The purpose of this study was to investigate some of the causes of poor performance in Physical science. The sample was composed of five secondary schools in Busia district. The data gathering instruments were administered to the teachers involved in teaching Physical sciences in the sampled schools. All the teachers interviewed were trained and had either a diploma or a degree in Science education.

Some of the areas covered in this research include the degree of improvisation of apparatus, availability of appropriate text-books for teaching this subject, the approach in teaching the subject and the effectiveness of the supervisory role of head-teachers.

The research tools used included an interview guide, observation guide, text-book evaluation guide and analysis of examination papers.

The results show that lack of appropriate apparatus and inability of teachers to improvise hinder effective teaching in physical science. This in essence has meant that teachers theoretical approach was the dominant method used in teaching and the practical approach was neglected.

From the low numbers of pupils enrolling for this subject it was found that pupils tended to dislike the subject. From the finds of the study and given the small number schools studied, some recommendations are made to improve performance and for further research into the area of poor performance in this subject.