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Editorial

We have launched the first issue of our 7th year. It was not easy to strive to publish a qualified journal within seven years, especially during an academic upgrade and similar criteria for researchers. At the end of this period, JOTCS-C indexed in DOAJ, DRJI, ASOS index, TEİ; and the Doi number for the articles was taken.

In this issue, four research papers were published. In the first paper, Paşa and Azbay (2022) has examined opinions of middle school students on implementation activities for pure substances and mixtures units in the homeschooling during the pandemic. Authors think that one of the most important learning ways we will use to develop the attitude towards active learning in order to make the science lesson more effective and permanent during the pandemic is science activities. Thus they have designed and implemented science activities that can be done at home during the COVID-19 pandemic. The participants of the research consist of middle school students in the 7th-grade class who take science courses. They concluded that the students

easily adapt the materials used in the laboratory at home, and the experiments contributed them a better understanding of the subject, and they experienced more easily due to performing by themselves. However, Paşa and Azbay (2022) also found that there are students who have difficulties in doing the experiments at home.

In the second paper, Acar Şeşen and Mutlu (2022) analyzed the dissertations published at the teacher training level in Turkey, including the socio-scientific environmental issues, with descriptive content analysis. They used the "socio-scientific" as a keyword, and 118 dissertations published in the Council of Higher Education Thesis Center database until November 2021 accessed. It was concluded that dissertations whose topic socio-scientific environmental issues at the teacher training level were published between 2008 and 2021, and the highest number of dissertations took place in 2014 and 2019. Master and doctoral dissertations had also a close percentage to each other. Nuclear power plants/nuclear energy were used as the most frequent socio-scientific environmental issue. The survey research design was preferred more than experimental research in the dissertations, and argumentation was used commonly as a learning approach.

In the third study, Polat and Bilen (2022) evaluated cognitive process dimension of teog and lgs central exam science questions with Revised Bloom Taxonomy. They think that central exams have a decisive role in making important decisions about the education process, such as placing students in some programs, deciding on their educational progress, determining the performance of teachers and school success levels. Thus, they analysed a total of 240 science questions in the central exams (Basic Education to Secondary Education Exam-TEOG and Entrance System for High Schools-LGS) applied between 2013 and 2021 according to the cognitive process dimension of the Revised Bloom Taxonomy (RBT). They determined that 227 questions (94.58%) in TEOG and LGS exams are at a low level, and 13 questions (5.42%) are at high-level cognitive steps. It was concluded that the questions were not distributed proportionally to the cognitive steps, and were insufficient in measuring especially high-level skills. Polat and Bilen (2022) think that removing this deficiency in the central exams that concern the whole country will be beneficial for the high-level cognitive development of students. So, they recommended to determine the objectives first, then to create taxonomies that will guide the objectives, and finally, to consider the RBT) table while preparing the exam questions.

In the fourth article, Ayyıldız and Çubukçu (2022) have aimed to determine the misconceptions, which negatively affects the learning process of students and is a very difficult process to eliminate and made a content analysis on the misconceptions in 9th grade chemistry subjects. For this purpose, firstly, a comprehensive review of the literature was made by examining documents such as articles, thesis, electronic books, and papers, and misconceptions encountered in 9th grade chemistry subjects were determined. Then, a content analysis was carried out on which units and subjects/concepts these misconceptions were distributed in the 9th Grade Chemistry Curriculum. They found that a total of 338 misconceptions about the 9th grade level chemistry lesson were determined. Ayyıldız and Çubukcu (2022) concluded that the most common misconception was related to the "Atom and Periodic System" unit and the "atom" concept explained under this unit. They also think that the findings of the research will

make important contributions to the field in terms of preventing the formation of misconceptions.

Finally, I hope that the interest in JOTCS-C will continue increasingly in the following years. It was important to publish a qualified chemistry education journal in our country, and especially to carry out this process within the Turkish Chemical Society for us. I would like to thank on behalf of our editorial board all the authors who submitted articles, and all reviewers for their professional comments.

See you in the new issue in September 2022

Kind regards

Prof. Dr Canan NAKİBOĞLU
Editor-in-chief, JOTCS-C

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