

**INTRODUCTION TO IT&SOCIETY
ISSUE 6:**

**JOHN P. ROBINSON
JOS DE HAAN**

In contrast to the previous issues, Issue 6 examines digital divides in six different countries, three focused mainly on adults and three on children. They provide a diverse set of the public's response to new information technologies.

Examining Internet diffusion in different countries allows analysts the opportunity to identify regularities and irregularities in the diffusion process in different socio-cultural circumstances. These examinations can also provide insights into the dynamics of diffusion in particular countries. How much do we find that the young or highly educated take the lead in diffusion? How far, and at what point in the process, do we find women or minorities catching up in their IT usage?

In the lead article, Herbert Kubicek examines many of the ironies in Germany's attempt to overcome its digital divide problems. When the European Commission published comparative data on computer and Internet penetration in its member states in 1999, Germany was ranked ninth. The newly elected German government vowed to move Germany to the top and to close the existing digital divides by gender, age and education in the process. Four years later in 2003, however, Germany continued to rank ninth, and the various demographic gaps by gender, age and education had actually become larger. Kubicek presents a critical review of the measures taken by the government to narrow these gaps. Which online skills are necessary and how they are to be acquired differs greatly for different underrepresented groups. For young people at the lowest educational level, measures to acquire Internet literacy need to be integrated more fully into the educational system and working conditions. This idea is generalized into a learning curve model suggesting how social welfare organizations may fight today's digital divides, which are "moving targets" – quite different from the situation five years previously.

Nurmela and Vihera, in contrast, review Finnish national sample data on how far and how fast Finland has advanced in its use of information and communications technologies. Finland emerges as one of the leading countries in Kubicek's comparative tables. Here, new technology seems to have become an integral part of most people's everyday lives more readily and universally than

in Germany, with the exception of those of retirement age and small households in remote areas. Their results suggest that once people have begun to use the Internet (or mobile phones), their specific uses are quite similar to each other regardless of whether the user is younger or older, employed, a student, entrepreneur or unemployed. One question the authors raise in their review is whether the use of IT is becoming more diversified during this fast growth period. They conclude that it is questionable to automatically interpret the non-use of certain information or communications media as a sign of marginalization- when it is unclear from what are people being marginalized.

Liang and Ning report on the unique situation in China, where in smaller cities, income, education and demand did not pose the major barriers for people to adopt the Internet because of the key roles played by Internet cafés. At the same time, the Internet café itself presents problems, especially in the form of teenagers' addiction to online games and chatting, as well as the imbalances by gender posed by the cafés' highly "male" atmosphere. With the popularization and easy access of Internet cafés, Internet adoption in China's even smaller cities and the countryside should continue to grow. Their results further demonstrate how the Internet has played a surprisingly democratizing role in "opening up" daily life in China.

Research on the IT usage of youth is useful because this usually leading group tends to herald the newest uses of the technology. Turning to the IT issues among youth, the first article by de Haan and Huysmans describes Dutch adolescents' full media time use-- reading, radio and TV in relation to computer/ Internet use-- and how these media/IT use patterns are related to their psychological maturation. Four domains of children's development are distinguished: cognitive, socio-moral, emotional and physical. In interviews with a large national sample of Dutch youth aged 12-18, only slight correlations were found between media/IT use and the developmental state of youth on the four aspects of maturation. There were some intriguing relations, however, between IT use and mass media use.

Morrone and Zannella review recent research on the diffusion and use of PCs and Internet in Italy, with its distinct "digital divide" in media access and usage by social and economic factors. Media usage in Italy is undergoing an important transition, especially as young people use new media that influence their socialization, leisure time, education, family life and job opportunities. Gender, generation, regional and other social factors affect their mixed usage of media. Demographic and regional differences still persist and could result in the digital divide in the form of social exclusion for many Italian youth and adults in the future.

Linebarger, Royer and Chernin's small-scale exploratory study examined the IT use and attitudes of 74 very young (i.e., 4-8 year olds) children and their parents in the U.S. Access, use and perceptions regarding computers and the Internet were related to three traditional digital divide constructs: 1) family socioeconomic status (SES), 2) location of access to new technologies (i.e., both

home and school access versus school access only), and 3) individual child characteristics (i.e., gender and age). While Internet access varied by family socioeconomic status (SES), Internet use varied more by location of access to computers and the Internet. Interestingly, parents from low SES backgrounds were less comfortable with and less likely to view the computer and the Internet as educational tools, while their children were more likely than those children from working- and middle-SES backgrounds to choose the computer when they wanted to learn something new. There were surprising differences in girls' use and attitudes compared to boys.

Thus, in contrast to Germany's inability to close its gaps by gender, age and other factors, the evidence from the other countries (ranging from leading edge IT countries like Finland, Netherlands and the U.S., and less developed countries like Italy and China) show more encouraging and inclusive patterns. In the next issue (#7), readers will have the opportunity to check on these results in a broader comparative perspective.