ABSTRACT

The theoretical part of the thesis is focused on the description of sensory analysis, its history, basic methods, principles, and procedures in the analysis of solutions. It specializes in three basic tastes: salty, sour and bitter. It then focuses on explaining the basic analytical methods whose applications can be found in practical chemistry teaching, in particular an introduction to the principles of conductometry, spectrophotometry and potentiometry. It then addresses the issues of science teaching, language and the difficulty to learn these sciences. The aim of this bachelor thesis was an attempt to increase the transparency of analytical methods in practical chemistry teaching through sensory analysis methods. Building on previous work addressing this issue, further experimental activities were designed and piloted. These activities give the possibility to increase first of all the interest and motivation of the students in chemistry, then to lead the students to think on their own, to find new solutions, to be able to work with the instruments within the analytical methods and to verify and compare the results of the measurements. The activities have been validated on chemistry teacher education students and are included in the practical part divided into sensory and instrumental parts. The thesis also contains a list of evaluation of reports in which the evaluation records can be found within the activities for salty, sour and bitter taste. Future work is planned to validate these themes on a larger sample and to expand the number of activities.

KEYWORDS

sensory analysis, laboratory activity, conductometry, spectrophotometry, potentiometry