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Title: Learning the nomenclature and formulation of inorganic compounds with Jigsaw cooperative learning method

Names: Jiménez-Martínez, María Dolores & López-Miranda González, Santiago
University Catholic of Murcia, Spain

Abstract (250-300 words)

It is well-known that students tend to find problems when learning the formulation and nomenclature of inorganic chemical compounds. They assume their study as the memorisation of a set of particular rules, which will vary according to the type of nomenclature and the family studied; instead of approaching this task as a global study with a certain number of particularities. As a result, students presumably end up memorising an endless number of concretions, in very few cases reasoning. The search for a solution to this issue would be appropriate, since the negative predisposition of students to the study of the formulation and nomenclature of inorganic chemical compounds could be changed, making it more attractive, interesting and motivating. Likewise, creating a relaxed and calm environment in the classroom would foster that students fearlessly express their difficulties. In this vein, implementing the use of cooperative structures would facilitate other competences acquisition. Therefore, this didactic approach is based on cooperative learning, since the Jigsaw technique is used. Students will assume the role of members of the IUPAC (International Union of Pure and Applied Chemistry). Then, this proposal also falls within the scope of contextualized collaborative learning, since students can somehow connect with their daily experiences and assume a role during the teaching-learning process, in which the teacher would be the promoter of the teaching while students set the pace. In conclusion, the main aim of the present paper is to find a way to revert the sometimes tedious process of memorising the formulation and nomenclature of inorganic chemical compounds and make their study more interesting for students through a methodology that enables them to play an active role in the process and learn from each other.

Biography(100-150 words)

Dr Jiménez-Martínez has completed her PhD in Food Technology in the University of Murcia. She earned her chemistry degree from the University of Valencia. Additionally, she received her master's degree on industry and chemical research, having specialized in analytical chemistry, from the University of Santiago de Compostela. She has also worked as a chemist in two research projects: one of them on neonatal screening and the other on ultrasound technology for winemaking. She is currently studying a master's degree in teacher training at the Catholic University of Murcia.

Dr. Santiago López-Miranda has 14 years of teaching experience at the UCAM Universidad Católica de Murcia, as a professor of mathematics and physics. Besides, he has 6-year experience in the master's degree in teacher training. He has also participate in numerous teaching innovation activities, especially related to online teaching.

Presenting author details

Full name: Jiménez-Martínez, María Dolores
Session name/ number: Track 1: Fundamentals of Chemistry Education
Category: ePoster
Email id: jmmariado@gmail.com
Contact number: +34676405887