian Foundation for Basic Research for the financial support of the study. This paper was prepared as a part of grant "Methodology for the analysis of bulk data in education and its integration into training programs for teachers and heads of educational institutions in the logic "Pedagogy based on data", "Management of education based on data" N 19-29-14016-mk from Russian Foundation for Basic Research in the competition for the best projects of interdisciplinary fundamental research "Fundamental scientific support of the general education digitalization processes".

The author thanks the participants in the program "Improving the management of regional education systems through the development of a digital educational environment" of the Presidential Academy, members of project groups for participating in the study on the portal for the examination of projects for digital transformation of education and expert dialogues.

## References

- Big Data in Education: Data Analysis as a Basis for Decision Making. (2020). http://www.bigdata.conferences.science
- Cormode, G., & Krishnamurthy, B. (2008). Key differences between Web 1.0 and Web 2.0. *First Monday*, *13*(6). https://firstmonday.org/ojs/index.php/fm/article/view/2125/1972
- Emejulu, A., & McGregor, C. (2016). Towards a radical digital citizenship in digital education. *Critical Studies in Education*. 1-17. https://doi.org/10.1080/17508487.2016.1234494
- Fiofanova, O. A. (2020a). Big Data v Rossijskom obrazovanii: metody` analiza danny`x ob obrazovaniya i razvitiya cheloveka, cifrovy`e servisy` danny`x [Big Data in Russian education: methods for analyzing data on education and human development, digital data services]. In R.V. Ershova (Ed.), *Digitai Society as cultural and Historical Context of Human Development* (pp.401-406). Kolomna: State Educational Institution of Higher Education of Moscow Region «State University of Humanities and Social Studies»
- Fiofanova, O. A. (2020b). Didactic Shift in Organization of Training for the Field of Education. *Industry Competitiveness: Digitalization, Management, and Integration, 1,* 696-702.
- Governor, J., Hinchcliffe, D., & Nickull, D. (2019). Web 2.0 Architectures: What Entepreneurs and Information Architects Need to Know. O'Reily.
- Institute of Industrial Management, RANEPA. (n.d.). Institute. Retrieved 12 October, 2020, from https://iim.ranepa.ru/about/
- Jarke, J., & Breiter, A. (2019). Editorial: the datafication of education, *Learning. Media and Technology*, 44(1), 1-6.
- Obrazovatel'naya programma "Povy'shenie e'ffektivnosti upravleniya regional'ny'mi sistemami obrazovaniya cherez razvitie cifrovoj obrazovatel'noj sredy'" [Educational program "Improving the management of regional education systems through the development of a digital educational environment"]. (2020). https://firo.ranepa.ru/obrazovanie/professionalnaya-perepodgotovka/645-prof-perepodgotovka-upravlencev-obshch-obr#raspisanie-zanyatij
- Obuchenie regional'ny'x komand po programme professional'noj perepodgotovki "Povy'shenie e'ffektivnosti upravleniya regional'ny'mi sistemami obrazovaniya cherez razvitie cifrovoj obrazovatel'noj sredy'" [Training of regional teams in the professional retraining program "Improving the management of regional education systems through the development of a digital educational environment"]. (2020). http://nimro.ru/news/obuchenie-regionalnykh-komand-po-

programme-professionalnojj-perepodgotovki-povyshenie-ehffektivnosti-upravleniyaregionalnymi-sistemami-obrazovaniya-cherez-razvitie-cifrovojj-obrazovatelnojj-sredy.html.

- Pasport federal`nogo proekta "Cifrovaya obrazovatel`naya sreda" [PASSPORT priority project "Modern digital educational environment in the Russian Federation"]. (2016). http://static.government.ru/media/files/8SiLmMBgjAN89vZbUUtmuF5lZYfTvOAG.pdf
- Portal Programmy` "Povy`shenie e`ffektivnosti upravleniya regional`ny`mi sistemami obrazovaniya cherez razvitie cifrovoj obrazovatel`noj sredy`" [Portal of the Program "Improving the management of regional education systems through the development of a digital educational environment"]. https://iim.ranepa.ru/about/
- Pustovachenko, N. N. (2019). Vnedrenie celevoj modeli cifrovoj obrazovatel`noj sredy` v 2020 godu [Implementation of the target model digital educational environment in 2020]. https://www.koiro.edu.ru/centers/tsentr-informatizatsii-obrazovaniya/tsifrovaya-obrazovatelnayasreda/materialy/realizatsiya-tsos-2020.pdf?fbclid=IwAR2100aUDvBNvi-NCEJcUR7d32VeTvgbnyPpwXpFmfYcd I5xRWr5-ETxcM
- Rasporyazhenie Pravitel'stva RF ot 09.11.2019 N 2650-r "Ob utverzhdenii raspredeleniya iny'x mezhbyudzhetny'x transfertov iz federal'nogo byudzheta v 2019 godu byudzhetam sub''ektov Rossijskoj Federacii v celyax sofinansirovaniya rasxodny'x obyazatel'stv sub'ektov Rossijskoj Federacii, voznikayushhix pri realizacii regional'ny'x proektov, obespechivayushhix dostizhenie celej, pokazatelej i rezul'tata federal'nogo proekta Informacionnaya infrastruktura nacional'noj programmy' Cifrovaya e'konomika Rossijskoj Federacii. [Decree of the Government of the Russian Federation of 09.11.2019 N 2650-r "On approving the distribution of other inter-budget transfers from the federal budget in 2019 to the budgets of the constituent entities of the Russian Federation in order to co-finance expenditure commitments of the constituent entities of the Russian Federation arising from the implementation of regional projects ensuring the achievement of goals, indicators and results federal project Information Infrastructure of the National Digital Economy of the Russian Federation"]. (2019, November 09.). https://fzakon.ru/rasporyazheniyapravitelstva/rasporyazhenie-pravitelstva-rf-ot-09.11.2019-n-2650-r/

Shuen, A. (2018). Web 2:0: A Strategy Guide. O'Reilly.