

# The Digital Divide in Education



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Two decades ago when information and communications technology (ICT) was first widely used in education, the thinking was that it would be a liberation for the under-privileged. It would help bridge the gap between poor and rich, as the poor would have equal access to information and knowledge. That hasn't happened.

Instead a 'digital divide' has opened up – the gap between those who have access to technology and those who do not – a phenomenon that raises questions of equity of access. Even in developed countries such as the US, the UK and Australia, there is an access divide between those with the financial standing to afford the latest technology for their children and low-income families who cannot afford it. And in developing countries, such as Mainland China, major swathes of Africa, and some SE Asian countries, some communities have no access to the internet, let alone ICT in education.

Governments need to develop policies to fill the divide – because it is getting wider, and some students are being left far behind. Policies need to be put in place to ensure that lack of access to ICT doesn't marginalise some students. This is not a technological problem: however, it is a situation that could have serious ramifications in society.

Even when there is access to ICT, there is still a divide in how it is used. Research has revealed that high socio-economic status (SES) families have good usage – the parents are better educated and therefore able to nurture and guide their children. But in low-income families ICT usage is often not positive – there are risk factors and ethical problems in using computers, often through lack of parental guidance, either because the parents themselves don't know or aren't there as they are working.

The results of various studies suggest that inequalities have not disappeared in the increasingly networked society, and members of disadvantaged families are not particularly advantaged by their access to ICT. This raises the question of whether the digital divide problem has been sufficiently addressed at a time when education policy-makers and schools have already committed to

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taking bold steps to extensively utilize ICT in teaching and learning.

Current research at HKU is looking into ICT as a cultural tool, as well as a cognitive one. In-depth studies are being carried out following 22 students, from junior primary to secondary level, for one year to provide a better basis for capturing the extent of the digital divide in education.

Rather than a simple analysis of disparity among schools or students, a number of diverse but overlapping elements are being cross-examined, encompassing different types of technology, and, more importantly, different forms and levels of access, with special emphasis on specific areas of society and the activities of the individuals.

Policy implications suggest positive and quality usage of technologies must be encouraged, and there is a need to build cultural capital for low SES families and to provide guidance for parents in how to help their children to use ICT positively as an educational and productive tool.

With ICT, the boundaries between family and school are blurring. Today, students can learn in many ways – and often in better and more interesting ways than they were taught in class – and they can learn anywhere. It is a new paradigm: students don't look primarily to their teachers when they want to learn, they open their mobile devices.

Digital equity is not only about the distribution of teaching or technology resources. Further, it is necessary to look beyond the cognitive aspects of learning to the social, cultural and contextual factors in order to ensure that ICT in education is an asset to all.

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