



Active Methods and Techniques of Digesting and Processing Information by Humanities Students in The Classroom

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Abstract

The article substantiates the need to update the methodological arsenal of a teacher in higher education and suggests discussing some active and interactive methods of digesting and processing educational text information by humanities degree students in the classroom. Active learning methods are a general name for a group of methods focused on practical learning through the use of modern pedagogical technologies, collective learning, role-playing games, as well as techniques that stimulate students' cognitive activity and motivate them to conduct professionally significant activities directly in the classroom (without special training). The article briefly describes the methodology of application and the experience of using a number of active and interactive methods and techniques of students' work, such as the terminological dictation (self-dictation, thesaurus), the text-express, the letter indexing of text and dictionary fragments, the cinquain condensing key information, the puzzle method filling in intentional omissions, the cluster-scheme as a type of generalizing task for group work. The work also outlines the prospects for further understanding of the problem identified in the article. The authors assume that the article presents methods and techniques that will be in demand in the methodological practices of any teacher regardless of the specialization. However, they are especially important for the people who are into humanities and most often deal with text comprehension and text processing.

Keywords: active methods and techniques, interactive methods, processing educational information, terminological dictation, text-express, letter indexing of new information, cinquain, puzzle method, cluster-scheme.

Introduction

The need for fundamental changes in humanities teaching is obvious. The competence-based approach, which is strengthening its position, focuses on the person's ability to act in various problem situations beyond the educational ones, and requires a shift in the activity focus from the teacher to the student or pupil (Heckman, Kauts, 2012; Shuklina, Suldin, 2019).

Nowadays school teaching community is actively discussing new pedagogical technologies, searching for new forms,

methods and techniques and testing them in practice, that allows students to intensify their work during the lesson, increase their motivation to acquire knowledge and implement a differentiated and individualized approach (Universal Competencies..., 2020; Bulueva, 2017). However, higher school teachers (at least a certain part of them) are quite skeptical about mastering new technologies, innovative methods, active and interactive techniques of working with students, as well as including them in their personal

methodological arsenal. They believe that teacher professionalism is determined only by the deep knowledge of the subject being taught. It is obvious that the need for deep knowledge of the subject is undeniable. However, new conditions of social development determine the relevance of such teaching methods that would allow not only the standard model of teaching, involving, on the one hand, lectures as teachers' monologues, and, on the other hand, seminars as students' response monologues that reproduce the received knowledge "close to the text". Unfortunately, a big number of teachers consider these rules to be unshakable, as well as the fundamental changes taking place in the learning process to be only a kind of "fashion".

The developers of new educational strategies think differently, arguing that for a modern teacher it is no longer enough to be competent in the field of the specialty and deliver huge knowledge bases in the audience filled with eager to learn students. Nowadays effective teachers should be ready not only to share deep knowledge in their discipline, but also to know some things about their students, about how they learn. In addition, it is assumed that teachers will foster various methods of learning and evaluating, which, unfortunately, they are not really ready to use or can use only to a limited extent (Bonwell, Sutherland, 1996).

The current contradiction between what "is" and what "should be" determines the importance of discussing methods and techniques that allow the teacher to organize educational activities in accordance with the new requirements. Changes in views on the organization of the learning process are necessary because in modern world any information is rapidly

becoming obsolete, and the knowledge that is just passed ("taught") - without organizing the activities, for which the knowledge is acquired, without demonstrating new ways of working, without applying techniques to activate work and establish feedback - is "passive" knowledge that becomes obsolete before one can use it. The statement of this fact also determines the relevance of the analysis and methodological interpretation of the active forms and methods of teaching students that are in demand in modern practice.

Materials and Methods

A new look at the teaching process is that a student should work *directly in the classroom* and should not just study for the seminar during extracurricular time and then present what he managed to prepare at home at the seminar or practical lesson. Fixation on a dialogue and "live work" in the classroom stimulates the search for and exploration of the teaching methods, which make it possible to construct a training situation so that a student *is forced* to act directly and thoroughly in class, and teacher's main task is to teach a student how to use new ways of *independent work* with the material, search for the right material, be able to process, interpret and reformat it. Data from foreign studies confirm that the use of active approaches is the most effective way of teaching in modern educational practice (Charles C. Bonwel, 1991; Johnson, Johnson, and Smith, 1991; Tracey E. Sutheland, 1996 and others). Domestic teachers and methodologists (Azimov, Shchukin, Balaev, Panina, Vavilova, Zhuk and others) also consider active and interactive learning as a way to intensify the students' cognitive activity, they study in detail such forms as

discussion, case technologies, business games and game methods in general as the most popular ones (Panina, Vavilova, 2008); they focus their attention on such methods as working in randomly created groups, discussions on professional topics, organization and moderation of “brainstorming” (Duplenskiy, Gibadullina, 2018; Bystrai, 2020). These forms of teaching are successfully used (in Belarus) while conducting methodological seminars at advanced training courses, planning the activities of institutions and solving problems. In their adapted version they can be used in professional training (Zhuk, Koshel, 2001). Active learning methods are also being developed as part of the project “Reading and Writing for Critical Thinking – RWCT” that is being implemented internationally.

Active methods are rightly considered as one of the areas of improvement of existing educational systems. However, even the most concise review on the topic gives an idea of the lack of unity in the conceptual apparatus of the significant scientific concept of “active learning methods”; its applied component is also noticeably insufficient.

The purpose of this article is to present the existing experience of using some active forms, methods and techniques of working with various types of educational information that stimulate the students’ cognitive activity and are aimed at the formation of specialists’ professional skills. Assuming that the described methods and techniques will not be superfluous in teachers’ arsenal regardless of specialization, we believe that it is especially important for a humanities teacher, who most often deals with comprehension and processing of text information.

Active learning methods is “a common name for a group of methods focused on practical language learning through the widespread use of collective learning including role-playing games and modern pedagogical technologies”; “methods that stimulate students’ cognitive activity” (Azimov, Shchukin, 2018, 13); a group of such methods of organizing and managing the students’ educational and cognitive activities, which, in comparison with traditional methods, have some distinctive features, in particular:

- activation of students’ behavior in the learning process;
- high degree of involvement of all participants in the learning process;
- mandatory interaction of students with each other and with the materials being learnt (texts);
- possibility of gradual assessment of the success and completeness of knowledge acquisition;
- high degree of motivation, emotional background and creative nature of classes;
- primary focus on the acquisition and development of professional behavioral skills (Balaev, 1986, 30).

Such methods are usually based on a dialogue, which involves a free exchange of opinions about the ways to resolve problematic situations and a high level of activity of the dialogue participants. While applying the methods of active learning, teacher-practitioners note the presence of certain barriers that prevent their use. C.C. Bonwell names the barriers when using the methods of active and interactive learning: the difficulty in presenting a large array of material in the classroom; active learning requires too much time for the teacher to

prepare even one lesson; it seems impossible to use active learning methods in a numerous audience; the possibility of negative consequences and colleagues' conservative attitude to new approaches; the impact of students' assessment on the teacher's work, etc. (Bonwell, Eison, 1991).

A part of what we mean by active methods is sometimes included in the concepts of *innovative teaching methods*, *interactive learning methods*, *activation methods* (mostly projected on foreign language teaching) (See: Azimov, Shchukin, 2018, 93, 99, 161). You should also pay attention to the fact that the concepts of *active learning methods* and *interactive methods* are sometimes equated, although, obviously, these are not phenomena of the same order. Interactive methods are more complex and personal in their application, because in addition to teaching and learning they are aimed at **developing the personality** of the participant of the educational process. The concept of "interaction" is taken from works on social psychology. The concept of interactionism is associated with the name of the American philosopher G.H. Mead. (Mead, 1945). The theory of interactionism considers the development of the personality and the construction of the self in situations of communication and interaction with other people (Mead, 1945, 213), however, we recognize: these findings are being increasingly reflected in the modern practice of education and upbringing.

Here another attitude is actualized: the meaning of students' educational activity is not simply to reproduce what they hear at a lecture or read in books, but to produce their own ideas, opinions and positions, as well as think through arguments. Considering the global goals of modern education: to

teach above all to **think, structure and interpret knowledge** – such a path is much more effective than the endless accumulation of information. The well-known American methodologist B. Bloom distinguished between knowledge and understanding: knowledge is the ability to reproduce special information including facts, accepted terminology, criteria, methodological principles and theories, and understanding is the ability to understand the meaning of any message; he also defined three types of understanding modes: a) translation, transfer to another form (other words, a graph and so on), b) interpretation, rearrangement of ideas into a new configuration, c) extrapolation, evaluation and forecasting based on previously received information (Bloom, 1956).

All forms of work and techniques related to information processing, facts interpretation, presentation of educational information in a "different configuration" (in the form of schemes, clusters, reference notes, diagrams, etc.) with the inclusion of assessment and self-assessment procedures, ranking and rating, which we refer to in our practical work and some of which we present, are considered to be active methods.

Results and Discussion

Some active forms and techniques of classroom work can be presented in the form of a *terminological dictation (dictation-thesaurus)* - thus, both the form and the content of this type of work reveal the content of the phenomenon stated by the title. Terminological dictation-thesaurus is one of the capacious, economical methods of theory review and knowledge updating before explaining a new topic or it becomes a form

of introducing new knowledge, keywords and concepts of a scientific text.

An example of the terminological dictation “*New techniques for working with educational information*”: *Lecture-dialogue, lecture with indexing and grading of information, KUN technique, puzzle method, method of comparative charts, test-express, dictation-thesaurus, a keyword and a clue, cinquain, cluster-scheme, rating, case method, memory card.*

We will comment on some methods included in the terminology dictation, which assume a high degree of involvement, active thinking and behavior of the students, the presence of non-delayed feedback and some other performance indicators (Novikova, 2012, 87-89).

At the stage of reviewing, updating of knowledge, introduction to the topic, *test-express* is effective, which is a short test of 5 questions that can only be answered “yes” / “no” for a limited time (no more than 2 minutes for the entire test); the test is immediately checked by the *key*, for each correct answer the student gives himself 1 point. The number of correct answers is the “starting” score, which the “marathon” of the lesson begins with. This technique is especially appropriate for the current *rating assessment* of knowledge. Given the specifics of the Russian Language and Speech Culture classes, we sometimes conduct a *dictation-express* instead of a *test-express*. Dictation-express is a dictation consisting of only 1-2 sentences (the law of economy is applied again; all dictation takes no more than 5 minutes). However, such a text should be as rich as possible with difficult spelling cases (spell density is up to 90%) and, therefore, it is supposed to be artificial, compiled by a teacher or a creative student.

With reference to the methods that allow us to activate the students’ work during the lecture, we use the *method of indexing* (differentiating and grading) new information more often than others with the help of the method that we call the *KLN technique*. This type of work is developed on the basis of one of the methods of developing critical thinking (RWCT), when students are asked to distribute recorded lecture material (or printed lecture abstracts) into 3 groups: “I know” – “I learnt” – “I want to learn”. We have simplified the method: instead of distributing information into 3 columns we suggest letter indexing with 3 letters - *KLN*, where *K* is something known, *L* is something new, understood and learnt, and *N* is something new, but misunderstood and requiring additional explanations. After indexing, it is possible to compare (sometimes in % ratio) the known and the new that is learnt (*K* and *L*), the learnt and the new that is misunderstood (*L* and *N*). In this way you can differentiate and grade not only the lecture text, but also individual terms and concepts offered in the form of the above terminological dictation (self-dictation, dictation-thesaurus) at the beginning of the lesson or as a generalizing task at the final stage of the lesson. After completing such a task, *reflection* is easily organized; questions to the teacher arise inevitably, since the *N* icons are, in fact, questions. The mere fact that students have questions in spite of all usual difficulties with “stirring up” the audience and they have no difficulties with their formulation proves the effectiveness of the proposed form of work with educational information. Another technique aimed at understanding new information is compilation of *cinquain*. Methodologists consider cinquain as a tool for synthesizing complex

information, as well as for evaluating students' knowledge of concepts and vocabulary. Making up a cinquain is a technique that, on the one hand, promotes the development of theoretical thinking and the formation of intellectual culture; on the other hand, it is a practical and provides students with a certain technological mechanism for understanding and processing information. The logical-cognitive term *cinquain* (a five-line poetic form that emerged in the XX century under the influence of Japanese poetry) is now used much broader than in poetry for didactic purposes as an effective method of developing figurative speech, which allows you to obtain the result (conclusion, generalization, summary) rather quickly. In practice we consider this term to be a *technique of semantic condensation of the text* (the text in a broad sense; sometimes this text refers to the content of the lecture or conversation, cultural and speech situation) *according to the given scheme*: one noun, two adjectives and three verbs, which specify "vertex" key noun, then a sentence that represents the main idea of the text (topic) or the author-researcher's attitude to the text under study, that is followed by closing cinquain word (noun 2, phrase, periphrase) representing the conceptual interpretation of the key noun:

noun

adj. adj.

verb verb verb

sentence

noun 2

While composing cinquain in the classroom, it is more convenient to use the periphrastic analogues of the new term: "*semantic anagram*", "*semantic pyramid*", "*five steps of meaning*", etc. The technique of cinquain composing is

effective while working with both a single word and in the process of analyzing the text; cinquain is often used as the final task regarding the material learnt in any discipline. For example, at the Russian language class devoted to the functions and role of the native language in society, at the stage of the consolidation a cinquain was compiled according to the content of the teacher's lecture and the subsequent conversation, for instance, in the following version:

language

stable changing

denotes combines preserves

the language reflects the life of the people

part of the culture

Cinquain can also become the basis of a problem task, when it is assigned to complete the cinquain proposed by the teacher, fill in the gaps, that is, apply the *puzzle method*.

After the first two stages: introduction of the terminology apparatus and compilation of a cinquain – students move on to the third, final, stage of work: they make a cluster-scheme on the topic of the lesson, for example, summarize the knowledge gained on the topic "Current issues of teaching Russian in modern times" highlighting information blocks-clusters: "State policy in the field of education", "The content of the subject "Russian language", "Teaching medium", "Modern technologies in Russian language teaching", "Language environment", "Language and the Internet", "New research fields in linguistics of the XXI century", "Personal methodological arsenal of the teacher", "Legal literacy of the teacher", etc. Other methods can also be used: ranking problems, collective

compilation of comparative charts, memory cards.

Research Results

We associate the prospects for further research in this area with comprehension and inclusion of other modern methods and techniques into teachers' methodological "moneybox", which is supposed to contain the *heuristic dialogue* training how to solve unusual language tasks based on linguistic intuition; "*brainstorming*" that is effective in group learning when determining problem areas; *case method* that is based on the analysis of the complex of practice-oriented situations of pragmatic language behavior; *modeling professional situations, role-playing and business games* and anthropotechnics; methods of *problem-based learning*, in particular, the construction of theory in the form of diagrams and reference notes, the construction of *algorithms* for solving linguistic, linguistic and methodological, as well as pragmatolinguistic problems, etc.

Conclusion

Undoubtedly, active learning is more effective than passive learning – this is an axiom. Tomorrow's education should provide not only information, but also the ways how to work with it. Foreign and domestic scientists' research, our experience and observations on the educational process confirm that the use of active methods is an effective way to promote students' learning at a level that meets modern requirements. The forms, methods and techniques discussed in the article are aimed at providing help to practice teachers. At the same time, it should be noted that traditional methods and forms are not abolished. However, traditional methods and forms of teaching

are known, fully mastered and widely used, and new active and interactive ones are less developed, described and, consequently, less mastered. Despite the presence of certain obstacles that "prevent" teachers from using these types of work, we are sure that it is very important for a teacher to explore and master new educational space. The mastery of active learning methods makes it possible to increase the overall level of young people receiving higher education, their ability to generate and select new knowledge effectively, to change cognitive attitudes and paradigms of thinking rapidly. Students are supposed to learn how to train and retrain when circumstances require it.

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