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| Digital divide |
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| **09.09.2010** |

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**What is digital divide?**

The term *digital divide* refers to the gap between people with effective access to [digital](http://www.nethelper.com/article/Digital) and information technology and those with very limited or no access at all. It includes the imbalances in physical access to [technology](http://www.nethelper.com/article/Technology) as well as the imbalances in resources and skills needed to effectively participate as a [digital citizen](http://www.nethelper.com/article/Digital_citizen). The digital divide may be classified based on [gender](http://www.nethelper.com/article/Gender), [income](http://www.nethelper.com/article/Income), [race](http://www.nethelper.com/article/Race_%28classification_of_human_beings%29) groups, and by locations. The term [*global digital divide*](http://www.nethelper.com/article/Global_digital_divide) refers to differences in technology access between countries or the whole world.

**Origins of the term**

The term initially referred to gaps in ownership of computers between groups, during which time the increase of ownership was limited to certain ethnic groups. The term came into regular usage in the mid-1990s, though the term had previously appeared in several news articles and political speeches as early as 1995. The [President of the United States](http://www.nethelper.com/article/President_of_the_United_States) [Bill Clinton](http://www.nethelper.com/article/Bill_Clinton) and [his Vice President](http://www.nethelper.com/article/Vice_President_of_the_United_States) [Al Gore](http://www.nethelper.com/article/Al_Gore) used the term in a 1996 speech in [Knoxville](http://www.nethelper.com/article/Knoxville%2C_Tennessee), [Tennessee](http://www.nethelper.com/article/Tennessee).

**Means of connectivity**

Infrastructure. The infrastructure by which individuals, households, businesses, and communities connect to the Internet address the physical mediums that people use to connect to the Internet such as desktop computers, laptops, cell phones, iPods or other MP3 players, Xboxes or Play Stations, electronic books readers, and tablets such as iPads.

Location. Internet connectivity can be utilized at a variety of locations such as homes, offices, schools, libraries, public spaces, Internet cafes, etc. There are also varying levels of connectivity in rural, suburban, and urban areas.

**Digital divide evolution**

Typical measurements of inequality distribution used to describe the Digital Divide are the [Lorenz Curve](http://www.nethelper.com/article/Lorenz_Curve) and [Gini coefficient](http://www.nethelper.com/article/Gini_coefficient),[[14]](http://www.nethelper.com/article/Digital_divide#cite_note-Bridging_the_digital_divide-13) however, the question of whether or not the digital divide is growing or closing is difficult to answer. In *Bridging the digital divide: An opportunity for growth for the 21st century*, examples of these ways of measuring are illustrated [[14]](http://www.nethelper.com/article/Digital_divide#cite_note-Bridging_the_digital_divide-13). In the Lorenz curve, perfect equality of Internet usage across nations is represented by a 45-degree diagonal line, which has a Gini coefficient of zero. Perfect inequality gives a Gini coefficient of one. Therefore if you look at figures 2.4 and 2.5 in the document, both graphs show a trend of growing equality from 1997 to 2005 with the Gini coefficient decreasing. However, these graphs don’t show the important, detailed analysis of specific income groups[[15]](http://www.nethelper.com/article/Digital_divide#cite_note-The_Digital_Divide_in_Canada-14). The progress represented is predominantly of the middle-income groups when compared to the highest income groups. The lowest income groups continue to decrease their level of equality in comparison to the high income groups. Therefore, there is still a long way to go before the digital divide will be eliminated. [[15]](http://www.nethelper.com/article/Digital_divide#cite_note-The_Digital_Divide_in_Canada-14)

**Digital divide and education**

One area of significant focus was school computer access; in the 1990s, rich schools were much more likely to provide their students with regular computer access. In the late 1990s, rich schools were much more likely to have Internet access. In the context of schools, which have consistently been involved in the discussion of the divide, current formulations of the divide focus more on how (and whether) students use computers, and less on whether there are computers or Internet connections. For public libraries and afterschool programs have also been important to have access to Internet and training locations for disadvantaged youth. The overall number of public classrooms with Internet access from 14% in 1996 to 95% in 2005. Recently, discussions of a digital divide in school access have broadened to include technology related skills and training in addition to basic access to computers and Internet access. Technology offers a unique opportunity to extend learning support beyond the classroom, something that has been difficult to do until now. “The variety of functions that the Internet can serve for the individual user makes it “unprecedentedly malleable” to the user’s current needs and purposes”.

**Global digital divide**

In countries where the Internet and other technologies are not accessible, education is suffering, and uneducated people and societies that are not benefiting from the information age, cannot be competitive in the [global economy](http://www.nethelper.com/article/Global_economy). This leads to these countries, which tend to be developing countries, suffering greater economic downfall and richer countries advancing their education and economy. However, when dealing with the global aspect of digital divide there are several factors that lead to digital divide. For example, country of residence, [ethnicity](http://www.nethelper.com/article/Ethnicity), [gender](http://www.nethelper.com/article/Gender), age, educational attainment, and [income](http://www.nethelper.com/article/Income) levels are all factors of the global aspects of digital divide. The digital divide is a term used to refer to the gap between people who have access to the Internet and those that do not. It can also refer to the skills people have – the divide between peoples who are at ease using technology to access and analyse information and those who are not.

**Digital divide, e-democracy and e-governance**

The theoretical concepts of [e-democracy](http://www.nethelper.com/article/E-democracy) (electronic democracy) are still in early development, but many scholars agree that [blogs](http://www.nethelper.com/article/Blog) (web logs), [wikis](http://www.nethelper.com/article/Wiki) and [mailing lists](http://www.nethelper.com/article/Mailing_list) may have significant effects in broadening the way democracy operates. There is no consensus yet among scholars about the possible outcomes of this revolution. One of the main problems associated with the digital divide as applied to a [liberal democracy](http://www.nethelper.com/article/Liberal_democracy) is the capacity to participate in the new [public space](http://www.nethelper.com/article/Public_space), the [cyberspace](http://www.nethelper.com/article/Cyberspace) - as in the extreme case, exclusively computer-based democratic participation ([deliberation forums](http://www.nethelper.com/article/Internet_forum), [online voting](http://www.nethelper.com/article/Online_voting), etc) could mean that no access meant no vote. Therefore, there is a risk that some social groups — those without adequate access to or knowledge of IT — will be under-represented (or others over-represented) in the policy formation processes and this would be incompatible with the equality principles of [democracy](http://www.nethelper.com/article/Democracy).

**Overcoming the digital divide**

There are projects offering a partial solution to the global digital divide; these projects tend to rely heavily upon [open standards](http://www.nethelper.com/article/Open_standards) and free [open source software](http://www.nethelper.com/article/Open_source_software). The [*OLPC XO-1*](http://www.nethelper.com/article/OLPC_XO-1) is an inexpensive [laptop computer](http://www.nethelper.com/article/Laptop_computer) intended to be distributed to children in developing countries around the world, to provide them with [access to knowledge](http://www.nethelper.com/article/Access_to_Knowledge_movement). Programmer and [free software](http://www.nethelper.com/article/Free_software) advocate [Richard Stallman](http://www.nethelper.com/article/Richard_Stallman) has highlighted the importance of free software among groups concerned with the digital divide such as the [World Summit on the Information Society](http://www.nethelper.com/article/World_Summit_on_the_Information_Society). Organizations such as [Geekcorps](http://www.nethelper.com/article/Geekcorps), EduVision and [Inveneo](http://www.nethelper.com/article/Inveneo) also help to overcome the digital divide. They often do so through the use of education systems that draw on [information technology](http://www.nethelper.com/article/Information_technology). The technology they employ often includes [low-cost](http://www.nethelper.com/article/Low-cost) laptops/[subnotebooks](http://www.nethelper.com/article/Subnotebook), handhelds, tablet PCs, Mini-ITX PCs and low-cost [WiFi](http://www.nethelper.com/article/WiFi)-extending technology. In addition, other information technology material usable in the classroom can also be made [diy](http://www.nethelper.com/article/Diy) to lower expenses, including [projectors](http://www.nethelper.com/article/Projector). Yet another solution is to try to better understand the lifestyle of a minority or marginalized community. In doing this, researchers can figure out what is meaningful to them [minorities and marginalized users] and how they use (or do not use) different forms of the Internet for meeting their objectives Additionally. “One strategy is to transfer goal-setting, decision making, and choice-determining processes into the hands of the disadvantaged users in order that they ‘fit’ Internet into their daily lives in ways that they themselves consider to be meaningful”.

International cooperation between governments have begun, aiming at dealing with the global digital divide. For example, in an attempt to bridge this digital divide, an agreement between the [United States Agency for International Development](http://www.nethelper.com/article/United_States_Agency_for_International_Development) (USAID) and the [Egyptian government](http://www.nethelper.com/article/Egyptian_government) emerged. The USAID funded state-of-the-art equipment for [Egyptian education](http://www.nethelper.com/article/Egyptian_education), their brilliance of knowledge in using such equipment caused such equipment to increase in use throughout the years. Now, Egyptian society is more computer literate and knowledgeable about computers than they used to be.

The [United Nations](http://www.nethelper.com/article/United_Nations) is aiming to raise awareness of the divide by way of the [World Information Society Day](http://www.nethelper.com/article/World_Information_Society_Day). It also set up the Information and Communications Technology (ICT) Task Force in November 2001.[[50]](http://www.nethelper.com/article/Digital_divide#cite_note-49) At the [Massachusetts Institute of Technology](http://www.nethelper.com/article/Massachusetts_Institute_of_Technology), the IMARA organization (from [Swahili](http://www.nethelper.com/article/Swahili_language) word for "power") sponsors a variety of outreach programs which bridge the Global Digital Divide. Its aim is to find and implement long-term, sustainable solutions which will increase the availability of educational technology and resources to domestic and international communities.

Some cities in the world have started programs to bridge the digital divide for their residents, school children, students, parents and the elderly. One such program, founded in 1996, was sponsored by the city of Boston and called the Boston Digital Bridge Foundation.

But not everything so good as it has shown in last four paragraphs. An individual must be able to connect in order to achieve enhancement of social and cultural capital and achieve mass economic gains in productivity. Therefore access is a necessary (but not sufficient) condition for overcoming the digital divide. Access to ICT meets significant challenges that stem from income restrictions. The borderline between ICT as a [necessity good](http://en.wikipedia.org/wiki/Necessity_good) and ICT as a [luxury good](http://en.wikipedia.org/wiki/Luxury_good) is roughly around the “magical number” of US$10 per person per month, or US$120 per year, which means that people consider ICT expenditure of US$120 per year as a basic necessity. Since more than 40% of the world population lives on less than US$ 2 per day, and around 20% live on less than US$ 1 per day (or less than US$ 365 per year), these income segments would have to spend one third of their income on ICT (120/365 = 33%), which is a lot to ask, since the global average of ICT spending is at a mere 3% of income. Potential solutions include driving down the costs or ICT, which includes low cost technologies and shared access through [Telecentres](http://en.wikipedia.org/wiki/Telecentre).

Furthermore, even though individuals might be capable of accessing the Internet, many are thwarted by barriers to entry such as a lack of means to infrastructure or the inability to comprehend the information that the Internet provides. Lack of adequate infrastructure and lack of knowledge are two major obstacles that impede mass connectivity. These barriers limit individuals' capabilities in what they can do and what they can achieve in accessing technology. Some individuals have the ability to connect, but have nonfunctioning capabilities in that they do not have the knowledge to use what information ICTs and Internet technologies provide them. This leads to a focus on capabilities and skills, as well as awareness to move from mere access to effective usage of ICT.

**Truths about digital divide**

1. Closing the Digital Divide may be the only way to make globalization work for the poor (because in other case they will be separated from other world more and more).
2. The consequence of not closing the Divide is terrorism (because children can easily become tricked by wrong full grown terrorists).
3. Closing the Digital Divide is the only way to support the growth of world markets. (in other case there will be no new customers and as the consequence there will be no evolution of world markets)
4. World leaders from every sector — business, government, academia — can benefit from closing the Divide. Yet no one sector has the incentives to lead the effort to close the Divide.
5. The midlevel countries in relatively advanced emerging markets, not the poorest countries, are the best settings for experimental efforts to close the Digital Divide.

**Criticisms**

Second-level digital divide. The second-level digital divide, also referred to as the production gap, describes the gap that separates the consumers of content on the internet from the producers of content. As the technological digital divide is decreasing between those with access to the internet and those without, the meaning of the term digital divide is evolving. Previously, digital divide research has focused on accessibility to the internet and internet consumption. However, with more and more of the population with access to the internet, researchers are examining how people use the internet to create content and what impact socioeconomics are having on user behavior. New applications have made it possible for anyone with a computer and an internet connection to be a creator of content, yet the majority of user generated content available widely on the internet, like public blogs, is created by a small portion of the internet using population. Web technologies like Facebook, YouTube, Twitter, and Blogs enable users to participate online and create content without having to understand how the technology actually works, leading to an ever increasing digital divide between those who have the skills and understanding to interact more fully with the technology and those who are passive consumers of it. Many are only nominal content creators through the use of Web, like posting photos and status updates on Facebook, but not truly interacting with the technology. Some of the reasons for this production gap include material factors like what type of internet connection one has and the frequency of access to the internet. The more frequently a person has access to the internet and the faster the connection, the more opportunities they have to gain the technology skills and the more time they have to be creative. Other reasons include cultural factors often associated with class and socioeconomic status. Users of lower socioeconomic status are less likely to participate in content creation due to disadvantages in education and lack of the necessary free time for the work involved in blog or web site creation and maintenance.

The knowledge divide. Since gender, age, racial, income, and educational gaps in the digital divide have lessened compared to past levels, some researchers suggest that the digital divide is shifting from a gap in access and connectivity to ICTs to a [knowledge divide](http://en.wikipedia.org/wiki/Knowledge_divide). A knowledge divide concerning technology presents the possibility that the gap has moved beyond access and having the resources to connect to ICTs to interpreting and understanding information presented once connected.

**Sources:**

Wikipedia the free encyclopedia — http://en.wikipedia.org/wiki/Digital\_divide

Digital divide institute — http://www.digitaldivide.org