A child’s transition from pre-school to primary school is not a single event of change with only immediate but also far reaching consequences. Success or failure in adapting to the changing context of formal schooling has the potential to shape the child’s educational and social-emotional future. Globally, studies show that more than half the children who enrolled in first grade, either repeated first grade or dropped out. In Sub Saharan Africa the rate is more than one in three (37%). In Nyeri South Sub county, available data indicates lack of readiness and poor performance among Standard 1 pupils. The purpose of this study is to identify challenges facing children’s smooth transition from pre-school to primary school in Nyeri South County. Specifically, the study aims to establish the influence of teacher factors, language factors and parental factors on the smooth transition of children from pre-school to Std 1 in public primary schools in Nyeri South Sub-county. The study will be guided by the ecological developmental model by Bronfenbrenner (1979) and will adopt a descriptive survey design. The target population will be the 56 public primary schools, their head teachers and Std 1 class teachers in Nyeri South Sub-County. A total of 18 (32%) schools, head teachers and Std 1 teachers will form the sample size. To collect data, interviews for head teachers and questionnaires for Std 1 teachers will be used. Piloting will be conducted in four schools with four head teachers and Std 1 teachers in the sub-county. To increase validity and reliability of the research instruments, validity and reliability tests will be conducted and a reliability coefficient of 0.7 will be considered acceptable. Data will be collected using both quantitative and qualitative techniques. Descriptive methods such as frequency distribution, percentages and mean, will be used to analyze quantitative data while qualitative information from head teachers and Std 1 teachers sampled will be organised and described according to study themes. Findings will be presented in form of tables and figures. It is hoped that the findings of this study will help to create awareness to all ECDE stakeholders on the importance of smooth transition from pre-school to primary school.