INFORMATICS

Secondary Education
Second Year
Humanities and Sciences Sections

Center for Educational Research and Development

National Textbook

New Curricula

Republic of Lebanon

Minstry of Education and Higher Education

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The National Textbook Project

This is the second installment of textbooks completed by the Center as part of a three-stage effort to produce the books called for by the New Curricula. We are placing these books in the hands of students with the great hope that we are moving, step by step, toward the goal of acquiring sound and modern learning, using sophisticated educational means and up-to-date methodology that encourage and reinforce individual thinking and research, the acquisition of skills, the development of ethical and national attitudes, the feeling of national belonging as well as the feeling of belonging to humanity at large.

The on-going revolution in information, communication and educational technology has undoubtedly limited the role of the textbook and lowered the rank it used so recently to occupy. However, in our society and in many other societies, the textbook remains the basic means of education, and it is our duty to exert our utmost effort and care to come up with the best product as to form and content. Yet we should not lose sight of the fact that the textbook is not sufficient by itself but should rather be used as a stepping stone to access other sources of information. What is important is to keep a clear vision and maintain the right course toward our objective. The means should not turn into the end and the student should always remain the focus of the learning/teaching process.

No one ignores or denies the fact that textbook writing requires very high academic and educational qualifications and very wide field experience. The authors committees undeniably possess such qualifications and qualities, yet last year's textbooks did contain some faults and gaps which were duly pointed out by researchers in many articles, and, indeed, we have benefited from some of them. Such is the nature of human work, no matter how good the intentions or how great the effort exerted.

Constructive criticism is a real contribution to raising the standard of authorship, minimizing errors and filling gaps. We only hope that criticism will always be objective and motivated by a desire to enhance educational reform in order to achieve better products.

A favorite adage handed down from our old scholars: "He who criticizes you is as helpful as a co-author". Let all criticism directed at the Center be of this caliber.

In closing, we hope that we all will have benefited from our experience and that the textbooks of the third and final stage be closer to realizing our hopes and more beneficial to our students. We are now preparing ourselves to assess the parts so far achieved of the new curricula and to assure that our educational movement is proceeding on the right track for achieving the best results.

June 2, 1999

President, National Center for Educational Research and Development

Nemer FRAYHA

INTRODUCTION

This is the second of three textbooks prepared to incorporate *Computer Science* into the *Lebanese Educational System* at the secondary education level. This text continues to build on the material covered in the first year's textbook to provide the student the kind of information most needed for a better understanding of today's computer technology and applications.

Throughout the text, the approach adopted is *learn by doing*. The text is full of activities designed to help the student gain a basic understanding of *Database Management*, *Multimedia Presentations*, *Computer Networks*, and the *Internet*. At the same time, students will learn how to effectively use the various tools used to do such activities. Each lesson begins with an introductory statement of learning objectives followed by a series of activities that progress from the most basic to the more advanced in a seemingly continuous activity that keep the students focused with *Tips* and *Know More* additional information.

The rest of the text is organized as follows:

Lesson 1 through 6 cover ***Database Management System***, a popular database program available for most PCs;

Lesson 7 through 11 cover ***PowerPoint***, a program designed to help users create and run stimulating multimedia presentations;

Lesson 12 through 14 discuss the ***Fundamentals of Data Communications*** and ***Computer Networks***;

Lessons 15 and 16 introduce the Internet and describes two of its most important applications: ***Electronic Mail*** and the ***World Wide Web.***

Authors

ABOUT THIS BOOK

As the subject of informatics demands, practice and hands-on exercises are emphasized in this book. The lessons are generally structured to proceed from explanations to practice, to concept acquisition, to generalizations. Each lesson includes several elements that serve the following purposes:

Introduction

To set the framework and the focus of the lesson and state the objectives that the learner is expected to achieve.

Definition

To introduce new concepts.

Activity

To provide hands-on experience about the explained concepts practice.
To provide direct application of learned concepts.

Tip

To provide assistance in solving problems.

Know More

To provide further reading about some sections.

Summary

To provide a short description of the points that were covered in the lesson.

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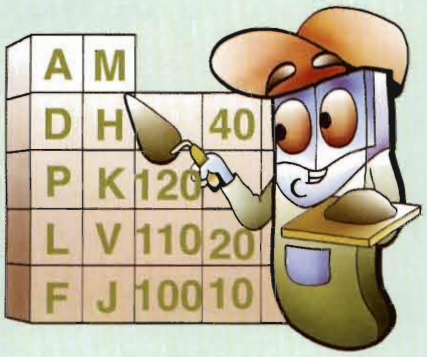

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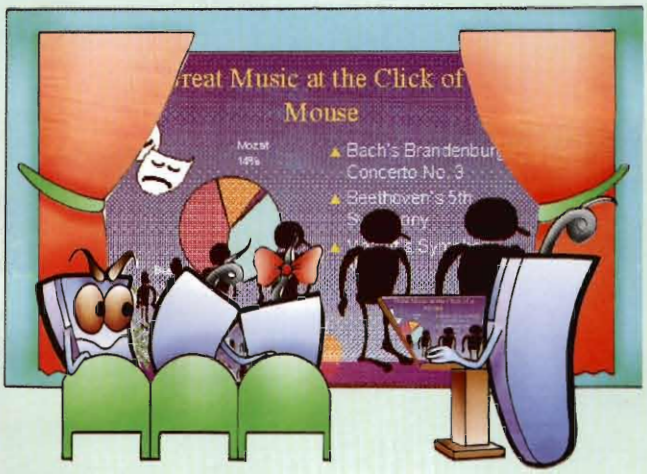

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