



UNIVERSITI TEKNOLOGI MARA

**THE EFFECTIVE USE OF INFORMATION AND COMMUNICATION TECHNOLOGY  
(ICT) IN THE TEACHING AND LEARNING OF SCIENCE AMONG THE PUPILS  
IN YEAR 4 IN SK MEDANG, SARAWAK.**

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## Abstracts

The purpose of the study was to identify and analysed the effectiveness of teaching and learning Science using the methods based on the use of modern technologies. The method describe are the use of ICT in the teaching and learning sessions among the Year 4 pupils at SK Medang, Pusa, Sarawak. It also to identified whether the used of ICT in teaching and learning can attract the pupil's interest to learn the Science subject. Sixteen pupils from Year 4 were involved in this study. Two sets of paper and a form, which are pre-test paper, post-test paper and questionnaire form were prepared for pupils. The pre-test and post-test paper consist of two section, objective and subjective question while the questionnaires form consist of two parts about demographic and the effectiveness of ICT applications in Science subject. Overall, the results of this study are consistent with researcher's statement. This study confirms that pupils were more easily understand some specific Science topics with the used of ICT applications as compared to teaching by using blackboard and chalk only. The used of ICT applications are very effective for certain topics that have visual and audio effects. Besides that, it also showed that ICT applications during lesson session can help to improved pupils' understanding of the particular science topic. In fact, the use of ICT applications in learning sessions also attracted the interest of pupils while giving pleasure to the pupils in the learning process. Therefore, it is proven that the use of ICT so much help and effectiveness in the delivery of teaching sessions. It is recommended to others especially the administrative and other science teachers to understand the importance of ICT in helping pupils develop an understanding of a topic and it's not just for science subjects, but also for other subjects. Researcher also want to prove that the sacrifice of teachers' to provide teaching aids using ICT applications is more worthwhile than just focusing on the use of the blackboard and chalk only. This is because pupils feel more fun and raise their interest in the subject of Science. In conclusion, the researcher agreed that pupil's learning session should be diversified, and one of the most effective methods is to use ICT applications.

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# CHAPTER 1

## INTRODUCTION

### **1.1 Introduction**

Information and Communication Technology (ICT) is one field of learning that involves various fields, especially computer and communication systems. ICT is a technology used exclusively in the use of computers, communications equipment and software application for acquiring, processing, storing, sending, retrieving, changing and protecting information anywhere and anytime. Therefore, this standard focuses on software applications and knowledge in dealing with a variety of hardware shape information on the level of pupil abilities. In Level 1, the focus is on the integration of ICT across the curriculum.

According to Dokumen Standard Kurikulum Pentaksiran Sains Tahun 3 (2012), software and hardware skills in ICT will produce some of the skills of communication skills that involve partnership and dissemination of information; and security deployment information, problem-solving skills including thinking critical, creative and reflective as well as investigations, exploration and arcing idea. Pupils will acquire the ability to handle information systems confidently, accurately and diligently. Code of Conduct ICT will foster communication in attitude responsibility, respect, collaboration and accountability.

Based on the content of needed as stated above, it is obvious that every school has a very big responsibility in implementing and achieving the goals and requirements. Even among the administrators, teachers and pupils also need to keep learning and teaching sessions to be in line with the need to achieve the ministry's vision.