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**Potential for integrating mobile phones in science teaching and learning in Sri Lanka:  
Findings from professional development workshops and a follow up study**

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The potential offered by technological tools based on Information Communication Technology (ICT) and mobile devices for science teaching and learning are now well recognized. Even though these tools are widely used in most of the developed countries, they are not widespread in developing country like Sri Lanka. One of the main barriers for their widespread uptake is the cost. Therefore, a cheap alternative such as the use of mobile phones is worthy of consideration. This study was conducted to assess the mobile phone readiness of Sri Lankan science teachers as a tool in teaching-learning and to plan and implement a process.

A mail survey and semi-structured interviews were conducted to gather information on the attitudes of teachers and the prevalence of the use of mobile phones in teaching and learning. Results revealed that science teachers have positive attitudes towards the use of mobile phones for teaching and learning. However, the findings also showed the importance of developing the teachers' knowledge and skills prior to integrating mobile phones in the teaching and learning processes. A carefully designed process was used as a change agent to build up the teachers' knowledge and skills on using mobile phones for teaching. Steps in this process were: A brainstorming session; a hands-on-session; a three-day planning workshop; lesson implementation, and a final review workshop.

During the workshops, the teachers planned four science lessons that integrated mobile phones. These lessons were role-played and refined before their implementation in real classrooms. The teachers participated in the review workshop to share their experience, thoughts and the problems of using mobile phones in lessons.

During the workshop and lesson implementation, data were collected using video, audio recordings and field notes. Data were analyzed using a thematic analysis technique using NVivo 8 software.

Two main themes emerged from the analysis. They were professional development workshops (a) enabled teachers to recognize the potential of mobile phones for science teaching and learning, and (b) helped teachers to share their experience related to mobile phones for science teaching and learning. A follow up study showed that some teachers continue to use mobile phones for their teaching and learning.

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