Mathematics plays an important role in scientific advancement and technological development of any nation. Performance in the subject worldwide has not been impressive. International comparative studies on students’ attitude, engagement and performance in science and mathematics (PISA & TIMSS) have singled out teachers’ teaching practices as wanting. Too often mathematics is taught by teachers describing how to solve a type of maths problem, doing few examples on the board and then setting an exercise for students. Therefore, Mathematics Education curriculum teachers of mathematics go through at the universities and other colleges need constant revision, changes and innovations based on experience and research if effective teachers of 21st century are to be produced. This paper attempts to review and present research findings on the state of mathematics education in Kenya and makes comparison with success cases of Japan, China, Singapore, Hong Kong, Korea and Germany. It then attempts to discuss some of the required reforms and innovations needed to reposition teaching and learning of mathematics in Kenya for effective global competitiveness.

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