

LEARNING SCIENCE THROUGH ENVIRONMENT RELATED ACTIVITIES AT PRIMARY SCHOOL LEVEL

P.R.K.A. VITHARANA¹ AND S. KARUNARATNE²

¹*Ruwanpura National College of Education, Wellandura, Kahawatte.*

²*Science Education Unit, Faculty of Science, University of Peradeniya*

Knowledge and skills of science are required by each and every individual to live successfully in the modern complex world. In order to gain such knowledge and skills, a proper foundation with a number of experiences that allow children to be alert and curious about the things is essential in the early years of education. The primary cycle of education has been divided into three key stages, namely; key stage one—grade I and II, key stage two—grade III and IV and, key stage three—grade V. The purpose of this study was to provide children with enjoyable and exciting learning environment by organizing hands-on science activities through the subject—Environment Related Activities (ERA) at primary level of the school system.

A preliminary study was conducted by administering a questionnaire to primary teachers to understand how they teach ERA and their difficulties. Ten classrooms were observed to identify strengths and weaknesses of teachers in teaching science related components of ERA at key stage one. All the lessons were tape recorded and detailed fieldnotes were made. Same teachers were interviewed to make clarifications of weaknesses. By analyzing data gathered from the questionnaire, classroom observations and interviews using triangulation, it was found that 90% of teachers were incapable of organizing their lessons with activities to provide children with enjoyable opportunities. They were not competent to get the active involvement of children and to use a variety of teaching aids in their lessons. Hence, hands-on science activities were developed for each theme of ERA to enhance curiosity of children and to improve the skill of observation, which is essential in learning science. These activities were piloted in five classrooms in three selected schools. Necessary improvements of the activities were made using the data obtained through observation and feedback received from teachers.

Children were very active in gaining experiences by developing their senses through seeing, touching, tasting, hearing and smelling. They were so curious to see the outcomes of the activities by collecting things, measuring, pouring and recording what they had observed. They were very enthusiastic in finding out things for themselves. Teachers' responses towards developed activities indicated that children were very interested in learning science through such activities and were motivated to be inquisitive and investigative. The teachers stated that they were motivated to plan activities to involve children in doing science and, it is not necessary to explain everything for the children. As teachers requested, it is essential to guide primary teachers through seminars and activity-based workshops. These will help them to organize their Environment Related Activities (ERA) lessons to involve children actively by providing opportunities through enjoyable and challenging activities with problem-solving.

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