In Africa higher education is characterized by extremely low participation rates with the exception of South Africa. Access and equity in higher education in sub-Saharan Africa are fundamentally determined by access to and the quality of secondary education. However there is an increasing quest for higher education which has not been met satisfactorily. There is however need to assess the contribution of the satellite campuses in ensuring access and participation, as quality issue. The University of Nairobi is running several satellite campuses but studies have not assessed the feasibility of the programmes in increasing accessibility and participation. The purpose of this study was to analyze the contribution of satellite campuses to access to higher education. The study utilized the case of the University of Nairobi. The objectives of the study were i) To analyze the enrollment levels in the various courses offered at the University in the past 5 years; ii) To analyze the contribution of the satellite campuses in the enrollment levels in the University of Nairobi; iii) To determine the influence of accessibility of the campuses in participation of its current students in higher education; and iv) To determine the problems faced by the satellite colleges in ensuring access to higher education of the target population. The theoretical framework for this study focused on a theory of learning with specific reference to the theory of Communities of Practice. The research adopted a descriptive research design on a population of administrators and students in these campuses. The target sample was 36 administrators and 120 students of the University from the satellite campuses. Simple random sampling technique was used to recruit students in each of the satellite campuses into the study. Purposive sampling was used to sample the administrators in the campuses. Two questionnaires, one for administrators one for students was used to collect information from the study respondents. Piloting was done on a small representative sample that was not included in the study. This ensured pre-testing the instruments for validity and reliability prior to the main study. From the findings, most of the students in satellite campuses in University of Nairobi pursue business related courses, while very few pursue their masters or postgraduate studies in these campuses. The current enrollment levels in all the courses offered in the satellite campuses in the University was indicated by the administrators as having increased mainly due to expansion and availability of teaching staff. From the findings, the objectives for setting up satellite campuses by the University were to ensure opportunity to pursue university education is available to residents in various parts of the country with offerings particular to fields of study that characteristically have a low financial overhead. The study recommended that the University of Nairobi needs to develop more satellite campuses in the major towns in Kenya with considerable reduced fee. This will ensure more participation and access of higher education by students from many areas. More learning facilities as well as teaching workforce should be enhanced by the University to improve delivery of services in a concrete manner.