Kitchen as home laboratory – interdisciplinary project for primary school

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Abstract

Teaching natural subjects involves shaping the school student's research attitude, which is reflected in the general requirements in the core curriculum.

The project method, which has been used for a long time, is currently taking on a slightly different meaning due to the changing expectations regarding the educational process. A sense of agency, responsibility for group work, developing key competences and 4K are only some of the advantages of a properly applied project method. And it's all about learning by doing and by teaching others.

The Kitchen as home laboratory project is implemented by students of grades 7 and 8 of primary school as part of the project "Education Inspiration". It is not a new idea (e.g., Nguyen and Keuseman, 2020).

It was the students who chose the thematic areas related to water, oil, milk, egg, which they want to deal with. They are looking for answers to the questions: What shines in the kitchen? Why is it worth using coffee grounds in the kitchen and bathroom? Can only raisins dance? What can I use as an acid-base indicator?

Searching for interesting experiments, checking the effectiveness of instructions, modifying their experiments to guarantee safety are only some of the steps implemented in the project. Pupils look for interesting facts and try to explain the occurring processes and phenomena on division into school subjects.

The end results are a board game and an e-book containing worksheets for school students, trivia, and recommended literature.

What does the school gain? Since a meeting with students of grades 4-6 is planned, during which all experiments will be carried out, we count on the involvement of younger students and an increase in interest in natural subjects.

Acknowledgements

References

• Nguyen, J.G., Keuseman, K.J. (2020). Chemistry in the Kitchen Laboratories at Home, J. Chem. Educ., 97, 3042–3047.

Keywords

kitchen, laboratory, science school subject, project