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Knowledge management as a strategy for the administration of education in the Research University

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Abstract

The article studies the substantiation of the changes in the Classical University when its liberal model is transforming into the pragmatic model in modern knowledge society. The content of pragmatic model (commercialization of knowledge, education market, competitions) is against its classical model. Therefore, there is a need to clarify the criteria of the Classical University. The corporate culture is considered as its new criterion. The corporate culture aimed towards shaping of the professional and the person who is relevant to the modern knowledge society. Therefore, the modern Research University continues the traditional Idea of the Classical University in conditions of information (knowledge) society. Secondly, new strategy for the management of education in the Research University is the knowledge management. Thirdly, the corporate culture of the Research University can join complementarily the classical criteria of University and modern orientation to the market and commercialization of education. The specific content of the corporate culture as a new criterion of the University is relevant to the conditions of information or knowledge society. The corporate culture of the Research University provides not only competitiveness of professional, but also in its spiritual and moral characteristics.

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1. Introduction

Changing of priorities in the development of post-industrial society (Bell, 1999; Inozemtsev, 2001), or the "third wave" (Toffler, 1999), or the information or knowledge society (Castells, 2000), are making actual the issue of relevant management strategies. Knowledge management is one of such strategies. But this strategy is used by the business structure only. The social institutions of the economy adapt the knowledge management without any theoretical reflection. So it would be more appropriate if the strategy is used in academic and educational institutions, which are related to the production of knowledge. This statement concerns the Research

*Galina Petrova. Tel.: +7-913-103-8235 *E-mail address*: seminar_2008@mail.ru University primarily. Today the Research University adopts the idea of the traditional Classical University associated with the production of knowledge.

2. Subject and the method of research

On the one hand, the logic of social development dictates the need to direct a managerial attention to knowledge management. On the other hand, the institute, which is engaged in the production of knowledge, still does not bind itself with such strategy. The object of study is management in the knowledge society. Subject is university education in the Research University. The goal of the article is finding the philosophical foundations of knowledge management in the Research University. It is necessary to see the specifics of the educational institution, which entered the global educational environment and accepted the rules of competition and the possibility of commercialization. The Research University has to accept the call of the knowledge society.

We used the following methods. Comparative method for studying the historical types of social and cultural development was needed to justify the specific characteristics of the Classical and Research Universities. This method has helped us to compare Idea, Mission and Criteria of universities. The philosophical hermeneutic method of analysis was also necessary to understand the different cultural epochs and universities. Separately, it should be said about the method of socio-cultural research, which involves the description of the University functioning. These methods and approaches build technique, adequate to research subject and allowing seeing the specifics of the university in the cultural and historical conditions. Hypothesis of study is the Research University is a transformation of the Classical University and continuing its tradition in a knowledge society. Knowledge management is the strategy of the Research University. What are the bases for the similarities and differences of the Classical University and Research Universities? How their identity and continuity affect the governance in these universities?

3. Results

3.1. Knowledge management: definition

What is "knowledge management"? And why "cognitive" is translated as "knowledge" in Russian? It is important to understand the cognitive turn of modern scientific knowledge, which affects the nature of knowledge in education. The Research University is a leading university, and therefore the changes here are of greatest interest.

Cognitive turn of the epistemology took place in the twentieth century when the new philosophical trends (i.e. phenomenology, hermeneutics, and philosophical anthropology) had emerged. They brought the understanding that the classic type of scientific rationality with its characteristics of rigid logic, standardization the cliché and algorithmic thinking limits the world and emphasize only its universal essence. The modern world has come to a state of self-organization and non-linearity "differAnce" (Derrida, 1996, p. 102) and "smart" was "suspected" (Ricoeur, 1995, p. 231-232). This is an inadequate to the uniqueness the human form of "presence" in the world (Heidegger). Cognitive thought becomes multi-rational (Nurgaleeva, 2013). P. Drucker says, "knowledge is exist only in their applications." According to Drucker this is not knowledge, but a getero-knowledge. Knowledge is used not only for the classical principle of pure satisfaction, but extra-utilitarian cognitive. It has the character of "employee interaction with his colleagues" and becomes, according to D. Bell, "a game between persons" (Inozemtsev, 1999). Knowledge "should be consumed". (Lyotard, 1998, p. 18) Thus, knowledge exists both as social and personal capital.

Knowledge as the form of cogito assumed a rational understanding of the reality. Heterogeneity and personalization of knowledge exists within a constant state of creation. Communication of all the structures of

consciousness, their cognitive work within updated contexts is cognitive turn in epistemology. Therefore, knowledge management is translated as cognitive management.

3.2. Knowledge worker

Knowledge gets epistemological and socio-cultural significance. It is requirement of the knowledge society. A modern professional becomes, by F. Machlup "knowledge worker" (Inozemtsev, 2007), or "new employee" (P. Drucker), or the "new individuality" (M. Castells). All the researchers note a desire for self-realization, self-determination and self-expression in a new type of worker. The socio-cultural role of knowledge worker is managing, collection, storage and processing of information. These activities have to correlate with the expertise which shows his ability to reject a burden of experience. In the professional world all workers are "knowledge workers" because the factor of knowledge is the leading factor. These knowledge workers" belongs to a new structure of modern society, which is over-stratum of intellectuals. Knowledge and intelligence for the modern worker is the feature that unites modern professionals. There is a new model of man in such circumstances. Personal capacities for the production of knowledge are added to professionalism in this model. The role of education grows as a consequence.

Thus, A. Toffler refers "fast retraining" and "flexible intelligence" as the main characteristic of the person of "postindustrial society" among "the ability to communicate and to choose" (Toffler, 2002). The "fluid intelligence" and readiness to re-learn as soon as possible make education as an important process of technologies for whole life (Subbeto, 2000).

3.3. Knowledge management in the Research University

Knowledge management is becoming a primarily strategy of management in the Research University. This is a resonance of general epistemological changes. Knowledge prefers learning by scientific research.

Firstly, knowledge management is concentrated on the management of the formation of a new educational subjectivity. The modern model of human is an "informational human", i.e. human of a network and the "space of flows". The transcendental subject of Kant did not imagine itself in the network society. The logic of "space of flows" do not adopt for uncertain and unpredictable kaleidoscopic of society. In the literature this fact was described by the term "technostructure". Castells says, "at the time, as information systems increase human power in the organization and integration, they simultaneously undermine the traditional Western concept of a separate and independent individual ... In short, technology is helping to destroy the very vision of the world, which was cherished in the past" (Castells, 2000). So, knowledge management in the Research University is the management strategy, which is oriented to a person of the network society, a professional actor of technostructure.

Secondly, the vector of knowledge management focuses on the educational knowledge which able to live in a "space of flows" (Castells, 2000). This strategy of management aims at training a man who needs to survive in the network society ("space of flows"). Therefore he needs to acquire such personal characteristics as multirational form of vision the world, active and flexible thinking, capability of non-algorithmic steps and risk in decision making, the ability to quickly navigate in the changing situations of mobile world.

Thirdly, education organized on the basis of knowledge management moves away from the need to focus on the acquisition of universal and common knowledge.

Today, the law of competition between knowledge workers creates an education as personal training of "technological subjectivity", and this is "the important" (Habermas, 2006).

3.4. Cognitive competence

Most importantly that the knowledge management direct to the formation of cognitive competence of the individual. It is necessary to look thoroughly at the concept and content of cognitive competence as the ability to produce new knowledge.

J.F. Lyotard believes that an education as the learning of competencies is a broad notion 'education', and it allows the student to have the knowledge "we need to know, decide, evaluate, change ..." (1998, p. 53). Modern education provides a student with an access to interdisciplinary unity of fundamental and applied research. The Truth acquired value character, its effectiveness is not determined by the degree of its depth and objectivity, but sale, "Can I sell it?" And "Is it effective?" (Lyotard, 1998, p. 124). Such Truth belongs to applied sciences. The modern Research University is different from the Classical University, which honored the research in their fundamental purity and did not care about their material forms. Material forms could bring an instant profit. The Research University interested in material profit.

At a time when the University becomes a world phenomenon, and accepts the rules of competition, a positive effect of the expansion of substantial volume of competence appear due to union of fundamental and applied research. The concept of "cognitive competence" captures this unity. Firstly, this concept focuses on "cognitive processes, skills, abilities, capturing the movement of the Truth". There is a question about the process of birth of the Truth, its obsolescence and re-emergence as a new (Petrova, 2012, p. 107). Education based on the principles of knowledge management is associated with the procedurality of the scientific knowledge. Second, cognitive competence outputs the knowledge beyond the applied Truth as the only criterion of science. The business is based on the Truth which includes "the criteria technical skills, equity, moral, wisdom, beauty of sound, color, etc." (Lyotard, 1998). J.F. Lyotard draws attention to the specifics of management at the University, when business is not main point. The University is primarily educational, but not a commercial social institution. Education by nature is not a commercial one, although it has commercial opportunities. Thirdly, the cognitive competence orients the content of education towards its methodological foundation (University, 2004).

4. Conclusion

Knowledge management directed towards an organization of the educational process, which form the active personality, who is able to generate constantly new knowledge. The active personality is relevant for contemporary world and its plural forms, norms and patterns of development. Personality exists in diverse cultures simultaneity. Knowledge management in education aims to training of professional mobility, the ability to see the world in constant development and unpredictable trends. The modern Research University adopts the Classical University to new world.

Knowledge management at university is the management strategy relevant to society of knowledge. The main mechanism of its realization is the formation cognitive competence, and its main result is metodologization of content of educational

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References

Bell, D. (1999). Future of post-industrial society. Experience in social forecasting. M.: Academia, 1999. Derrida, J. (1996). Position. Kiev: Izd "D.-LA."

Drucker, P. The era of social transformation. From http://www.archipelag.ru/geoeconomics/osnovi/leader/transformation/

Inozemtsev, V. L. (1999). Science, the individual and society in the post-industrial reality. *Russian Chemical Journal*, 6, 13-32. Volume XLIII.

Inozemtsev, V. L. (2001). Post-industrial economy and "post-industrial" society (On the problem of the social trends of the XXI century). Social Sciences and Modernity, 3, 140-152.

Inozemtsev, V. L. (2007). On Modern Inequality. Sociobiological nature of the contradictions of the XXI century. In Mikhail Khodorkovsky (scientific. Eds). *Posthumanity* (p. 10-73). M.: The algorithm.

Castells, M. (2000). The Information Age: Economy, Society and Culture. M .: State House. Univ - Higher School of Economics.

Lyotard, J. F. (1998). The postmodern condition. M.: Institute of Experimental Sociology; St. Petersburg: Publishing House "Aletheia".

Nurgaleeva L. (2013). Multirational and transversal. Projection communicative ontology. *Bulletin of the Tomsk State University*, 4 (24), 117-123.

Petrova, G. I. (2008). Interdisciplinary university education as a modern form of its fundamental nature. *Bulletin of the Tomsk State University*, 3 (4), 7-14.

Petrova, G. I. (2010). Classic university in the non-classical time. Tomsk: Publishing House of the YTL.

Ricoeur, P. (1995) The conflict of interpretations. Essays on hermeneutics. M .: «Academia-Center", "Medium".

Subetto, A. I. (2000). Kvalitologiya education. St. Petersburg., M.: Research Center of the quality of training.

Toffler, A. (1999). The third wave. M .: "Firm" Publisher ACT ».

Toffler, A. (2002). Future Shock. M .: "Publisher ACT».

University as a center of culture-generating education. Changing forms of communication in the learning process. (2004). MA Gusakovsky (eds.), Minsk: Belarusian State University. From http://www.bsu.by/Cache/pdf/388903.pdf

Habermas, J. (2006). First to sense the importance of: What distinguishes intellectual. *Emergency reserve*, 3. From http://magazines.russ.ru/nz/2006/47/ha2.html

Heidegger, M. (1997). Being and Time. M .: ad MArginem.