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Editorial Board

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(sorted by the last names)

Reviewers of this issue

Editorial

We have launched the second issue of our 6th year. It was not easy to strive to publish a qualified journal within six years, especially during the Covid-19 pandemic. At the end of this period, JOTCS-C has been indexed in DOAJ, DRJI, ASOS index, TEİ; and the Doi numbers for the articles has been delivered.

In this issue, five research papers and a book review paper were published. In the first paper, Tosun, Şenocak and Taşkesenligil (2021) have aimed to reveal the research trends of articles related to problem-based learning (PBL) in chemistry education and to provide insights into the characteristics of the research activities through bibliometric and descriptive content analyses. For bibliometric analysis, a total of 119 articles were accessed from the Web of

Science (WoS), and for descriptive content analysis, a total of 30 articles were eliminated from the "Education & Educational Research" category of WoS. The bibliometric analysis results showed that the most-used keywords were problem-solving/decision making, problem-based learning, undergraduate, inquiry-based/discovery learning, laboratory instruction, and collaborative/cooperative learning. The most used words in the abstracts of the articles were, a problem, students, learning, study, course, approach, skill, and chemistry. The descriptive content analysis results showed that undergraduate chemistry laboratories and chemistry courses were the main learning environments for PBL settings in chemistry education. Undergraduate students were the most frequently preferred sample. They found that quantitative and qualitative studies were the main research focus, but there was a limited number of mixed studies. Also, interviews, achievement tests, and alternative assessment tools were widely used as data collection tools in the articles (Tosun et al., 2021).

In the second paper, Hasib (2021) has examined the book "The Etymology of Chemical Names: Tradition and Convenience vs. Rationality in Chemical Nomenclature" discussing the etymology and the context of chemical names. The aims, organization, chapter outlines, and the readership of the book along with some other facets have been briefed in this review paper. The specialty and the efficacy of the book from a teaching-learning perspective have been projected with reference to the cited literature.

In the third study, Demir (2021) has compared 2018 chemistry curriculum and 2018 science high school chemistry curriculum in terms of basic elements. She has aimed to determine how and to what extent the difference between the two programs and to evaluate this situation in terms of the general framework of the science high school chemistry curriculum. It was determined that the aims of the science high school chemistry curriculum were more comprehensive than that of the chemistry curriculum. Demir (2021) stated that the most striking point in terms of the learning-teaching process is the emphasis on the laboratory-based and activity-based teaching of the course, and there are more experimental acquisitions in the science high school program. Finally, she found that no significant difference was observed between the two programs in terms of measurement and evaluation.

In the fourth article, Nakiboğlu (2021) has evaluated the extent to which the activities in the science high school chemistry textbooks are written to meet the four dimensions (gaining data by experimenting, inferring using data, interpretation, and generalization) of the 2018 Science High School Chemistry Curriculum and evaluate the achievement of this goal of the program. She has determined the acquisitions including experimental studies in the 2018 Science High School Chemistry Curriculum firstly. Then, the experiments in the 9th, 10th, 11th, and 12th grade science high school chemistry textbooks taught in the 2020-2021 academic year were analyzed. Nakiboğlu (2021) has concluded that the 42 achievements of the 2018 Science High School Chemistry Curriculum included experimental study and the textbooks included experiments that met all of these acquisitions. On the other hand, as a result of the dimensional analysis of the experiments, it was shown that the experiments were not qualitatively prepared in a way that would lead to a complete fulfillment of this purpose.

In the fifth paper, Zan (2021) had examined the problems, which are experienced in distance education during the Covid-19 pandemic process, concerned with the technical problems in online platforms, the problems caused

by chemistry teachers or by students, and identified by the teachers during the teaching of the chemistry course. 286 chemistry teachers participated in the study. The data collection form used in the study consists of three main parts, except the introduction part where demographic information is collected. The questions asked in the first part are about the distance education system, student-teacher interaction, and the use of technology. In the second part, questions were asked to investigate the applicability of the 9th, 10th, 11th, and 12th-grade chemistry curriculums on the basis of units in the distance education process. In the last part, open-ended questions were asked to the teachers.

In the last paper, Büyükekşi and Yavuz (2021) have conducted a descriptive study with 13 4th grade Elementary Science Education students and 40 4th grade Primary School Education students at Zonguldak Bülent Ecevit University, Ereğli Faculty of Education, to examine the level of students' ability to associate chemistry knowledge on heat and temperature topic with daily events. In this study, the students were asked to solve 6 open-ended questions about the concepts of heat, temperature, boiling and phase change. Each question is a case, that we may encounter frequently in daily life. Results of the research revealed the level of associating chemistry knowledge with daily life events of science and classroom teacher students was close to each other and was not at a sufficient level.

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 March 2022.

Kind regards,

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

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