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## FORMATION OF CRITICAL THINKING SKILLS IN THE COURSE OF "NATURAL GEOGRAPHY OF UZBEKISTAN" IN THE STUDY OF TOPICS THAT ARE DIFFICULT FOR STUDENTS TO MASTER THROUGH THE CLUSTER METHOD.

*(Study of the topic "Uzbekistan's soils, flora and fauna" from "Natural geography of Uzbekistan" of the 7th grade)*

<https://doi.org/10.5281/zenodo.7871968>

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### **Abstract.**

*This article talks about the formation of critical thinking skills by studying some topics that are difficult to master in the natural geography course of Uzbekistan through the cluster method.*

### **Keywords.**

*cluster, critical thinking, soil, plant, pedagogy, space, interactive methods.*

Raising a highly educated and intellectually developed generation in our country requires further improvement of the quality and efficiency of education in general secondary schools.

Our activities to eliminate the typical gaps in the knowledge of students of general secondary schools, as well as the analysis of students' participation in the "Knowledge Competition", Science Olympiads show that the topic of the VII grade "Natural Geography of Uzbekistan" course "Uzbekistan's soil, flora and fauna" includes topics that are difficult to master. The use of "cluster" interactive methods of teaching is effective in learning this topic. After all, these methods help to determine the student's personal creative attitude to the information in the textbook, along with the formation of critical thinking skills in students during the study of a large volume of text.

The term cluster was first used by Michael Eugene Porter, an American economist, professor at Harvard School, and an expert in the study of competitive opportunities. He defined the cluster as an association of enterprises and organizations that are geographically adjacent, connected to each other, operating

in a specific field and complementing each other's work.<sup>54</sup>. In pedagogy, it is also called "cluster" - "network method technology", and this method includes logical thinking, general thinking.

expansion is used in the sense of a method aimed at teaching the independent use of literature, which serves to accelerate and expand the thinking activity of students before a deep study of any topic.

**Cluster-** this is a graphic form of information organization recorded in the form of a diagram showing all the connections between the main semantic units when they are separated. This is a model that helps systematize and summarize the learning material.

In training from the cluster model can be used in the following cases:

1. explain the new material
2. strengthening the learned topic
3. when working independently with training manuals
4. to check homework
5. during research, practical training

It is possible to use the cluster during the lesson, in the form of a general strategy of the lesson, at all its stages (proposal, comprehension, analysis).

The use of a cluster in classes is aimed at understanding a certain topic, allows to graphically describe the studied material according to the purpose, helps to independently search for knowledge. In the information given in the textbook of natural geography of Uzbekistan that we are studying. There is a lot of information about the soil plants and animals of Uzbekistan, and it causes some inconvenience to the students in their assimilation. In the "Cluster" method, if the reader reads the text and takes into account the need to express a sufficient reaction, if the soil types are analyzed separately and put in a table, or if an interesting question and answer is made, if the distribution area of plants is taken into a separate table or an interesting cluster, and if the assignment is given to continue the responsibility of the student increases and the possibility of using the textbook and the atlas increases.

During the lesson, if a group of students composes a text, a group of students composes questions from the given tasks in a cluster form and records them in a notebook. Another group of students participates in evaluating the statements of their classmates on the assignment. At the same time, another group of students

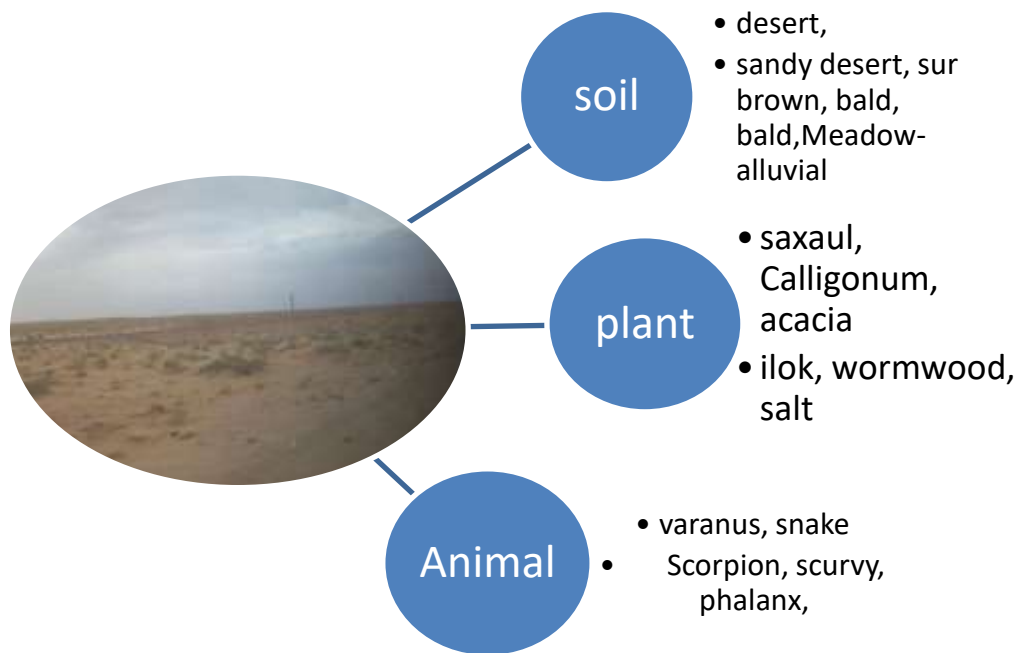
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<sup>54</sup> Muhammedov G'. I. Pedagogical education innovation cluster: need, need, result. – People's word, society, February 15, 2019.

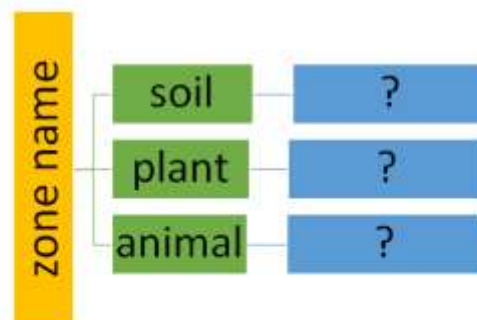
read the texts written by their classmates and express their opinions. In this way, all students actively participate in the learning process.

When students read the text prepared by their classmates, they put marks in the margin of the notebook, and when they hear the expressed opinions, they put marks in their notebooks.

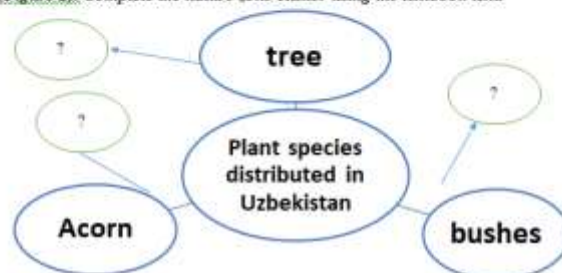
In addition, if we organize resources related to the topic when analyzing the topic through a cluster, the following clusters can be learned by students during the lesson:



(Figure 1). Description of the desert zone using the cluster method



(Figure 2). Complete the nature zone cluster using the textbook text.



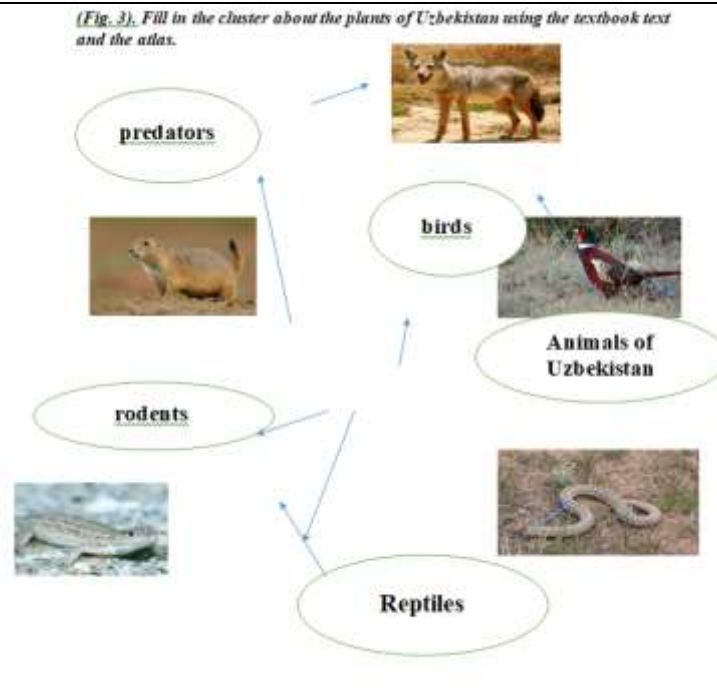
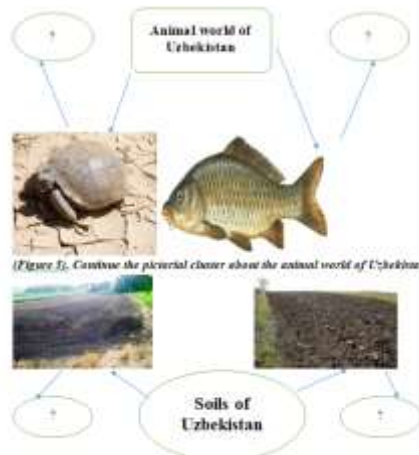


Figure. 4). Pictorial cluster of the animal world of Uzbekistan

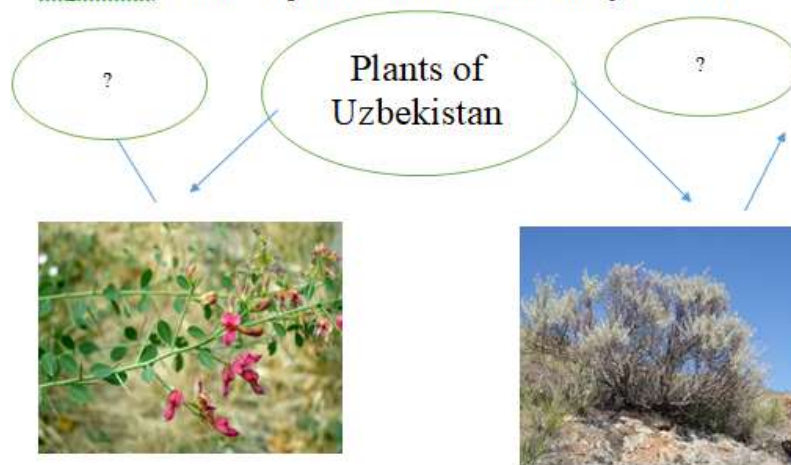
At the end of the lesson, the teacher will have the opportunity to determine, summarize and draw a final conclusion about the knowledge of the participants of the lesson. Most importantly, it ensures the quality and efficiency of the lesson. Active participation of all students in the course of the lesson is ensured.

For example, if homework is given from several clusters related to the topic, the student can learn the topic more perfectly.

Homework: Continue the following cluster:



*(Figure. 6). Continue the pictorial cluster about the soils of Uzbekistan.*



*(Figure. 7). Continue the pictorial cluster about the plants of Uzbekistan.*

During the lesson, the teacher is required to analyze the positive and negative aspects of each solution found by the students, to pay attention to the tasks completed by the student and to regularly evaluate them. This increases the students' desire and sense of responsibility for the next lessons, and the student prepares more interesting questions for the next lesson by completing the tasks given at home. will come. It can be seen that improving the quality and effectiveness of education is an urgent task, and for this, every teacher is required to know the most effective technologies of teaching his subject and to regularly improve his professional skills by continuously studying the innovations in this field. This process, in turn, is competitive, inquisitive, especially creative thinking, allows raising a highly educated and intellectually developed generation. In general, non-traditional technologies used in the educational process increase students' motivation, create a collaborative environment, and give them a sense of creative freedom and self-esteem. "If we raise every child in our multi-ethnic Uzbekistan as "this is my child, the foundation and ground of my tomorrow", we will certainly achieve results"<sup>55</sup>. Of course, we should not make any mistakes in the education of young people who are our future generation.

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