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BUILDING STUDENTS' INTEREST IN CHEMISTRY THROUGH SIMPLE EXPERIMENTS USING HOUSEHOLD CHEMICALS

A PROJECT REPORT PRESENTED BY

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ABSTRACT

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The educationalist found more failures in the chemistry subject in advanced level stream in the past two decades of our country. Chemistry is a common subject in the science stream. Compared with other subjects, chemistry is commonly believed to be more difficult subject. The teachers engaging in paper marking of Advanced level chemistry subject and Ordinary level science subject have noted that most students do not answer properly to questions based on chemical reactions; chemical application and most students have not understood correct concepts and theories of chemistry. The research has been found many incorrect applications of chemicals in day to day life by students.

The aim of learning chemistry is to understand concepts of chemistry, learning principles and themes to explain and comprehend experimental facts involved in chemical changes. The teachers of chemistry found the reasons for high failure rate on this subject. The reasons were lack of laboratory facilities in schools, insufficient supply of chemicals and equipment, students irregularly participation in chemistry classes, and they did not have enough time to complete the very broad chemistry syllabus in school time table. Most of the students did not like this subject. They always say that chemistry is a boring subject but it is compulsory, hence they have to engage in work unsatisfactorily.

The aim of project was to introduce enrichment of few qualitative experiments which can be carried out even outside of the practical class. This also identifies the students' current knowledge and understanding about chemical education and real life experiences.

The tools of this research were questionnaire for teachers, informal discussions with students and teachers, pre-test and post-test. A set of qualitative simple experiments using commonly available chemicals in the market were introduced in this project. The research helps to solve the above mentioned problems because of the qualitative experiments can be carried out outside of the laboratory using simple equipment. Accordingly active teaching and learning method practiced in this research encouraged the students to improve learning pattern and enthusiasm in the chemistry subject.

Here a pre- test was applied with MCQ questions relating to common chemicals available in the market for day to day application. There were two hundred and seven students to face the pre-test, but the most number of students did not score enough marks to reach the highest competency level of the pre-test.

According to the pre test results, students are with a lack of experience in chemical activities of day to day life.

The aim of teaching chemistry is to understand real concepts and principles of chemistry and comprehend experimental facts involved in chemical changes of real life experiences.

Thus, this project was aimed to introduce a new way of teaching and learning procedure which gives a better feedback to the students.