

Arab Republic of Egypt
Institute of National Planning



2022

Planning and Development Issues Series No: (332)

**Executive
Summary**

**Strategic Planning of Industrial Technical
Education in Egypt in Light of Deepening Local
Industrialization**

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Study Team

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Introduction

Industrial technical education is the backbone of the industry, a source for providing skilled and technical labor to various industries, and is one of the main axes of the trade and industry strategy emanating from Egypt's Vision 2030. In light of the deepening of local industrialization, industrial technical education is required to graduate a new type of graduates who have high-quality skills, the ability to continue education, and develop their capabilities in line with the requirements of the Egyptian product.

This study aims at an environmental analysis of the current situation of industrial technical education, knowing the trends of graduates of the three-year system, and the expected demand for them, the role of this education in the industry and sustainable development, and drawing lessons learned from contemporary models and trends in the field of improving and reforming industrial technical education. Finally, a strategic planning proposal was presented to improve this education in light of deepening local industrialization.

The current study used the descriptive approach and the SWOT method to achieve the foregoing goals, and it ended with some requirements that represent a framework for activating the role of industrial technical education in deepening local industrialization.

Objectives

The main objectives are to perform the following:

1. Environmental analysis of the current situation of industrial technical education in Egypt.
2. Trends in the supply of industrial technical education graduates (three-year system) and the expected demand for them.
3. The role of industrial technical education in the industry, deepening local industrialization, and sustaining development.
4. Contemporary trends and models for the development of industrial-technological education.
5. The proposed strategic vision for the development of industrial technical education in Egypt in the light of deepening local industrialization.

Methodology

The data was collected from its primary sources of records, statistics, previous studies, and scientific research, and the environmental analysis of the situation of industrial technical education was done by dealing with the components of this education system to detect weaknesses and their causes. In addition, presenting the strengths, opportunities, and threats by analyzing the internal and external environment of this education using the SWOT method, which is a useful tool for analyzing the general situation of the industrial education system under study. This study also used the descriptive method.

Findings

1. The necessity of conducting a periodic review of the industry's needs (the program to deepen local manufacturing) of industrial technical education and for the relative distribution of these needs to the industry sectors. This requires an available and integrated system of information related to the needs of industry and local manufacturing while anticipating the various educational and skill needs in the long term.
2. Raising the level of graduates of industrial technical education, working to raise their efficiency, and providing vocational training on one of the types of technologies used in industry. Moreover, there should be great attention to technical specializations in the field of labor-intensive industries, export industries, and information and communication technology, where dealing with these technologies requires highly skilled graduates.
3. Maximizing the use of contemporary models and trends that support the development of industrial technical education, sending missions of students/graduates, and practical teachers to obtain qualitative training and gain necessary and required experiences.
4. It is necessary to consider society's negative view of technical education graduates by not linking enrollment in this education with obtaining lower grades, and raising the wage levels of these graduates while improving their living and working conditions.
5. Continuous and periodic follow-up of the evolution of the role of industrial technical education in achieving industry requirements and deepening local manufacturing (follow-up areas in training - quality - meeting manufacturing needs - sustainable professional development for teachers - combined participation).

Recommendations

1. Improving the teaching performance of industrial education teachers by refining students' experiences and determining their trends in technology and experiences provided to them. Helping in achieving models in changing these trends while acquiring skills with the importance of giving them confidence in teamwork experience, problem-solving, and providing innovative solutions.
2. Developing the technology curriculum and making industrial education aid to local industrialization.
3. Improving vocational training in schools or in factories, which requires the continuation of qualifying industrial education teachers, preparing the place for training, and providing the necessary tools, equipment, and materials. At the same

time, there should be an encouragement to the training curriculum to coordinate the relationship of the school with the workshop, while adhering to quality standards and strengthening and supporting partnership in implementing, planning, and evaluating programs.

Policy

- 1- Informing those responsible for industrial technical education among policymakers and decision-makers of the importance and feasibility of continuous and effective development of all elements of this education system, emphasizing that the development process of education is a societal process that includes all representatives in its context and all stakeholders and aspirations.
- 2- Keeping pace with the efforts being made to reform and improve the path of technical and industrial education and vocational training by reconsidering their foundations and addressing their structural imbalances. In addition to remedying the shortcomings in performance rates that were reflected in international development indicators and guides of comparative performance at the world level.
- 3- Contributing to achieving the state's goals for sustainable development, Egypt's Vision 2030, through the national program for local industrialization. It aims at raising the competitiveness of the local product to be an alternative to the imported ones and to support productive activities in the promising industrial sectors.