Повышение творческой активности магистрантов педагогического образования средствами иммерсионной технологии

Введение. Необходимость повышения творческой активности магистрантов в процессе моделирования будущей профессиональной деятельности преподавателя иностранного языка высшей школы и недостаточная разработанность технологического аспекта проблемы актуализируют поиск разработки перспективных педагогических путей, в том числе, на основе иммерсионной технологии. Цель исследования заключается в проектировании и реализации экспериментальной программы повышения творческой активности магистрантов, раскрывающей методико-технологическое обеспечение исследуемого процесса, а также в выявлении и научном обосновании педагогических условий эффективной ее реализации.

Материалы и методы. В опытно-экспериментальном исследовании приняли участие 68 студентов магистратуры 1–2 года обучения Воронежского государственного педагогического университета и Елецкого государственного университета им. И. А. Бунина (Российская Федерация). Уровень творческой активности магистрантов диагностировался по методике изучения мотивации профессиональной деятельности К. Замфир в модификации А. Реана; тесту «Оценка способности к саморазвитию, самообразованию» (В. И. Андреев), авторскому опроснику; методу экспертных оценок, методу самооценки и портфолио достижений. Статистическая обработка данных осуществлялась по критерию χ²-Пирсона.

Результаты. Разработанная программа повышения творческой активности магистрантов педагогического образования и выявленные педагогические условия для ее реализации с использованием потенциала иммерсионной технологии позволяют целенаправленно и поэтапно развивать у обучающихся мотивационную, когнитивную, деятельностную и рефлексивную составляющую творческой активности. Эффективность и целесообразность авторской программы и педагогических условий повышения творческой активности магистрантов подтверждена статистически (χ² = 9.460 > χ²₀,₀₅).

Заключение. Программа прогнозирует разработку учебно-методического комплекса, позволяющего совершенствовать организационно-методическое обеспечение развития творческой активности магистрантов педагогического образования.

Ключевые слова: творческая активность, магистранты, иммерсионная технология, программа, педагогические условия

N. V. VOLYNKINA, V. N. KARTASHOVA

Education master’s degree students’ creative activity enhancement by means of immersion technology

*Introduction.* The necessity of master's degree students’ creative activity enhancement during their future professional activity of a foreign language teacher in a higher school simulating and insufficient development of a technological aspect of the problem highlight the search for perspective pedagogical ways, among them on the basis of immersion technology. The aim of the research is to develop and implement master’s degree students’ creative activity enhancement experimental program which discovers methodological and technological support of the process studied and also identification and scientific justification for pedagogical conditions for its effective implementation.

*Materials and methods.* 68 master’s degree students of the first and second courses of Voronezh state pedagogical university and Bunin Yelets State University (Russian Federation) participated in the pilot study. The level of master’s degree students’ creative activity was diagnosed on the basis of K. Zamfir’s method (A. Rean’s modification) of studying professional activity motivation; V. I. Andreev’s test “Self-development and self-education abilities assessment”, the authors’ questionnaire; the method of expert assessment; the method of self-evaluation and portfolio’s developments. The data processing was carried out on the basis of the $\chi^2$-Pearson statistical test.

*Research results.* The first developed program of education master’s degree students’ creative activity enhancement on the basis of system, personal and activity oriented, professionally oriented approaches and identified pedagogical conditions for its implementation using the immersion technology potential allow to develop deliberately and gradually motivational, cognitive, activity oriented and reflexive component of creative activity. Effectiveness and appropriateness of the authors’ program and pedagogical conditions for education master’s degree students’ creative activity enhancement were proved ($\chi^2 = 9.460 > \chi^2_{0.05}$).

*Conclusion.* The program predicts a tutorially methodological set development contributing to organization and technique support of education master’s degree students’ creative activity enhancement.

*Keywords:* creative activity, master’s degree students, immersion technology, program, pedagogical conditions

Introduction

The common aim of the different European states youth policy in the XXI century according to UNESCO is to contribute to peaceful integration of young people into the society. During ten-twelve years of being in the youth age group it is necessary to get education, to learn professional and creative skills, rights and duties, to undergo civic and moral education in order to live an independent life as a fully functional creative person. That’s why at present time in education particular importance is attached to the problem of creative person training which involves a person’s coming into the world of creativity, his/her creative activity development. Accordingly, the solving of the problem is the responsibility of a teacher. But as practice shows teachers focused on problems concerning the Unified State Examination preparation not always aim at their students’ creative activity enhancement and reaching this goal successfully within the USE system. The problem of future teacher creative activity development during professional training in a higher school is high-priority and urgent for contemporary pedagogical education. The learners develop their creativity during creative independent activity which can be organized with the help of optimal technologies. From our point of view one of the most significant technologies for students’ creative activity enhancement is an immersion technology which allows to organize the “immersion” of students into their future professional activity during their learning process.

The problem of learners’ creative activity development is far from being new, it is multifaceted, complex, studied by scientists of different areas. Philosophers have paid great attention to the problem of creativity since antiquity. In ancient Greek philosophy creativity was considered as divinity (cosmos creation) and humanity (art, crafts). In medieval philosophy it was viewed in connection with the idea of the Creator God creating the world. In this understanding creativity is an act of will evolving existence from non-existence.

In the Middle Ages ideas of creativity were connected mainly with Culture and Art spheres, with inspiration. I. Kant [1] thought that creativity lied in the foundation of knowledge; it connected the diversity of sensual impressions and concepts of rationality. A representative of existentialist philosophy A. Bergson [2] considered creativity as continuous appearance of New, and N. A. Berdyaev [3] – as “release and overcoming”, a man’s superiority over personal ego and selfishness”. Creativity is born from freedom because a spirit of obedience always drowns out the spirit of creativity.

developing system of personal abilities focusing on values of socially significant activity and encouraging creative self-realization and self-development.

It is justified that “students’ creative activity in a higher school is a characteristic of person’s activity relating to a student’s content and procedural activity, his/her striving for successful mastery of the skills and ways of activities, mobilization of moral efforts to reach the goal of the activity” (E. R. Statsenko [12, p. 194]).

N. V. Teltevskaya sees creative activity as “a state of a person that is characterized by his/her desire for obtaining new knowledge and means of activity, intellectual tense and exercising will power during the activity” (N. V. Teltevskaya [13, p. 302]).

We have carefully studied psychological and pedagogical literature concerning the problem of education master’s degree students’ creative activity enhancement. For example, very interesting ideas about components and criteria of students’ creativity development are presented in A. T. Kaldybayeva’s work [14]; A. K. Hulme, L. Norris and J. Donohue [15] consider creative activity development through mobile pedagogy for English language teaching. The analysis made it possible to determine the main components of creative activity: motivational, cognitive, activity oriented and reflexive. It is very important to identify pedagogical conditions for these learners’ creative activity components development. Contemporary researchers identify the following pedagogical conditions for students’ creative activity development: creation of developing environment (S. M. Varnavskih [16]), social and cultural environment in a higher school (A. Yu. Mukhin [17]); involving students into creative project designing and implementing (M. V. Chernikovskaya [18]); solving creative tasks for the purposes of students’ self-development (R. K. Seryozhnikova [19]). The problem of technologies of students’ creative activity development is being studied. M. Suvorova, M. A. Kartavykh [20] offer a simulation technology connected with simulating situations of students ecologists’ future professional activity during learning process as a means of students’ creative activity development.

Students’ creative activity development during foreign language learning is studied by many researchers. The ways of students’ creativity enhancement during foreign language learning in a non-linguistic higher school are considered by E. A. Akbilek, L. M. Kaznacheeva, Yu. M. Zinina [21]; N. V. Volynkina [22] discovers future teachers’ intellectual and creative skills development in the multicultural educational sphere; the procedural aspect of students’ creativity development during foreign language classrooms is studied by N. Ye. Gorskaya and Ye. Yu. Holdeeva [23]; L. T. Tkach [24] discovers the peculiarities of immersion into the professional and pedagogical activity through culture with the teacher’s support; G. F. Ustinina [25] thinks that a creative component is very important in competitive specialists training; O. V. Filippova’s work [26] is devoted to innovative technologies in development of communicative person of a teacher of Russian as a foreign language during master’s degree program and others. Researchers E. A. Akbilek, N. V. Volynkina, L. M. Kaznacheeva, Yu. M. Zinina believe that it is possible to enhance learners’ creative activity under terms of structural and informative change of a foreign language lesson using such techniques as person oriented communication, collective interaction and cooperative learning, different goals setting for a student and a teacher in their collective activities, role arrangement of learning process and so on. G. F. Ustinina identifies possibilities of students’ creative abilities development within out-class activities in a foreign language.

However, the problem of education master’s degree students’ – future foreign language teachers’ – creative activity enhancement by means of immersion technology
hasn’t been studied yet. We have analyzed the works of E. Curtis, J. L. Brownlee and R. Spooner-Lane [27] who consider changes to secondary teachers’ understanding of student creative learning and pedagogical practices, S. Gaftandzhieva and R. Doneva’s work where [28] worldwide survey on the creative use of social networking in higher education is carried out, A. Sendra and N. Lozano-Monterrubio’s work [29] who develop a gameful approach as a tool for innovation and teaching quality in higher education and others. The scientific literature analysis allowed to identify the contradiction: on the one hand it is necessary to enhance master’s degree students’ creative activity during simulating their future professional activity of a foreign language teacher in a higher school but, on the other hand, a technological aspect of the problem is developed insufficiently including special program development and identification of pedagogical conditions for its effective implementation.

The aim of the research is to design and implement an experimental program of education master’s degree students’ creative activity enhancement by means of immersion technology and to identify and scientifically justify for pedagogical conditions for its effective implementation during education master’s degree students’ learning process (44.04.01 Teacher education, the specialty “Theory and methodology of a foreign language teaching in the secondary and higher school”).

The research consisted of the following stages:
1) theoretical and methodological review of the problem;
2) development and implementation of the education master’s degree students’ creative activity enhancement program created by the authors; identification and scientific justification for pedagogical conditions for its effective implementation;
3) the research results processing and interpreting, the experiment effectiveness assessment, final conclusions making.

Materials and methods

The object of the research is the process of master’s students’ training (44.04.01 Teacher education, the specialty “Theory and methodology of a foreign language teaching in the secondary and higher school”). The subject is education master’s degree students’ creative activity enhancement by means of immersion technology. The following methods were used in the research: analysis, generalization of innovative pedagogical experience, pedagogical experiment, pedagogical observation, interviews, testing, quantitative and qualitative analysis, and methods of mathematical and statistical empiric data processing (the \(\chi^2\)-Pearson statistical test).

68 (34 – the control group (the CG), 34 – the experimental group (the EG)) master’s degree students of the first and second courses of Voronezh state pedagogical university and Bunin Yelets State University took part in the pilot study. To diagnose the level (high, average, threshold) of the creative activity motivational component development K. Zamfir’s method (A. Rean’s modification) of studying professional activity motivation and V. I. Andreev’s test “Self-development and self-education abilities assessment” were employed; for cognitive and activity oriented components the authors’ questionnaire and the method of expert assessment were applied; for reflexive component we used the method of self-evaluation and portfolio’s developments.
Research results

The experiment was made up of diagnostic, formative and control stages. Before the diagnostic work aimed at master’s degree students’ creative activity development questionnaire study for teachers (29 respondents) and for students (86 respondents) of different courses and forms of studying in VSPU and YSU was held and a degree of necessity of creative activity enhancement during the independent work was figured out.

The survey revealed that 81% teachers and 59% students find creative activity enhancement “absolutely necessary”; 19% teachers and 36% students – “not always necessary, there is practice for it”; 4% students don’t find it necessary to enhance creative activity. The students’ and teachers’ responses confirmed the suggestion about the necessity of carrying out special work on students’ creative activity development in a higher school.

At the diagnostic stage of the experimental work we determined the experimental group (the EG) and the control group (the CG), the quantity of participants was equal (34 respondents each). At the diagnostic stage we found out a significant positive correlation link of the creative activity components (motivational, cognitive, activity oriented and reflexive).

To diagnose the development level of the students’ creative activity we chose diagnostic methods according to identified criteria and indicators (Table 1); the reference level of the students’ creative activity was determined on the basis of the diagnostic tools offered.

18 teachers and 9 experts – representatives of Information and Science department of VSPU and YSU named after I. A. Bunin participated in the diagnostic procedures.

<table>
<thead>
<tr>
<th>Criteria/structural components</th>
<th>Indicators</th>
<th>Diagnostic methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Motivational</td>
<td>The need for self-education and professional self-development; Focusing on creating a new product</td>
<td>K. Zamfir’s method (A. Rean’s modification) of studying professional activity motivation; V. I. Andreev’s test “Self-development and self-education abilities assessment”</td>
</tr>
<tr>
<td>Cognitive</td>
<td>Ability to seek and analyze information; Professional skills demonstration during methodic problems solvation</td>
<td>the authors’ questionnaire; the method of expert assessment</td>
</tr>
<tr>
<td>Activity oriented</td>
<td>Readiness to solve professional creative problems: designing, arranging and conducting lectures and practical lessons</td>
<td>the method of expert assessment</td>
</tr>
<tr>
<td>Reflexive</td>
<td>The style of self-evaluation</td>
<td>the method of self-evaluation and portfolio’s developments</td>
</tr>
</tbody>
</table>

The results of the experiment at the diagnostic stage are presented in Table 2. Pearson’s $\chi^2$ test at the diagnostic stage showed 0,095.

The formative stage was implementation of a specially developed program of education master’s degree students’ creative activity enhancement by means of immersion technology and creation of pedagogical conditions for its effective implementation.
Table 2

<table>
<thead>
<tr>
<th>Structural components</th>
<th>the EG</th>
<th>the CG</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High level</td>
<td>Average level</td>
</tr>
<tr>
<td>Motivational</td>
<td>8,5</td>
<td>31</td>
</tr>
<tr>
<td>Cognitive</td>
<td>6,8</td>
<td>27,6</td>
</tr>
<tr>
<td>Activity oriented</td>
<td>0</td>
<td>10,2</td>
</tr>
<tr>
<td>Reflexive</td>
<td>3,4</td>
<td>24,1</td>
</tr>
</tbody>
</table>

|                           | High level       | Average level    | Threshold level |
| Motivational              | 10,4             | 32,8             | 56,8            |
| Cognitive                 | 6,8              | 25,9             | 67,3            |
| Activity oriented         | 0                | 12,2             | 87,8            |
| Reflexive                 | 5,3              | 24,1             | 70,6            |

The results of development level of education master’s degree students’ creative activity at the diagnostic stage (%)

The authors’ program was developed on the basis of system, personal and activity oriented, professionally oriented approaches. The system approach caused understanding of the activity as a system. The students’ learning process was considered as a set of components: subjects of the activity, aims, content, forms, methods, and means of the content implementation and so on.

The system approach required implementation of the principle of theoretical fundamental knowledge and practical activity experience unity.

The personal and activity oriented approach was characterized by focusing on learner’s personality development as an active subject of learning activity, his/her comprehensive training for continuous self-development and self-improvement process. During enhancement of creative activity as a student’s personal quality this approach assumed the initiative and autonomy and allowed to study the process of creative activity development provided the learning process was organized in such a way that the key role was played by active autonomous master’s degree students’ activity. The principle of autonomy meant from our point of view developing special training material and different forms and types of learning process arrangement.

The professionally oriented approach meant involving each learner into the professional development process, correlation with those demands which the profession makes and his/her own ideas about professionally significant qualities of a foreign language education teacher.

During the learning activity the student turned into an active subject of the learning process beginning with development of his/her own creative product and finishing with assessment of his/her own activity.

The experimental program on the basis of the immersion technology allowed to make a dialogue between “I am a teacher” and a real professional activity, it focused on search for the meaning of the activity, own practical activities, the final result undergone by reflection.

The immersion technology (to immerge – to plunge) is a technology of full or partial immersion master’s degree students into their future professional sphere providing for arrangement and informative modification of the lesson, synthesis of linguistic and methodical disciplines, involving master’s degree students into their creative activity, performing the assignments concerning lessons conduction in their students’ group.

Education bachelor’s degree students as master’s degree students of the first course had some experience in teaching foreign language lessons since most of them worked in a secondary school as foreign language teachers, but they had no opportunity to conduct lectures and practical classes in the system of a higher school. Only being masters’ degree sophomores they were allowed to act as a teacher of a higher school according to the
curriculum during their work experience. Teaching practice was carried out at the major department and lasted for ten weeks. During this period the learners practiced in arranging and conducting practical classes and reading lectures at undergraduate level.

The following methods were used in the authors’ program: project-based learning involving a creative problem solving and presenting the results by the students during their research (in doing so the theme of the research should be personally significant for the learner and cause positive emotions); case study method employing real professional pedagogical situations description and including operations of the research process, analytical procedures; brainstorm as a way of quick involving all members of the group into discussion about pedagogical or methodological professional problems and different ideas generation during creative thinking, their selection and critical evaluation; portfolio as a way of individual achievements recording, accumulating and evaluating, allowing to provide a quantitative and qualitative assessment of a future teacher’s creative activity development level through the analysis of different educational results (portfolio of creative work focused on learning the educational content, it was filling up with works performed).

The main form was an interactive lecture. A lecture is one of the most widespread verbal forms of professional training. Lecture is “an informative way of considerable amount of learning material system presentation” [30, p. 423].

Recently lecture as a traditional form of group learning and a way of holistic, systematized, evidence-based presentation of a scientific problem solving has been criticized and replaced by active learning methods. Many methodologists think that the main disadvantage of a traditional lecture is that it “allows students to be passive information receivers and doesn’t provide complete feed-back” [31, p. 1142]. From our point of view if a traditional lecture is added by students’ autonomous work concerning preparation and giving a lecture for his/her classmates, teacher’s and classmates’ further analysis, the master’s degree student’s self-analysis then it can be considered to be an active learning method focusing on students’ creative activity development.

In other words master’s degree students give an interactive lecture. In order to be interactive a lecture must have problem content and style of reading, flexible structure, rich in media materials, encourage students to respond [32]. To organize a lecture it is necessary to take into account a set of principles focusing on enhancing and maintaining listeners’ attention: connection of new information and his/her own experience, knowledge; clear structure of the information, emotional reactions attraction; making strong impressions, reflection encouraging [33].

Within the experimental program we employed the immersion technology while implementing a set of disciplines from the curriculum of master’s degree program studied in the first semester: “Multicultural foreign language education”, “Competence approach within foreign language education”, “Innovative processes in education”.

The authors’ program on the basis of the immersion technology was multi-phased. At the first phase the students prepared for a mini-lecture. We worked out a leaflet “Peculiarities of preparing and delivering mini-lectures”. It was noted that any lecture should have a contently logical structure. The first part of the lecture was introduction the aim of which was focusing listeners’ attention on the theme discussed. The main part of the lecture was thematically relevant information. The final part was a summary where conclusions were made.

The second phase dealt with preparation of Power Point lecture presentation. The presentation became functioning only if it was an integral part of the learning dialogue and was accompanied by expressive and purposeful words of the teacher [34, p. 155].
The third phase involved students making up creative assignments focused on learning the content of the lecture. It included problem questions, creative test assignments that formed methodological skills and enhanced the master’s degree students’ creative activity.

The fourth phase was devoted to giving the lecture itself and arranging reflection: analysis and self-analysis of students’ readiness for reading mini-lectures. Reflexive procedures concerning future professional activity enhanced learners’ creative activity.

While implementing the program the following pedagogical conditions were established: 1) creation of a productive interaction situation providing high degree motivation for creative activity representing awareness of future professional activity values, for his/her own professional development on the basis of creative activity during the learning process; 2) refocusing from informative learning to students’ autonomous learning activity enhancement; 3) involving the learners into sphere of future profession, active learning methods and multi-phased immersion technology employment; 4) purposeful teaching master’s degree students reflexive analysis skills contributing to awareness of real pedagogical reality and his/her own practical reality which in future provides success in the future pedagogical activity.

The results of the experiment at the control stage are presented in Table 3. Pearson’s χ² test at the control stage showed 9,460.

Table 3
The results of development level of education master’s degree students’ creative activity at the control stage (%)  

<table>
<thead>
<tr>
<th>Structural components</th>
<th>the EG</th>
<th></th>
<th>the CG</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High level</td>
<td>Average level</td>
<td>Threshold level</td>
<td>High level</td>
<td>Average level</td>
</tr>
<tr>
<td>Motivational</td>
<td>13,9</td>
<td>60,2</td>
<td>25,9</td>
<td>10,2</td>
<td>37,9</td>
</tr>
<tr>
<td>Cognitive</td>
<td>12,2</td>
<td>50</td>
<td>37,8</td>
<td>8,5</td>
<td>29,4</td>
</tr>
<tr>
<td>Activity oriented</td>
<td>1,8</td>
<td>20,6</td>
<td>77,6</td>
<td>0</td>
<td>15,4</td>
</tr>
<tr>
<td>Reflexive</td>
<td>5,3</td>
<td>48,2</td>
<td>46,5</td>
<td>5,1</td>
<td>29,4</td>
</tr>
</tbody>
</table>

We noted significant positive differences in the EG in comparison with the CG: the high level in the EG before the experiment was demonstrated by 5,2% master’s degree students, after the experiment – 8,6%, in the CG – 6,0% and 6,5% accordingly; the average level in the EG was shown by 23,7% before and 45,3% students after the experiment, in the CG – 24,1% and 28,4%; the threshold level was shown by 71,1% learners of the EG at the beginning of the experimental work, after the experiment the indicators decreased to 46,1%, in the CG – from 69,8% to 65,1% only (figure 1).

On the basis of the formative experiment results analysis we made a conclusion about effectiveness and appropriateness of the author’s program and pedagogical conditions for education master’s degree students’ creative activity enhancement (44.04.01 Teacher education, “Theory and methodology of a foreign language teaching in the secondary and higher school”).
Discussion

For the first time a pilot program has been set up the hallmark of which was not only development of education master’s degree students’ professional competences determined by the Federal State Educational Standards but purposeful enhancement of the creative component, intensive creative potential development on the basis the immersion technology during foreign language teacher professional skills in the secondary and higher school development. The main idea of the program was that the traditional foundation was enriched by carefully identified, optimally balanced organizational ad methodological support on the basis of system, personal and activity oriented, professionally oriented approaches and taking into account the latest directions of pedagogical science concerning future foreign language teachers’ intellectual and creative abilities development. The program allowed to develop deliberately and gradually motivational, cognitive, activity oriented and reflexive component of creative activity thus globally affecting professional and personal aspects of future foreign language teachers’ development.

To bring up creators is possible if you yourself are a bright creative personality which the teacher profession means. At the master’s degree level it is possible to reach the goal if the following conditions are establishes for it: 1) creation of a productive interaction situation providing high degree motivation for creative activity representing awareness of future professional activity values, for his/her own professional development on the basis of creative activity during the learning process; 2) refocusing from informative learning to students’ autonomous learning activity enhancement; 3) involving the learners into sphere of future profession, active learning methods and multi-phased immersion technology employment; 4) purposeful teaching master’s degree students reflexive analysis skills contributing to awareness of real pedagogical reality and his/her own practical reality which in future provides success in the future pedagogical activity.

The data received in the research are correlated with the research results of the scientists mentioned above about peculiarities of students’ creative activity development.
during the “immersion” into professional pedagogical activity for example S. M. Varnavskikh demonstrating the role of the developing educational environment; A. Yu. Mukhin justifying for pedagogical conditions for students’ creative activity development in a higher school etc.

Within the context the developed program and pedagogical conditions for its effective implementation predict the search for new approaches to the problem solvation, authors’ tutorially methodological set development focused on learners’ professional interests which directly enhances creative activity and contributes to future foreign language teachers’ professional competency formation.

Conclusions

The development and implementation of the master’s degree students’ creative activity enhancement experimental program (44.04.01 Teacher education, the specialty “Theory and methodology of a foreign language teaching in the secondary and higher school”) on the basis of the immersion technology provide a solution to the problem of methodological and technological support of the process studied. The program implemented in four phases contributes to purposeful development of motivational, cognitive, activity oriented and reflexive components of the future foreign language teacher’s creative activity which is statistically confirmed. Thus, employment of technologies simulating the future professional activity as foreign language teachers in a high school during education master’s degree students’ learning process is an objective opportunity of quality training of a future qualified professional who is able to think productively and creatively, analyze complex problems, find ways and means for their solving. Graduating from the university as a learning result future master’s degree students develop their abilities in order to actualize their creative potential, obtain new skills for achieving the creative results.

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