

This research project was conducted in five selected secondary school in Kericho District, Kenya, to identify: the problems experienced by girls in learning physics at 'O' - level and their implications on the girls' interest in the subject.

The purpose of the study was to attempt and find out some information about the problems and difficulties that are experienced by the girls (students) while learning physics in their schools. The issues investigated included the availability of physics textbooks; the shortcomings of the textbooks used by the teachers and students; the nature of physics concepts and reasons as to why they (girls) drop the subject. The study also aimed at finding the feeling of the teachers and students towards girls studying physics.

The sample students were mainly drawn from forms three and four girls and their respective physics teachers. From each of the selected schools 15 girls were drawn at random plus two physics teachers who teach the sampled girls. Thus a total of 85 respondents were expected to participate in the study, but to unavoidable circumstances the sample population reduced to 83.

The research instruments used in the project constituted two types of questionnaires; one for teachers and the other for students. Each questionnaire had two sections 'A' and 'B'. Section 'A' contained questions which were fact-finding while section 'B' concentrated on the feeling of the teachers and students towards physics.

Two kinds of questions were used in section 'A', namely, closed-ended and open-ended. Each kind was analysed separately as parts I and II respectively. Section 'B' questionnaire items constituted declarative statements and each had five choices in which a respondent had to choose only one alternative that conformed with the respondent's feeling about the meaning of the statements.

The information gathered through these research instruments were pooled together and summarized in tables 1 and 6 showing percentages corresponding to each questionnaire item. These percentages were used to describe the existing situation regarding the difficulties the girls had in learning physics.

This study revealed that, in the sampled schools the main textbooks used by the teachers and students are: complete Juniors Physics by A. Atkinson; Ordinary Level Physics by A.F Abbott and Principles of Physics by Nelkon. These books are inadequately available in the schools as the ratio of textbooks to students is high.

The sampled girls indicated that, they found the language used by the textbooks to be difficult despite the claim by their teachers that the level of language was appropriate to them. The other obstacles encountered by the girls in learning physics included; difficulty in manipulation of mathematical calculations; lack of confidence in following the teacher due to his/her style of teaching and other characteristics.

From the teachers point of view, the girls have a number of shortcomings in learning physics, viz, poor physics background from primary schools; poor reading habits, the girls were easily swayed by the general consensus amongst older students that physics is difficult, etc. These

problems modulate the girls' interest in the subject. For example, mathematics was indicated as the main cause of girls dropping physics and opting for other subjects.

The main areas influenced by these problems includes reading time devoted to physics; value of the subject knowledge learnt in daily life and desire to pursue the subject for further studies, just to mention a few.

In light of the above named problems and their implications on the girls' interests, the researcher made some recommendations on possible areas for further researcher for more information and hence provide conceivable channels of remedial actions. The researcher also recommended steps which can be adopted to encourage girls to study physics and eventually join the so-called masculine jobs. These included proper guidance and counseling about careers; regular visits to sites, industries, etc. Where physics knowledge is applied; inviting guest speakers to talk to them; especially women, about what they do in science Oriented Careers.

Lastly, this study was carried out in the period, July to September 1986, and hence the report may not be detailed as expected, as time was the main limiting factor in addition to other limitations.