Research Journal of Applied Sciences 10 (10): 643-647, 2015
ISSN: 1815-932X

Professional Adaptation of Students as Future Teachers Using Case Study Technology

Albina R. Abdrafikova, Rimma M. Ahmadullina and Tatiana S. Pimenova
Kazan Federal University, Tatarstan Str. 2, Kazan, Russia

Abstract: The study actualizes the adaptation problem of students as future teachers to the conditions of professional activity at the stage of a high school education. The essence of professional adaptation as a multidimensional integrative process is revealed. This process is carried out through a variety of activities at all stages of education and subsequent employment. The study also analyzes the characteristics and the advantages of the case-study technology in the development of personal characteristics of students ensuring their readiness for professional activity and, consequently, a successful professional adaptation. The revealed technologies are described based on the analysis of methodological literature concerning the use of technology case studies in the educational process, the main stages of working with a case and the specific rules of this technology use in methodological and pedagogical discipline modules are determined in order to train the skills of professional adaptation, the methods of self-development and career development for a future expert. Using two techniques which allows to determine three groups of motives within an external and an internal motivation of the of study: admission to a university, actual and professional motives, the professional and educational reasons are studied in the control and experimental groups of students. Experimental data concerning the effect of case-study use on the development of student motivation which are the indicator of this technology application effectiveness in the process of professional adaptation.

Key words: Technology, professional activity, motivation of training, internal and external motivation, adaptation

INTRODUCTION

Educational activity, being one of the most complex activities, presents an extensive set of requirements to its subject. They are complicated and updated constantly, which is explained by overall acceleration of technological progress and an increased role of education in the world and therefore, the responsibility of a teacher to the community. A young specialist, being in the environment of increased competition and requirements is forced to acquire quickly the practical skills and abilities, to adapt to the specifics of an educational organization, its psychological climate, the nature of relationship with the participants of the educational process, etc. This greatly aggravates the problem vocational training quality improvement but also the problem of future teacher adaptation to professional activity conditions at the stage of a high school training.

The issues of professional adaptation of a teacher were considered by domestic and foreign authors. As an independent subject of the study the professional adaptation is presented in the researches written by V.A. Antipenko, V.M. Byzova, N.M. Golyanskaya, N.E. Kasatkina, V.Y. Kozharskaya, G.G. Solodova, E.L. Rudneva, T.M. Churekova, Moroz A.G. The laws of a teacher professional development in the course of professional adaptation were studied by T.A. Arzhakaeva, S.G. Vershlovsky, F.N. Gonobolin, N.V. Kuzmina, V.A. Slastenin, A.I. Scherbakov and others. The research of T.A. Aksakova, S.G. Vershlovsky, G.V. Kondrateva, I.D. Luschnikova, M-I.Ya. Pedayas, T.S. Polyakova, etc. are particularly noteworthy and dedicated to the initial period analysis of a young teacher activity during his social and professional development. L.M. Mitina, A.N. Hodakovconsider a number of specific interrelated adaptation aspects for a novice teacher.

The essence of professional adaptation at the variety of existing definitions is characterized by the mastery degree of professional skills, specific professionally important personal qualities and positive attitude to the profession (Anonymous, 2006). In this context, we take the concept of "adaptation to professional and educational activities" as "an integrative multi-level process that ensures the successful entry of a person into a professional field of activity through the social, psychological, educational, labor, manufacturing activity

Corresponding Author: Albina R. Abdrafikova, Kazan Federal University, Tatarstan Str. 2, Kazan, Russia

during the periods of pre-professional, professional and post-professional education and self-professional activity" (Makarov, 2005).

The initial stages of this process occur at the stage of training largely determining the success of the futurecareer for a young professional. This is confirmed by the opinion of experts, considering vocational education as the first stage of professional adaptation. Analyzing and grouping numerous factors that influence the process of adaptation, they call individual characteristics and the quality of training, material and social factors and the professional environment conditions. The education system ability to develop creative thinking skills and practice skills, the skills of the preparation quality of the preparation of the system of education to shape the skills of creative thinking and practice skills of the new psychological behavior and interaction stereotype is considered as a preparation quality (Msenashenko *et al*., 1996).

In vocational training, most training programs involve the combination of techniques and technologies. At that the focus on self-employment and the development of competencies updates the priority of interactive technologies and, in particular, the method of case study or specific situation analysis. On the one hand, the advantage of this method is the possibility of integration with other active means and on the other hand, in its indubitable effectiveness as a means of trainee personal characteristics ensuring their readiness for professional activity and, therefore, a successful professional adaptation. These characteristics, in our opinion, include the ability to self-determination, the ability to realize their own goals and interests, a general intellectual and communicative potential, the interest and positive motivation to learning, an individual style of thinking and behavior.

Based on the foregoing, we set a goal to reveal the impact of the case-study technology application on the process of student professional adaptation as future teachers.

We agree with the statement that successful adaptation of young employees to a profession depends on their professional readiness, consisting of three components: information, operational and motivational, which characterize knowledge, the ways of operation and needs (Stepanova, 2011). Some researchers believe that a key component of readiness for professional activity and the determinant of its success are the motives of educational and professional activities and the main motives of educational and professional activities of a student in a high school are professional, educational and achievement motives (Anonymous, 2007). In this context, the motivation of educational and professional activity served in our study as the main criterion for determining the efficiency of case study technology use on the process of professional adaptation of students as future teachers.

MATERIALS AND METHODS

In the study, we relied on the interactionist concept of adaptation. According to Phillips (1968), adaptedness is expressed by two types of responses on the impact of the environment. The first one involves the adoption of social norms and an effective adaptation to the social expectations which are met by each in accordance with one's age and sex (for example, school attendance and the mastery of academic subjects or the establishment of friendship relationss with peers). This adaptation is considered by him as the expression of conformity in relation to the requirements which a society places concerning an individual behavior. In the second, more specific sense, adaptation is not confined to the adoption of social standards: it means the flexibility and efficiency in meeting with new and potentially hazardous conditions and the ability to provide a desired trend for oneself. In this sense, adaptation means that a person successfully uses the developed conditions to implement his goals and aspirations. An adaptive behavior includes a successful decision-making, initiative, the determination of own future (Philips, 1968). For the research, the second meaning of adaptation was the actual one, containing the idea of activity and most adequately representing the problems of modern education in respect of an individual development, competent for solving vitally and professionally important problems.

The methodological basis of the study was the idea of post-classical education, which is characterized by the increasing role of subject-subject relations, based on diverse types of communication not only between a teacher and trainees but also between trainees and other participants of the educational process.

In the study, we used the study technique of pedagogical university student motivation and the methodology "Motivation of success among high school students" written by Ketko and Pakulina (2010). The techniques allow to identify three groups of motives in external and internal motivation study: admission to the university, actual professional motives and their dominance, determination of motivation to study development level.

Two groups of 4 course students were involved into the experiment: an experimental and a control one which was offered the start-profile with 36 questions during the

first stage: "The study of pedagogical university student motivation". The comparative analysis of learning motives is performed from the standpoint of students as future teachers, with relatively equal results among two groups. This profile allowed to diagnose the degree of motivation stability in two groups (Table 1, Fig. 1).

During the second stage, based on a theoretical analysis of psychological and educational literature the improvement and the adjustment of statements was performed based survey findings.

To identify internal and external motivation to learning the questionnaire was proposed including the following categories (Table 2, Fig. 2):

- What did help you to choose this profession?
- What is the most important thing for you during your study?
- The diploma gives you the opportunity to

At the third stage, in the framework of a student-centered teaching we used "case-study" technology in the module of methodological and pedagogical disciplines, aimed at future specialist skills training for professional adaptation, the methods of self-development and career development (creative solutions to professional problems and situation analysis) as well as the development of professional competencies to address the issue of student professional adaptation development in an experimental group. The "case" refers to a written description of a particular real situation. Students are asked to analyze circumstances, understand a problem, suggest possible options for solving it and choose the best one. Therefore, the students develop the following skills: analytical (analysis, data classification), practical and creative (suggestions, decision analysis), communication (ability to work in a group, to debate, to convince opponents), social (to evaluate the behavior of others), reflective (self-examination). The most important in this technology is the development of the ability to analyze a situation and evaluate alternatives, the application of theoretical knowledge in practice (Abdrafikova and Konopatskaya, 2014).

During the development of case studies their structural diversity was taken into account: problem, contentious, time, role-playing, event-driven and activity structures. A substantial component was determined based on the existing classification of pedagogical situations.

Based on the analysis of methodological literature on the use of case study technology in the educational process one may state the following main stages of the work with a case, each of which implies a certain content of training activities and "works" for the development of a student specific competences (Table 3).

Concerning the forms of work organization with cases, we adhered to the following rules:

- The cases different in content but similar in structure, aims and objectives were proposed
- At the same time the group was offered no more than 2-3 cases, in order to be able to fit in a class during a discussion

Table 1: The dynamics of learning motives during the learning process of students in a pedagogical high school

Courses	University admission motives (%)	Real motives (%)	Professional motives (%)
4th course, test group	52	83	52
4th course, control group	53	77	48

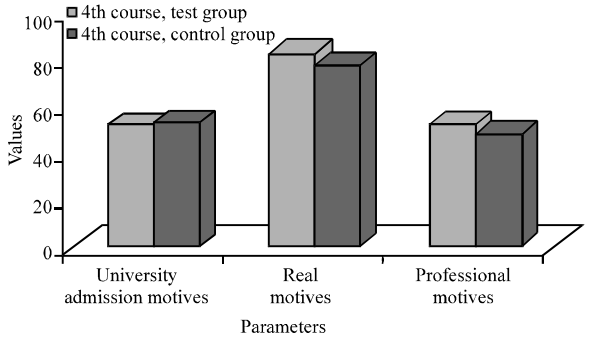

Fig. 1: The dynamics parameters learning motives of the learning process of student in a pedagogical high school

Table 2: Surveyresults

Type of motivation	4th courses: Test group	4th courses: Control group
External motivation	2.7	4.2
Internal motivation	7.4	3.8

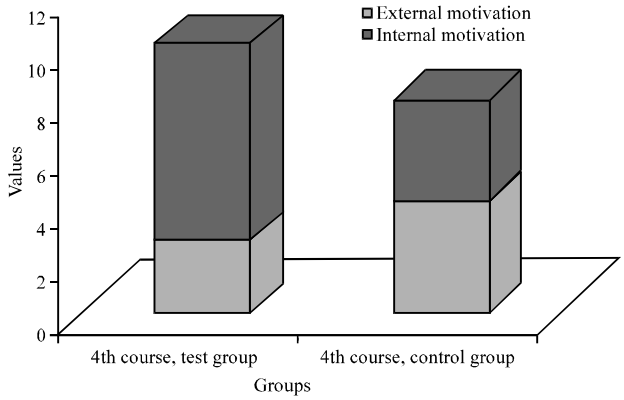

Fig. 2: Results of dynamic group

Table 3: The essential description of stages for a case work

Case operation stages	Stage contents	Developed competencies
Introduction to a case and its analysis	At this stage, students should identify the key issues of a case and to understand which of the provided data are important for the decision; enter the situational context of a case, determine its protagonists, select facts and concepts necessary for an analysis, understand what difficulties may arise during a problem solution	OK-1: understanding the culture of thinking, the ability to synthesize, analyze and process data, set a goal and select the ways to achieve it PK-14: understanding the analysis of socio-cultural space specifics, the infrastructure for social welfare provision concerning the representatives of various social groups PK-15: the ability to identify, formulate and solve problems in the field of psycho-social, structural and complex-oriented social work, health and social care
Identification of true causes concerning the problems stated in a case	This stage involves the identification of development patterns concerning a problem situation, an analysis of its consequences, the establishing of possible causes that led to the emergence of the problem, the definition of a problem situation characteristics, reflecting its interaction with external and internal environment. At that cause-and-effect relationship can not be specified directly but students have to reveal them on their own	OK-1: understanding the culture of thinking, the ability to synthesize, analyze and process data, set a goal and select the ways to achieve it OK-9: the use of basic terms and methods of social, humanitarian and economic sciences during the solution of social and professional problems OK-20: The readiness for an effective application of psychological and pedagogical knowledge to meet the challenges of social, national, state and personal development and social welfare issues
Search forpossible solutions	The search for possible solutions of a problem is performed during the process of working in small groups. The central place of this stage is occupied by the discussion, during which students learn to argue, prove and justify their point of view. A special place in the organization of a debate belongs to the use of idea generation method, known as “brainstorm”	PK-11: the ability to use competently legislative and other regulatory acts of federal and regional levels PK-15: the ability to identify, formulate and solve problems in the field of psycho-social, structural and complex-oriented social work, medical and social assistance
Choice and justification of an optimal solution	The objective of this stage is to select and substantiate an optimum solution that is acceptable and the most effective in this problematic situation. At that students discuss first possible solutions in small groups and then present the best version (according to their point of view) of a situation solution in a group	OK-2: the ability to logically true and clear to develop oral and written language logically, clearly and with arguments OK-3: the willingness to cooperate with colleagues, teamwork OK-4: the ability to find organizational and managerial solutions in unusual situations and a willingness to take responsibility for them
Prediction of selected solution effects	At this stage, the main task is the preparation of predictions about the consequences of a selected solution, the evaluation of positive and negative consequences	OK-20: the ability to perform predictions, design, simulation and an expert evaluation of social processes and phenomena in the field of psycho-social, structural and complex-oriented social work, health and social care

- The cases were designed for the work in small groups to develop communication skills, group decision methods mastering and time management skills
- And as a case is a kind of a role-playing system that is it involves a certain position of participants, each participant had to play several roles

RESULTS AND DISCUSSION

The experimental results showed that student motivation reserves for study are quite extensive and require thoughtful organizational and intense managerial and educational efforts of a teaching staff for the competent influence on motivation structure increase among university students to educational and professional activity.

The analysis of obtained results showed that the indicators of external and internal professional motives and study motives improved in both groups (Table 4,

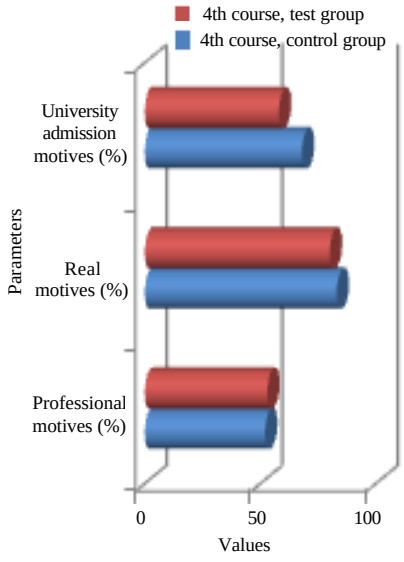

Fig. 3: The dynamics motives in groups

Table 4: Study motive research results

Courses	University admission motives (%)	Real motives (%)	Professional motives (%)
4th course, testgroup	52	83	68
4th course, controlgroup	53	80	58

Fig. 3). However, in the experimental group the indicators of external and internal professional motives and study motives exceeded the motives the similar ones of the control group.

CONCLUSION

Thus, we can say that the case study technology contributes to the development of the student ability to make decisions at first in similar and then in non-specific socio-cultural situations.

The "Case study" method allows you to create a practical professional competence and provides the ability to apply creatively the studied material taking into account the professional knowledge of trainees. The efficiency of modern education at the introduction of new educational technologies may be improved significantly by the integration of a case in the course of vocational-oriented learning. The main result in our opinion is the motivation to study increase and the mastery of different disciplines and a chosen profession which is the measure of professional adaptation success.

ACKNOWLEDGEMENT

The research is performed according to the Russian Government Program of Competitive Growth of Kazan Federal University.

REFERENCES

Anonymous, 2006. Psychology of personality adaptation. Analysis. Theory. In: A.A. Rean, A.R. Kudashev, A.A. Baranov (Eds.), St. Petersburg: PRIME-EVROZNAK, pp: 479.

Anonymous, 2007. Psycho-pedagogical support of innovative educational programs implementation. Yu. P. Zinchenko, I.A. Volodarskaya (Eds.), M.: MSU, pp: 120.

Abdrafikova, A.R. and E.A. Konopatskaya, 2014. English Language Teaching; 7 (12).

Ketko, S.M. and S.A. Pakulina, 2010. The methods of student educational diagnosis at a pedagogical high school. Psychological Science and Education psyedu.ru. No. 1. (Electronic resource). http://psyedu.ru/journal/2010/1/Pakulina.phtml.

Makarov, A.N., 2005. Adaptation of students to professional and educational activities in terms of a multi-level education: Nizhny Novgorod (Electronic resource). http://www.dissercat.com/.

Msenashenko, V.S., L.S. Cazarin, V.A. Kuznetsova and N.R. Senatorova, 1996. About teacher training in magistracy. Higher education in Russia, pp: 23-31.

Philips, 1968. Human adaptation and his failures. New York.

Stepanova, O.N., 2011. Motivational component in the structure of professional adaptation for correctional system staff. The Bulletin of BSU, No. 5 (Electronic resource). http://cyberleninka.ru.