

**AN INVESTIGATION INTO THE INTEGRATION OF COMPUTER  
TECHNOLOGY IN TEACHING AND LEARNING OF BIOLOGY IN  
SECONDARY SCHOOLS IN GATUNDU NORTH SUB-COUNTY**

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## ABSTRACT

Over the years, education stakeholders in Kenya have lamented over poor performance in sciences and mathematics in national examinations. In an attempt to change this bad situation, the ministry of education in conjunction with the government of Japan came up with a remedy in the name of strengthening mathematics and sciences in secondary education (SMASSE). This is a body that was charged with looking for means and ways of improving the performance of science and mathematics in national examinations. For a number of years, the body has been in operation. It is mandated to give in-service training to practicing teachers. One of the remedies to poor performance has been the integration of computer technology in teaching sciences and mathematics. As such, integration of computer technology has been incorporated in the in-service training of teachers every time they go for in service during school holiday. It is for this reason that the researcher sought to investigate whether the knowledge obtained from the in-service course is put into practice. Hence the purpose of this study was to investigate into the integration of computer technology in the teaching and learning of biology in Gatundu North Sub-county in Kiambu county public secondary schools. The purpose of the study was to assess the integration of computer technology in the teaching and learning of sciences in secondary schools and specifically in biology in Gatundu North sub-county. Its objectives were: To find out how well schools in Gatundu North Sub-county are equipped with computers, their accessibility for use in teaching and learning biology; To determine whether integration of computer technology promote teaching and learning of biology in secondary schools and finally to identify barriers to integration of computer technology in teaching and learning biology in secondary schools in Gatundu North Sub - County. The study was based on constructivist theory. Descriptive research design was used. A total of one hundred and thirty eight respondents were sampled for the study. Questionnaires collected from field were checked to confirm if all questions were answered and data was coded. Qualitative data was first organized into themes, then descriptive statistical method was used after frequencies and percentages were calculated from the data obtained in the field. This information was presented on tables to make its interpretation easier and clearer. The study found that most secondary schools in Gatundu North Sub -County despite the fact they had computers, the available computers were insufficient and so that teachers of biology preferred to teach without them because much time was wasted as students were supposed to wait for others to finish. Majority of the respondents were of the view that integration of computer technology in teaching and learning of biology did not promote teaching and learning of biology because many students were not much familiar with computers since many had interacted with computer for the first time in secondary school. This study recommends that since most schools failed to integrate computers due to lack of computers and also lack of enough computers to cater for each student, government to implement a project that will ensure that all the secondary schools are well equipped with computers.