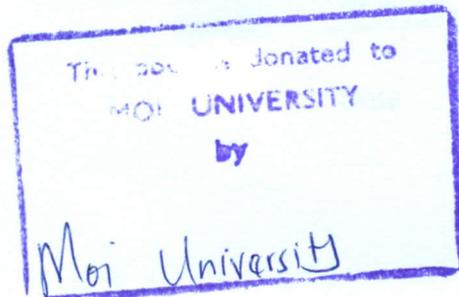


**KENYAN PRIMARY TEACHER EDUCATION TRAINEES' PERCEPTIONS  
AND INFLUENCE OF SUBJECT SPECIALIZATION AND GENDER ON  
PERFORMANCE IN SCIENCE PROCESS SKILLS**

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## ABSTRACT

The purpose of this study was to determine Primary Teacher Education trainees' perceptions regarding conceptualization of science subject content, qualification for teaching science in primary schools and Integrated Science Process Skills (ISPS) and further find out how subject specialization and trainees' gender influenced performance in ISPS. Quantitative approach was used. The target population was the 2014 second year trainees in the five public primary teachers training colleges in the Rift Valley Zone in Kenya. Stratified proportionate random sampling techniques were used to select 300 male and female trainees from both science and arts options. Primary Teacher Trainees Questionnaire and Test of Integrated Process Skills were used for data collection. Descriptive statistics was used to describe the data and independent *t*-test further used to analyze data from the test. This study found out that more trainees specializing in science subject rated their conceptual understanding of science subject content and ISPS to be higher and also scored higher grades in ISPS than trainees specializing in arts subject. The study also found out that more of the trainees in science option than arts option were of the opinion that science be taught by trainees who specialized in science. The study further found out that more male trainees than female trainees rated their conceptual understanding of science subject content and ISPS to be higher and also scored higher grades in ISPS than female trainees. This study recommended that science subject in Kenya's primary schools be taught by teachers who specialized in science during training. It further recommends that PTE training provide a gender-appropriate training to the trainees that highlights gender differences in performance in science.