INVESTIGATION OF TEACHING APPROACHES USED IN TEACHING CHEMISTRY IN GRADE 11: A CASE STUDY IN WALAPANE EDUCATION ZONE

D.M.M.P. Dissanayake

Postgraduate Institute of Science, University of Peradeniya, Peradeniya, Sri Lanka

Results of G.C.E. (O/L) examinations and zonal level achievement tests have shown that student achievement level is lower in chemistry section than other section of the science subject. This might be due to the poor teaching learning process of the subject in schools. Teacher should be a good facilitator in teaching learning process to achieve the objectives of the lessons. To be an effective facilitator, teacher should have a good training about the process of teaching and learning. Therefore, this study was carried out to identify the relevant training needs of teachers and to apply the results to develop further teacher training programs. To learn about their perception of the teaching process, a questionnaire was distributed among teachers. Students' perception on the teaching learning process was also investigated by a questionnaire distributed among randomly selected studets. Though the analysis of the two questionnaires, it was difficult to find out the most common teaching method used in class rooms. Therefore, Brunel test method was used as an indirect method to find out the most common teaching methods used by teachers. Data collected by questionnaire and Brunel test were compared and summarized. Then class room observations were done to verify the data collected from the questionnaire. Informal interviews were done with teachers to clarify some problems in classroom observations. In-service advisers of the zone were also interviewed to get some details about teaching learning process. Problem solving method, lectures, demonstrations done by teachers, group activities and practical work (labs) are commonly used methods in teaching chemistry. From these methods problem solving method was the most common. However, practical work (labs) was rarely used in the teaching learning process compared to others. Though the teacher used different teaching methods in the class room, it was always teacher centered. Students' low literacy levels, students absenteeism, lack of teachers' knowledge on some science concepts and lack of physical resources are prominent problems in teaching learning process. Therefore, teachers should be made aware of teaching methods that can be used to teach chemistry. Similarly, they should be trained to use a student centered approach in the classroom. Moreover their practical knowledge should also be enhanced by ongoing trainings. They should also be trained to identify and use low cost alternative apparatus in practical work.