Today's labour market issues are outsourcing and offshoring. So why read a book about the impact of computers on jobs and wages? The answer, say authors Frank Levy and Richard Murnane, is that computerisation and offshoring go hand in hand.

Call centres are moving from Illinois to India, they argue, because the work can be described in scripts on a computer screen. Manufacturing jobs are moving to China because the work is predictable and requires little expert knowledge. In both cases, the jobs rely on rules-based logic (if x, then y) of the kind at which computers excel.

Sometimes it makes sense to automate fully such tasks using, say, industrial robots to replace factory workers or automated voice response systems to replace call centre operators. Sometimes it makes sense to shift the work to low-cost economies.

Either way, such jobs make up an ever-declining fraction of those available in developed economies. Thus offshoring is just the latest chapter in a story that began in the 1960s with the arrival of computers in the workplace.

Then, the big fear was that automation would cause mass unemployment. It took canny economists such as Herbert Simon - the late Nobel laureate, polymath and seer - to point out that the efficiencies gained from computerisation would promote economic growth and, in turn, create new jobs.

So it proved. At the peak of the business cycle in 1969 the US unemployment rate was 3.5 per cent. At the peak of 1999 the rate was 4 per cent. In the meantime, the number of people employed in the US economy rose from 83m to 135m.

Yet while the unemployment rate changed little, there were deep structural changes in the types of work available. Blue-collar and clerical jobs fell victim first to automation and, latterly, offshoring. Meanwhile new jobs were created either at the top of the earnings pyramid (doctors, lawyers, computer programmers) or close to the bottom (food service, hospitality, retail).

Professors Levy and Murnane, both labour economists, point to an inexorable "hollowing out" of the jobs market - more janitors and more managers.

They write: "The result is a picture in which the number of menial jobs is growing but the general shift of occupations is towards higher-end jobs." Moreover, they expect these trends to continue and predict a further decline in demand for what they describe as "moderately skilled" labour.

The implications are disturbing. First, the income gap between well-paid professionals and "the working poor" will continue to widen.

Second, many of the jobs lost in the slowdown of the last few years - clerical and factory jobs lost to automation, call centre jobs
lost to India, manufacturing jobs lost to China will not be coming back.

Computers should not shoulder all the blame. Globalisation and economic development are also at work. But Prof Levy and Prof Murnane believe computerisation is an important factor.

They point out that while computers are good at rules-based logic, they are profoundly dumb in other respects. They lack the mental models and experiences that help humans navigate through an unpredictable world. Anything that falls outside the rules with which they were programmed sends computers into a spin.

Similarly, computers struggle to deal with complex communication. Nor do they have the capacity for "metacognition" - thinking about how one is thinking and, if necessary, changing tack.

This mix of amazing strengths and glaring weaknesses explains why computers substitute for labour in some occupations but complement human work in others. Thus robots are used to build cars but cannot match the diagnostic skills of an expert mechanic. Computers are useful teaching aids but make very bad teachers.

How should society respond to the challenge of computerisation? By teaching tomorrow's workers the skills they will need to add value in a world filled with computers. According to the authors, this means spending less time teaching children how to use computers and more time teaching them "how to engage in sustained reasoning, manage complexity, test a solution, collaborate and communicate to other audiences".

This is high-falutin' stuff. But the point is well taken: in today's "hollowed-out" labour market, those who fail to master these skills will find employment only in low-paying service jobs.

It is a chilling thought. The digital divide is not between those with internet access and those without. It is, rather, between "those who can and those who cannot do valued work in an economy filled with computers".