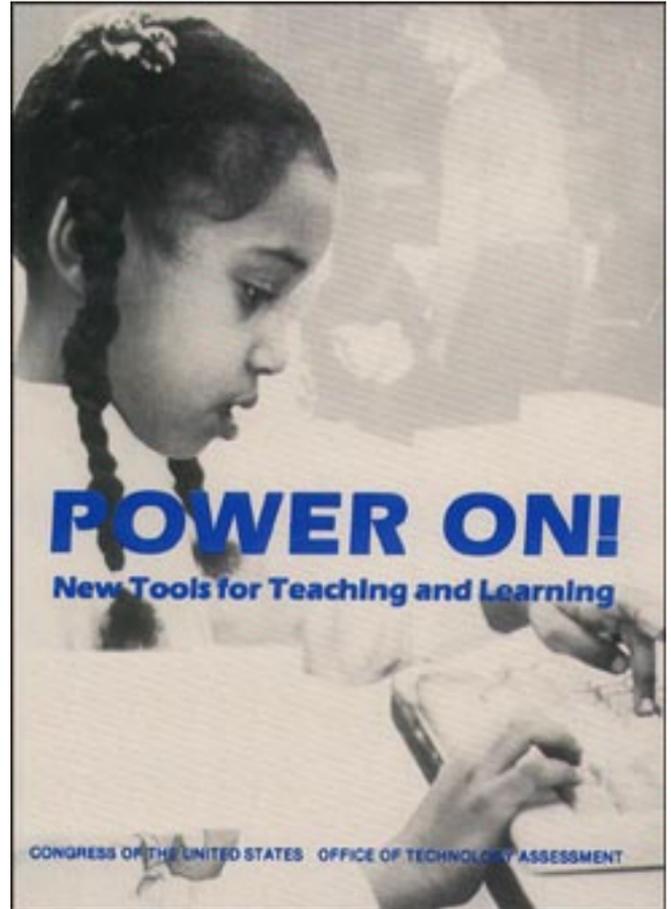


*Power On! New Tools for Teaching and Learning*

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# Foreword

It has been less than a decade since the first personal computers appeared on the education scene. Schools have acquired computers rapidly since then, but most elements of the instructional process remain the same. This contrasts with other sectors of society, where technology has changed the way business is transacted, medical problems are analyzed, and products are produced. During this same decade, calls for improving the quality of education for all children have increased. To better understand the potential of new interactive technologies for improving learning, the House Committee on Education and Labor, and its Subcommittee on Select Education, asked the Office of Technology Assessment to do this study.

Teachers, administrators, parents, software publishers, hardware manufacturers, researchers, policy makers at all levels of government, and students all play a role in turning on the power of new tools for teaching and learning. This report examines developments in the use of computer-based technologies, analyzes key trends in hardware and software development, evaluates the capability of technology to improve learning in many areas, and explores ways to substantially increase student access to technology. The role of the teacher, teachers' needs for training, and the impact of Federal support for educational technology, research and development are reviewed as well.

Throughout this study, the Advisory Panel, workshop participants, and many others played key roles in defining major issues, providing information, and championing a broad range of perspectives. OTA thanks them for their substantial commitment of time and energy. Their participation does not necessarily represent an endorsement of the contents of the report, for which OTA bears sole responsibility.



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NOTE: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

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