

Editorial: 2019; 9(2)

Dear Readers,

We are excited to announce that October 2019 issue of Journal of Inquiry Based Activities (JIBA) has been published. We would like to thank to all who contributed to this issue by submitting or reviewing manuscripts or have been readers of JIBA. The journal has a unique role by serving as a bridge between the academic research and school practice. We have authors from different backgrounds ranging from prospective teachers to education professors. And we have readers who are teachers, prospective teachers, or teacher educators. With each issue, we would like to grow and serve to a larger education community.

In this issue, you will find articles on science education. In the first article, Dr. Kara introduced an activity to teach elements and the periodic table to the eighth-grade students. The activity engaged the students in a research process where they investigated the properties and uses of elements and then practiced their knowledge in a competition. The author reported increased academic performance of the students related to the topic of elements and periodic table.

In the second article, a specialist science teacher, Ayřegöl Kağnıcı, and Dr. Sadi introduced a Science, Technology, Engineering, and Mathematics (STEM) lesson that was planned according to the 5E learning model. The activity engaged the 11th grade students in creating a reflex arc model. Throughout the activity, the students examined how reflexes takes place in human body and the role of different organs in the reflex action.

In the third article, Dr. Ormancı and Dr. Çepni reported the development process of a web-assisted science material related to the topic of bones in the sixth grade. The material, a web site, involved the use of interactive whiteboard, animation, and animated concept cartoons and it was used in a series of science lessons designed based on a guided inquiry approach. The authors reported that the material was used successfully and was appreciated by the teachers and the students.

In the fourth article, you will read another STEM activity. The author, a science teacher, Elif Çilek described the implementation of a series of lessons about the role of gases that are effective in global warming. The lessons engaged the fifth-grade students in creating and interpreting graphs, examining simulations about global warming, defending and arguing their ideas based on scientific evidence, and creating a model to measure temperature.

In the fifth article, Dr. Bozkurt Altan and two science teachers, İrem Üçüncüoğlu and Hüseyin Özek introduced an activity that focused on engineering design for middle grade students. The activity started with a problem about moving companies and asked students to generate solutions for the problem. During the problem-solving process, the students followed a 5-step engineering design cycle in which they defined the problem, developed solutions, chose the best solution, made and tested a prototype, and presented their prototype to other students.

In the sixth article, Dr. Sezen Vekli reported on the implementation of an activity that was designed according to inquiry-based science approach. The activity was implemented with eighth grade students. Throughout the activity, the students examined the biodiversity in a national park. They formed hypotheses about why the biodiversity was decreasing in the park and tested their hypothesis using scientific processes. The activity ended with students' reporting on their findings and research processes.

The last article in this issue was written by Dr. Cansiz and introduces an activity about how to use history of science in teaching nature of science. The activity was designed based on an explicit-reflective approach and was used at the beginning of the circulatory system topic. The activity engaged the sixth-grade students in reading a historical story about circulatory system and William Harvey and in making connections between the story and the corresponding nature of science aspect.

I would like to express my special appreciation to the people who contributed to this issue. I especially would like to thank all authors and reviewers for their contribution to JIBA. I hope that you enjoy reading the articles in the issue and using them in practice.

Sincerely,
Evrin Erbilgin, Ph.D.
Editor-in-Chief, JIBA

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