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THE PRESENT EDUCATIONAL PROCESS AS A STATE OF THE FUTURE SOCIAL SYSTEM

Introduction. *The work considers formation possibilities of the present educational process for Russian students to provide the future digital economy with staff.*

Materials and methods. *The frame analysis “institutional socialization of students” is the author’s cognitive strategy that functionally integrates interconnected slots of the social process: the state, an educational institution, a student, and serves as a basis for a sociological study of the problem.*

Results. *Developments and recommendations are based on data analysis of a comprehensive empirical study of macro-, meso- and micro-levels of students social and professional development system in higher education. The construction of educational, social and scientific activities of students is proposed to be based on the idea of academic student groups structural and functional mobility by means of the author’s social technology “Group Development Wheel”. Development of students personalities is associated with the development of a self-governing educational group in the project format of professional training at a higher education institution.*

Discussion. *The advisability of strengthening the social design direction of future specialists by using the resources of art and sociology through the mechanism of educational process diffusion is also explained.*

Conclusion. *The development of a human capital in education is the key to a society successful position at the digital level, both for the education system and for an individual.*

Key words: digitalization, socialization, self-management, social technology, on-line learning, cinematology, sociological support.

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ОБРАЗОВАТЕЛЬНЫЙ ПРОЦЕСС НАСТОЯЩЕГО КАК СОСТОЯНИЕ СОЦИАЛЬНОЙ СИСТЕМЫ БУДУЩЕГО

Введение. *Рассматриваются возможности для выстраивания актуального образовательного процесса в российских вузах сегодня для кадрового обеспечения цифровой экономики в перспективе.*

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Материалы и методы. Опорой для социологического исследования проблемы послужила авторская стратегия познания – фрейм-анализ «Институциональная социализация студентов», функционально интегрирующий взаимосвязанные слоты социального процесса: государство, институт образования, студент.

Результаты исследования. На основе анализа данных комплексного эмпирического изучения макро-, мезо- и микроуровней системы обеспечения социально-профессионального развития студенческой молодежи в высшем образовании представлены разработки и рекомендации. Предлагается выстраивать учебную, общественную и научную деятельность учащихся на основе идеи структурно-функциональной мобильности академических студенческих групп посредством авторской социальной технологии «Колесо группового развития». Развитие личности студента ассоциировано с развитием самоуправляющейся учебной группы в проектном формате профессиональной подготовки в вузе.

Обсуждение. Объясняется целесообразность усиления направления социального дизайна будущих специалистов механизмом диффузии образовательного процесса с использованием ресурсов искусства и социологии.

Заключение. Развитие человеческого капитала в образовании – это залог успешной позиции на цифровом уровне социума как для образования, так и для личности.

Ключевые слова: цифровизация, социализация, самоуправление, социальная технология, online-обучение, синемалогия, социологическое сопровождение.

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Источник финансирования. Инициативная работа.

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Introduction. Russian society has its own history and traditions, and it is not isolated, but surrounded by countries. Today, it is at a stage of entering a global system, hence, it is focused on the world economic, informational, cultural, educational, scientific, and political integration on a multinational basis. Accordingly, social processes expected updates inevitably causes states changes of all social system elements. All open society subsystems are diffused through the democratic institutions activities (and, of course, public (open) sociology, institutional conjunction, public units presence at different public administration levels, government responsiveness to citizens needs, freedom of self-expression, access to alternative sources of information, public organizations autonomy, and etc.). Public sociology is a research activity that is accessible in every sense (actuality, dialogism); a honest and unselfish cognitive search for truth; a deep immersion in an issue. The sociology epistemological function is especially important for a society progressive development, since it is a starting point and well-timed context in other social functions implementations, such as informational, administrative, organizational, prognostic and propaganda. The latter of these should be manifested especially actively in education, as it allows to form public ideals and create heroes images, thus forming certain public relations based on patterns. Science without borders reveals previously hidden knowledge potentials to obtain new meanings and manifestations of studied processes, thus orienting to adequate corresponding acceptance of modern challenges. Nowadays research process is a social process, and a social action aimed at the interaction of what is studied and who is studying. New era problems relevance requires a transition from archaic research methods and “straw polls” to complex case methods that use interdisciplinary knowledge tools. An employee performing a strictly defined function

under increased risks conditions, both artificial (industrial disasters, informational noises, and others) and natural, is becoming a thing of the past. Currently, a cooperation based on a “soft skills” complex regardless of an activity field (economics, science, education, art) is required, thus in culture, education, science a “generalists” knowledge collaboration is an universal optimization tool of a “fact-checking” mechanism.

Based on an understanding that a society development takes place in various forms of social processes, for this scientific discourse the author highlights an actual problem of an advisability and measure of a subject-subject relation digital formatting in the present educational field. The transition to new technologies in education and other social fields is inevitable and it has to be considered as a reality. The awareness speed depends on modern technologies integration into individuals everyday life. All public spheres can take advantage of digital transformations, however not all use them. In present conditions, when the Russian economy depends on a feedstock, and companies (for various reasons) are not interested in investing in production main means, it is possible to assume that there is no domestic digital economy now, however, a free market situation replicates digital innovations in certain public services. Neither Internet nor automation of traditional processes are an industrial revolution, they are only a basis for fundamental changes, and a corresponding transition requires complex changes. First of all, an actual legislative framework should be formed to regulate relations in the digital economy at the state level (documents on professional activities registration and standardization of the “Industry 4.0” resolving conflicts that are currently growing, for example, in a so-called “precariat” class and etc.). The social life digitalization forces academic education to search for development opportunities of basic functions, such as translation and innovation. The future competencies design based on the culture and thinking development reveals formation prospects of new social and functional roles of an individual in a society. Accordingly, modern scientists have a task of both formulating theories and concepts, and developing practical recommendations. Today, a new vision of the educational process that meets requirements of “Industry 4.0” is formed in the scientific community. At the same time, an important feature of a student educational process, as before, is a sensitivity in a personality formation, which is associated with a social and professional development focused on a subsequent integration into a social system.

Materials and methods. The author of this publication conducted a sociological analysis of modern higher education conditions for the “Industry 4.0” staffing. It was based conceptually on the author's theory, implied in its own empirical research using quantitative (questionnaire) and qualitative (observation, expert interview) tools. The actual issue study was carried out in a frame analysis configuration, namely “institutional socialization of students”, that implied interconnected consideration of slots “state”, “society (educational institution)”, “personality (student, student group)”, which are supposedly separated in reality and thus generating certain social issues (labour shortage and specialists surplus, simultaneously, which causes unemployment; insufficient employee qualification (narrow) and etc.).

Note, a person socialization problem in a traditional perspective of relations considerations (“society – personality”) was converted by the theory author into another

coordinates system (“state – society – personality”) taking into account the specific problem to be solved (institutional socialization of students). Objectifying distance in a scientific sociological cognition is necessary for an actual context degree manifestation of a notion “social” in the studied social process. A methodological imperative of this logic is an explanation of the social as a proportionate connection between subjective and objective systems, i. e. social as synonymous with public (related to a graduate professional relevance), social as societal (necessary intercommunity quality of public relations in a digital globalization era), social as normative (socially approved by official policy). Note, a term “frame” is a collective term for the context. The world experience is always in motion, and sometimes these changes are significant in actors routine practices, but for some reason they are not significant for scientific research. Perhaps it is the consensus of macrosociology and microsociology, which is achieved instrumentally by the frame analysis, that integrates (all) necessary contexts of the category “social” in the studied issue. Thus, a structural and functional complex of specific expectations is formed, which is used to assess an expanded social situation that lies at a various public spheres and levels junction State-society-personality (object-subject-subjective) author's approach to the specific research issue solving is structurally represented by a macro-level (process regulatory support at the state level), meso-level (process organization within the educational institution), and micro-level (formation process of a social subject (student, student group) actual type). The optics and logic of this approach allow comprehensively considering such an important definition of “social” in this scientific research.

The proposed cognitive strategy can be attributed to a group of “critical theories”. Firstly, this strategy focuses on a specific set of institutional and personal values (slots of this frame), and thus provides basics for considered social institutions criticism, as well as social orders and so on. Secondly, results of theoretical and practical (and it is important) implementations of this cognitive strategy orient towards studied social institutions reformation or transformation in order to achieve market determinants important values. Thirdly, the author's development is initially aimed at specific social issue studying and sources of this issue identifying, and also at particular recommendations proposing for their elimination/resolution, same as a number of critical projects approaches. Obvious proof of the latter is author's developments (besides the mentioned approach), such as a management mechanism model of a students socialization in an education system, social technology “Group Development Wheel” and others. Note, the social technology has been tested in a students educational process at Pushkin Leningrad State University in 2010–2013, and it was also used in scientific and social activities frameworks of students participating in a scientific society of another university, namely Pavlov First Saint Petersburg State Medical University in 2017–2018 [1].

Results. Digitalization is a system of economic, social and cultural relations based on a digital information and communication technologies usage. The “digital economy” definition has its own history, it was introduced by an IT specialist and has many interpretations, but it is always associated with an intensive ICT development [2]. Today, it is impossible to discuss about an overcoming of a turning point in a new economy formation without the state participation due to a digital inequality of some regions in Russia. The technologies role in

ensuring a development of Russia is indicated in the decree of the President of the Russian Federation V. V. Putin "On the strategy of scientific and technological development of the Russian Federation". In addition to a criticism of a current situation in educational organizations and their work efficiency, the document sets tasks of creating opportunities for both talented youth identification and research conduction that meets modern principles of scientific and innovative activities organization, including an usage of social sciences methods [3]. These are familiar tasks for the education institute, and there are documents regulating higher education activities, primarily, the Federal State Educational Standards and Federal Law No. 273 "On Education in the Russian Federation", where requirements and possibilities of socio-cultural environment formation, which supports a student all-round personality development, are presented. Recommendations on a wide use in an educational process of interactive forms of conducting classes (business, role-playing games, trainings, and etc.) and a prospect of such classes (scientific research activities, design developments implementation, and etc.) realization are given. The author of this publication supports the V. V. Putin's critical point of view due to results of the author's sociological research. Results of this research are given further. 69 % of the questionnaire respondents (students) confirm presence of an authoritarian communication style between educators and students, and this is an answer to a democracy development in a future personnel preparation communicative component. An educational process organization "learning through research" is not familiar to students, but traditional pedagogical technologies (active), such as laboratory workshops, writing and presenting reports, are often used (48 %). At the same time, most of positive answers were received on questions about possibilities of group role-play teaching methods implementations (81 %). The respondents opinions on a question about a possibility of special subgroups formation, which are leadership simulators within academic student groups, are as follows: "it contributes to a student personality development" (69 %) and "it develops self-governance" (61 %). The questionnaire survey was conducted in 2014 at five Russian Universities, namely Herzen University, Mechnikov University, Pavlov First Saint Petersburg State Medical University, Saint Petersburg State Pediatric Medical University, Russian State Hydrometeorological University, and was attended by 400 respondents that are students of 1–3 years of levels "bachelor", "specialist".

Note, besides an orienting activity of the state in the country digitalization promoting, a support in two directions, namely legislative and investment, is still needed. After all, the state background that contributes to an analytical systems confident introduction generates a motivation process and companies involvement to digital technologies application, which allows to perceive this new economy as "traditional" one over time. Today movement trajectories in the digitalization direction are outlined. First of all, transformations are manifested in high-tech industries, which is associated with a software production and distribution. Modernization and progress are evident in banking and service sectors, as well as in chemical industry, mechanical engineering, and agriculture. It is important to understand that the digital economy generates new business models, thus, companies need to realize how to use these business models and benefit from digital technologies. New technologies require changes in enterprises and they inevitably affect specific people. Employees preparation for

upcoming changes is an important current task and specific social demand for the education system. Consider activities of digital economy leading companies, such as Google, Amazon, Airbnb, Netflix, Spotify, Uber, Tesla. What tools they use and for what purposes? These are remote desktops, virtual operators, virtual IT cloud infrastructure, IoT, Big Data, neural networks, artificial intelligence, robotics, and etc. The digital economy development is inextricably linked with a knowledge economy development, and this is an identity. The knowledge economy foundation is an intangible production, and growth accelerators are people possessing this knowledge. Consequently, the main competence that needs to be developed is a continuous learning ability, readiness to constantly master new knowledge on new emerging technologies. This is a significant factor for a successful professional career in the digital world. Further the developed author's social technology "Group development wheel", which can be used in a future specialists educational process (educational, scientific, social students life), is presented.

The central factor of the "Group development wheel" model is a balance definition, which contributes to a development and advancement of students in learning tasks defined prospects, when students that are members of working subgroups complement each other in an activity field of their subgroups and at the same time participate in an entire academic student group life under the specific subgroup-determiner control. The used "wheel" term besides the semantic (progressive) meaning of a social process, also corresponds to the model structure (wheel structure), where working subgroups are in the model outer rim (periphery) and they are radially controlled by the central element, i.e. subgroup-determiner (core). The academic student group structure (typically 10–20 students) is differentiated into working subgroups (3–8 students), which are formed according to a role content principle. The problem of team-oriented methods of organization is actively developed in the scientific community and publicly available. As the model basis author took a group role-playing composition developed by R. M. Belbin [4]. In this case, the author's novation of an experimental activity is a selection of the core in the student group, which is a special subgroup serves as leadership simulator (so-called subgroup-determiner derived from Latin *determinaus, determinautis*). The subgroup was originally formed from a number of potential leaders on a self-representation basis. The working subgroups and the subgroup-determiner compositions are in a constant rotation during the educational process, until a subgroup member determines his effective role-playing behavior.

The developed and applied in practice social technology, besides changing structural and organizational components of the educational process, influences an activity substantive component. The organization of students work was according to project work principles of academic disciplines. The method of projects is a training system when students acquire new experience (knowledge, skills) during planning and executing gradually becoming more complex tasks of a practical orientation (projects) and it is the most famous among complex training systems in the world history. The method of projects implies solving a problem, which involves information integration from various fields of science, technique and technology. The project activity goal is to find an unique personal solution, which determines the main learning motivation and, therefore, self-education. Such learning content becomes

one of student movements means into his future professional life. Approaches to topics selections, initial project training theoretical positions, main requirements, project development stages and other project activity nuances are widely covered in the literature. For example, when mastering the “Sociology of Management” discipline, students have to determine development trajectories of their own team within their subgroups and design a development project (determine effectiveness, match role-positions taken by team members, outline development prospects).

According to testing results of the model (study was conducted by using an observation method), the socialization process in student groups is controlled, and a resocialization phase of the process is identified. The study confirmed scientific assumptions about eliminating possibilities of an unproductive and conflict students behavior by social coping technologies using. It is worth noting that social students group changes and a social development of specific students are related to a social structure dynamics due to specially created conditions (social technology application to the educational process). Some conclusions regarding the leadership simulators subgroups are given further. The main trend is associated with gradual educator elimination from a leading role to an auxiliary one when delegating authority to subgroups, i. e. leadership simulators (subgroups-determiner). The group impact, which is focused on an effective interpersonal interactions search, contributes to a natural leadership potential development. The social technology “Group development wheel” in the educational process allows to construct a group composition, organize social space and team perception by means of a specific condition, namely a leadership field (core) that forms reflexive positions for a self actor. If there is no core, there is no team. The conclusion is that it is possible to change the educator traditional role to the role of a students project activities consultant, as it is in the present case.

Further few comments on the technology use at Pavlov First Saint Petersburg State Medical University in 2017–2018 are given. Medical students that are participants of a students scientific society (SSS) were divided into working subgroups, and a students scientific society general management was carried out by a leading subgroup (subgroup-determiner), which included the SSS head and his two deputies that are students of the University. The working SSS subgroups developed thematic projects taking into account their team vision of issue solving. As a result, projects presentations were in a trend sessions format. All events organized by the SSS moderator (subgroup-determiner) had common topics and many non-standard solutions in various areas of students activities, such as culture, sport, education, study and, of course, science. Complex issues solutions were formulated as a result of debates and experts (educators) opinions. According to the students participating in the innovative scientific activities opinions, the tasks execution quality is directly related to an effective roles assignment, and a accepting by each participant of his role in the event. The students received effective social training in addition to a medicine specifics deeper understanding. The self-development experience, self-importance feeling in the group generates an additional further personal growth necessity not only in the profession, but also in creativity and society, according to medical students opinions.

Discussion. The robotization and automation, remote work introduction radically change a classic work team nature. Today as before innovation cycles changes are accompanied by a loss of familiar jobs and creation of new ones. The industrial and administrative processes conversion into the digital economy based on artificial intelligence elements and self-learning systems is a new kind of activity that carries a potential and problems of the fourth wave of innovation. Considering experts researches on challenges of the future, it is possible to discover along with the proposed developments of the author also recommendations of other authors in the present field and even in a field of a virtual teams problems managing. The author I. V. Petrova would like to do an important remark. During the study it was noted that particular features of changing a thematic educational material to students professional and social life issues together with the training organization based on the “Group development wheel” technology undoubtedly contribute to a scientific worldview formation, and more importantly, active life position, which is the most significant result in the author's opinion. This conclusion is of particular importance, since it confirms existence of potential solutions to many social issues. The scientific literature presents a different vision of such problems levelling possibilities. Through sociocentrism and anthropocentrism analytic prisms, some scientists summarize that a consolidating status of a phenomenon “patriotism” is lost. Another group of scientists finds causes and connects different levels of national identity development (from low to high) with ethnic and religious backgrounds. According to many studies results, scientists conclude that now as a decade ago Russian youth personal interests are their primary values, while public and environmental issues, as well as patriotism, freedom and democracy, occupy minor positions in their life hierarchy. It is important to note that youth socialization problems are primarily associated with issues in an education field. In addition to the “Group development wheel” technology presented by the author of this publication, there are other projects of “improving” a person of the future. A common basis is in such projects foundations. Educating a young person, forming a future specialist is not an element of the education knowledge system, but an understanding phenomenon. Today, students of narrowly focused specialties, such as cultural, medical, engineering, need to understand an importance of an integrative knowledge, universal competencies development and flexible skills of interaction in society. Modern scientists search and present their developments, models of managerial abilities development of technical specialties students and others, among which are animation and storytelling by using UTAUT technologies (Unified Theory of Acceptance and Use of Technology), master classes using the “Data Visualization 101” technique and others. At the same time, there are critical notes on studies results that interactive learning based on kinesthetic and tactile interactions causes greater effect and approval among students than a frontman-lecturer style even when he uses material visualization techniques.

Currently, the author of the publication continues to upgrade the educational process of students, and still using the social technology “Group development wheel”. Modernization is associated with an educational process diffusion by introducing the resource of art into a discipline modules content. At Herzen University student groups (“bachelor”, “master”) are differentiated in accordance with the author's technology requirements and received

knowledge and skills on “Communication Management”, “Sociology” disciplines. Methods of group discussion, rapid assessment method, synectics, benchmarking and other possible tools are used to analyze in groups of films fragments, videos, artifacts and cyberculture practices in topics projections and problems solving of disciplines. In the author's opinion, feature films, performances, paintings, musical works using significantly expands improving possibilities of a classes effectiveness. There are various approaches, for example, it is recommended to watch entire films together with students and use subsequent subject analysis in a cinemalogy framework. The author agrees that when mastering some disciplines it is much easier to talk with students on a subject matter after feature film showing at the beginning of a course. Instead of giving some fictional examples, education should include elements of artistic creation. Considering a limited time factor in studying conditions, the author, however, recommends using small films fragments (15 min) as video cases with following discussion, and also showing very short fragments (1–3 min) only for a vivid illustration of certain aspects of a main lessons material. It is possible to offer students a preview of certain films in a “homework” format for a further mastering of a specific material in a group, classroom, in analysis, as a preparatory independent students work. The film “12 angry men” directed by S. Lumet is an outstanding study guide on social psychology, conflict management, organizational behaviour, and sociology in terms of “group dynamics” and “decision-making mechanisms”. Such phenomena as a groupthink, escalation of commitment, group polarization, conformity, stages of conflict development and its resolution are clearly demonstrated. The film “Alexander Nevsky” directed by S. Eisenstein is a great example of crisis management showing how to unite and properly motivate fellow citizens and colleagues. The problem of a relations harmonization between society and person is relevant and observable through social reality transformations. Uncontrollable changes in a human environment, both natural, inartificial, and artificial, are real threats to a mankind security. In order to predict riskiness problems, researchers propose various models of coping mechanisms, including psychological ones, based on identified interrelations of threats and risks. In artworks, cinema, and literature, we find examples to follow, in sports we learn how to win. The film “The Game” directed by D. Fincher is a psychology training for a certain attitude formation towards unpredictable situations. Students-spectators see how a hero attitude changes on what is happening, and implicitly change with him. The grotesque in this case is perceived as a possible reality. The hero develops ingenuity, emotional stability, decisiveness, and other personality traits, while changing his worldview and, as a consequence, his attitude toward people. On this film surface is extremism and elitism, but if not just watching the film, but to learn seeing, then the main thing can be seen. At the present stage of a mankind development, when a processes intensification is increasing, innovations circulation is accelerating, unpredictability and inexplicability of situations and actions of life games characters become a normality, then the most important thing is a highly effective leadership of “this new world”, which is built on an initiative of thinking outside the box people. Approaches to a formation and education of such individuals can be different, but in all cases there are certainly present a worldview and preferences of educators from one side, and necessity of a students particularities consideration from the other side.

Another promising update of an university students educational process, which can be offered for expert environment discussion, is a “Sociological support of university students education processes”. The author proposes to develop it in two directions. Firstly, it can be deployed in a format of “Sociological laboratories” for diagnosing, process of a students socialization monitoring, and etc. (“embedded research” for a management in education). There could be organizing and conducting marketing research, as well as a students supporting in conducting research while a qualification work preparation, students work promotion, “bachelor” and “master” students professional trainings organization in a “Sociology” direction, and etc. Secondly, in a different format, a supervisor activity can be restored through an activity of “Sociological offices”, which is really necessary in students opinions. The students survey results are reported further. 13 % of respondents need and expressed the need for a supervisor support (47 % found it difficult to answer). Note, that 47 % of respondents had no idea about the supervisor activity existence in general. Today, an old vision that “supervisor is a teacher” should be changed to a new and relevant one, which is “supervisor is a student”. Under the guidance of a sociology educator with the author's program of classes on personal students growth, who are motivated to develop their professional career, and by using a supervisor activity a supporting leadership school (on a faculty) can be opened as a mainstream of this social project.

Conclusion. Let us emphasize the main thing that presented idea of a self-organizing group of the technology “Group development wheel” is scientifically based and tested in educational processes of student groups at Russian universities. An important aspect in this context is an understanding that a relationship problem between the society and person is closely connected with a readiness formation problem of an individual for collective actions. The proposed structural mobilization of a group or even “community” forms relevant conditions for social development of, both individual and group, and prepares an individual for further social actions and relations. In the author's opinion, the “Group development wheel” as a meta-model can be recommended as a tool for solving various social problems.

The digital economy is certainly incapacitated without forcing the processes of digital relations locations, it is necessary to enter on all levels of its participants interaction, from personal to state. Electronic channels of data exchange and their accessibility, willingness of actors to participate in electronic interactions, are integral parts of it, but what about social interactions? Today it is necessary to understand what is primary and what is secondary in an educational process of future specialists, what aspect of communication, social or informational, and at what extent is effective for a competences mastering? It is necessary to understand what processes need to be converted into electronic format to get an effect of innovations and, thus, form a relevant and controllable educational process. In a scientific community there is an experience exchange on an on-line training courses introduction at universities, and educators opinions regarding a potential distribution of their experience is very cautious. Consumers of educational services are students, and they are unwillingly use an electronic format of trainings, try to avoid it as much as possible, mislead an educator about allegedly using an electronic resource, and using a formal approach (viewing proposed product “at higher speeds” and etc.). The transformation of an educational process should be

reasonable, thus a new technologies introduction for the sake of technologies themselves is not effective. Digital services should level or reduce problems that already exist, and not initiate new ones. Today, on-line learning requires approbation and it is more reasonable to conduct it within a flexible form of education (distance learning), as well as external studies, since its service consumer is ready for machine learning, taking into account his level of preparation and motivation. It is also important to provide mechanisms for introducing innovative changes that ensure not only information technologies expansion, but also develop understanding of personal management decisions values among public sector employees, educators, students. Only as a result of such harmonious changes each person turns into an advanced user of innovations, and not into the next obstacle of transformation. Professionals who plan to remain in demand in this rapidly changing life have to possess important competencies of a digital world and apply innovations into life, but not in isolation, alone, but in a team. Management in such teams is organized in the form of self-governing working groups that independently invent methods for developing target solutions and tools allowing their achievement. The digital formation is a formation of innovators and devotees, world of ideas and calls, and therefore it is a social design phenomenon.

СПИСОК ЛИТЕРАТУРЫ

1. Petrova I. V., Petrov A. A. Social design: technology «wheel of group development» // The European Proceedings of Social & Behavioural Sciences EpSBS. Vol. LI. P. 882–893. URL: <https://www.futureacademy.org.uk/files/images/upload/18thPCSF2018F095.pdf> (дата обращения: 19.01.2019).
2. Negroponte N. *Being Digital*. New York: Knopf, 1995.
3. Указ Президента РФ от 01.12.2016 № 642 «О Стратегии научно-технологического развития Российской Федерации». URL: <http://legalacts.ru/doc/ukaz-prezidenta-rf-ot-01122016-n-642-o-strategii/> (дата обращения: 21.01.2019).
4. Belbin R. M. *Beyond the Team*. Oxford: Elsevier Butterworth-Heinemann, 2012.

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REFERENCES

1. Petrova, I.V. and Petrov, A.A. Social design: technology “wheel of group development” // The European Proceedings of Social & Behavioural Sciences EpSBS. Vol. LI, pp. 882–893, available at: <https://www.futureacademy.org.uk/files/images/upload/18thPCSF2018F095.pdf> (accessed 19.01.2019), doi: 10.15405/epsbs.2018.12.02.95.
2. Negroponte, N. (1995), *Being Digital*, Knopf, NY, USA.
3. Decree of the President of the Russian Federation (2016), no. 642 of 01.12.2016: *O Strategii nauchno-tekhnologicheskogo razvitiya Rossiiskoi Federatsii* [About the Strategy of Scientific and Technological Development of the Russian Federation], available at: <http://legalacts.ru/doc/ukaz-prezidenta-rf-ot-01122016-n-642-o-strategii/> (accessed 21.01.2019).
4. Belbin, R.M. (2012), *Beyond the Team*, Elsevier Butterworth-Heinemann, Oxford, UK.

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