

# Professional Education Features in the Credit Conditions of Teaching

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## Abstract

This article is investigating professional education features in the credit conditions of teaching as more flexible and efficient way in increasing students' level of self-education and creative development of knowledge. It ensures graduates academic mobility and their constant demand in the rapidly changing conditions of labor market. Flexible planning of academic programs tailored to the labor market needs and recommendations, including selectivity of 50% curriculum disciplines, teaching quality improvement, intensifying the learning process, introduction of information systems and increasing the students self-reliance role. Credit system teaching role and its differences with traditional education features were analyzed.

**Keywords:** credit system education, professional education, features, labor market, learning process, teaching

## 1. Introduction

The current specialist are required to have professional competence which include knowledge, skills, attitudes and values for the majority of the scholars, the ability to make decisions in non-standard situations, to work in team, to independently find, analyze information and use effectively, to work rationally in a rapidly changing world (Antera, 2021). There is an academic agreement in the competencies that should facilitate individual and societal transformation towards sustainability being those of problem-solving, interpersonal competence, systems-thinking, future-thinking, strategic and normative competencies (Cebriante al., 2021).

These qualities are acquired by students in the use of active forms of learning, in pairs, in groups, in solving specific life situations, independently, on the computer, etc. are enjoyed when operating in dialog mode. Correct

organization of the learning environment increases students' interest in science and encourages them to give all their energy and enthusiasm (Zaripova et al., 2020).

Professional education system development and modernization requires formation of a qualitatively new approaches to its financing; an important element in effective economic mechanism formation in the process of modernization and development of higher education should become educational lending, allowing expand financing sources (Grunin, 2011). In a general, education content is considered as main element in educational process, through which the persons involved in educational process can achieve personal and socially significant skills (Batyshev, 1998); the content of education at a certain level is understood as a set of subjects to be studied, interdisciplinary courses, modules that form the

basis of the curriculum of an educational institution (Batyshev, 1997). Credit technology is an educational technology that increases level of self-education and creative development of students' knowledge based on their individualization, selectivity of the educational

trajectory within the educational process framework in regulation by account the knowledge amount in the form of credits (Zhaksybaeva, 2016). Difference between credit education and traditional education is shown in Figure 1:

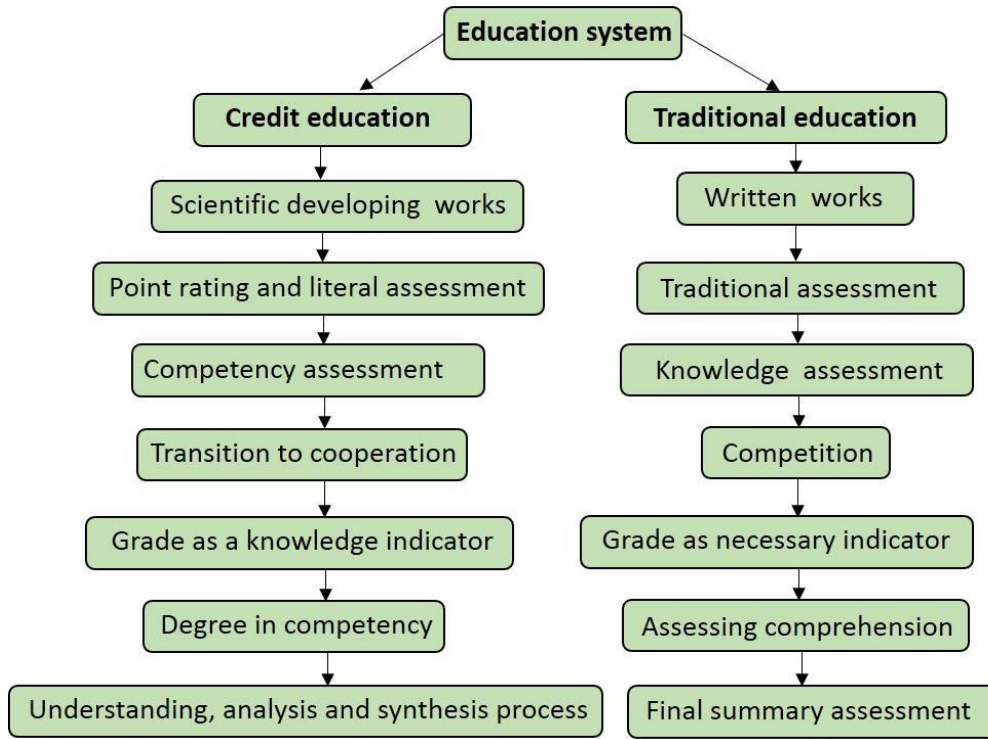


Figure 1. Differences between credits with traditional education (adapted from Zhaksybaeva, 2016).

**2. Research methods and materials**

This work is based on analysis of various determinations of credit technology teaching in professional education. Main features in the credit teaching were characterized including students independent work based on teachers' guidance, digital competency requiring students' knowledge of digital resources and tools necessary for education performance. Some advantages in the credit technology teaching were mentioned as effective use of proposed methods for students' independent work, encouraging their mental and practical activities, developing students' intellectual quality provision for their future profession.

**3. Results and discussion**

Credit education requires students' digital competency as an important tool involving the confident and critical use of Information Society Technologies (IST) for work, education, leisure and communication. Students use computers to produce, assess, store, present and exchange information during educational process. Percentage of students' digital competency and levels of technological training enrolled in a master's program in compulsory secondary education and baccalaureate teaching, professional training, and language teaching, which qualifies graduates for the teaching profession can be achieved by platforms shown in Figure 2.

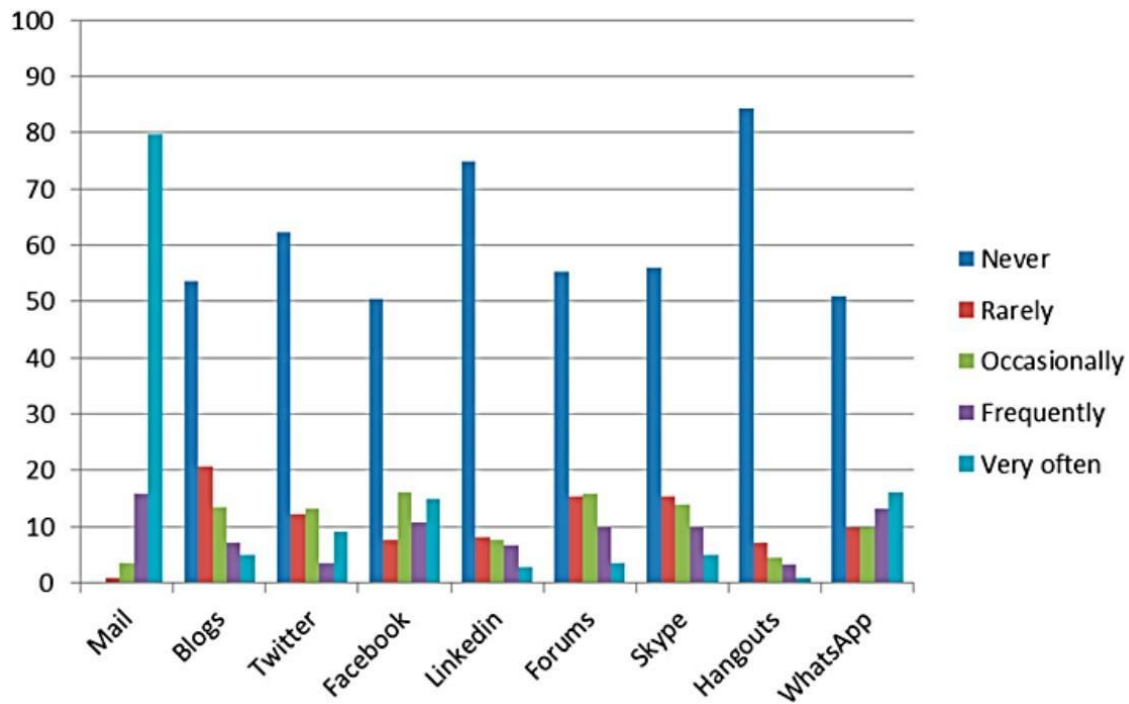


Figure 2. Percentage of digital resources or tools use by respondents to communicate remotely with their teacher and with their classmates (represented from Pérez-Navío et al., 2021).

Credit teaching in education aimed at improving the independent learning level and individual creative acquisition of knowledge. Credit training made possible to qualitatively change education content, forms and learning methods based on the following forms of education: 1) students classroom independent work in which students communicate in a dialogue mode, training, discussion, business and didactic games, presentations, case studies, individual and group projects development; 2) students independent work based on teachers' guidance as one of educational work forms in credit technology education (Elibaeva & Dzhumagulova, 2015).

Students' independent work in credit teaching can be multifaceted according to features, types, forms and following characteristics: 1) pedagogical goal is teaching or testing; 2) specific tasks aimed to study the material theoretically, expand phenomenon characteristics, mastering methodology, method testing, drawing up a diagram, building a graph; 3) nature of student's activity: reproductive, requiring memorization and understanding, assimilation and reproduction of information in lectures, books, computers; work performance according to the "standard" with some modification; partially search works, requiring knowledge of previously studied material and ability to establish some dependencies; creative work solving the problem of situational issues, business game; 4) independence degree as a

nature of student activity, productive work requires students minimum independence, reconstructive-variable work requires an average independence, and creative work requires students maximum independence; 5) according to form with a book, notes, lecture, instruments and equipment: assimilation; generalization which is carried out in preparation for midterm control work or exam; demonstration: performance or response in a seminar or lab; application: the use of knowledge in solving theoretical, mathematical, methodological problems: independent work involving their combination (Mukasheva et al., 2015).

Introduction of credit system in the Russian and Kazakhstan universities were started at the beginning of the 21st century, however, as government documents analysis in the field of education showed, that credit system education acquired a number of specific characteristics with tasks in education system to introduce effective use of new learning technologies, including credit, distance learning, information and communication technologies that promote rapid adaptation to professional education to satisfy society and labor market needs (Iksanova, 2011). Credit teaching helps to solve the openness and transparency problem in national educational systems, including mutual recognition of learning outcomes obtained in various countries and educational institutions; credit loan presence as a tool measures the student's labor costs in education, makes it

possible to study in various foreign country universities and freely transfer from one university to another, and build curriculum in accordance with professional interests (Ivankina et al., 2011). For the comparability of national educational systems and recognition of issued documents after education, a training models were proposed including bachelor's, master's, doctoral PhD, based on credit technology according to the ECTS model (European Credit Transfer System) which is acquiring knowledge through credits based on European Credit Transfer System (Ovakimyan & Nass, 2010).

Medical universities and faculties in Europe and Russia determined those directions in the Bologna Process, which they consider acceptable and appropriate for Medical Graduate School progress as Graduation Recognition qualifications; development of academic mobility; introduction of a credit system; system implementation and education quality management (Abirova et al., 2013).

Modern education based on individualization and differentiation, alternative education systems and schools, flexibility and mobility of curriculum documentation, adaptation to changing conditions of the socio-economic environment. Recently, the content of education is also changing rapidly, which affects educational standards timing. The education system in Kyrgyzstan must be able to respond dynamically to development, as well as to the accelerated globalization and informatization processes.

Within the project framework "Creation of experimental convergent curriculum in the direction of "Economics" in the Kyrgyz Republic pilot universities it was developed an experimental training plan for preparation of bachelors in the "Economics" direction using the ECTS credit system and, starting from 2004 to 2005 academic year, introduced into the educational process in seven Kyrgyzstan universities including Institute for Integration of International Educational Programs at Kyrgyz National University named after J. Balasagyn (Abakirova, 2012).

ECTS evaluates the total labor intensity in the educational work of one academic year in 60 credits (per semester, the student gains 30 credits, and in the trimester 20 credits.) Academic year duration is 30 weeks and 6 weeks are allotted for passing exams as final control. In addition, in European countries, the duration of study for obtaining undergraduate degrees are three to four years and require 180 to

240 credits, respectively (Abilova & Amirkenova, 2014).

Educational practice has developed an effective system of credit technology with advantage, requiring constant improvement of pedagogical skills, advanced training of organizers in the educational process, exchange of best practices, and education quality improvement. The most important issue in the implementation of the credit system of education is material and technical base compliance and communication in universities. Education marketing role is growing, attracting public, foreign and private investments, improving education system monitoring, evaluation and quality (Karaseva & Zima, 2011).

Credit teaching technology in education is defined a set of agreed factors for its successful operation, including the provision of teaching materials using basic textbooks that meet European standards, as well as language channels, computer labs, video halls, etc. to organize students independent work.

In the credit system education, it is important that school provides students with the necessary sources of information in full: textbooks and manuals, e-textbooks, access to sectoral educational resources, active handouts, etc. Professional education system should develop conditions for the Kyrgyz Republic's access to the Bologna process, as well as provide students with the opportunity to choose their own educational trajectory, mobility, academic freedom of bachelors, masters, doctors, instead of traditional education system (Abakirova, 2012). The need for Kyrgyzstan to join the Bologna process is reflected in objectives which adheres to a market economy and democracy. Kyrgyzstan access to the Bologna Process will provide the following advantages: a) expansion of ties in the field of professional education; b) prospects for the students, teachers, and researchers exchange with universities in European countries contributing to sustainability; c) increased opportunities to provide educational services to foreign students export professional education in Kyrgyzstan and mastering rational forms in organization of educational process and new educational technologies.

As Bologna session priority direction in the Communiqué Conference of the European ministers responsible for higher education held in Belgium, 2009, students' academic mobility was planned (Bazhenova, 2012). The main goal in academic mobility is to provide the student with opportunity to receive education in the

chosen field of study, provide with access to recognized knowledge centers with leading scientific schools, to develop the student's knowledge in various cultural fields (Baranova, 2018).

### Conclusion

Thus, dynamics of success can be achieved in the credit teaching by students' efforts in their study to obtain necessary skills for their future profession. Credit teaching is defined as an effective system requiring constant improvement of teachers' pedagogical skills, advanced training of organizers in the educational process, practice exchange for education quality improvement. In addition, credit teaching helps to solve the openness and transparency problem in national educational systems with mutual recognition of learning outcomes obtained in various countries.

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