

ALEXANDER LETYAGIN**PRACTICE-ORIENTED ACTIVITY OF THE SUBJECTS OF THE EDUCATIONAL PROCESS AS A BASIS FOR THE OPTIMAL TRANSITION FROM TRADITION TO INNOVATION IN THE SYSTEM OF GENERAL AND PROFESSIONAL (PEDAGOGICAL) EDUCATION****Abstract**

The article deals with the problems of content and technological modernization that arise in the process of transition from the information paradigm of education to the activity one. A combined training model of class teaching using information, practice-based activity and visual components is offered as an example and a result of innovative approach implementation to the structuring of school textbooks, teacher's methodical materials and university textbooks. The greatest attention is paid to the functional features and mutual complementation of the proposed components that allow to obtain individual learning outcomes in accordance with the requirements of the practice-oriented educational standards in the organizations representing the system of general and higher education.

Key words: educational paradigm, activity approach, innovation, practice-oriented education, design of classes in schools and universities, content structure of textbooks

Introduction

A change of educational paradigms is characteristic for the modern complex stage of Russian education development. General education is transferring from the information to the system-activity approach as well as from the formation of knowledge, abilities and skills to the formation of three groups of educational outcomes: personal, metasubject and subject. Higher pedagogical education transfers to the formation of professional competencies: key and special.

The contradiction between the needs of the society to make Russian education competitive at the world level and the lack of the educational process management experience using modern educational paradigm by the majority of educational process participants has sharpened during the transition period in the development of general and pedagogical education. Despite the attempts to improve the qualification of teachers working at the institutions of general and higher (pedagogical) education the majority of them perceives the shift to a new educational paradigm as a problem.

It should be noted that the "educational revolution" – a change of educational paradigms – in Russia goes from the "top". These were the leaders of Russian education who introduced a series of regulations that were to become the basis of educational activities during the transition period. These documents include the "Law on Education in the Russian Federation" (2012), Federal State Educational Standards (general and higher education) and the concepts and complex programs such as "The concept of long-term socio-economic development of the Russian Federation for the period until 2020" and "A complex program for the improvement

of the professional skills of teachers at educational institutions” (Konceptija dolgosrochnogo social’no-jekonomicheskogo razvitija Rossijskoj Federacii na period do 2020 goda, 2008; Ob utverzhdenii federal’nogo gosudarstvennogo obrazovatel’nogo standartu osnovnogo obshego obrazovanija, 2010; Federal’nyj zakon «Ob obrazovanii v Rossijskoj Federacii», 2012).

The study of documents, concepts, programs by the teaching staff of both general and higher education institutions has not received the “activity impulse” yet that is understood as a wish to implement modern educational ideas into practice. It should be noted that the contents of educational and methodical complexes does not always and not in all academic disciplines helps to resolve the problems arising during the transition period.

Outcomes of the practice-oriented seminars

It seems that one of the main tasks in assisting teaching staff in the transition to the modern educational paradigm is not only in the informing how to work in the new ways but also in showing the teachers and students of pedagogical universities effective situations of working in the new educational situations.

The experience of conducting practice-oriented seminars with the teachers of geography in 54 regions of the Russian Federation during 2007-2015 showed that the practical component of the workshops’ content gets most interest. This is evidenced by a big number of questions, willingness to participate in practical tasks at the seminar, feedback from participants about the use of workshop materials in their professional activities. In addition, a ten-year experience has been accumulated within practice-oriented classes with the students of the pedagogical institution of higher education (Moscow State Pedagogical University) on the subject “ICT usage in teaching geography”.

When planning the content of practice-oriented training and seminars the general idea is in the space-time connection of informational, practical and independent work based on the visualization of the studied educational content. In practice this idea of innovative workshops and seminars’ organisation is implemented in the content of the initial course of geography textbooks and in the learning manual for future teachers on “ICT usage in teaching geography” course (Letyagin, 2014; Golubchenko, Kijamova, 2011).

Innovative structure of practice-oriented content of textbooks and methodical manual

The content of textbooks for primary geography course has been updated not only in relation to scientific geographical content but also redistributed by the years of study allowing students to develop their educational potential accumulated in the classroom and in extracurricular activities. Besides that psychological and physiological characteristics of young adolescents were taken into account; it led to the possibility of creating optimal conditions for the implementation of the activity approach and using tier differentiation technology while teaching.

Each paragraph of the textbooks for primary geography course consists of information, practice-based activity and visual components. On the basis of work with the information component (paragraph text, illustrations containing additional

information, glossary) students receive necessary knowledge which they use doing practice-based activity (“The school of geographer-pathfinder”) and visual (“Video Geography”) components. If earlier the purpose of training activities was to learn, memorize and to a lesser extent apply, now part of the information that has been transformed into knowledge should be used by the students in practice, and half of the information obtained within and in connection with practical activities also becomes knowledge. Practice-based activity component of the paragraph contains tasks oriented at the practical application of knowledge: modelling geographical instruments, objects and processes, creation of educational games etc. Visual component of the paragraph allows not only to see the studied geographical objects and processes but also to “look inside” the processes invisible for a man.

It should be noted that not a continuous study of the paragraph text but a constant reference to it in the context of a specific learning task allows students with a different educational level to receive individual learning outcomes. Tier differentiation of the work with the textbook text is technologically provided due to the text quantization done by the teacher when designing and planning the lesson. Moreover, the practical component of the paragraph often involves different forms of students’ group work which leads to the formation of communicative universal learning activities as well as eliminates the negative aspect of traditional tier differentiation technologies, i.e. inhuman division of students into groups according to the level of intellectual development.

Methodical manual on the initial course of geography contains necessary tools for flexible design of the lesson’s content which can serve as a basis for the formation of concrete personal and meta subject educational outcomes (here different variants of short reflection phases are offered) as well as meta subject outcomes (here various forms of training activities’ organisation both at the lesson and at home are suggested) (Letyagin, 2014). Running practice-oriented seminars with the teachers of geography on the rotating schedule of the above mentioned components of the textbooks on the initial course of geography showed their effectiveness.

Characteristics of practice-oriented classes at the university

At practice-oriented classes within the program of future teachers’ ICT competences development offered for the students at the Faculty of Geography of Moscow State Pedagogical University three types of learning activities are used: the study of the information component on the theme of the class, practical work on the formation and development of the students’ ICT skills, the initial stage of the students’ independent work under the supervision of the teacher. Application of the tier differentiation technology while teaching allows students to master the content of each theme at one of the three levels. For example, the study of the theme “Global Positioning Systems (GPS) in geographical education” takes 2 classes aimed to form students’ ability to apply knowledge of the Global Positioning System in the educational process, skills to work with a GPS-navigator and use it in their professional activities as a means of teaching geography.

Specific objectives of the classes allow to formulate the following requirements for the level of training.

The student should know and explain:

Level A – the concepts “Global Positioning System”, “geocaching”, “geotagging”; basic techniques of working with a GPS-navigator; the sources of information in the Internet for the organization of educational geocaching and geotagging;

Level B – the basic principles of work of the Global Positioning System, functional features of GPS-navigators, the rules of geocaching geotagging; functional opportunities of geocaching and geotagging, the ways to use them at geography lessons and in extracurricular activities;

Level C – the main ways of organization and conducting classes with schoolchildren on the usage of GPS-navigator, creation of the project of educational geocaching and geotagging.

The student should be able to:

Level A – retrieve digital educational resources devoted to the system of global positioning of geography in the Internet; work with a GPS-navigator;

Level B – possess technical and methodological GPS-navigator usage techniques when teaching geography; develop the routes for the geocaching game;

Level C – use GPS-navigator with a different purpose at geography lessons; conduct geocaching game on the specified area; create virtual routes in the style of “geotagging” in accordance with the goals and objectives of the geography lesson (Letyagin, 2014).

The effectiveness of practice-oriented training in the formation of ICT competencies is witnessed by the facts of knowledge and skills’ usage in the field of educational information and communication technologies in the teaching practice of educational organizations.

Conclusion

The experience of content planning and conducting classes at schools and universities based on the combination of interrelated components seems efficient and appropriate. The main features of this approach are seen in the combination of practice-based activity and visual components around the main idea of the class, implementation of all study phases of the learning content (perception, comprehension, application), obtaining individual learning outcomes in accordance with the differentiation level of the parties participating in the educational process.

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