Informational Technology and Its Impact on American Education

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Foreword

Over the last decade, American education has come to face a number of new demands that must be met with limited resources. Many of these new demands arise from the rising dependence of our society on technology as a basis for domestic economic growth, international competitiveness, and national security. In October 1980, the House Committee on Education and Labor, its Subcommittee on Special Education, and the Subcommittee on Science, Research, and Technology of the House Committee on Science and Technology asked OTA to examine the extent to which information technology could serve American needs for education and training.

This report documents two basic sets of conclusions:

1. The so-called information revolution, driven by rapid advances in communication and computer technology, is profoundly affecting American education. It is changing the nature of what needs to be learned, who needs to learn it, who will provide it, and how it will be provided and paid for.

2. Information technology can potentially improve and enrich the educational services that traditional educational institutions provide, distribute education and training into new environments such as the home and office, reach new clients such as handicapped or homebound persons, and teach job-related skills in the use of technology.

The OTA report provides an overview of the issues relating to the educational applications of the new information technologies. It examines both the demands that the information revolution will make on education and the opportunities afforded by the new information technologies to meet those demands. Rather than focusing on a single technology, it examines a wide variety of new information products and services such as those based on the combined capabilities of computers, telecommunications systems, and video technologies. Similarly, the report surveys a broad range of educational providers, and examines how the application of information technologies may affect their abilities to provide education and their respective educational roles.

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