

Technology Diffusion and Economic Growth: An Alternative Conceptual Model

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ABSTRACT Technological development goes beyond the acquisition of requisite skills through environmental exposure, education and training to the ability to engage in innovative tasks whose results include improved processes, systems, higher levels of performance, greater efficiency and new products. This article reports the results of a study centred on the links between technology diffusion and economic growth in order to present an alternative interpretation of their role. The methodology involved an initial review of growth accounting procedures, the use of secondary data on registration of patents, energy generation statistics, income per capita and GDP. Next, using internet search engines, technology transfer, adoption and innovation are unpacked in the context of contemporary models of innovation, diffusion and adoption. The resulting elements are reconfigured into linear information flows that mimic knowledge transfer between the phases of the system with specified outcomes. The findings indicate mixed outputs on the basis of which an alternative conceptual model is developed.