



Fayoum University
Faculty of Education
Department of Education Administration and Policies

Activating the Role of Information Technology in Achieving School-Based Reform in General Secondary Schools in Egypt

An M.A. Proposal in Education

With a major in Education Administration and Policies

Submitted by

Shaimaa Said Mahmoud

Under the Supervision of

Prof. Youssef Abd Al-moa'ti Mostafa

Professor and Head of Education Administration
and Policies

Faculty of Education

Fayoum University

Dr. Abeer Ahmad Mohammad Ali

Lecturer in Education Administration
and Policies

Faculty of Education

Fayoum University

Translated by FUCLT

Dr. Ahmad M. Abd Al-salam

Summary

In the present era, the world is conspicuously witnessing a great deal of scientific and technological progress, the explosion of knowledge and culture, and the challenges posed by the nature of the age in which we live. Consequently, these challenges affected the various aspects of life with its social, economic, cultural and educational dimensions. The challenges of information, with its different dimensions, constituted the starting point of many calls for the reform of the educational system and technology plans in order to bring about certain changes in all educational institutions. These institutions should not ignore this amazing number of technological innovations and have to fully integrate them into school improvement and development plans.

Problem of the Study:

The study problem is determined by the following main question:

How can the role of information technology be activated in achieving school-based reform in general secondary schools in Egypt?

The following sub-questions emerged from this question:

- 1- What is the theoretical and conceptual framework for the role of information technology in achieving school-based reform?
- 2- What is the most important contemporary global experience in using information technology in achieving school-based reform?
- 3- What is the theoretical reality of the use of information technology in achieving school-based reform in general secondary schools?

4- What is the field reality of the use of information technology in achieving school-based reform in general secondary schools?

5- What is the proposed scenario for activating the role of information technology to support school-based reform in achieving school-based reform in general secondary schools in Egypt?

Importance of the Study:

The importance of this study emerged from the following considerations:

1- The importance of the general secondary education stage: it is considered as an intermediate stage in the education process, which should last forever. The seriousness of this stage is highly illustrated by its association with the stage of adolescence and the determination of the students' future. Besides, it granted knowledge and life skills for its students' in order to be good citizens in the 21st century.

2- The importance of the subject under study: It deals with a subject of vital concern for those interested in education in general, and those interested in the reform of education in particular, namely the school-based reform and preparation for educational accreditation that should be achieved through information technology.

3- Lack of Arab research and studies on the subject of school-based reform, so this study represents a new scientific addition.

4- The importance of this study is also attributed to the quality of the beneficiaries. It is expected that the beneficiaries of the educational

process in Egypt will benefit from this study on the national level, represented in the Ministry of Education and on the local level, represented in administrations and schools.

Objectives of the Study:

The study aimed at the following:

- 1- Identifying the theoretical framework, and indicating the role that information technology plays in achieving school-based reforms.
- 2- Identifying the experiences of some countries in the use of information technology in achieving school-based reform.
- 3- Studying the reality of the use of information technology in achieving the school-based reform in secondary schools in order to identify the most important obstacles to the use of information technology in achieving school-based reform.
- 4- Developing a proposed vision to activate the role of information technology in achieving school-based reform in secondary schools in Egypt in light of the experiences of the United States of America, England and Australia. .

Limits of the Study:

The current study limits are as follows:

- 1- Topical limits: the study was limited to study the role of information technology in achieving school-based reforms in the following areas (school independence, decentralization support, school-based training, community

participation, self-assessment and school accounting) in the general secondary schools of the Arab Republic of Egypt. Besides, this study dealt with the experiences of the United States of America, Australia and England in the use of information technology in achieving school-based reform in general secondary schools of education.

2- Human Limits: The study was limited to some human elements within the general secondary school: the school leaders (the manager, the vices), the first teachers, the statisticians and information unit specialists and the training unit officials.

3- Spatial Limits: The study was limited to some public secondary schools in the governorates of (Cairo - Fayoum – Alexandria).

4- Time Limits: The field study was applied on the period from December 6, 2017 to February 26, 2018.

Methodology of the Study:

The researcher used the descriptive approach in the study to identify the concepts, objectives, principles, requirements and elements of school-based reform as well as to recognize the concept of information technology, its role in achieving school-based reform components, and monitor the experiences of the United States, England and Australia in the use of technology information in achieving school-based reform. Besides, this study scrutinized and analyzed the reality of the use of information technology in achieving school-based reform in general secondary schools in Egypt in order to identify obstacles that hinder the use of information technology in achieving school-based reform. It also attempted to visualize

a proposal to activate the role of information technology in achieving school-based reform.

Sources and Tools of the Study:

The study relied on multiple sources of data, including: official documents, reports, symposiums, conferences, specialized scientific periodicals, books and bibliographies of Arabic and foreign publications available on the subject of study, scientific letters and researches, and some websites in addition to a questionnaire, and conducting some personal interviews with the sample.

Steps of the Study:

The current study is conducted according to the following steps:

The First Step: The general framework of the study includes: (an introduction – problem of the study - importance of the study - objectives of the study - limits of the study - study terminology - study methodology - sources of study and its tools - previous studies and comments - Steps of the study.

The Second Step: The theoretical and conceptual framework for the role of information technology in achieving school-based reform.

The Third Step: The most important contemporary global experiences in the use of information technology in achieving school-based reform.

The Fourth Step: Field Study.

The Fifth Step: a proposed vision to activate the role of information technology in achieving school-based reform in secondary schools in Egypt.

Results and Recommendations of the Study:

The study found out that there are a number of obstacles that hinder the use of information technology in achieving school-based reform in general secondary education schools, the most important of which are the following:

-The weakness of the school's technological infrastructure (networks, technological means, computers).

-Lack of financial support to provide incentives to those who excel in using technology to improve school work.

-Weak budget to maintain and modernize the equipment and instruments in the school.

-The weakness of the contribution of the higher administrations in supporting the information systems and technology in the school.

-Most managers hold paper-based routines in school management.

-Lack of technical staff trained on the collection, processing and storage of data due to lack of sufficient knowledge in the secondary school employees how to deal with it, and lack of awareness of the importance of the use of information systems and computer in the completion of administrative work along with weak training on how to process and analyze data.

The Most Important Recommendations of the Study:

- Increasing the financial authorities of schools to use resources other than government resources for the technological development of schools.

- The Ministry of Education must encourage companies specialized in the manufacture of computers, software production to provide all facilities for the provision of equipments, and maintaining them periodically, in order to support the infrastructure and metadata of information technology in schools.

- Providing an internal maintenance technician who should be continuously in school to maintain and modernize the equipment as well as assisting in training on information technology.

-Encouraging the Ministry of Education students and teachers outstanding and distinguished in the production of various software, as one of the areas of investment in the field of information technology and systems, and the development of their intellectual capital.

-The ministry should seek to increase the number of computers in schools as well as increasing its capabilities to overcome the problem of equipment aging, and keep abreast of developments and technological changes.

-The private sector institutions should be responsible for providing electronic devices and equipment in schools and performing maintenance periodically.

-Providing moral and financial incentives for those who excel in using technology to improve school work.

-Establishing internal computer networks in schools within public secondary schools to facilitate the exchange of information and internal communication within the school.