Prospective chemistry teachers' views about the use of Kahoot in the nuclear chemistry course

C. Nakiboğlu
Balıkesir University, Balıkesir, Turkey, e-mail: *canan@balikesir.edu.tr*

Most of the chemistry classes are conducted online at university levels due to Covid-19 currently. One of such courses conducted at Balıkesir University was Nuclear Chemistry. The course is intended to provide the prospective chemistry teachers (PCTs) with the fundamental nuclear chemistry knowledge necessary to teach in their future high school chemistry class, give them an awareness and understanding of the expose of radiation and radioactivity in everyday life. This course is also aimed to educate the PCTs as scientifically literate people and to gain skill them to be able to manage social-scientific discussions concerning everyday radiation, nuclear power, and radioactive waste. On the other hand, the studies have shown that the students hold a series of misconceptions concerning both the concepts related to nuclear chemistry [1, 2] and the prerequisite knowledge for essential to learn nuclear chemistry [1, 3]. For this reason, it is critical to identify whether the PCTs had any misconceptions in their previous learning at the beginning of the lesson, and measure their knowledge frequently during the lessons and shape the teaching accordingly to be able to provide meaningful learning. Furthermore, increasing the motivation of students and provide their cognitive engagement in the lessons are the other most important challenges in online courses. All these challenges can be achieved by activating students in the lessons. Kahoot! is a game-based learning platform [4] used to include students in the lesson, motivate and measure learning. In this study, the Kahoot was used as a formative measurement during the online Nuclear Chemistry course which was the 7th-semester course, and the views of the PCTs about the applications were taken. The study group consists of 12 PCTs, seven female and five male. A total of 4 Kahoot applications were carried out, one of which was designed to assess the pre-existing knowledge of the PCTs at the beginning of the lesson. The data for the PCTs' views were collected with a Google form with 10 open-ended questions.

Within the scope of this study, firstly, the findings of the PCTs' views on the use of Kahoot will be presented. Besides, it will be explaned how the Kahoot application was performed in the lesson and the observations of the instructor on how the use of Kahoot affects the PCTs' motivation and cognitive participation will be given.

References

[1] C. Nakiboğlu, B. Bülbül. Tekin Chem. Educ. (2006) 83:1712
[2] A. Kohnle. et al. Eur. J. Phys. (2011) 32: 55
[3] C. Nakiboglu. Chem. Educ. Res. Pract. (2003) 4:171
[4] A. I. Wang, R. Tahir. Comput. Educ. (2020) 149