Apresentações de painéis

Resumos SBBq

Egg and a lot of science: an interdisciplinary experiment

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Introduction: How to tell if an egg is rotten? How to calculate the volume of an egg? Because the rotten egg float? Why has this characteristic rotten egg smell? Because the gray-green color is formed on the surface of the cooked egg yolk? These issues are commonplace and unnoticed in day-to-day. Our grandmothers know how to tell if an egg is rotten or not, you just put the egg in a glass of water. If it is rotten floating, sinking is good. But why this happens? That they do not know answer. With only one egg chemical reactions work, macromolecules (proteins), density, membranes and conservation of matter. Hydrogen sulphide is responsible for the aroma of a freshly cooked egg. This gas as they break down the molecules of albumin, a protein present in the egg is formed. The color comes from a sulfide precipitation, this time with the Fe^{2+} ion contained in the yolk ($\text{Fe}^{2+} + \text{S}_2 \rightarrow \text{FeS}$). The use of simple and easy to perform experiments, correlating various knowledge proves a very useful tool in science education. **Objectives:** Develop multidisciplinary learning contents through the problem. **Materials and methods:** The teacher provides students with a boiled egg, salt, a syringe and a cup, a plate and water. The teacher lays the aforementioned issues for students and allows them to exchange information with each other, seeking answers through experimentation. **Results and discussion:** Students engaged with the activity and interaction of groups in order to solve the proposed problem. Still, through trial and error have sought in various ways to find the answers. This tool takes the student to be active in the teaching process, making him seek answers in their acquired knowledge in other areas. We believe that the collective construction of knowledge was significant for students' learning, which can be proven by the constant reminder of concepts worked. **Conclusion:** The tool fosters the development of the methodology of questioning, making the subject active learner in the learning process. So, being a model for other future work activities with specific concepts. And another point to be considered is the introduction of students in scientific methodology.

Keyword: classroom practice, questioning the methodology, experiments with eggs.