

## ABSTRACT

The low enrolment of female students in science related courses in tertiary institutions in Kenya has been in the public domain for some time and it is of concern to education policy makers. Women's equal enrolment with their male counterparts in science related courses is key to drive Kenya's Vision 2030. This initiative aimed at making the country a newly industrializing middle income country by providing high quality life for all its citizens. The purpose of the study therefore was to determine factors which hinder female access to science related programs in technical training institutions in Nyanza Region, Kenya. The specific objectives of the study were to: determine the enrolment failures of female compared to male in science related courses; assess factors which hinder female access to science related programs and determine factors that can promote female access to science related programs. The available related literature reviewed has revealed that there is low enrolment of female students in public technical training institutions in Nyanza Region. The conceptual framework adapted to guide the study showed that there are several conditions which need to be put in place to enable female enrolment in science related programs to be at par with male students' enrolment in technical training institutions. Ex-post facto research design was used to carry out the study in public technical training institutions in Nyanza Region, Kenya. The study population involved 2,200 male and eight hundred (800) female students enrolled in science related courses, forty (40) Heads of Departments and eight (8) Principals in public technical training institutions in Nyanza Region, Kenya. The study used stratified sampling technique to sample both male and female. The study further used simple random sampling technique to sample 30% of male and female students from their strata. On the other hand, the study also used purposive sampling technique to sample forty (40) Heads of Departments and eight (8) Principals for the study. Questionnaires and interview schedules were used to collect data from the respondents. The instruments were validated by experts in the School of Education at JOOUST and their comments were used to construct the final instruments. To ensure reliability of the instruments, the researcher piloted the instruments in two public technical training institutions; this helped to remove ambiguity, questions that were not soliciting expected results and those that were repeated. Questionnaires were issued to the respondents and interviews were conducted by the researcher. Data collected were analyzed through descriptive statistics. Data was presented in form of tables, pie charts and verbatim reporting. The study findings might help in formulating policies geared towards narrowing the existing inequalities in enrolment of female students in science related courses in technical training institutions; improve enrolment of girls in science related courses in technical institutions and might also contribute to the knowledge in the field of gender equality where further research on gender issues were to be recommended by this study.