

Review of *High Technology and Low-Income Communities: Prospects for the Positive Use of Advanced Information Technology*, edited by Donald A. Schön, Bish Sanyal, and William J. Mitchell, MIT Press, 1999.

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Does information technology represent a major transformation in human economic interactions or merely the latest step along a gradual continuum? Will new information technology widen the gap between rich and poor or will it provide low-income communities with the tools to close the gap? According to the various contributors to *High Technology and Low-Income Communities: Prospects for the Positive Use of Advanced Information Technology*, the answer to both questions is "yes." In other words, at this time we cannot conclude with much confidence how high technology will affect low-income communities in the long run; we cannot even conclude with certainty that it will have an important effect at all.

Emerging from a colloquium held at MIT in the spring of 1996, this anthology, edited by the late Donald A. Schön, to whom the book is dedicated, and his former MIT colleagues Bish Sanyal and William J. Mitchell, brings together the insights of urban planners, social activists, and technological pioneers. While the first two of these groups are interested primarily in the plight of cities and low-income communities, the latter is interested primarily in the evolution of high technology. Out of the juxtaposition of these viewpoints arises not a consensus, but both pessimistic and optimistic views on how high technology (used more-or-less synonymously with information technology in the book) is affecting and will affect low-income communities.

For the most part, the most pessimistic views are offered in Part I of the book and authored by leading academics, such as Manuel Castells, Peter Hall, and Leo Marx. These contributors examine historical, sociological, political, and economic trends to suggest that access to information technology is, and is likely to remain, restricted by class, race, and geography. Schools in isolated inner-city communities, for example, are less likely to offer high-tech training to their students and their students are less likely to graduate, etc. With the exception of the chapter by Mitchell, Part I presents largely theoretical arguments that high technology will serve to widen the gaps between rich and poor, creating communities that are as isolated from informational opportunities as inner cities today are often isolated from economic and educational opportunities.

In contrast to the other chapters in Part I, Mitchell's chapter presents a range of contrasts between physical presence and "telepresence" and generally finds much to recommend the latter. In so doing, however, he seems to have neglected all the negative possibilities that could arise for low-income communities, such as greater social and geographic isolation, from a telesociety. For

Mitchell, the mere possibility of positive outcomes seems to be good enough; we need not consider the political and economic realities of technological diffusion. Fortunately, the other authors in Part I are more sensitive to the potential for new technology to differentially benefit those at the top of the socio-economic ladder.

The contributors to Part II of the book are less interested in possibilities and theories and more in documenting the positive use of high technology in low-income communities. Thus, overall Part II presents a somewhat more optimistic viewpoint, offering concrete examples of how high technology is being used to better life in low-income (and often minority) communities. In these chapters, we learn about how computers are already being used as tools to improve neighborhoods' access to planning data, empower local communities, and foster improved technological fluency and self-confidence among inner-city youth. The story in these chapters is not exclusively rosy, however, and within we also hear concerns for technological equality (for example, equal access to the electronic world, especially in the schools, and the technological modernization of the inner city) and how failure to address these concerns will hinder the ability of low-income communities to use high tech to improve their lot.

Absent from Part II, however, and from the book altogether, are empirical comparisons of the use of high technology in low-income and high-income communities. Without such comparisons, we cannot evaluate whether the positive examples from Part II represent the closing of digital and economic divides or whether they are a few outlying cases preventing even faster growth in the magnitudes of these divides. Quite possibly, while low-income communities are advancing via high tech as spelled out in Part II, wealthier communities are speeding ahead even faster.

As a result of this important omission, the policy recommendations that emerge in Part III (which consists of a single chapter co-authored by Sanyal and Schön) are fairly modest in tone, focusing on equal opportunity in the high-tech realm. Although the authors do acknowledge that the

differential capacity to access and manipulate information between upper- and lower-income communities is likely to continue because of the fast pace of technological innovation and the higher-income resident's greater ability to purchase new hardware and software (p. 388),

they do not recommend policies designed to eliminate such mismatched capacities. Rather, the authors call on government to support minimum data and information needs. My fear, however, is that such minimums will become increasingly obsolete and inadequate as the well off continually upgrade their technological skills and informational access. In this scenario, the more pessimistic views expressed in Part I of the book may well prove accurate even if high technology infiltrates and is used in low-income communities. Much like the supposed equal access to housing, merely regulating equal access to information technology may result in

increasingly segregated telecommunities. My suspicion is, despite the claims of some authors that high technology renders geography less relevant, that the correlations between spatial, economic, and digital segregation will be positive and high. Little in this volume suggests otherwise.