SPECIFICS OF ACADEMIC DISCIPLINES INTEGRATION IN CONDITIONS OF THE CREDIT TECHNOLOGY APPLIED IN HIGHER EDUCATIONAL INSTITUTIONS OF THE REPUBLIC OF KAZAKHSTAN

Tleuberdiev B., Shvaikovskiy A., Makulbek A.
South Kazakhstan State University im. M. Auezova, Shymkent,
e-mail: koncel@ukgu.kz srd-sksu@yandex.kz

In the article the peculiarities of adoption of the credit educational technology in the Republic of Kazakhstan and the existing problems of its further realization are considered. The credit technology is a new technology for the educational system of the Republic of Kazakhstan. It helps to increase the levels of self-education and knowledge creative development on the basis of individualization, electiveness of the educational program within the framework of the regulated educational process and account of the knowledge volume in credits. The research leading idea consists in the use of the potential of intersubject relations in conditions of the credit technology as a means of reinforcing the integration processes stimulating the students' interest to cognitive activity, quality improvement of mastering the disciplines of the speciality curriculum. The establishment of the disciplines' prerequisites and postrequisites at organization of the credit technology assumes the further work on designing such training courses which are constructed on the integrated approach.

Keywords: credit technology, integration, individualization, method, innovation, modernization, key competences

The distinctive feature of higher education of the XXI century is the international cooperation. In the Republic of Kazakhstan the educational systems of the European countries are the subject of special attention. The integration into the European educational space is impossible without application of the international technologies. This is the reason of adoption of the credit technology in home higher institutions. On the way to integration with the European educational space there are some attempts to organize the whole education system according to the global requirements. The State program of education development in the Republic of Kazakhstan for 2011–2020 as one of the priority directions includes «... design of the effectively working educational system providing the broad cross-section of the population with educational standards (at a global level) of high quality» [1].

One of the basic aspects of reforming the modern education is reinforcing of the integration processes stimulating the students' interest to the knowledge of the essence and the world phenomena as complete objects. The tendencies of integration and differentiation in science and education are increasing nowadays.

Moving to modern socially-oriented market economy is one of the basic directions of the reforms carried out in the Republic of Kazakhstan. Adoption of the credit technology in the system of higher education of Kazakhstan became the consequence of the country's inclusion in Bologna process which basic purpose is creation of the united European educational space.

Tasks setting

The aim of the research: theoretical substantiation and revealing of the ways of realization of the disciplines integration in the higher school educational process in conditions of the credit technology.

The tasks of the research:

1. To study the theoretical bases of the intersubject relations realization.
2. To investigate the potential of the intersubject relations in conditions of the credit technology.
3. To work out methods of the intersubject relations realization in teaching and cognitive process of the higher school in conditions of the credit technology.
4. To test the worked out methods in the course of pedagogical experiment and to suggest scientific-methodical recommendations on the problem researched.

The methods of the research: study and analysis of scientific articles, didactic, methodical works on the problem researched; analysis of normative documentation (the state standards of education, typical curriculums, curricula, educational and methodical complexes of specialities and disciplines); observation; conversation with students; questionnaire of the participants of the educational process; the experimental work carrying out.

Results

A credit technology – an educational technology, allowing to reinforce the levels of self-education and knowledge creative mastering on the basis of individualization, electiveness of the educational program within the framework of the regulated educational process and account of the knowledge volume in credits.

The main principles of the given system consist, first of all, in freedom of the students' choice of the academic disciplines, special courses and even teachers. At the beginning of each course a student gets a course program with the whole complex of questions, tasks, tests for self-checking, etc. – the so-called syllabus. A teacher acts now only as a consultant directing and adjusting the students' work.

A student gets an opportunity to take at choice the obligatory subjects and disciplines preschedully.

It is possible to judge about the perspectivity of the credit technology on the following parameters:

– achievement of the international "transparency" of the existing national educational systems (the aim – to enable people to get education at convenient locality);

– compatibility with any national educational system;

– applicability by all kinds of the programs and forms of higher education (full-time, part-time, distant);

– opportunity of the international test transfer;

– compatibility with the European diplomas.

In addition the credit system profitably represents the interests both of students and teachers:

– introduction of credits for estimation of the labor expenditures;

– personal participation of each student in formation of the individual curriculum;

– freedom of choice of the curriculum disciplines;

– use of the score system of academic progress.

A teacher's interests are submitted by the teaching technology. In the traditional system applied until recently all over the postsoviet space, a teacher acted as the transmitter of ready knowledge, and a student – as the passive perceiving party. In the credit system a teacher has become the organizer of cognitive-reflective activity and makes a student study during all his educational activity, not just in the higher school. A student becomes the active perceiving party, learning and getting experience of continuous self-education on the basis of initiative and independence.

However with introduction of the credit system in the Republic of Kazakhstan there was a number of problems, in particular, connected to very short terms of its introduction (2004-2005). In this connection, the students have not been timely provided with teaching and methodical materials as the teachers simply did not have time for material preparation for each student. Besides originally there were some problems with students' educational knowledge assessment on the new system. If earlier a lesson lasted 1,5 hours now it lasts only 50 minutes. Each discipline can have from one up to three credits, i.e. is designed for 45–135 hours, and into the structure of one credit are included: 15 hours of lectures, 15 hours of independent work with a teacher, 15 hours of students' self-independent work. If there is more than one credit it is possible to vary hours. For example, if there are three credits for a subject (45 hours of lectures, 45 hours of independent work with a teacher, 45 hours of students' self-independent work) it is possible to conduct 15 lectures and 30 seminars or 30 lectures and 15 seminars (hours for independent work with a teacher and students' self-independent work are not varied).

But to get accustomed to all this both the students and teachers needed a period of adaptation. Thus, the teachers are interested now in making the subject interesting to students, otherwise they can be dismissed, if not enough of the educational groups will be formed.

Despite of all these difficulties, the credit system allows teachers and students to form the educational process and to determine the subjects which are necessary for the future professional work.

Besides students get opportunity to study the subjects not presented in the higher school programs, and to pass them in other higher schools under the programs of internal and external academic mobility. These disciplines are put on the diploma on the basis of the transfer system.

Thus, taking the way of reforming the higher education and approaching its standards to the European, Kazakhstan, first, gets opportunity to make the higher school diplomas liquid abroad. Besides the RK government hopes «to optimize» economically the educational sphere of the country and to make it attractive for the Europeans. In general the credit technology is progressive and can really organize the European educational space in the united integral system.

Within the framework of the given research the regulations on the credit technology, a theoretical material and the collected experience of activity of the higher educational institutions in the Republic of Kazakhstan on introduction of the credit technology have been investigated [2].

The analysis of the didactic material, curricula, programs, teaching and methodical complexes of various disciplines, seminars on introduction of the given educational system, show, that in conditions of the credit educational system undoubtedly there is an active process of integration of various branches of sciences. It influences the quality of mastering the subjects [3].

In view of the conducted research the working programs on various subjects of the specialities «Foreign language: two foreign languages», «Theory and practice of translation», «Foreign philology» and the syllabuses for students of the given specialities were analyzed.

In our opinion, the urgency of the problem of the disciplines integration in conditions of the credit system, its insufficient readiness in modern pedagogics has been increased.

The interpretation of the concept of intersubject relations in pedagogical science is ambiguous. Traditionally the intersubject

relations are considered as the mutual coordination of curriculums caused by the system of sciences and didactic purposes. At the same time comprehension of the intersubject relations as didactic condition providing the development of cognitive abilities is popularized. There is a tendency of the intersubject relations allocation in independent didactic principle.

Today in pedagogics they address more often to the concept of the disciplines integration. Integration means association in the whole of some parts or elements. Integration – the process of the sciences rapprochement and connection, occurring alongside with differentiation.

We consider the phenomena of intersubject relations and integration from the following positions. The didactic principle of the intersubject relations is characterized from our point of view as directive to organization of the pedagogical process in view of the common in the contents of subjects and approaches to their mastering. Such organization of the teaching process under influence of the purposeful realization of the intersubject relations positively affects its productivity. At their systematic and purposeful realization the whole educational process caused by a high level of integration is reconstructed.

Integration of the disciplines we consider as the pedagogical phenomenon determining the ways of developing the subject system of education and directed on deepening of interrelations and interdependence between the subjects. Integration as the pedagogical phenomenon has methodological substantiation and, not denying the subject system, in many respects it promotes soution of the common and adjacent problems at training the specialists with higher education. Integration of the subjects – one of the directions of active search of new pedagogical decisions promoting development of the creative potential of the teaching staff for more effective influence on independent cognitive activity of students, on the level of their activity in mastering the curriculum disciplines [4].

The important positive moment in the history of development and realization of the idea of intersubject relations is transfer of the higher school of the Republic of Kazakhstan to the credit system. The credit technology deduces the educational process on a new qualitative level and has a number of distinctive features.

As the monitoring has shown, in conditions of the credit technology the significant role in mastering the discipline material and organization of the educational process the intersubject relations have. The educational process in the integrated subjects is directed not only on maintenance of the learners with knowledge necessary for practical activities, but also on development of the skills to use this knowledge creatively in new conditions, to analyze them, to choose the necessary and missing in the information stream, and also to plan independently, to carry out and supervise the activity. The important significance has formation of such common discipline skills which will provide the quality of independent cognitive activity of a student at higher school disciplines studying and will affect the development of the professional competence of the future specialists.

The credit technology is inconceivable without teaching and methodical maintenance of the cognitive process. The teaching and methodical maintenance of the discipline is directed on solution of the following specific tasks.

The efficiency of the intersubject relations at the credit technology lessons is proved by the following didactic conditions: concrete instruction on the discipline prerequisites and postrequisites in working programs (syllabuses); precise determination of the teaching material volume and contents, on the basis of which the intersubject relations are realized; their developed inclusion in the contents of lectures, in methodical design of practical classes, in calendar-thematic plans of teachers and plans for practical classes in students' syllabuses; concretization of the learning objectives from the point of view of the acquired adjacent concepts and skills; analysis of the concepts common for several subjects; development of the generalized world outlook categories; application of the generalized cognitive skills and methods; development of the common subject skills necessary for mastering all the higher school disciplines; application of various visual aids from the related disciplines; statement of the problem questions of the intersubject contents; application of the interactive methods of teaching; coordination of activity of teachers of different subjects.

The potential of the intersubject relations now as the research has shown, is extremely great. There is a necessity for development of conceptually new integrated approaches to mastering the higher school disciplines in conditions of the credit technology. The principle of the intersubject relations is traditionally connected to solution of didactic problems and regarded as one of the conditions of development of the teaching technology. The principle of the interbranch scientific integration in high degree is connected to the substantial component of the educational process probability. The theoretical research of the problem of integration allows to allocate such positive properties of the principle of organization of the intersubject relations as complete reflection of the world picture, the outlook formation promoting the depth and knowledge transparency; formation of the learners' cognitive interest, development of their productive activity, the common

discipline skills promoting qualitative mastering of the higher school program.

In the context of the common discipline skills formation the importance of the language disciplines affecting the quality of all subjects mastering is increasing. It makes teachers of the language disciplines use the great opportunities of the intersubject relations during classes for achievement of a high level of teaching and getting perfect results in learning. Both a teacher and a student should realize, that in all subjects the same speech skills are formed, but on different language material. Therefore the intersubject relations which consolidate, reinforce the developed skills are of paramount importance.

The priority direction of the research is the characteristic of the condition of organization of the intersubject relations both at language, and other kinds of lessons, revealing the potential of intersubject relations. The research was carried out by the analysis of working programs and syllabuses of some disciplines of the philological faculty of South Kazakhstan M.Auezov State University. It was carried out by oral interrogations and questioning, representing one of the most accessible and effective methods of studying the condition of the given problem and revealing the probable ways of the educational process development.

The analysis of the teaching and methodical complexes was of great importance for objective estimation of the condition, determination of the ways of development and designing the new strategy in realization of the intersubject relations in the higher school.

Conclusion

On the basis of theoretical propositions and the experimental research data we have come to the following conclusions:

1. The results of the carried out research convincingly testify that integration of the disciplines is the pedagogical phenomenon determining the ways of development of the subject system and directed on deepening of the disciplines interrelations and interdependence. The didactic principle of the intersubject relations is characterized as proposition, direction on organization of the pedagogical process in view of the principle of integration.

2. Transfer to the credit system, supposing among the ways of the educational process development one of the most effective – organization of a strong system of the higher school disciplines relations, has made urgent again the problem of the intersubject relations in the framework of designing the approaches to prerequisites and postrequisites application.

3. In conditions of the credit system it is extremely necessary: formation of the common discipline skills in view of the requirements of the credit technology providing the material qualitative mastering; instruction on the disciplines prerequisites and postrequisites; use of opportunities of one of the main components of organization of the independent cognitive activity of a student – a syllabus.

4. The results of the experimental teaching have shown, that introduction of the new approach to realization of the intersubject relations substantially promoted:

– active use of the intersubject relations by students in the independent cognitive activity;

– adaptation of the former schoolchildren to the higher school system;

– students' mastering of the certain knowledge systems: philosophical, social, psychopedagogical, philological, ethical;

– formation of the system of common discipline skills: adaptable, cognitive, communicative, research, designing;

– formation of the system of common discipline skills of preparation of oral scientific message, written execution of the cognitive activity results, work with printed sources, reference to computer support;

– improvement of quality of mastering the subjects studied.

The carried out research and the results of the experimental work prove the urgency of the problem of the intersubject relations in conditions of the credit system. The urgency and many aspects of the given problem give opportunities for its research. Only in the aspect of the credit technology it is possible to allocate some directions in research of the potential of intersubject relations in the higher school: application of the credit technology mechanisms for coordination of teachers' work; activity of advisors in formation of an educational trajectory of students, designing the individual curricula in the aspect of the intersubject relations realization; working out and introduction of new integrated courses into the educational process of the higher school; improvement of the curricula in view of the principle of the intersubject relations.

These conclusions speak of the prospects of the further scientific researches devoted to the intersubject relations in the aspect of the higher school teaching.

References

1. State program of education development in the Republic of Kazakhstan for 2011–2020. – Astana: Akorda, № 1118, 7.12.2010.

2. Rules of educational process organization on the credit technology in the Republic of Kazakhstan. – Order №152, 20.04.2011.

3. Kolos E.A. Development of the system of higher education in Kazakhstan: innovations, experience and prospects. – Ust Kamenogorsk, 2008. – 207 p.

4. The instructive letter on organization of the educational process on credit technology in higher educational institutions of the RK, №U-01, 14.03.2008.