ISSN 0798 1015

REVISTA ESPACIOS

HOME Revista ESPACIOS ÍNDICES A LOS AUTORES

EDUCACIÓN • EDUCAÇÃO • EDUCATION Vol. 38 (Nº 55) Year 2017. Páge 26

International integration movement in quality management of Russian education

Movimiento internacional de integración en la gestión de la calidad de la educación rusa

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Received: 03/08/2017 • Approved: 28/08/2017

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ABSTRACT:
The competency-based approach, notwithstanding all its positive effects on education quality in general, cannot escape problems and difficulties. One of the principal problems is the problem of legal enforceability of the regulations at the local level. The third generation Federal State Educational Standards imply liberalization in the sphere of educational scope and procedures. From the perspectives of procedures, the principle problem of the competency-based approach is represented by its excessive focus on individual unsupervised activities of the students.
Keywords Integrative Processes, Management, Education Quality, Educational Environment, Competency-Based Approach

RESUMEN:
El enfoque basado en las competencias, a pesar de todos sus efectos positivos en la calidad de la educación en general, no puede escapar de problemas y dificultades. Uno de los principales problemas es el problema de la aplicabilidad legal de los reglamentos a nivel local. La tercera generación de normas educativas del estado federal implica la liberalización en la esfera del ámbito y los procedimientos educativos. Desde el punto de vista de los procedimientos, el problema principal del enfoque basado en las competencias está representado por su excesivo enfoque en las actividades individuales no supervisadas de los estudiantes.
Palabras clave procesos integrativos, gestión, calidad educativa, entorno educativo, enfoque basado en competencias

1. Introduction

Globalization of the modern world and of the challenges facing humanity led to the need of

integration of social and educational communities in the first place. In this regard, the current importance of the investigation has been predetermined by the fact that efficient management of modern educational institution needs special approach to organizational, social and economic environment. There is a need for adequate management under the conditions of reforms in Russian education system. Today, studying and resolving the issues in the sphere of education is of urgent importance, inasmuch as in the modern world education has been recognized as one of the principal human values. The notion of “education” is considered pivotal. It affects all other processes in culture and society. The principal objective of the study is to consider the integrative approach in the sphere of management and in creation of the unified European educational environment that should help resolve the standing problems of science and education. The methods of the investigation imply considering the Bologna Process as an international integration movement in the sphere of education. Modern Russia has been a participant of the movement for more than a decade. Over this period, the regulations and norms have been developed and are intensively implemented to introduce the integrative approach. In practice, there is a necessity to study advantages and disadvantages of the modern stage of management and development in the system of education in Russia.

Applying semantic and conceptual analysis to the third generation Federal State Educational Standards some certain commonality in the contents has been found suggestive of certain general principles that would improve management of regional education system under the conditions of international integration movement in Russia.

In modern era of information when everything is constantly changed and updated, no stable existence of society can be imagined without interpenetration and mutual complementarity of all social subsystems. The problem under consideration becomes even more important with respect to the spheres targeted at the future. These are, in the first place, science and education. Both can be regarded as successful only when they go ahead of the time. Integration of science and education is by no means artificial. In terms of purposes, they are very closely connected, and their focus on future is the basis of their kinship. In the truest sense, education is called upon to help students overtake the time, and this is especially true for higher education. As far back as the beginning of the 20th century, the group of psychologists spearheaded by A. Binet came to the conclusion that bachelor degree education program would only be successful if the mental age of the graduates is by 20% ahead of their chronological age (Kun 2005). This would enable the well-trained specialists to reveal their maximum capabilities faster and easier as compared to their peers without accomplishments. The urgent task of modern education is not only to pass the achievements of the civilization onto the younger generation, but also to teach them how to study and to continue the search for new solutions and innovations for the benefit of the society. These targets predetermine the change in the fundamental principles of education management.

The major idea of managing regional education system implies improvement of its quality and competitive power that would make it possible for the educated people to overtake the time and reach the qualitatively new level of scientific achievements not only surpassing their teachers, but also becoming the best of the equals in the educational space of the world. In modern world, knowledge becomes outdated so fast that it would take international efforts to keep on with the adequate level of competence ensuring the field for exchanging information and achievements irrespective of the state borders. It is clear that major modern trends in the sphere of management are represented by global integrative processes initiated by the Bologna Declaration.

Modernization of Russian education is an inevitable and justified response to the challenges of the global integration processes. It is clear that under such conditions the educational structures, scope, norms and regulations in this sphere should be flexible enough to meet the requirements of the society at any moment of its development. This is the level of management Russia is reaching now.

The principal objective of integration is to create and manage single European educational

environment that should help solve the current problems of science and education. This idea makes a methodological basis of the Bologna Process, an international integration movement in the sphere of management of Russian system of education.

The study considers establishment, development and modern state of the humanities component in Russian pedagogical education. Its educating role has been highlighted; its innate historical traditions of developing future technical intellectuals have been investigated.

2. Methodology

Since the 90s of the last century, the modernization of education has been up and running. Many things have changed, but there are foundations clearly perceived even now, i.e. the competency-based approach to standardization of educational scope. This approach is also the methodological basis of this study. The competency-based approach is called upon to bring together education and science, methods of education and methods of investigation, cognitive processes of a student and of a scientist.

3. Results

The analysis of pedagogical literature showed that management of integrative processes in the sphere of education sets the tasks to arrange innovative activity. To arrange activity here is to make it a single regulated system with correctly defined characteristics and with logically built structure and process of its implementation. Integration makes it necessary to implement managerial, primarily organizational innovations in the sphere of education. An important area of these innovations is represented by the development of the interactions between different educational institutions, by the establishment of the integrated educational structures. Some definitions used in the analysis of the integration are given below:

In this study, integration is understood as the process and result of establishment of the integrity featuring the following most important characteristics: the unity between the part and the whole, which is implemented through interdisciplinary connections and is associated with the emergence or tightening of the relationships between the components.

It has to be noted that in order to integrate, i.e. to connect the components of educational process correctly, some certain actions of creative nature should be undertaken. Within the framework of the preparatory activity, the pedagogue determines the following: motives and objective of the integrated class; an aggregate of the integrated components; systemically important and auxiliary components; integrated form; nature of interdisciplinary connections between the materials; structure of the presented materials; methods of and approaches to integration; methods to improve efficiency of visual educational materials; criteria for evaluating the efficiency of the class; the form of recording the presents class; forms and types of controlling the materials learned.

In his investigations M.S. Prokopyev (2014) notes that “integration” used in the system of education have different meanings: 1) as the objective of education it should provide a student with some definite knowledge reflecting the relations between the parts of the world as the one whole with interconnections between each elements; 2) as the means of education it should be focused on developing erudition or comprehensive knowledge and on the improvement of the existing field-specific qualification; 3) integration should not force out classical disciplines but rather unify the obtained knowledge into a single system.

J. Locke was the first to suggest the idea of determining the scope of education based on interdisciplinary approach. This idea has been further developed by J.H. Pestalozzi who revealed the variety and the importance of the correlations between educational subjects and told that a student should in his own consciousness unite the knowledge in the same manner as this knowledge is arranged in the real surrounding world.

J. Dewey (1999) was the founder of the concept of interdisciplinary integration in pedagogy, and it was he who noted the anthropocentric nature of this phenomenon. The issues of theory and practice of interdisciplinary integration were studied by many Russian scientists: V.S. Bibler (1975), T.G. Brazhe (1996), A.M.Matyushkin (1982), A.A. Pinskiy (Bulinin-Sokolova, 2002), V.V. Usanov (2012), etc.

Both foreign and domestic scientists consider interdisciplinary integration as a condition when, if this condition is realized, the process of educational activity is founded on interdisciplinary relationships.

A.Ya. Danilyuk (2010) distinguishes three principles of integrative organization: the unity of differentiation and integration; integration as an anthropocentric nature; cultural congruity of integration.

In education, interdisciplinary integration has historic origins and presents considerable innovations in modern didactics.

Considering integration as an independent notion entirely opposite to differentiation, it would be difficult to find the difference between "integration" and "union"; therefore, when integration is studied apart from differentiation it cannot be perceived as an independent scientific notion.

Investigation of the subject of integration implies justification of the term of "interdisciplinary integration". In philosophy, this notion is used widely; it pedagogy, the definition is missing; thereat, quite a few other terms are in circulation:

- in education in the Russian Federation: interdisciplinary, cross-curriculum, interdisciplinary and inter-subject integration, integrative, integrated, integral courses and programs, integrative processes;

- in education in the United States of America: integration, interdisciplinary, cross-disciplinary, integrated, trans-disciplinary, integrative, core, fusion, interconnected, correlated;

- in Federal Republic of Germany: interdisciplinaer, faecherverbindender, multidisciplinaer, faecheruebergreifender Unterricht, Integration.

Based on the works of other scientists the authors of this study identified several groups of interpretations of "Integration in education".

"Integration" as methodological and didactical principle of education. This definition is used in the works belonging to N.V. Gruzdeva (1996), A.Ya. Danilyuk (Danilyuk, Kondakov & Tishkov, 2010), K.Yu. Kolesina (2016), S.A. Samsikov (2000), V.N. Fomenko (1994), etc. Integration possesses general methodological nature and is considered a new principle embodied in the existing system of education as interdisciplinary relationships and as a mechanism.

Thus, according to N.V. Gruzdeva (1996), the principle of integration is based on mutual complementarity of different forms of perceiving the reality and it creates the preconditions for the development of the personal picture of the world and for finding oneself in this world.

2. *Integration as didactic condition improving the efficiency of educational process*. This interpretation was found in the works belonging to D.M. Kiryushkin (Fyodorova, & Kiryushkin, 1972), A.A. Pinskiy (Dick, Pinsky, & Usanov, 1987), A.V. Usova (2000), V.N. Fyodorova (1972). According to V.N. Fyodorova (1972), interdisciplinary relationships are limited by the scope of the curriculum and they cannot be the principle of didactics. The role of interdisciplinary relationships is much narrower and it is revealed as didactic precondition.

J. Mittelstrass (2011), German pedagogue, directly associates interdisciplinary relationships with subject centralism accepting the latter as a tool of reformation in the entire educational process used for improving the efficiency of subject centralism and to attain the unity of scientific practices.

3. *Integration as an author's interpretation or vision in education*. Thus, according to S.I. Yakimenko (1992), integration in the process of education is considered to be the way to

update the scope of education, as the means for improving the efficiency of educational process. D.N. Monakhov (2009) interprets integration as a form of organization of educational process based on the integrity of perception of the surrounding world and based on the universality of the laws of nature. I.A. Kolesnikova (1995) describes interdisciplinary integration within the concept on noosphere. I. Kolozhvari(1996) believes integration to be principal didactic requirement. M.N. Berulava (1998) describes integration as phenomenon.

This group also includes the point of view shared by the pedagogues in the United States of America: integration in education is a process of organizing the cognition when students can apply knowledge and skills obtained in the educational institutions to real-life situations. In Europe, R. Schultz explains integration as an educational platform within interdisciplinary project-based education.

4. *Interdisciplinary integration as a tool for transformation of the curriculum*. Taylor R.P. (1980), an American pedagogue, believes that integration represents the connections between the subjects that are required for the "new generation" curriculum; B.S. Bloom (1981) considers interdisciplinary integration as an area of investigations that facilitate better understanding of the new materials related to the surrounding world. According to G. MacDonald (1924), the notion of interdisciplinary integration covers the study of scientific and educational subjects within the framework of different types of educational activity based on knowledge in different disciplines.

In the works belonging to the investigators from Siberian Federal University (Gafurova, Osipova, 2010; Pak, 2013) the idea of the competency-based approach is considered as the possibility to create knowledge and skills-transformations, as the possibility to have good command of the obtained information and to create, based on this information, new products, including intellectual products, i.e. in its essence, this idea reflects the integration of education and scientific activities, it rates integration as the ideal objective of the process of education. On the other hand, in the works of Ye.Z. Vlasova (1999) and Tryapitsyna (2012) from the Herzen State Pedagogical University, the competency-based approach is often associated with the activity approach, and in fact, the competency-based approach is regarded as a special case of the activity methodology.

In the works of the researchers from the Department of Pedagogy of Moscow State Regional University, the implementation of the competency-based approach implies that the knowledge-based educational model should be replaced by the competency-based model. The knowledge-based model assumes that the process of education is an ascent over three stages. Expertise, knowledge and skills make the summit of the educational process. The skills within this so-called EKS or ZUN complex play the leading role because this level makes it possible for a man to generate one's own style of activity. Automatic ability to solve standard tasks enhances operative capabilities of a person. When one of the tasks is solved at the level of unconscious control, the person can prevent unfortunate mistakes and free one's consciousness to think over the new modified tasks (Krivshenko & Yurkina 2015).

However, today the knowledge-based model is not universal. In the modern system of education, there are certain contradictions between the information that represents the knowledge to be attained and psychological capabilities of students. Modern situation is characterized by the avalanche-like accumulation of the information that has to be learned to orientate oneself in the surrounding processes. There is a new term, "knowledge half-life period", meaning that the information passed on in the process of teaching becomes partially outdated even at the stage of learning. This situation predetermines a certain revision of the regulations of educational scope, didactical methods and means.

Therefore, the knowledge-based model, especially in professional education, is now being replaced by the competency-based model. The latter formulates the objective of education as acquisition of knowledge, development of practical experience (skills), and mastering some instrumental capabilities to create, from the available knowledge and skills, the images-transformations prerequisite for successful solutions of non-standardized tasks. Principal

notions of the competency-based model of education are “competency” and “competences” (Nikolayeva 2014).

It should be noted that within the framework of the concept of social and economic development of the Russian Federation until 2020, Federal State Educational Standards for Higher Professional Education (FGOS VPO) set new requirements to the quality of professional education of pedagogues. These requirements are associated with the competency-based approach to the objectives and results of education. In turn, there are more demanding requirements set by employers to the level of teacher training. In terms of pedagogical competence, the teachers are supposed to be highly qualified to fulfill their job, to resolve practical issues of introducing modern techniques in the process of education, to create new electronic resources and intellectual products in the course of their professional activity. This objective has been reflected in the RF Government Decree dd. October, 4, 2000 No. 751 “On the National Doctrine of Education in the Russian Federation” which clearly states that “institution of higher professional education shall train highly qualified specialists who are motivated to professional growth under the conditions of developing electronic education”.

The analysis of the adoption of the new generation FSES in M.K. Ammosov North-Eastern Federal University shows that competency is understood as an integrative characteristic of a specialist that is revealed through willingness and capability to resolve current professional tasks creatively making maximum use of one’s own personal qualities based on the acquired knowledge and the developed skills. Thereat, competency is represented by the aggregate of competences that can help outline the problem areas where a specialist is competent. In this study, competency is a capability to apply knowledge, skills and personal qualities to perform successful activities in a definite subject area. At the same time, competency is indicative of the level or degree of success achieved by the individual in applying his developed competences to solve different tasks and problems.

It should be noted that many problems of the modern education emerged because of the excessive efforts in the implementation of the competency-based approach. There were too many organizers of the process who understood word-for-word the idea that the students must obtain knowledge themselves rather than receive it out-of-the-box. This understanding of the issue resulted in the excessive focus on independent unobserved activity that was even supposed to replace the fundamental component of education. In this regard, the following things should be noted:

- first, the competency-based approach is an appropriate and modern trend in education, but it is underproductive when founded solely on students’ independent activity (Nikolayeva 2014).
- second, the subject and problem areas make it possible to identify a wide range of competences. For example, communicative competence is, among other things, required for the competent specialist predominantly focused on communications with people. Technological competences are required for those who specialize in “human-machine” systems (Monastyrskaya & Mazurova 2014).

third, the knowledge-based model is a certain static set of knowledge, experience and skills, while the competency-based model helps protect students from any unpredicted situations, as it is dynamic, actually adjusting to current conditions and configurations of tasks (Krivshenko 2015).

The authors of this study were primarily interested in establishing the competency-based approach in norms and regulations of Russian education and in the practical aspects of its implementation. Educational practices are quite extensive; therefore, the analysis was undertaken for education management in implementation of the new third generation standards for pedagogical education. The choice has been predetermined by educating nature of the process.

4. Conclusions

The analysis of the contents of the third generation FSES shows that the humanities component

of professional and then of technological education has come a long and complex way overcoming, at different stages, utilitarian and ideological approaches to its formation (Baranova 2016).

In the 90s of the 20th century, under the effects of social democratization, the higher education generated classical humanities component that covered mandatory studies of such disciplines as the history of Russia, science of law, philosophy, and also psychology and pedagogy. This set of humanities, free from ideological domination, was the triumph or the Golden Age of humanities in professional-technological and in pedagogical education. Importantly, history and philosophy are traditional, conventional set of subjects for any type of higher education; while the introduction of legal studies can be associated with the principal trends for democratization and for the creation of civil society. Psychological and pedagogical component established as a constant subsector in both technical education and humanities forestalled the idea that was implemented in educational policy of the later epoch: the institutes should be turned into universities (Yurkina 2014).

Traditionally, higher educational institutions not only trained a man to be versant with some certain scientific area, but they also developed a person capable of translating the obtained knowledge thus ensuring the succession and propagation of the scientifically obtained information.

The standards that aim to implement the competency-based approach are noted for their exclusively liberal approach to scope and procedures of the process of education. It should be noted that the higher education standards FSES HE (FGOS VO) 3+ are positioned as the “standards of choice” meaning the choice of the educational trajectory made by the students and the possibility for teacher’s creativity in the fulfillment of the curriculum. Unfortunately, neither of these statements are unconditionally positive.

The described trends have been observed by many scientists and pedagogues who are often too quick to blame the Bologna Process. However, the Bologna Declaration consists of generalized statements, and it hardly sets forth anything particular. Everything depends on its interpretation “at the local level”. On the contrary, the provisions on educational mobility of students and teachers, on transfer credits, on comparable methodologies, on cooperation in the sphere of curriculum development stipulate similarity rather than difference in the scope of education. The central idea of the Bologna Process is to unify education, to create Eurasian educational environment, to unite the minds in solving modern global problems. It should not go unnoticed that in modern Russian system of education there is a controversy between the declared principles and the implemented decisions.

Today, to eliminate the contradictions and to protect the existence of the fundamental nature of the humanities component in higher pedagogical education, centralized measures should be undertaken to create the unified environment of education and upbringing. The loss of the fundamental nature in this sphere of education would make it reasonable to assume that tomorrow communicative, moral and civilian competences of future pedagogues of professional education will be questionable, and the very future of this scientific area may be endangered.

Acknowledgement

The article is published within the framework of the Russian Government Project No.27.3715.2017 / ПЧ

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Revista ESPACIOS. ISSN 0798 1015
Vol. 38 (Nº 55) Year 2017

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