

## INTERACTIVE TEACHING METHODS IN A UNIVERSITY CLASSROOM

Natavan Mammadova

Baku Business University, Azerbaijan, natavangm@gmail.com

**Abstract:** When I enter the classroom, I understand that I am no longer a source of knowledge for my students. That is, the role of the teacher, which I myself saw as a student, no longer exists. Perhaps this is logical. Why ask a single teacher if you can ask Google and Google ask everyone else. This is where the problem begins: Google provides hundreds of dissimilar options and 1000 similar answers for a single problem. How to analyze information correctly? Which data is relevant? Which sources should be trusted and which should not be considered? The teacher can help with these questions. The teacher in the student audience today is probably not a source of knowledge, but a guide. Interactive teaching methods are road signs on the way to knowledge and skills to apply it. With the help of interactive teaching methods, students, together with the teacher, explore a specific thematic problem, make presentations of their findings, learn to work both individually and in a group. Finally students acquire independent research skills. Interactive teaching methods include: Presentation, Cubism, Zigzag (mosaic), Brainstorming, Brainwriting, KWL Rolestorming, Aquarium, Auction, Carousel, Clustering, Case-study, Venn diagram, Design, Discussion, Debate, Decision Tree, Role-playing Games, Simulation, Survey, Verbal associations, Insert, Socrates dialogue, Synectics - the method of analogy, Staging, Cinquain, Round table, Conceptual table, Semantic feature analysis, Jigsaw, Think-Pair-Share, Three-step interview, Circle the Sage, Three-minute review, Numbered heads together, Team-Pair-Solo, Six Thinking Hats, Kanban, Scamper, 5 Whys, The Three Chairs Secret and many others. Some of them, the most frequently used by me, I consider in this article.

My choice of these teaching methods is partly due to the fact that at Baku Business University, special trainings were conducted for the entire teaching staff on how to master these interactive teaching methods. Universities as an organization understand that the walls of the alma mater are no longer a source of static knowledge; they understand that knowledge itself undergoes changes and updates every day. They understand that today Life-long Learning is becoming more and more relevant. Life-long Learning as a modern approach reduces the value of formal learning. It is no longer necessary to spend many years at university, when you can start a professional career after the first stage of education and at the same time improve your education, which will be of an applied nature. Why do we say yes to interactive methods? Within the interactive training, qualities such as student autonomy, decision-making responsibility are shaped. Cognitive, creative, communicative, personal activity of students are developed.

**Keywords:** education, interactive, teacher, university.

### 1. INTRODUCTION

Remember how in our student years we liked to spend time with friends and how often we were upset by the need to read boring textbooks or spend hours listening to monotonous lectures? Today, nothing has changed, students in the same way want to have fun and do not like to engage in imposed uninteresting things. They don't like to sit still and silently on uninteresting lessons, memorize a huge mass of information and then try to explain it for some reason. The question arises: why do we continue to use the very same teaching methods that caused boredom and irritation once in our lives? Why we do nothing to change this situation? A serious need for this is long overdue. Life-long Learning as a modern approach reduces the value of formal learning. It is no longer necessary to spend 4, 6 or 10 years at the university, when you can start a professional career after the first stage of education and at the same time improve your education, which will be of an applied nature. The long road to knowledge can now be left to philosophers. Universities compete with new forms of education. But on the side of the universities, there are social institutions, which are inseparably link the image of a successful person with a university degree behind. Studying at the university allows young people to pause, gives the opportunity to develop not only mental intelligence, but also to mature emotional intelligence, create a circle of friends and find their place in life. Years at the university, therefore, have an important psychological function. Due to these aspects, advocating for universities, they face the task not of survival, but of finding new forms of education that would meet the requirements of today. Today it has become obvious that it is not the personality that must be managed, but the process of its development. The priority in the work of a teacher is given to methods of mediated pedagogical influence: dialogic methods of communication, a joint search for truth, development through the creation of upbringing situations, diverse creative activities. The main methodological innovations are connected today with the use of interactive teaching methods. One Chinese parable says: "Tell me - and I will forget; show me, and I will remember; let me do it, and I will understand." These words reflect the essence of interactive learning.

## 2. BENEFITS OF INTERACTIVE TEACHING METHODS

The main reason for the backlog of our education system is the inability to apply the knowledge gained in the study of disciplines. Modern pedagogical science has formulated it as the inability of our school to form students' competencies. We must clearly understand that we are on the threshold of very serious changes in education. Modernization of modern education consists in its substantial and structural renewal. The main task of training at the present stage is the formation of key competencies necessary for the practical activities of each person. In their activities, every modern teacher strives to ensure that our students are able to engage in dialogue and be understood, fluent in information technology, and capable of self-determination and self-education. Key competences are considered as the readiness of students to use the acquired knowledge, skills, ways of working in real life to solve practical problems. The acquisition of these competencies is based on the experience of students in specific situations. Mastering key competences allows a person to be a successful and sought-after society. (Natalevich, 2012)

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Interactive - means the ability to interact or be in a conversation, a dialogue with someone (person) or something (for example a computer). Consequently, interactive learning is, above all, interactive learning, in which the teacher and the learner interact. The features of this interaction are as follows: the stay of education participants in one semantic space, joint immersion in the field of the problem being solved, i.e. experiencing consonant feelings associated with the adoption and implementation of problem solving. When using interactive methods, the learner becomes a full participant in the process of perception, his/her experience serves as the main source of educational cognition. The teacher does not give ready-made knowledge, but encourages students to search for their own. Compared to traditional forms of conducting classes, the interaction between the teacher and the learner changes in interactive learning: the activity of the teacher gives way to the activity of the learners, and the task of the teacher is to create the conditions for their initiative. It has been established by psychologists that, in terms of academic communication, an increase in perceptual accuracy is observed, the effectiveness of memory work increases, intellectual and emotional characteristics of a person develop more intensively, such as: sustainability of attention, ability to distribute it; Observation with perception; ability to analyze the activity of a partner, to see his motives, goals.

What are the benefits of interactive teaching methods?

First of all, interactive methods:

- awaken students' interest;
- encourage the active participation of everyone in the learning process;
- appeal to the feelings of each student;
- contribute to the effective absorption of educational material;
- have a multifaceted impact on students;
- provide feedback (audience response);
- form students' opinions and attitudes;
- form life skills;
- promote behavior change.

The basic rules for organizing interactive learning.

Rule one. All participants should be involved in the work in one way or another.

Rule two. We must take care of the psychological preparation of the participants. The point is that not everyone who comes to class is psychologically ready to be directly involved in certain forms of work. Warm-ups, constant encouragement for active participation in work, providing opportunities for self-realization are useful.

Rule three. There should not be many students in the interactive technology. The number of participants and the quality of training may be directly dependent. The optimal number of participants is 25 people.

Rule Four. Preparing the premises for work. The premises should be prepared in such a way that participants can easily change places to work in large and small groups.

Physical comfort should be created for the trainees.

Rule five. Clear consolidation (fixation) of procedures and regulations. It is necessary to agree on this at the very beginning and try not to violate it.

Rule six. It is necessary to pay attention to the division of the participants of the seminar into groups. Initially, it is better to build on the basis of voluntariness. Then it is appropriate to use the principle of random selection.

Mandatory conditions for the organization of interactive learning: trusting, at least, positive relations between the student and the trainees; democratic style; cooperation in the process of communication between teachers and students; reliance on the personal ("pedagogical") experience of students, the inclusion in the educational process of vivid examples, facts, images; the variety of forms and methods of presenting information, the variety of forms of activity of students, their mobility; the inclusion of external and internal motivation to work, as well as the mutual motivation of students, the focus on activity, mutual respect and democracy.

The interactive method can be considered as the most modern form of active methods. Interactive can include: discussion, heuristic conversation, Brainstorming, role-playing, business games, training, case method, project method, group work with illustrative material, discussion of video films, etc.

Interactive teaching methods include: Presentation, Cubism, Zigzag (mosaic), Brainstorming, Brainwriting, KWL, Rolestorming, Aquarium, Auction, Carousel, Clustering, Case-study, Venn diagram, Design, Discussion, Debate, Decision Tree, Role-playing Games, Simulation, Survey, Verbal associations, Insert, Socrates dialogue, Synectics - the method of analogy, Staging, Cinquain, Round table, Conceptual table, Semantic feature analysis, Jigsaw, Think-Pair-Share, Three-step interview, Circle the Sage, Three-minute review, Numbered heads together, Team-Pair-Solo, Six Thinking Hats, Kanban, Scamper, 5 Whys, The Three Chairs Secret and many others. (Veysova Z., 2007) I will not briefly describe the features of each of the methods listed by me, mentioned as a reference for those who want to familiarize themselves. In this way, I will take over the functions that the Internet browser is doing very well. I will discuss in more detail only some of them most frequently used by me.

### 3. THREE UNIVERSAL METHODS OF INTERACTIVE TEACHING

I would like to offer you the most important, in my opinion, interactive teaching methods in terms of the formation of key competencies.

**Brainstorming.** One of them is Brainstorming. Despite the popularity of this method, few people are familiar with its procedural side. Most often, Brainstorming is used as an initial warm-up for classes, as a way of initial immersion in the topic of research. It should be said that in this regard, Brainstorming is universal. It is really good both as a warm-up and as an independent method for a full-fledged learning process. Brainstorming is a way of producing new ideas to solve scientific and practical problems. The purpose of Brainstorming is the organization of collective mental activity in the search for non-traditional ways of solving problems. The use of the method in the educational process allows to solve the following problems: the creative assimilation by students of educational material; the connection of theoretical knowledge with practice; stirring up of educational and cognitive activity of students; the formation of the ability to focus attention and mental effort on the solution of the actual problem; the formation of the experience of collective mental activity. The problem formulated in a Brainstorming session should be of theoretical or practical relevance and arouse an active interest of students. A common requirement that must be considered when choosing a problem for Brainstorming is the possibility of many ambiguous solutions to a problem that is being put forward to students as a learning task. The absence of any criticism of the ideas put forward at the initial stage. Preparation for Brainstorming includes the following steps: determining the goal of the lesson, concretization of the training task; planning the general course of the lesson, determining the time of each stage of the lesson; selection of questions to warm up; development of criteria for the evaluation of received proposals and ideas, which will allow purposeful and meaningful analysis and generalization of the results of the lesson.

The method of organizing and conducting Brainstorming.

The organizational stage is carried out with one class. Before the start of the lesson, when students enter the classroom and sit down in places, you can turn on vigorous, dynamic music, preferably instrumental, since the text can influence the formation of the set of the students. At the beginning of the lesson, the teacher informs the subject and form of the lesson, formulates the problem that needs to be solved, justifies the task for finding a solution. He introduces students to the conditions of collective work and gives them the rules of Brainstorming. After that, several working groups of 3-5 people are formed. Each group selects an expert whose responsibilities are the fixation of ideas, their subsequent evaluation and selection of the most promising proposals. It is advisable to form working groups in accordance with the personal wishes of students, but the groups should be approximately equal in the number of participants. Groups are seated so that it is convenient to work and so that students can see each other. This stage takes about 10 minutes.

Warm up is carried out frontally with the whole group. The goal of the stage is to help students get rid of stereotypes and psychological barriers. Usually the warm-up is carried out as an exercise in quickly finding answers to questions. For the warm-up is important fast paced work. Therefore, if there is a pause, the teacher himself must put

forward 1-2 answer choices. As soon as the students begin to find answers with difficulty, they think for a long time, it is worth moving on to the next question. In order to create and maintain a relaxed and lively atmosphere, the teacher prepares unexpected, original questions that are not directly related to the subject of the Brainstorming, but are taken from a similar sphere. The teacher during the warm-up does not give an assessment of the students' answers, however, he perceives everything kindly, maintaining a positive reaction from the audience. Warm-up time: 15-20 minutes.

At the very beginning of the actual “Brainstorming” of the problem posed, the teacher reminds the problem, clarifies the task, gives criteria for evaluating ideas, repeats the rules of Brainstorming. A signal is given, after which the expression of ideas begins simultaneously in all groups. An expert on a separate sheet writes all the ideas put forward. Do not be afraid of light noise and animation in the classroom - the ease of the situation contributes to the activation of thought. It is better for the teacher not to interfere in the work of the groups, in order not to prevent them. Only in the case when the group violates the rules of work (for example, it begins to discuss or critically evaluate an idea), does the teacher return to the working group in a tactful and benevolent manner.

The time of the main stage is 10-15 minutes. This is a stage of intensive workload of students, usually towards the end one can feel the obvious fatigue of the participants of the “storming”. At the stage of evaluation and selection of the best ideas, experts unite into a group and evaluate ideas, selecting the best for presentation to the participants of the game. If possible, the experts at work time can move to another room so that the group does not interfere with them. The teacher determines the work time for experts in 15-20 minutes. Working groups rest at this stage. You can turn on music, put an interesting video on the topic of this lesson, make a short pause and allow students to switch, or offer them some simple tasks in a playful way, for example, a crossword puzzle for this course, a discussion of interesting situations.

At the final stage, representatives of the expert group make a report on the results of the Brainstorming session. They call the total number of ideas proposed during the Brainstorming and introduce the best of them. The authors of the ideas noted justify them. Based on the results of the discussion, a collective decision is taken on the implementation of certain proposals into practice.

The teacher summarizes, gives an overall assessment of the work groups. It is important to note the positive in work, the moments of manifestation of a high degree of creativity, the success of collective activities, etc. Such a final assessment in the study group creates a creative atmosphere, supports students. Even if the success of the group is not brilliant, you still need to rely on the positive in its work to encourage students to achieve greater results in the future. The final stage is the longest (10-15 minutes). This stage is very important in terms of education, since during the discussion and protection of ideas there is an intensive exchange of information, its understanding and active learning.

Brainstorming is very productive and gives good results. In case of failure, the teacher should not quickly abandon this form of work, but once again carefully analyze the preparation for the lesson and its entire course, try to find the causes of failure, eliminate them, and in the future it will succeed.

**Walt Disney's thinking strategy.** Continuing the theme of brainstorming as a leitmotif in the interactive techniques under consideration, I want to dwell on the creative technique called Walt Disney's thinking strategy. Walt Disney had three chairs in his office that were never moved and which he would use for creative thinking. Each chair represented a separate mental perspective from which he could view any idea. The first chair was for dreaming up new ideas, the second was for planning how those ideas could be made a reality and the third chair was for critically evaluating those plans in order to identify why they might not work. (Dilts R., 1995)

‘Disney’s Creativity Strategy’ identifies these three perspectives as The Dreamer, The Realist and The Critic (or The Spoiler).

The Dreamer - “If you can dream it, you can do it.” - Walt Disney.

This stage was for fantasizing. Creating the most fantastic and absurd ideas as possible. No filter. Just wonderful, raw ideas. This stage was about “why not?”

The Dreamer generates new ideas. If anything was possible we would... In a perfect world there would be...

Reality must be suspended – rational thought extinguishes creative sparks.

There must be no constraints, no boundaries.

There must be zero evaluation or criticism of ideas.

The more absurd and outrageous the idea the more likelihood of it being original.

The Realist

As the Realist, the Dreamer ideas would be re-examined, and re-worked into something more practical. It wasn't about the reasons it could not be achieved, but only about it could be done. This stage is about “how?”

The Realist plans how these new ideas could become a reality.

Considers what resources are available.

Looks for the underlying thought contained in the idea.

Reframes the idea to fit the present reality.

The Spoiler

The third stage he would become the critic... shooting holes in the ideas he had come up with.

The Critic, or Spoiler, finds reasons why the plan would not work.

Identifies all the problems with the plan.

Sees the negative consequences of the plan.

Points out how the plan could be better.

It is said, the ideas that survived this process were the ones Walt would work on. (Imagineers (Group), 1996).

By compartmentalizing the stages, Walt didn't let reality get in the way of the dream step. The realist was allowed to work without the harsh filter of a spoiler. And, the spoiler spends time examining a well-thought idea... something with a bit more structure.

Physical separation for each step is important because the three mental perspectives cannot occur at the same time. When we brainstorm alone and in groups – too often – we tend to fill the room with a dreamer or two, a few realists, and a bunch of spoilers. In these conditions dream ideas don't stand a chance. Walt used three chairs in his office but the same process was used with creative teams at Disney Studio where Walt had three separate rooms that he used for the creative process. The first was a Brainstorming room where ideas could be suggested, the second a storyboarding room for attempting to develop those ideas into real concepts and lastly a room where the developed ideas could be critically assessed. If an idea didn't survive the last room it would go back to the first room to be revised. When an idea met with silence in the third room it was ready to be implemented.

If it isn't possible to have three separate rooms you can create different perspectives in one room by rearranging the chairs. For example, during the Dreamer stage arrange chairs in a circle, for the Realist stage arrange chairs in a semi-circle facing the new ideas and for the Critic stage arrange chairs in a straight line facing the plans. This layout ensures that the team creates together but judges ideas rather than each other.

The method of three chairs in the university classroom:

First step. Create three workspaces. Place three chairs in different rooms (or far away from each other).

The second step. To enter the state of a dreamer, students need to tune in to the positive, take a comfortable position in the chair and raise their heads high. It's common for a realist to sit up straight with his head slightly tilted forward. Pose of criticism: the gaze is lowered, the head is tilted to the side, the hand supports the chin. Practice being in these three states and switching between them.

The third step. We need to help students tune in to the wave of the dreamer. Formulate a goal on a piece of paper. It can be: "Build your house" or "Start your own business". Come up with the most incredible ideas and fantasies and write them down. You need to answer the questions of such a plan: "What do you want to get in the end?", "How will you feel when you realize your goal?", "What will be the result of your actions?".

Fourth step. The realist must confirm that the goal is achievable. To do this, you need to answer the following questions: "How long will it take to achieve a given goal?", "What people can help in this matter?", "What step-by-step action plan can be proposed?".

Fifth step. The critic will help avoid possible mistakes and failures. The task of the critic is to take a sober view of the plan of the realist, to find all shortcomings. Questions critic: "Under what conditions the project cannot be implemented?", "What was not taken into account when drawing up the plan?", "What are the potential risks there?". (Capodagli, B. and others, 1999)

The advantage of the "three chairs" method is the ability to create an original and balanced action plan. The disadvantage of the method is that each person is accustomed to acting in one role, as a rule, this is the position of the critic. In this role, we seem to ourselves more competent and serious. The method of "three chairs" helps to overcome this "imbalance", but not in all cases. Therefore, psychologists recommend to go through all stages of the method again, if the desired result has not been achieved.

**"Six Hats of Thinking"**. Critical thinking development technologies make it possible to strive for the development of a number of qualities that are aimed at planning, flexibility, perseverance, readiness to correct their mistakes, search for compromise solutions. These qualities form an independent thinking, arming with the methods and methods of independent work, provide an opportunity to independently manage the educational process in the system "teacher-student". An interesting method that promotes the development of critical thinking is the Six Hats of Thinking method, because it allows you to learn how to lead a discussion in high school classes. The "Six Hats of Thinking" method is one of the tools for the development of creative thinking, developed by Edward de Bono back



in the 80s. XX century. (De Bono 1999) It is used during any discussion as a convenient way to control thinking and switch it.

The purpose of using the method in high school classes is to teach students to better understand the characteristics of their thinking, control their way of thinking and more accurately relate it to the tasks in order to more effectively use the thinking process when solving problems. Now let's look at the features of 6 hats during the discussion.

1. White hat: information. White hat is used to direct attention to information. In this mode of thinking, we are only interested in facts and figures. We ask questions about what we already know, what other information we need and how we can get it.

2. Red hat: feelings and intuition. In the red hat mode, discussion participants have the opportunity to express their emotions, feelings and intuitive guesses about the issue under consideration, without going into an explanation of why this is so, who is to blame and what to do.

3. Black hat: criticism. Black hat allows you to give free rein to critical assessments, fears and caution. It protects us from reckless and ill-considered actions, indicates possible risks and pitfalls. A discussion participant should exercise caution, look at possible secret threats, at significant and perceived flaws, be a little pessimistic.

4. Yellow hat: logical positive. Putting it on, we think about the perceived advantage that gives a solution or carries a proposal, we reflect on the benefits and prospects of a certain idea. And even if at first glance this idea or solution does not promise anything good, it is important to work out precisely this optimistic side and try to uncover hidden positive resources. Yellow hat requires us to shift our attention to the search for the merits, advantages and positive aspects of the idea under consideration.

5. Green hat: creativity. Being under a green hat, we invent new ideas, modify existing ones, look for alternatives, and explore opportunities.

6. Blue hat: process management. The blue hat differs from other hats in that it is not designed to work with the content of the task, but to control the work process itself, to implement the idea and work on solving problems. In particular, it is used at the beginning of the discussion to determine what is to be done, and at the end to summarize what has been achieved and to identify new goals. Blue hat in the course of the work of other hats, collects, summarizes and manages the work of all other hats. Putting on, taking off, replacing the hat of thinking or just calling it "hat" to simply designate one's thinking, the student assumes the specific role that this hat points to. (Natalevich O., Vonsovich L., 2016)

Six hats of thinking is a simple way to divide thinking into six types or modes, each of which corresponds to a metaphorical color "hat". This division allows you to use each mode much more efficiently, and the whole process of thinking becomes more focused and sustainable. The structure of the method is ideal for use in a university classroom: a group of students can be easily divided into 6 small groups. The draw method is perfect for this. The "Six Hats of Thinking" method allows you to learn how to lead a discussion; more effectively use the thinking process when solving problems, orients towards creating conditions for development of each person.

#### 4. CONCLUSION

Considering in this article the methods of the Brainstorming, Walt Disney's Three Thinking Chairs, and Edward de Bono's Six Hats of Thinking, I deliberately did not give examples of the use of techniques within one visual subject. The possibilities of the methods are broad and universal for both technical and humanitarian topics of the widest range. Their application is especially interesting against the background of the attenuation of the heuristic component in modern science. As you know, having experienced a powerful boom of scientific discoveries in the late XIX - early XX century, to our time, science has exhausted its heuristic potential. It is possible that the current domination of pragmatic motivation has deprived science of that romantic flair, which used to be the implicit engine of scientific discoveries. But thanks to interactive teaching methods, every student has the opportunity to feel like a pioneer.

So, the revival of the classical university seems to us to be too difficult and, ultimately, a hopeless task. It can only be about creating a new concept of higher education, assimilating all the listed key points, but with the amendment to modern realities.

Such a university should gain independence from state regulation, it should be based on a holistic concept, which allows considering individual institutions in their organic unity. Among other things, higher education should again be focused on the formation of personality. Not the least importance in this process is the figure of the teacher, who in the current system of higher education has a modest role as a translator of knowledge and controller of the adequacy of its reproduction. Interactive teaching methods are not only good luck for students, but also a godsend for teachers who can enrich their profession in a new way. Why do we say yes to interactive methods? With such training, qualities such as student autonomy, decision-making responsibility are shaped. Cognitive, creative,

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communicative, personal activities of students are developed, determining the behavioral qualities of a competent employee in the labor market and contributing to the socialization of the individual.

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