Male teacher participation in Preschool teaching is an issue of concern worldwide. The numbers of male teachers are on the decline as days go by. This is a serious indication of gender inequality in the preschool teacher profession. This study is set to assess Effects of male teacher participation on learning in Preschool centers in Vihiga Sub county. The study will be guided by the following objectives: Establish the proportions of male teachers teaching in Preschool centres in Vihiga Sub County, Find out the perceptions of female teachers and parents on males teaching in Preschool in Vihiga Sub County. Identify the challenges faced by male teachers in Preschool centers in Vihiga Sub county. Find out existing opportunities in increasing male teachers’ participation in preschool centres. Deci’s Motivation Theory will guide the study. The Qualitative research design will be employed by the study which will be carried out in Vihiga Sub County of Vihiga County. The study area has 78 primary schools with Preschool sections, 54 church/community based Preschool centres and 21 stand alone Preschool (private) centers. The enrollment as at July 2013 stands at 6,032 children in Preschool centers and 302 teachers. Of these teachers 7 are males while the rest were females (County Education office, October, 2013). The study will use stratified random sampling to sample 38 public and 8 private Preschool centres and 46 teachers from the sampled schools. The study will purposively sample 46 head teachers, 10 parents, 3 ECD field officers and one program director from the Vihiga DICECE. The data collection tools will be questionnaires and interviews. A pilot study will be done by collecting data from head teachers and teachers in 5 Preschool centers not sampled and one parent, two field officers and one programme officer from the neighboring, Sabatia district. The test re-test method will be used to administer the instrument during the pilot study. Cronchbachs’ Alpha reliability co-efficient of 0.8 and above will deem the instruments reliable. Data will be analyzed qualitatively and quantitatively and presented graphically and thematically. It is hoped that the findings of the study will improve male teacher participation in Preschool, consequently making a significant impact on Learning at the sector.