

**ENHANCING STUDENTS' LEARNING OF SCIENCE CONCEPTS THROUGH
A BLENDED LEARNING APPROACH**

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The blended learning approach is essential to enhance students' interest in science. The primary objective of this study is to explore whether the blended learning approach can be used to enhance students' knowledge and understanding of science concepts and their interests in learning science. Under new educational reforms to be implemented in Sri Lanka, the existing science curriculum has been revised by incorporating inquiry-based and blended learning approaches. Prior to the island-wide implementation of the reforms, newly developed curriculum materials were tested through a pilot study. The current study is based on one of the pilot studies conducted with 30 grade 10 students. The purposive sampling technique was employed. Google classroom was used as the blended learning platform. While pair work and hands-on activities were carried out in the physical classroom, introduction to the lesson, recording, reporting and self-reflection on hands-on activities were facilitated through Google classroom. Students' views on the blended learning experience were gathered through an observation schedule and student interviews. Students' knowledge and understanding were assessed by using rubrics. Results revealed that using the blended learning approach has enhanced students' knowledge and understanding of some science concepts and their interest in learning science. In addition, students could develop inquiry skills and 21st-century skills through blended learning activities.

Keywords: Assessment, Blended learning, Hands-on activities, Inquiry-based learning, Students' interests