

## DETERMINING PROSPECTIVE SCIENCE TEACHERS' ASSOCIATION LEVELS OF ELECTRICITY CONCEPTS

Dr. Özgül KAYA Karadeniz Technical University Fatih Faculty of Education Department of Secondary Science Education Trabzon, TURKEY

Res. Assist. Seyhan ERYILMAZ
Karadeniz Technical University
Fatih Faculty of Education
Department of Secondary Science Education
Trabzon, TURKEY

Prof. Dr. Ali Rıza AKDENİZ Karadeniz Technical University Fatih Faculty of Education Department of Secondary Science Education Trabzon, TURKEY

## **ABSTRACT**

Science teachers should know basic science concepts and associations between them in terms of successful concept instruction. It is also important for prospective science teachers to know these basic concepts and associate them properly. In this research, it is aimed to determine associations of electricity concepts taking part in science and technology curriculums by prospective science teachers; teachers in a near future. Basic concepts partaking in the unit of 'Electricity in Our Life' were designated and it was asked for 3<sup>rd</sup> class students (n=55) studied in Science Teaching Program at Karadeniz Technical University to prepare a concept map by using these concepts. Associations were written as a text and classified by researchers as false, partly true and meaningless. It is seen that participants have difficulties in association of electricity concepts, use some alternative concepts, do not associate all of the given concepts and add associations about some concepts that were not given. It is suggested that teachers and lecturers should use these concepts carefully, direct students to accurate sources; develop concept association oriented materials and implement them.

**Key Words:** Prospective science teachers, electricity concepts, association.