

## **I09. Effect of the Fourth Industrial Revolution on the future of the Competency Based Education. a case study of Nairobi County in Kenya**

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### **Abstract**

The Fourth Industrial Revolution (4IR) is the combination of the digital, physical, and biological worlds. The transition from the 8-4-4 system of education to the current Competency Based Education is accelerated by the Fourth Industrial Revolution, which is leveraging artificial intelligence, the internet of things, and the development of smart schools to improve the quality of education. The main purpose of this study was to investigate the effect of the Fourth Industrial Revolution on the future of the education in Nairobi County, Kenya. The study adopted a descriptive research design. The research objectives that guided the study were: 1) To identify the available technologies for the 4IR in schools to improve the Competency Based Education and 2) To find out whether teachers have been trained on the technologies that characterise the 4IR and influence education. The targeted population consisted of 210 primary teachers, of whom 136 were selected through stratified and simple random sampling. A structured questionnaire was used to collect data from the teachers. The data collected was processed using SPSS version 26.0 and analyzed using descriptive statistics. The findings were presented in frequency tables, graphs and charts. The study established that the majority of primary schools have inadequate technology devices for equipping learners with requisite skills that include coding, artificial intelligence, robotics, and advanced analytics. Further to note, was the small proportion of the teachers who indicated that they have been trained on how to integrate technology in the instructional process so as to enhance active learning? The teachers need capacity building on their pedagogical, professional, personality and social competencies that are key tenets for the Fourth Industrial Revolution in improving the Competency Based Education. The government through the Ministry of Education need to equip schools with technological infrastructure and capacity build teachers in order to improve the quality of education during this Fourth Industrial Revolution.

**Keywords:** *Competency Based Education, Fourth Industrial Revolution, Technologies*