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Integration of Educational and Research Activity of the Federal University Students, Studying in the Approach «Special (Speech Pathology) Education)»

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Abstract: In the modern conditions the need for development of the technology, permitting integrating the educational and the research activity of the federal university students is relevant for the purpose of increase of the competitive capacity and being in demand at the labor market taking into account the requirements of the international market. The process of integration shall be established by the two approaches: the substantial and the organizational and technological. The substantial approach shall include the interdisciplinary integration; creation of integrated courses, programs and projects; integration of the substantial constituents of various educational spheres (integration of the general and the professional education) building of the integrated substance of educational spheres. The organizational and technological approach shall be related to development of integrative learning and educational, interactive technologies. The specific feature of performing education of students of speech pathology approach shall be carried out taking into account the basic didactic principle-integration of different kinds of activity and providing the unity of theoretical and practical components of studies, connected with performance of practice of the activity itself: practicing the work methods, skills of resolving the real social challenges. The essential integrative tendency is providing in the course of studies of interaction between theory and independent work of students which forms the readiness for self-education, creates the basis for professional studies, possibility for constant increase of competence.

Key words: Integration, educational activity, research activity, special speech pathology education, studies technologies

INTRODUCTION

At the modern stage of education development, integration is declared as one of the key approaches of reforming the education and the state sector of science, the conditions for creation of competitive sector for research and providing flow-in of the talented youth to these spheres.

The Kazan federal University is the leading educational establishment in Volga region on preparation of pedagogues and psychologists has all levels of higher education (bachelor's program, specialist's program, master's program, graduate student's program) doctoral program as well as the developed system of career development and additional training of education employees. The key mission of the department is formation of a corporation of specialists of higher qualification in the sphere of special psychology, speech training and pre-school speech pathology. The priority approach of the activity is integration of educational and scientific-research activity of students and teachers with the purpose of development of cognitive potential not only of students but also specialists in the sphere of speech pathology, increase of their capacity for self-educational and scientific research activity (Nigmatullina and Boltakova, 2014).

The integration process in the higher educational establishment includes two approaches: the substantial including interdisciplinary integration: creation of integrated courses, programs and projects; integration of substantial constituents of different educational spheres (integration of general and special education) building the integrated substance of these or those educational spheres and organizational and technological, connected with development of integrative forms of education and studies as well as integrative technologies.

The research presents research experience of the department of special psychology and corrective pedagogic of the Institute of psychology and education of Kazan Federal University on performance of process of educational and scientific and research activity, contributing to obtaining knowledge by students as well

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as skills and professional competence, oriented at their personality and professional development. The significant integrative tendency is providing the interaction of theory with the self-work of the students in the course of the studies which forms the readiness to self-education, creates the basis for professional studies, possibility to constantly increase their competence (Nigmatullina, 2012; Nigmatullina and Boltakova, 2014). As applied to studies within the framework of special (speech pathology) education it is important to note that the specificity of this approach is built with observation of the basic didactic principle-integration of various types of activity and providing the unity of theoretical and practical components of studies. Both the theoretical and the practical component may be realized at the level of (familiarization) and connected with performance of practice of the activity itself with exercise of methods of this activity with skills to resolve the real social tasks. To master the new activity (even with the educational purposes) non-traditional forms of interaction of the teacher and the students are needed as well as the possibility of changing the activities, a stronger motivation. For this purpose before the department there functions an academic laboratory "Early help and complex support for children with disabilities" which performs the following:

Performing applied scientific researches in the field of early help and psychological-pedagogical support of educational process for children with disabilities and integration of scientific and educational activity with innovation projects, scientific and research works in the applied fields of science (Artemyeva, 2013b, 2014; Akhmetzyanova, 2014a, b).

Organizational procurement of scientific and research work of students, studying the approach No. 050700 (Special (speech pathology) education), section (Speech therapy), (Special psychology), (Preschool speech pathology) within the framework of students scientific and research groups, societies (Akhmetzyanova and Yu, 2013).

To perform complex psychological and pedagogical examination of children of children of tender and preschool age the equipment (BOS-logo-therapeutic) is used (Nigmatullina, 2014).

Within the framework of the laboratory functioning teachers implement interactive technologies of working with students such as brainstorm, round tables (discussions, debates), case-study (analysis of certain situations, situational analysis), business and role-playing, master-classes, Socratic dialogues, group discussions, trainings, tutoring, team creation technologies. These technologies are combined with high efficiency and a number of advantages. Studies become individual, taking into account the specific features of the personality, the interests and the needs of each student. Both teachers and students obtain the opportunity to intensively and shortly present any scope of educational information. Visual perception becomes better; the process of mastering the educational material becomes much simpler. Cognitive activity of students becomes active they get theoretical knowledge and practical skills (Artemyeva, 2010, 2013a).

The most effective technology, used in the course of studies of students is a tutorial which establishes holding live training sessions with the help of interactive technologies and promotional techniques, permitting supporting the independent activity of students. These instructions, a series of thoroughly developed programs, directing the students' activity, demonstration of implementing innovative methods and techniques in the research in the course of which the tutor gives instructions, performs demonstration and then gives the opportunity to the student to work off the skill.

The key aim of the personality developing approach performed at the department is creation in the course of studies of conditions, providing intellectual space for choice, manifesting and development of personality and intellectual abilities of students.

Such organization of mastering process is created in which students would strive to independently seek for new knowledge, developing their intellectual skills, interests, realizing their cognitive needs but not get ready information for over learning and reproduction without due understanding.

The important place in the system of intellectually developing education is occupied by formation of conceptual thinking of students, making the psychological basis of intellectual competence and the important condition for their intellectual and professional growth (Artemyeva, 2009; Kurbanova, 2014). The realized mastering of categorical science apparatus gives the possibility to understand information and to adequately perceive it, pointing essential, necessary and sufficient features of containing a certain concept, establishment of interaction of one concept with another. Formation in the individual consciousness of students of scientific concepts shall be performed not from the side of denotation but from the side of familiarization with hypotheses, postulates and models (Malanov, 2001).

The process of formation with students of scientific concepts is presented as the active activity, directed at connecting of sensitive and sensor impressions of students, convertible transformation of information from the language of scientific signs and symbols to the

language of images research with definitions of concepts under study and their properties, realization of links with other concepts. Active methods of study are also implemented as the result of which students become co-authors of defining the essence of this or that concept:

- «Brainstorm» or «who deeper penetrates to the essence of the concept?»: group work is offered over the proposed concept: a group distinguishes essential features and tries to provide a definition. Then each group defends its hypothesis. At the end of work a general concept is made which is compared with the generally accepted concept in science. The undoubted advantage of this method is that property, phenomenon, regularity which as a reality are behind the «open» concept, become personality significant for students
- Hierarchization of a concept: explanation of the concept with distinguishing its essential and necessary features shall be accompanied with graphic or schematic picture of this concept in the system of already known and determining the place and the kind in this system
- Comparison of several points of view about this or that concept
- «Business card-file»: this method shall be used at the final sessions, connected with classification of concepts under the following scheme:
  - A set of term cards is formed for each group. The students are given the task at separate cards to write all concepts of this section. At a separate sheet of paper the etalon shall be written
  - The groups exchange the sets of term cards and get an instruction to put them on the table in the logic sequence. For the purpose of successful performance of the task the students shall distinctly distinguish between the gender, the kind and the certain concepts
  - Verification of the made schemes may be performed by the teacher or with the help of the made etalon

«Business card-file» resolves several tasks: dozens of concepts are memorized, thinking operations are developed, development of replenishment of vocabulary is in progress, skills of business communication are practiced.

Mastering methods, providing learning of categorical science apparatus forms the individual style of cognitive activity, provides its self-regulation, independence, activity.

A team creation technology is actively used, permitting encouragement of cooperation, sharing information and creation of trust atmosphere. Technology of group studies presupposes uniting students into micro groups to perform sets of training actions for the purpose of exchanging experience, resolving the arising pedagogic problems. With the technology of group studies the technology of projects or projective activity of students is closely connected which is directed at development of the integrated program with the preliminary chosen purpose or concept which provides creation of a structured context of students' professional competence formation in the situation of real work. To develop and carry out the project a group of students is formed. The task of the project group is during the certain term to perform all necessary researches and other actions to establish the aim and the tasks of the project, directed at resolving a real problem, to develop recommendations for its practical introduction and completion. Sometimes members of the project team not only give recommendations but also continue working over the project and its practical implementation in the course of writing a graduate qualification paper.

Application of these technologies has allowed in the structure of the laboratory uniting students into creative groups, organized in accordance with their scientific interests, under the leadership of teachers of the department of special psychology and correctional pedagogic and developing the following projects: «Clinical and psychological bases for working in services of early help and Lekoteks», «Improvement of the correction process of speech pathologies with the help of innovation method of biological reverse connection», «Specific features of work of a special psychologist with ICP children in conditions of a Lekotek», «Inclusive education as a form of social and cultural rehabilitation of children with a complex defect structure» and «Using the method of system distributions of Helinger in the work with a family, taking care of a child with disabilities in conditions of a Lekotek».

Another innovation form of integration of educational and scientific and research activity of students shall be the "Students Academy of Sciences", organized at the department, the key aim of which was providing conditions for comprehensive and the most complete development of creative and scientific potential of students as well as formation of steady interest to scientific and practical and research work, attracting students to resolving actual tasks of science and practice. The key approaches of activity of the Academy are: organization and holding internal, interregional,

all-Russian and international conferences, forums, round tables, internet-conferences, Olympiads on the actual scientific themes, trainings, master-classes on increase of professional competence; increase of publication activity of students, learning to work with bibliographic data bases, learning technologies of scientific research, informing about possibility of participation in regional and federal target programs; performing residential scientific schools of international and all-Russian level (Fajzrahmanova, 2014). Within the framework of work of the Students academy of sciences the teachers effectively use one more innovation technology-coaching which permits at the cost of clear determination of their aims and tasks, new approaches and opportunities to achieve high results in professional life. In the course of coaching, the teacher does not teach does not give ready knowledge, advices, recommendations. He just puts questions to students, giving answers to which the students themselves come to a deeper understanding of the situation, problem and ways of resolution. Teachers use active methods of coaching: consulting; guidance; creation of the network of personal contacts, sponsorship (when experienced teacher speech pathologist helps the student to develop his carrier). Unlike individual teaching courses or instructions which just state, what shall be done, coaching helps the student to choose the actions himself and to study independently.

One of the effective forms of integration of educational and scientific and research activity of students is organization and holding scientific events of international, all-Russian and regional levels. For the purpose of promotion of research work of students conditions are created for disclosure of creative abilities of students, engagement of students to scientific and research work, encouragement of young course students to scientific and research work, promotion of participation of the teaching staff in organization of scientific and research work of students, selecting the best scientific works for participation in competitions. Starting from the first year, each student of the department under the leadership of the teacher performs research within the framework of a scientific topic selected by him, the results of which shall be approbated at the students' scientific and practical conferences, seminars, forums. For the purpose of integration of science and practice the department annually holds the all-Russian exhibition "Success vector: the best developments of guidance manual and correction sessions on speech pathology and special psychology" where students, practical specialists present the scientific and methodical guidance developed by them, programs on special psychology and correctional pedagogic.

The useful and interesting may be the experience of the department on accounting and registration of graduates, engaged in scientific and research work, having publications having defended thesis. This to a known extent may serve as the index of interaction of theory with independent work of students which forms the readiness to self-education, creates the basis for professional studies during the whole life, the possibility to constantly increase qualification.

RESULTS

The research performed has permitted making the following conclusions:

- Integration of educational and scientific and research activity shall be considered as the interrelated process as the result of which the students obtain knowledge, skills and professional competence, directed at their personality, social and professional development
- The process of integration covers both the contents and the technologies, the methods and the forms of education
- The most effective are interactive technologies of work with students such as brainstorm, round tables (discussions, debates), case-study (analysis of certain situations, situational analysis), business and role-playing, master classes, Socratic dialogues, discussions in group, trainings, tutoring, team creation technologies

CONCLUSION

At the today's stage of development of education the problem of integration of educational and scientific and research activity of students is acute and discussion as everywhere there is search of ways for increase of horizontal and vertical mobility of students within the framework of professional education system, freedom of choice of educational path and professional career and increase of the role of professional competences based on academic knowledge in the context of education. Moreover, constant search of ways and methods is performed as to provision of internal succession between the segments and the levels of the system on the whole and formation of the new types of integrated multilevel educational establishments which may maximally and completely satisfy the needs in studies within the framework of the local society and taking into account the specificity of the local labor market (Nigmatullina and Boltakova, 2014). Resolving this problem is actual for the system of higher education of our country of Kazan (Volga region) Federal University is the innovation center for technological development of the region, carrying out

the priority task for uniting education, science and production within the framework of preparation of competent specialists having the ability to quickly rearrange depending on changes at the labor markets of the Republic of Tatarstan and the Volga region federal district on the whole, at the same time arranging educational programs and scientific researches for the tasks of certain production approaches (Fajzrahmanova, 2014).

The theoretical analysis performed has demonstrated that there are reasons, slowing down the general course of actualization of this process in the context of the level education: the insufficient master by the students of skills for self-educational and scientific and research activity, the traditional nature of pedagogical interaction, low personality motivation of both students and teachers (Artemyeva and Yu, 2010).

In works of modern pedagogues and psychologists there is low efficiency of work performed by higher educational establishments is distinguished on actualization of the resource for educational and scientific and research activity of students, it is stated that pedagogical and organizational provision of this process is not completely disclosed, the specific features of the actualization process are disclosed fragmentarily; researches on certain kinds of graduates preparation prevail, typical tendencies and regularities of actualization of the integration process of educational, self-educational and scientific research activity of students are not studied (Akhmetzyanova and Yu, 2013).

In connection with this the success of the process of integration of educational and research activity of students shall be possible in case of realization of the following conditions: formation with the graduates of higher educational establishments of readiness for mastering professional competences and desire to personality and cognitive development and with the teacher readiness and motivation to tutoring of this activity; creation of innovation environment within the framework of professional preparation, providing realization of integration processes of educational and scientific and research activity of students and teachers; scientific and methodological providing of production, educational and scientific and research practice of students (Nigmatullina and Boltakova, 2014).

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