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Physics education for capacity development and research in Africa

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The acceleration of socio-economic development is intrinsically linked to the level of scientific development. While the existing scientific interventions within Africa played a transformative role in the enhancement of human capital development, adequate investment in research and development is required to make further significant strides going forward. Unlocking Africa's potential requires sustained investment in research and development. However, inadequate expenditure in research and development as a percentage of gross domestic product by African countries does not augur well for the progressive realisation of sustainable scientific development. This presentation highlights challenges afflicting physics education in Africa and provides a reflection on key areas for intervention to strengthen capacity building. Critical interrogation of enablers and constraints is required in order to harness the efficacy of capacity building efforts to engender fundamental transformative change in relation to meaningful enhancement of human capital development. Reconfiguration of the existing scientific interventions some of which yielded remarkable results remains a key strategic imperative in the long to medium term. The realisation of this key strategic imperative hinges to a large degree on the establishment of collaborative partnerships involving key stakeholders. Contextually appropriate recommendations for coherent acceleration of scientific development within the broader African context are advanced.

Abstract Category

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