

5 - Teaching-Learning Sequences as Innovations for Science Teaching and Learning | Empirical

SP - (16436) - THE TEACHING AND LEARNING OF ACTION COMPETENCE IN ANTIMICROBIAL RESISTANCE EDUCATION

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Short Abstract

In this presentation we will show findings from a project with the overarching purpose to gain knowledge about how biology education in secondary school can support the development of students' knowledge and action competence in relation to antimicrobial resistance (AMR) - in other words, competence to make decisions based on knowledge as well as values and priorities. The basic design of the project is to plan, perform, analyse and modify teaching in cycles to develop relevant and functional teaching sequences, taking into consideration problematic situations that students face when they encounter the content of AMR education. A teaching sequence of four lessons was planned collaboratively between researchers and three biology teachers at two different secondary schools. In this paper, we will focus on one of the activities, namely a group discussion about consuming the Cypriot cheese halloumi. The activity was carried out in the fourth of the lessons, as an activity where knowledge and priorities could be put to use. Analyses will be carried out of students' group discussions in a study case where many different interests are at stake. Discussions in 15 different student groups will be analysed by practical epistemology analysis. The preliminary results show that problematic situations arise of purely scientific matter, where students lack knowledge about the situation in order to proceed in the meaning making process. Another problematic situation arises in relation to how AMR is spread. The assignment also made the students discern that the problem in the study case make up a very complex situation. In the discussions in several groups, it became clear that there are many actors involved in producing and trading halloumi, and thereby values and priorities became central in the discussions. The findings will be used as a basis to make changes in the teaching sequence.