European Variety In Chemistry Education 2019: Abstract Booklet

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B7 Escape room- innovative method to teach concepts related to the periodic table

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Game-based learning [1,2] can be introduced in schools to support the learning experience, thus helping students to connect the previous knowledge and the one learned from the game. Games are fun, engaging and motivating, and if they incorporate chemistry content, they could be a powerful pedagogical tool with a great educational value. Well-designed educational games develop creative thinking, inquiring and problem-solving skills, higher-level thinking skills, collaborative or cooperative learning, self-confidence and decision making [3]. They encourage discussion among students, but also with the teacher, which is a crucial part in developing thinking, clarification and correction of potential misunderstandings and misconceptions.

The escape room method [4,5] has become a very popular innovative method to the chemistry teaching. Motivated by the International Year of Periodic Table [6], we created and performed several escape rooms related to the Periodic Table concepts in North Macedonia and Serbia [7,8]. Namely, we introduced educational games and puzzles among chemistry teachers within the programme for their continuing professional development in two countries. The escape room included five puzzles: Coded Message, Hidden Words, Improvised Chemistry Competition, Cool Chemistry Coffee Receipt and The Queen and the King puzzle.

This is rather novice and innovative teaching practice in North Macedonia and Serbia and we are optimistic to disseminate this idea further together with the teachers in our countries. These educational games and escape rooms have a potential to increase the students' interest and motivation to learn chemistry.

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