

## THE ROLE AND IMPORTANCE OF PRACTICAL (LABORATORY) CLASSES IN AROUSING INTEREST IN BIOLOGY AT SCHOOL AND THE FORMATION OF BASIC CONCEPTS IN SCIENCE

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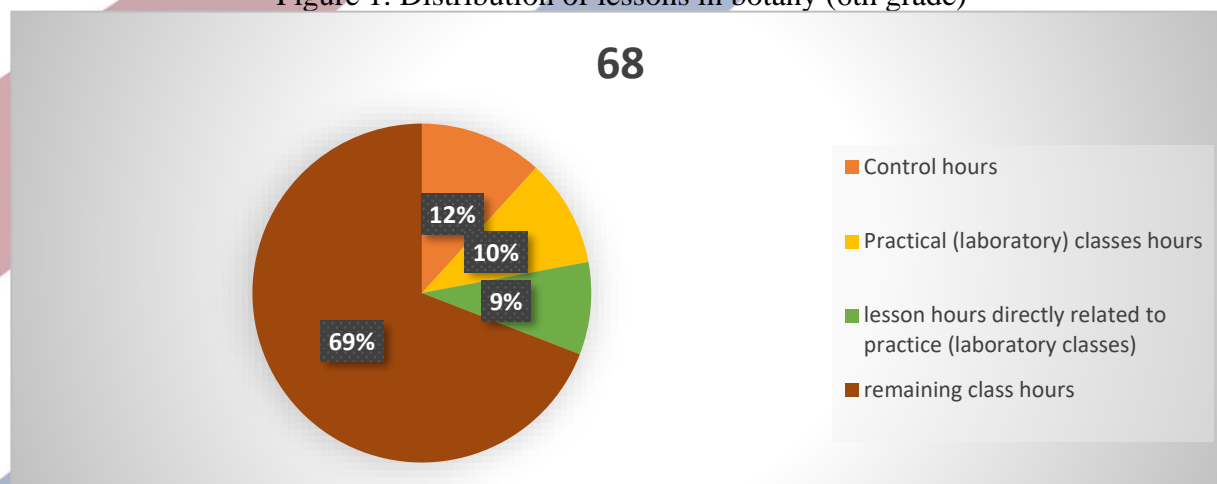
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**Annotation:** This article presents suggestions and conclusions about the role and importance of practical (laboratory) training in the formation of students' initial interest and understanding of science in the study of biology (botany).

**Keywords:** Biology, botany, leaves, photosynthesis, respiration, water evaporation, interactive methods, laboratory classes

Biology is derived from the Greek words "bios" - life and "logos" - education, and is a comprehensive science about nature. There are separate sections to explore each field. Botany is derived from the Greek word "botane" - verdure, grass, plant, and is a branch of biological science that studies plants. According to modern curricula, botany has been included in school curricula since the 6th grade. According to him, 2 hours a week is a total of 68 hours a year. Of these, 8 hours are allocated for control work. Practical (laboratory) classes total 7 hours. But there are other topics that need to be directly related to practical (laboratory) training. Such practical (laboratory) classes do not require special tools and equipment to work with pupils.

Figure 1. Distribution of lessons in botany (6th grade)



Such classes account for 9% of the total class hours. The leaves are a vegetative organ of plants and are actively involved in respiration, nutrient formation (photosynthesis), water evaporation (transpiration) and other important processes. These properties of the leaves are given as a separate topic and included in the list of lessons directly related to practical (laboratory) training. Such topics can be explained through the laboratory. In this way, we arouse pupils' interest in science and imagination. This method is more effective than watching videos on the internet, explaining them through presentations. Let's take a look at a few of them. The formation of organic matter in the leaves - photosynthesis. Required equipment: Plants (houseplants), black paper, alcohol, water, petri dish, iodine solution. Plant leaves that grow for several days in a dark room and plant leaves covered with clean black paper, b) wash them with alcohol (in this case they have changed color) and put in a petri dish, on top) iodine solution is instilled., d) Observe the color of the leaves. This is an experiment that proves that starch is formed only under the influence of light. Experiment with plant respiration. Required equipment: two glass cups, freshly cut leaf twigs, glass plate, matches. 1) To do this, take two glass cups, the mouth of which is tightly closed with a glass plate, and 2) put freshly cut leafy twigs in them. The stick does

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not go out, it burns. There is oxygen in the air. 4) Close the mouths of both cups tightly with a glass plate. 5) Place the first glass in a well-lit place, 6) Place the second in a dark place 7) After an hour, lower the burning stick and 8) check the amount of air in each glass. You can see the leaves breathing non-stop as the sticks in both glass' are extinguished. How much water can evaporate in a single plant? Required equipment: leafy plant, glassware, oil, scales, packaging. 1) To do this, a leafy twig of the plant is placed in a glass of water and 2) a little oil is dripped on its face to prevent the water from evaporating. 3) A glass jar is placed on one side of the taros, the other side is a packed 4) The sides are balanced. 5) As the leaves evaporate, the water in the bottle decreases, causing the scales to rise 6) After a day, the scales are rebalanced with the help of packaging, and 7) how much water evaporates in a day is checked. The above laboratory classes are not included in the curriculum, but can be taken as laboratory classes. Similar topics are also available in other departments of botany, zoology, human anatomy, general biology. Attitudes towards biology in schools need to be corrected. Because biology is different from other sciences, it requires practice. Today, there is growth and development in many areas. There are a lot of changes in schools as well. If we do not use changes properly, these changes will not find their place in human life. The main problem today is not that pupils do not have the ability to study. Perhaps the attention of students graduating from pedagogical disciplines to their own science has diminished. If we see the place of science in the world around us, we will achieve the expected result. Laboratory classes play a very important role in biology, especially in botany. The lesson will be better if you use interactive methods to implement the topic. This idea has become one of the main views of today. But students who do not know the importance of roots, stems, leaves and other plants in practice show how they are able in these methods. This is not to say that they should not use interactive methods in these lessons. My suggestion is to increase the number of hours spent in laboratory classes in schools, instead of the number of hours spent using interactive methods. Introduce botany classes in schools in gardens and open spaces. It is important that everyone closely monitors these measures. If we use laboratory lessons, we will change their behavior towards science, their attitude towards Mother Nature. He understands and thinks more fully about the actions of our government, such as the "Green Space".

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