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Report to the President on <u>Using Information Technology to Transform the Way</u> <u>We Learn</u>, February 9, 2001

Transmittal Letter to the President

President's Information Technology Advisory Committee

February 9, 2001

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Dear Mr. President:

Washington, DC 20500

The White House

The Honorable George W. Bush President of the United States

The President's Information Technology Advisory Committee (PITAC) applauds your new initiative on education, one of the Nation's most fundamental concerns. We share your vision of a more efficient, effective, accountable, and equitable education and training environment, and we believe that information technology will play an increasing role in realizing that vision. Our 1999 report, *Information Technology Research: Investing in Our Future*, identified learning for all citizens throughout their lives as one of the vital areas where information technology offers the potential to dramatically transform current practices in ways that will greatly benefit all Americans.

Thus, we are pleased to enclose **Using Information Technology to Transform the Way We Learn**, part of a series of studies following up on the 1999 report. This report highlights our findings and recommendations on how the Federal government can provide the leadership needed to solve key information technology challenges and to improve the quality of, and public access to, distant, knowledge-intensive, and otherwise unaffordable educational and training experiences. Our goal is to define a long-range program that will provide all citizens with full and easy electronic access to education and training resources enhanced by new technologies and used by properly prepared teachers and trainers. This combination of technology and teachers using new teaching and evaluation methods has the potential to provide enormous leverage in the pursuit of more effective and less costly education and training.

Based on our findings, information technology promises to help improve learning in very exciting new ways, provided that the educational infrastructure and technologies are improved. **The overarching recommendation is that the Federal government set as a national priority the effective integration of information technology with education and training.** This must be at the core of any far-reaching education initiative. Four subordinate recommendations urge that the Federal government:

- Establish and coordinate a major research initiative for information technology in education and training, including learning technologies and sciences, information technologies for education and training, and requirements for learning and teaching information technology fluency;
- Establish focused government-industryfoundation partnerships to aggressively pursue the information technology research program;
- Develop programs that enable educators and related professionals to use information technology effectively; and
- Work with industry and academia to develop technical standards for extendable component-based technologies and infrastructures that can be widely used in online education and training.

We believe that adopting these recommendations will allow the Nation to make significant strides towards realizing our shared vision. The Committee looks forward to working with you and the Congress to empower American citizens by providing them with lifelong access to dramatically improved educational experiences enhanced by information technology. Thank you for the continuing opportunity to advise you on these and other important issues.

Sincerely,

Raj Reddy, Ph.D. PITAC, Co-Chair Irving Wladawsky-Berger, Ph.D. PITAC, Co-Chair

Enclosure