

Informatics

BASIC EDUCATION - GRADE EIGHT



National
Textbook

Center for Educational Research and Development

New Curricula

Republic of Lebanon

Ministry of Education and Higher Education

■
INFORMATICS
■

Basic Education

Grade Eight

Center for Educational Research and Development



National
Textbook

New Curricula



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INFORMATICS



Basic Education
Grade Eight

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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 textbook at the intermediate level in a series of textbooks that aim at teaching Informatics at the intermediate and secondary levels. However, formalizing teaching information technology at these two levels does not imply that schools cannot teach basic computer skills such as typing, mouse handling, and running various programs at earlier educational stages. In fact, dealing with computers at earlier stages of education is favored to lay a background to help the students master the computer skills that are being introduced at later stages. Furthermore, using computers in teaching other subjects would facilitate mastering information technology skills.

The goals of this textbook are consistent with the goals of the curriculum at the intermediate stage. They progress along two lines: (1) training the students on useful information processing skills such as word processing, programming, using computer graphics, etc., and (2) helping the students develop desirable skills such as problem-solving and independent learning.

The content and the activities of this textbook aim at expanding the students' knowledge and skills about the computer hardware, managing files, word processing, handling computer graphics, computer programming that were started in grade seven, in addition to a new goal about organizing data in the form of spreadsheet. Thus, the textbook is organized in six units, five of which are continuation of units that started last year and a new unit about the use of spreadsheet. The continuation units are (1) computer components, (2) operating system, (3) word processing, (4) computer graphics, and (5) programming. We recommend the use of the same software that was started last year to minimize possible confusion about software selection.

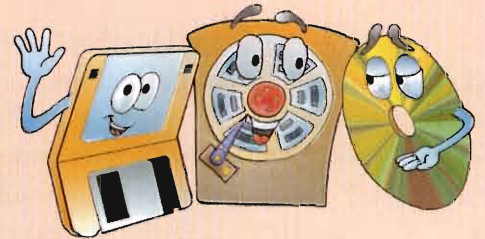
The unit on computer hardware introduces information about the computer memory, the central processing unit (CPU), and the common hardware peripherals. The operating system unit adds information about managing computer files and folders and preparing disks. The word processing unit adds information and activities about styles, tables, and page setup. The computer graphics unit adds concepts and activities about creating new images and manipulating existing ones. The spreadsheet unit introduces the basic concept, structure, and techniques of organizing data in the form of spreadsheet. The programming unit introduces concepts and activities related to program structuring, the use of variables, and using computations and text in programs.

The textbook explanations and activities are designed to limit memorization and encourage comprehension, practice, and skill acquisition. It would be of little or no value to use this textbook for memorization purposes. Therefore, this textbook should be implemented only through practice on computers.

A final word should be added about Sparky, the character that was introduced in the grade seven's textbook, but was changed into a Mousey in this year's textbook. Mousey was created to add fun and provide assistance when needed. Whether in the company of Mousey or Sparky, we certainly hope that you would find this textbook useful and enjoyable.

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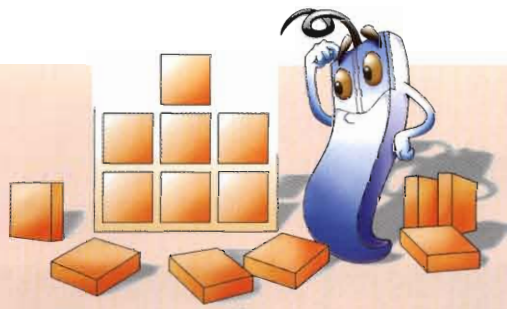
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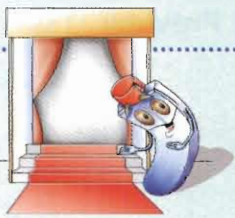


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About this book

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.



Tip

To provide assistance in solving problems.



Explanation

To introduce new concepts.



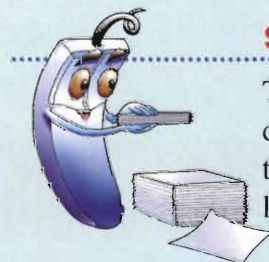
Know More

To provide further reading about some sections.



Activity

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



Summary

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



Explore it

To conduct exercises that require the learner to generalize the applicability of learner concepts.

You may call the cartoon character of the book *Mousy*.

