

Refocusing Engineering Curricula in Developing Countries for Endogenous Technology Development and Entrepreneurship

O.A.T. Mafe

Abstract

A fundamental cause of the economic backwardness of developing nations is their low level of technological development, resulting from low application of science and technology for the purposes of development. Accelerated technological and industrial development in these countries, therefore, require some urgent and drastic measures. The application of science and technology to the creation of endogenous technologies is a veritable means of achieving rapid industrialization. This, however requires skilled technical manpower which is motivated to create endogenous technologies and also develop it into small-scale industries by being willing to take entrepreneurial risks. The paper, therefore, considers ways and means of incorporating endogenous technology development and entrepreneurship into the engineering curricula of developing countries. It also advocates adoption of Problem Based Learning methodology as a suitable instructional approach for imparting the knowledge, skills and attitude (KSAs) required for successful creation of endogenous technologies and developing them into small-scale industries.

Keywords: Engineering curricula, developing countries, endogenous technology development, entrepreneurship.