Creative thinking method of foreign language communication learning in agrarian university

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Abstract. The present article is devoted to the analysis and development of the creativity-based method of teaching foreign-language in agrarian higher education institution. The aim of the article is to create a method for teaching foreign-language in agrarian higher education institution, including the consideration of creative thinking development as a means and technology of foreign-language communication skills development. The article provides a detailed analysis of oral communication teaching in a non-language university. The author of the article has developed a course of oral communication training for students of agrarian specialties with the use of a creative-based method of teaching. The article presents the principles and methodological algorithm of teaching methods, the criteria for estimating the level of creativity of students and the complex of exercises in teaching oral foreign language speech with the use of creative teaching methods. The present article is an attempt to develop an original technology based on the consideration of creative thinking as a basic methodological category and its introduction in the process of teaching foreign languages to the nonlanguage profile. The teaching model presented by the author of the article can be applied in the process of teaching foreign language oral speech to students of agrarian universities.

1 Introduction

The aim of this research is to optimize the process of teaching oral foreign language communication in a non-linguistic higher educational institution of agrarian training area in the form of the development and materialization of the innovative methodological teaching technology from the position of creative-oriented format of foreign language teaching in higher educational institution.

The urgency of the research is caused by the necessity of innovation of modern linguodidactics with the integrated use of theoretical and practical foundations of using creative way of thinking in the process of teaching foreign languages.

The scientific novelty of the research consists in the creation of the creativity-oriented teaching method on the basis of the synthesis of the integration of psychological and diagnostic tools in foreign language teaching methodology, forming a new technology of

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teaching oral professionally-oriented foreign language communication within the framework of the university profile.

The theoretical significance of the study is due to the development of the theoretical basis of the methodology of teaching professional foreign language communication in the agrarian university on the basis of integration of creative thinking, its indicators and components. This theoretical significance is presented in the form of learning principles.

The scientific and applied significance of the research is conditioned by the possibility of practical use of the developed by us creative-oriented method of teaching professional-oriented communication in agrarian higher education institution in accordance with the conceptual provisions of its content.

The basis of the proposed method of training are the views of such famous psychologists, experts in psychodiagnostics of creativity, as E. de Bono and P. Torrens.

2 Material and methods

In our study we consider the following methodological principles for working with creative thinking techniques:

- 1) Creative analysis of interpretation. The learner must think creatively, i.e. creatively and non-standardly to solve these maps, the more creative thinking skills the learner can demonstrate when performing this task, the better he/she will be able to cope with it. We consider creative analysis from the standpoint of fluency, flexibility, and originality of the task. It is necessary to remember at all times that there are no "correct" meanings of the cards, because the student expresses his or her position based, among other things, on his/her life situation.
- 2) Extraordinaryness of the idea generated. Students must generate the most original ideas when interpreting the images being portrayed. Here the teacher evaluates the fluency of speech, the flexibility of transition from one topic of discussion to another, and the originality of the idea generated. If it is difficult for a student to comment on his/her maps in a complete and detailed way, he/she may limit himself/herself to a short explanation.
- 3) Presence of dialectics, i.e. assumption of contradictory and ambivalent analyzing when interpreting the images depicted.
- 4) Respect for individuality. When a learner interprets his or her cards, the instructor must accept as positive any extraordinary response of the learner in generating an original idea, regardless of its partial or complete inconsistency of logic;
- 5) Taking into account the principle of accessibility and affordability of students, i.e. tasks related to the analysis of the depicted images, should be feasible to perform and the level of foreign language skills of students.

We also consider the following methodical algorithm for performing the tasks:

- 1. Presentation of material. This stage is the starting position of the class in which the teacher presents the material. The teacher should carefully prepare this material in advance so that the creative tasks correspond to the lexico-grammatical material.
- 2. Creative Pause. This stage consists of a pause of 5-15 minutes (depending on the level of foreign language proficiency of the students), during which students are given time to analyze the performed task.
- 3. Implementation. This stage represents the production of foreign language speech while working on a communicative task.
- 4. Summarizing. The final stage of the work is a general discussion of the completed task by the participants of the learning process.

We allocate creative criteria of dialogue evaluation and their following parameters (See Table 1):

Indicators	3 points	2 points	1 points	0 points
Fluency	No delay in the reaction of the generation of a statement	Delayed response time of up to 5 seconds	Delayed response time of up to 10 -15 seconds	The delay exceeds 15 seconds (presence of an outline)
Flexibility	Absolute transition (90-100%)	Significant transition (50%)	Partial transition (up to 50%)	Absence of transition (0%)
Originality	Absolute originality (90-100%)	Significant originality (50%)	Partial originality (up to 50%)	Absence of originality (0%)

Table 1. Creative thinking skills development as means for foreign-language communication skills improvement

We consider the following creative-language exercises preceding. These exercises, in our opinion, contribute to the formation of the creative thinking skill that contributes to the most successful performance of tasks:

I. Compose sentences whose words consist of the first five, six letters indicated in the task. Use agrarian terminology:

Example: S... B... A... M... P... (selective breeding and modern practices)

- 1. S... B... A... A... H... (selective breeding and animal husbandry)
- 2. G... M... F... I... W... U... (genetically modified food is widely used)
- 3. A... P... C... B... B... G... (agricultural products can be broadly grouped)

II. Give an answer in the right-hand column that describes and thematically unifies the listed words-agrarian terms from the left-hand column.

Example: Rising, falling – price.

Words	Responses
Stem, root, leaves	
Annual, biannual, perennial	

This creative-language exercise is aimed not only at building creative thinking skills, but also at reinforcing the lexical material of the class. The student needs to write the answer in the right column in the form of a single agrarian term.

III. Write agrarian terms: a) beginning with the specified letter, b) associated with this letter.

A			
P			
R			_
$v^{}$			

This creative-language exercise consists of three tasks. In the first assignment, the student must select an ecological term from the class vocabulary beginning with the letter provided. In the next task the student has to choose an agrarian term from the same vocabulary of the class, but the one that, according to the student, causes the closest association with the letter specified. In the last task the student has to comment on his/her choice of agrarian term and to explain his/her choice and possible associative connection with this letter. This exercise is

also of the nature of consolidation of the lexical minimum and formation of the skill of creative thinking. Taking into account the last task to this exercise, which is of a speech nature, it (the exercise) can also be called conditional - speech, contributing to the development of the skill of creative thinking.

IV. Find and name the agrarian words hidden among the chain (stream) of letters. Envhgdeseagriculture fenmsheogmlsolgqciemspfnghagronomykgiudbvhfdjvdjjjsskflgj dgtvimdjaowlsmcfsvbfcropskwsybrfgqivhsokehtbglaokebgtslkgyejpgnjpqtbdhrvskogrger mination jfnvhgyeiqhwtbfhwfdgwdheybcgsfqoimftbdlsoilckdenfvyfknhfyeudg

This creative-language exercise is aimed at developing the student's attention span. The student needs to find hidden among the stream of letters agrarian terms from the lexical minimum of the class. The exercise promotes the development of concentration and memory skills.

3 Results

This experiment involved first-year bachelors in ecology of 150 people in the experimental and control groups.

The evaluation criteria were such indicators of creative thinking as fluency, flexibility and originality. The aim of the experiment was to develop the skills of oral professionally oriented communication of agrarian content while performing mind-maps as a technology for the development of creative thinking. The evaluation was carried out according to the category from 0 to 3 points, where:

0 points - absence of creative approach to the execution of the problem task,

1 point - partial presence of creative approach to the execution of the problem task (50% originality in the answer),

2 points - high level of demonstration of creative thinking when completing the problem task (above 50% originality when answering),

3 points - absolute level of generating an extraordinary idea when completing a problem task (90% extraordinariness when answering).

Based on the above criteria the following formula was developed:

$$C = \frac{B + D + O}{2}$$

C - creative thinking

B - fluency

D - flexibility

O - originality

The total number of points for the above parameters was added up and divided by two. Each criterion with a maximum of three points received per class was valued at 45 points over 15 weeks of the semester. Thus, the maximum number received: 135 points divided by two. 67.5 points was the final maximum variant of the subjects' performance. The results of the subjects' performance are reflected in the table (See Table 2).

Table 2. Table of comparative analysis of pre-experimental and post-experimental stages in the experimental and control groups

Group	Parameters to be tested (skill groups)	Pre-experimental stage	Post-experimental stage
EG	1	25.5%	77%
CG	1	16.5%	48%

EG	2	32%	68%
CG	2	24%	27%
EG	2	33%	72%
CG	3	31%	44.5%
EG	1	14%	78.1%
CG	4	16%	37.2%
EG	5	11%	75.4%
CG	3	8.5%	36.7%

These criteria included the following:

- 1. The ability to navigate the situation of communication.
- 2. Conformity of the speech behavior of students to the model of speech behavior of native speakers in a similar situation.
- 3. Correctness of definition of communicative purposes and intentions of the partner(s) of communication.
- 4. Correctness of definition of appropriateness of formulas of verbal communication at realization of the certain communicative intention and achievement of the purpose during communication.
- 5. Level of creativity according to three indicators: fluency, flexibility, and originality. The results are also shown in the following diagram (See figure 1):

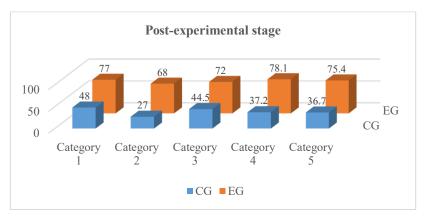


Fig. 1. Post-experimental stage

4 Discussion

Specialists in the field of creative thinking process research agree with the definition of creativity as a complex action occurring in the socio-institutional environment, connected with the situation and sphere of activity within which it is carried out [1].

Some scientists argue that the emergence and development of creativity is influenced by everyday life, work and leisure time. The study of this hypothesis led to the emergence of such concepts as "everyday creativity" [2] or "creative leisure" [3]; [4] and "emotional creativity" [5]; [6], offering theoretical substantiation and technologies of understanding of a variety of conditions and situations of development of creative process [7].

"Everyday (routine) creativity", according to other researchers [8], is based on solving in an extraordinary way not only within leisure time, but also in the academic environment, in the educational process. In this connection, this creativity includes originality, divergence and search of alternative ways of the decision of a problem. Very often "everyday creativity"

is materialized in an individually produced product used both by the creator of this product and in narrow circles of consumers [8]. The opposite point of view is held by another researcher of creative thinking B. Hegarty [3], who defines creative leisure time as a free pastime in which a person feels freedom of creative activity and motivation, i.e. creative activity carried out not to achieve a certain result materialized in the product of this activity, but for the process of this activity itself. In this regard, creative leisure accompanies the emergence of self-expression and self-realization of a person.

According to many scholars, creativity is associated with the ability to offer many extraordinary ways to solve a problem [9]. These skills demonstrate strong social traits that result largely from the educational environment [10]; [11]. Here scholars' opinions also differ as to the appropriateness of this concept: some focus attention on the result of creative activity, i.e., "creativity for the result of action" [12], others consider the process of extraordinary activity itself, i.e. "creativity for the process of action" [13]; [14].

Creative thinking students, according to modern foreign experts on the study of creative thinking in the educational environment, who gain experience in generating new ideas when solving problem problems in the educational process, demonstrate the best results of academic performance. Creative thinking skills are necessary for students in the digital age, as many situations require creative approaches in problem solving [15]; [16].

5 Conclusion

This study is focused on the development of the creative methodology of teaching a foreign language in the agrarian university.

The aim of the developed methodology is to form students' communicative competence skills as well as to activate students' activity when performing communicative exercises by developing creative thinking on the basis of creative-oriented orientation of the methodological concept of modern linguodidactics.

The essence of creative-oriented teaching is that it helps to reveal the potential of each learner's personality, to activate their cognitive and speech activity. The students get enough oral practice to form the necessary communicative skills, in addition, the use of a variety of strategies prepares them for real communication.

We found out that when performing tasks related to creative thinking skills development, students are able to freely use a variety of language means in various communicative situations, are able to complement and develop thoughts, ideas; to express freely and fluently their thoughts without prior preparation, achieving completeness of the statement, generate ideas in a foreign language.

The work confirmed the hypothesis that the implementation of communicative tasks in foreign language classes at the agrarian university will be more effective when using creative thinking as a means and method of teaching.

The main conclusion that can be drawn from the results of the study is that the developed methodology is effective and can be used by students and teachers in the process of teaching foreign language communication in an agrarian university.

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