

A proposed strategy for Dual Industrial High School Education for Achieving the Requirements of the Fourth Industrial Revolution in the light of Ergonomics (Human Engineering)

Abstract:

The current study aims to develop a proposed strategy for dual industrial high school education in Egypt to achieve the requirements of the era of the fourth industrial revolution, which has come to present new forms of work and it required non-stereotypical disciplines that accommodate the observed changes and set the compass of the educational system for the desired future in order for industrial technical high school education to play the role assigned to it. It aims at graduating qualified human resources to contribute to the development efforts in Egypt and advance growth and development rates, in the light of ergonomics, "human engineering". The descriptive approach has been used for its suitability for the nature of the study, another method used is the environmental analysis method "SWOT ANALYSIS" in diagnosing the reality of dual industrial high school education, and analyzing it to find out its strengths and identify its weaknesses. It is used for analyzing the external environment surrounding dual industrial high school education to determine the most important opportunities available and the threats facing it, leading to the basic concept of building a strategy in the light of ergonomics (human engineering), Which focuses on human interaction with the organizational environment, the cultural, social and informational environment, including tools, products, technical processes, and the services it provides. It also deals with several areas inside and outside the institution, namely: the work system, machines and technology, and the external environment. The study ended with the development of a number of strategic alternatives, and choosing the most appropriate alternative for the development of the dual industrial high school education system, to achieve the requirements of the Fourth Industrial Revolution.

Key Words: Strategy- Dual industrial high school Education - The Fourth Industrial Revolution- Ergonomics (Human Engineering).