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# MODULE-BASED DESIGN OF KAZAN FEDERAL UNIVERSITY MASTER PROGRAM "COMPARATIVE STUDIES IN EDUCATION"

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#### Abstract

The new educational paradigm and ongoing integration processes place special demands on the personality of teacher-researcher and his/her professional competence. This problem is of great urgency and it requires completely different approaches to designing and implementing educational programs for student teachers. This article reveals the main approaches and features of designing a university modulebased educational program on the example of master program "Comparative Studies in Education" (Russian-German studies). A leading approach to designing module-based master programs in higher education is the competence approach. The leading methods for exploring the stated problem are the modelling method and the structural systematization method. The article presents principles of implementing a module-based pedagogical master program within the context of a federal university. It reveals the main module components of a master program and describes the algorithm for introducing a module-based program into a university curriculum. The article reveals Russian experience in designing modular master programs. Results of this activity can be used in creation and implementation of joint educational programs for training of teacher-researchers in the context of dynamically developing modernization and integration processes. The article is addressed to the teaching and administrative staff of universities, interested in modernization of educational programs in the area of "Pedagogical Education".

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**Keywords:** Competence approach, pedagogical magistracy, module, structural components of the module, academic mobility, comparative studies in education.



# 1. Introduction

Kazan Federal University offers all level of pedagogical education programs: undergraduate and graduate programs, as well as programs for additional professional education (Kalimullin, 2014). Specific attention is paid to teacher training at the second stage (level) of higher education, following bachelor's degree and master's degree.

### 2. Problem Statement

Until September 2016, various structural divisions of Kazan Federal University (Leo Tolstoy Institute of Philology and Intercultural Communication, Institute of Management, Economics and Finance, Institute of Fundamental Medicine and Biology, Institute of International Relations, History and Oriental Studies, etc.), carried out master programs based on their own pedagogical departments. The tasks of developing a common strategy and tactics for intending teachers (masters) at federal university were transferred to a single center of responsibility. A modern center for pedagogical magistracy was set up on the basis of the Institute of Psychology and Education of Kazan Federal University. The center has lecture classrooms, special audiences for conducting practical classes, including interactive forms of instruction (interactive educational practice studio, training studio, public speaking studio and theatrical skill studio), cinema hall, study room for technical training facilities, center of practical competences, modern laboratories and recreation areas for undergraduates. All educational audiences of pedagogical magistracy center are equipped with modern multimedia demonstration systems. The presence of two structural subdivisions (IT lyceum and Lobachevsky lyceum) in the structure of Kazan Federal University makes it possible to strengthen practice-orientated training of future teachers-researchers.

At the same time, under modern conditions, self-sufficiency of the university is justly criticized in the process of training competent teacher-researcher. The process of active inclusion of European states in integration processes taking place in education is of great importance. The main idea of the ongoing integration processes in education is not the approval of educational models or samples that have been accepted once and for all. The aim is mutual development of participants, further joint search for the most progressive and dynamic models in education, responsive to contemporary challenges of the teaching profession. In this context, foreign-language communicative competence, academic mobility and skills of implementing comparative studies in education become essential qualities for a modern teacher-researcher. A teacher-researcher is a person who is capable of independent, critical, and problem-orientated pedagogical thinking and who has well-developed general pedagogical and research competences.

# 3. Research Questions

Training of competitive teacher-researchers requires new approaches to the design and implementation of educational programs. It suggests completely different mechanisms for implementation of pedagogical studies, including comparative studies and organization of various types of practices. The process of training such teacher-researcher is long, holistic, dynamic and continuous. At the same time, this process reveals further problems that require urgent solutions:

- low quality of graduates' practical training (Margolis, 2014a);

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- pedagogical research disconnected from the real needs of educational practice;

- a weak link between students' research work and practice in educational organizations (Margolis,

2014a);

- insufficient consideration of constructive international experience in training of a teacher-

researcher;

- non-active (reproductive) nature of technologies for the training of future teacher-researcher

(analytical statement, 2015);

- the lack of independent assessment of intending teachers' training quality (analytical statement,

2015).

4. Purpose of the Study

The purpose of this study is to develop a module-based master program "Comparative research in

education (Russian-German studies)", to disclose the principles of its design and implementation. In this

connection, the essence of concept module is defined, its main components are disclosed and an algorithm

for its implementation in educational process of the university is described.

5. Research Methods

Methodological basis for development of modular master program is the competence approach. In

the system of pedagogical education, it is considered by us as an approach focusing on the productive side

of education, expressed in the competence format. This approach is based on diagnostic goal setting,

updated content, modern technologies, interactive forms and methods of teaching in the process of

practice-oriented activities. These activities are aimed at forming specific graduates' professional skills

that allow them to carry out pedagogical and research activities at high professional level in accordance

with professional standard of teacher in the context of modern trends in modernization of education

(Kalimullin et al., 2016; Fattakhova et al., 2016).

Pedagogical bases of competence approach are laid down in the works of Baydenko (2004),

Gershunsky (2003), Seer (2005), Khutorskiy (2003), Zimnyaya (2004) and other researchers.

In the use of competence approach in teacher training, the following conditions are important:

competence as a result of education, activity technologies, interactive forms and methods of teaching as a

way of their formation and development, evaluation tools for assessing achievement of educational results

declared in the targeted characteristics of educational program. Competence is educational result within

the competence approach. Gershunsky (2003) defines competence as a readiness of learner to use the

acquired knowledge, educational skills, as well as ways of working in life to solve practical and

theoretical problems. Disclosing the difference between concepts of "competence" on the one hand, and

the notion of "knowledge", "ability" and "skills" on the other, it should be emphasized that competences

do not exclude these terms, although they are fundamentally different from each other. The difference

from knowledge - the fact that they exist in the form of activity, not only information about it; the

difference from abilities is that competencies can be applied to solution of various kinds of tasks (have the

transfer property), from skills is that they are conscious and not automated, which allows to act not only

in typical, but also in non-standard situations (Polosin, 2009).

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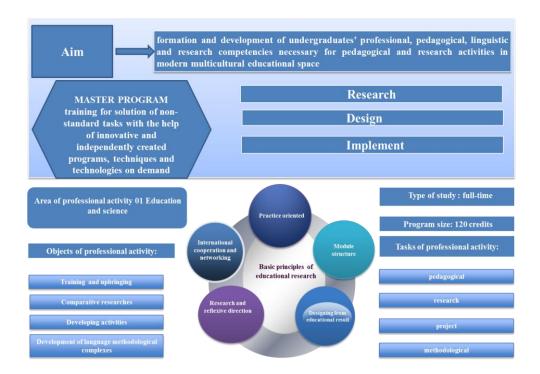
The main principle of designing master programs in the context of competence approach is the principle of modularity. Modular educational programs are one of the main tools for implementing the principle of modularity based on the competence approach (Bolotov, 2003; Vesmanov, 2014; Margolis, 2014a; Oleinikova, 2005; Savenkov, 2014).

At the development of modular master programs, the following scientific methods were used: analysis, synthesis, concretization, generalization; and the following methods: structural-system method, modeling method.

Experimental base of the research is "Kazan (Volga Region) Federal University". KFU acquires a new model of teacher-researcher training in the framework of research-oriented pedagogical education in classical university. The first result of this model is master program "Comparative studies in education (Russian-German studies)" implementation of which begins on September 1, 2018.

# 6. Findings

Master program "Comparative Studies in Education (Russian-German Studies)" is aimed at formation and development of vocational, pedagogical, linguistic and research competencies necessary for pedagogical and research activities in modern multicultural educational space. Basic principles of master program are: modularity, practical orientation, school and university partnership, research orientation, intercultural communication, reflection. General characteristics and principles of the developed master program are presented in Figure 01.



**Figure 01.** General characteristics of master program "Comparative Studies in Education (Russian-German Studies)"

Psychological and pedagogical training of future teachers-researchers are carried out in the Institute of Psychology and Education of KFU. Language, methodological, and scientific research will be

realized with participation of Technical University of Dresden. Various types of practices (pedagogical, research, etc.) will be held in the best educational and research organizations.

The organizational structure of master training in the framework of the program "Comparative Studies in Education (Russian-German Studies)" is presented in Figure 02.

**Figure 02.** Organizational structure for masters training in the framework of the program "Comparative Studies in Education (Russian-German Studies)"

The following figure (Fig. 03) presents the features of described master program implementation.



**Figure 03.** Features of master program implementation "Comparative Studies in Education (Russian-German Studies)"

The modular master program developed in the framework of research includes the following modules: "Fundamentals of science module", "Pedagogical activity in multicultural educational space", "Scientific research in education", "Interlingual communication and methods of German language teaching", "Monitoring the quality of language education".

The essential characteristic of master program modules relates to the support of future teachers so that to increase the practical orientation of studies and ensure integration of research, design, educational, and practical activities of undergraduates.

In this study, the module is viewed as an integrated set of training sections, various types of practices, student research, having a logical conclusion and developed as part of educational program.

One of the most important system-forming components of a module, that initiates educational process, is dispersed practice on the basis of educational organization. At this stage undergraduates get acquainted with problems and contradictions of modern teaching practice that may become the subject of future comparative studies. The next component is theoretical, that discloses underlying theories and cause-and-effect relations of module. Not only teachers of Kazan Federal University, but also researchers from the Technical University of Dresden (Germany) will be invited to give lectures. Practically oriented component is aimed at formation of performing professional actions in practical exercises, formation of skills for carrying out comparative studies in education. The next practice will be implementation of professional actions in supervisory environment of educational organization along with implementation of a mini-research on topical issues. Within the framework of this master program implementation, language and research internships of undergraduates are provided, including Technical University of Dresden. Important components of modules are independent scientific research work of students. A special role is played by the reflective component, which allows us to analyze the level of competence formation, identify difficulties, causes of their occurrence and outline ways to overcome them.

#### 6.1. Discussion

Vesmanov et al. (2014) note that the integral part of pedagogical training is the formation of research and project-orientated competencies for undergraduates in education and this should be allocated at least 50% of training time. We agree with the position of the authors of the above-mentioned article that the development of modern pedagogical education in Russia and the world over the past 20 years was concentrated on the following areas, namely: changes in the content of education, innovations in technologies, methods and forms of education and training, innovations in evaluation of educational results, innovations in the management of educational systems at various levels. At the same time, we consider it necessary to add that in modern conditions there are significant changes in relations between the teacher and the learner: subject-subject relations in educational process become priority subjects. The function of a teacher changes in educational process: from informing to directing, supporting and advising with the active position of learner. As part of research modules implementation, it is necessary to keep teachers-researchers motivated, ready and able to implement effectively pedagogical research in the above-mentioned areas that meet the needs of modern educational practice, based on specific educational organizations.

In this regard, a special role in the process of training teachers should be played by practitioners working in educational organizations starting from the first days of training in education. As

Savenkov et al. (2014) emphasize, practices allow undergraduates to actualize modern school reality and create necessary motivation for subsequent education. In addition, we must add that the problems identified in practice can be studied in master theses. On this issue Margolis (2014b) writes about the formation of ability for independent professional development. The author emphasizes that the achievement of this goal presupposes solution of two closely related tasks in teacher training: formation of research competencies and organization of reflection of one's own way of professional actions (Margolis, 2014b). Thus, organization of active reflexive activities is an integral component of a teacher-researcher training process.

When designing master programs, it is necessary to keep in mind that in today's dynamic, diverse world there does not exist (and will not exist) a single universal educational program for the masters training in pedagogics, since the unity of modern educational space in its dynamism and diversity is assumed. At the same time, the implementation of the Master Program "Comparative Studies in Education (Russian-German Studies)" will allow the following:

- to use Russian and foreign experience in designing and implementing joint educational programs for training educational researchers in the context of dynamically developing modernization and integration processes;
- to modernize the contents of the master program in accordance with the best domestic and international experiences and the needs of educational practice;
- to train teachers-researchers with a high level of professional motivation and professional competence;
- to help students develop language skills and research competence through a new activity: planning and implementation of comparative research in education;
- to involve leading Russian and international scientists into the process of implementing the master program;
- to develop academic mobility of students through participation in academic mobility programs (ERASMUS+, DAAD, etc.).

#### 7. Conclusion

The module-based master program "Pedagogical education" with the specialisation "Comparative research in education (Russian-German studies)" was developed and described. The aim of this program is to train ambitious educators who have a high level of pedagogical, linguistic and research competence, necessary for successful conduct of pedagogical and research activities in modern multicultural educational space. The effectiveness of the training under this program is designed to ensure the program's coherence, its practical orientation, effective partnerships between schools and university, research orientation, intercultural communication with students and lecturers from Germany, as well as the active reflexive activity of undergraduates throughout all the stages of the implementation of the master program.

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