

## USE OF INTERACTIVE METHODS IN CHEMISTRY

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**Annotation:** This article provides information on teaching chemistry using interactive teaching methods. The use of interactive teaching methods in the educational system significantly increases students' interest in acquiring knowledge.

**Keywords:** interactive methods, enable, spatula

### Introduction

One of the most pressing issues nowadays is the effective delivery of lessons, particularly in practical and laboratory classes in the field of chemistry, using modern technological tools through interactive methods, in a clear and straightforward manner to students. The main responsibility of the teacher leading the educational process is considered to be choosing the most effective method of teaching, which will promote the development of education, upbringing, and the right direction of students' potential.

#### Utilizing Various Modern and Interactive Methods During the Lesson

In our lesson, we employ various modern and interactive teaching methods, taking into account the individual characteristics of the students. The aim of using interactive methods is to make the lessons interesting, engaging, and most importantly, effective in delivering the content. This leads to an increase in the student's knowledge, personal development, and the overall effectiveness of the learning process.

We all know that merely reading and writing is not enough for comprehension and internalization. It is essential for students to actively engage with the material, contemplate, discuss, and exchange ideas with their peers. In this article, we will delve into several interactive methods in detail.

**"EMABLE"** - allows the reader to explore the subject extensively, in harmony with each other.

Topic: production of nitric acid in industry.

Technology name: Emable(to allow)

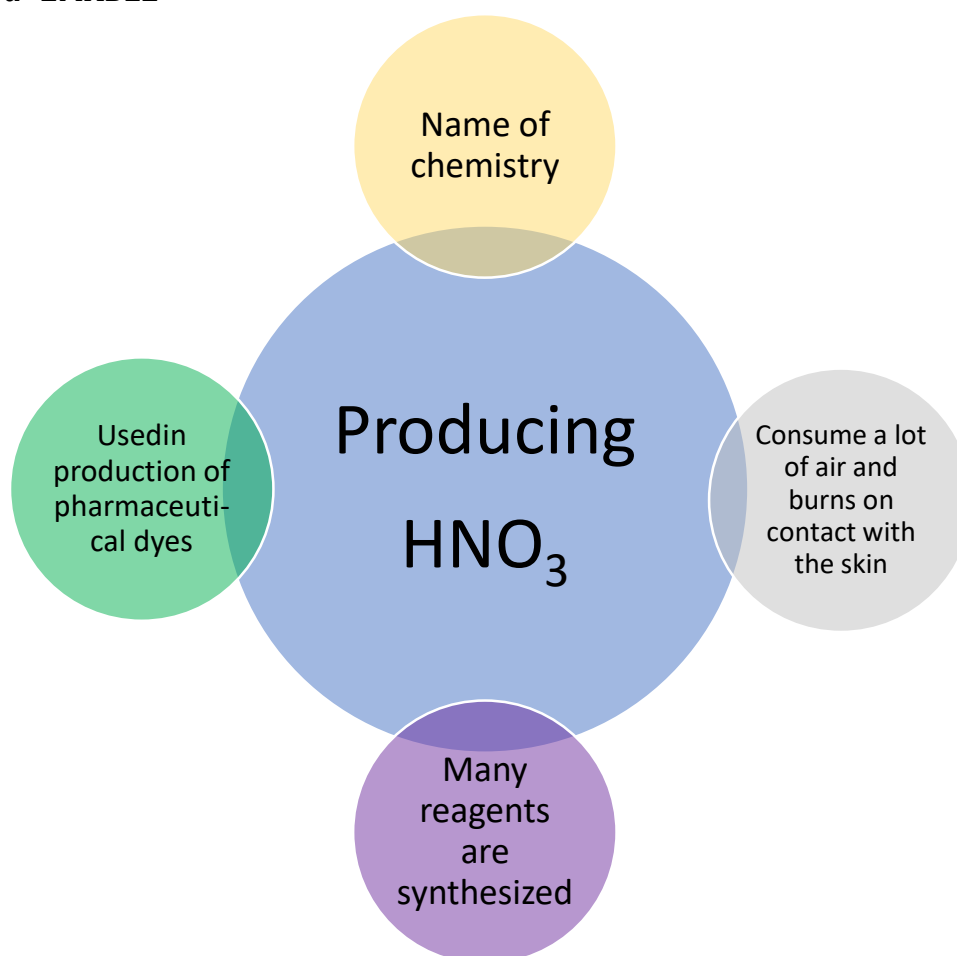
In such activity, students are initially divided into groups. Teachers can ask for the topic covered through this activity, strengthen the new topic and use it in assessment.



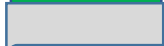

The sequence of conducting the lesson starts with familiarizing students with the conditions and rules of this technology. Afterward, the nature and purpose of the activity are explained. During the lesson, students are divided into groups, and in each group, a description of the "Enabling" technology is provided, along with the distribution of illustrative papers.

In the center of the illustration, a problem to be solved is presented, and around it, tasks given by the teacher are carried out. As the process unfolds, special attention is paid to the young students who actively participate.

After the teacher completes the activity with all the groups, a summary is provided regarding the achievements and shortcomings of the collectively performed task. Finally, at the end of the lesson, each group is given a grade, and students are assessed based on the accumulated scores.

Method "EMABLE"



-  - Content that captures attention
-  - Achievement and positive aspect
-  - Disadvantage and negative aspect
-  - Expected result

So, this technology enables students to develop the habit of independent thinking and expressing their own ideas freely during the lesson. The "Emable" technology can be used in practical activities and seminars.

One of the methods aimed at helping students remember the covered topics and enhancing logical thinking, as well as encouraging them to independently analyze and provide correct answers to given questions, is the "Spatula" method. Initially, supplemental materials are provided to students, and the methods of execution are explained.

Stages of conducting the "Spatula" method

1. Read diligently and revise
2. In the given actions, it is necessary to specify the option that you consider correct.

3. It is necessary to divide into small groups of 4 people, and each group member must check his answer in a cell.

4. correct and incorrect answers are calculated and the result is obtained.

For example: using the "Spatula" method in the topic of metals.

Metallar	Cu	Fe	Ag	Au	K	Li
Conducts heat well	+	+				
Does not transfer heat						
Conducts electricity well	+		+			
Light metals						+

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