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ABSTRACT

This paper discusses the digital divide from the perspective of Latin America and the Caribbean. Highlights include: new issues that make access to electronic resources difficult for users; differences in technological infrastructure among countries; how Internet users are distributed worldwide; Internet access in Africa; the number of students per computers and number of schools with Internet access in 50 U.S. states; percentage of U.S. citizens using the Internet by race; reasons why people quit using the Internet; the online racial divide in the United States; and the digital divide in Mexico, including statistics on computer use. (Contains 16 references.) (MES)

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The Digital Divide: The view from Latin America and the Caribbean

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In sixties, when electronic resources had no appeared in the information markets, nor in the library services, users had only access to the documents and printed materials. The use of bibliographic materials should be made only in the library building, due to technology resources for remote access were nonexistent .

In those times, the difference between people with or without access to information, was based on the financial capability of the library for acquisition of its materials, on
the right or wrong way to organize the materials, and of course , on the policies of library services. The electronic resources did not mean big differences, because the use of them were reduced to reproduction of catalog cards, copy, and maybe some mechanical system of lending-borrow service.

With arriving of information technology, people taught that access to information would be easier, and would also promote a faster and efficient organization of library materials.

In that moment, a divergence between librarians and computer specialists rose, it was about the playing-roll of technology on librarianship. Computer specialists, spread out the idea that limits and restrictions that people had to access to the information would disappear, and then all people could use the materials easy and free, if library adopted the electronic version of those materials in paper.

Some enthusiastic experts got to express that libraries and books were "species in extinction" and electronic media will replace them.

The most relevant promoter of that idea was Willfrid Lancaster with his book *"The paperless society"* .

Perhaps, the most daring vision of what computers would be at the beginning of XXI century, is founded in the novel by Arthur C. Clarke, which was the basis of the Stanley Kubrik film "2001 Space Odessy", where a computer named HAL speaks by itself and is able to have feelings. This film shows a wide spread vision of middle sixties: trough one generation period, computers would be able to do almost everything that humans do.

Marvin Minsky said: " In few years we will have machines that can read Shakespeare, oil a car, tell jokes, and have fights in an office. (cited by Levy Steven " 2001:Why HAL Never happened" Newsweek special edition dec 200 feb 2001 p58).

Actually it never happened, in real, and scientists offered us an explanation for that, they said that many of the activities of human beings are made unconsciously or automatically, using a term according to computers, and this, can not be made by computers yet.
In this work I pretend to analyze the causes of why this expectatives not only were unclimbed but with the use of information technology another problem rose: a divide that do not seem easy to close by the moment, and which, is causing a big division between users who have and users who have not access to the electronic resources.

Now a days we talk about a Digital Divide that segregates those with lack of possibilities of using the digital formats at *Internet,* from the others, who count with them.
This phenomenon, seems to be multideterminated, but in this work will talk about some of them only.

In a subsequent work will be necessary to describe widely this problem in order to have a better comprehension of the elements involved and explain it from an integrating perspective.
Previously we saw that the most important limitation for the use of bibliographic materials was the economic status of the library in order to acquire materials and documents. But now the user has to face and confront new issues that make the access difficult or almost impossible, for instance:

1. Lack of telecommunications infrastructure .
2. Lack of computer equipment, updated and enough to rich efficient access to the information.
3. Lack of expert people who can handle equipment and new technology stuff.
4. Lack of a training team in computer and library resources.
5. Do not have users prepared enough in order to use and get benefits from them

The training or the capability of get benefits from technology and library resources has been called informative literate or informative abilities, to count with them , make an important difference between users and possibilities of access to information.

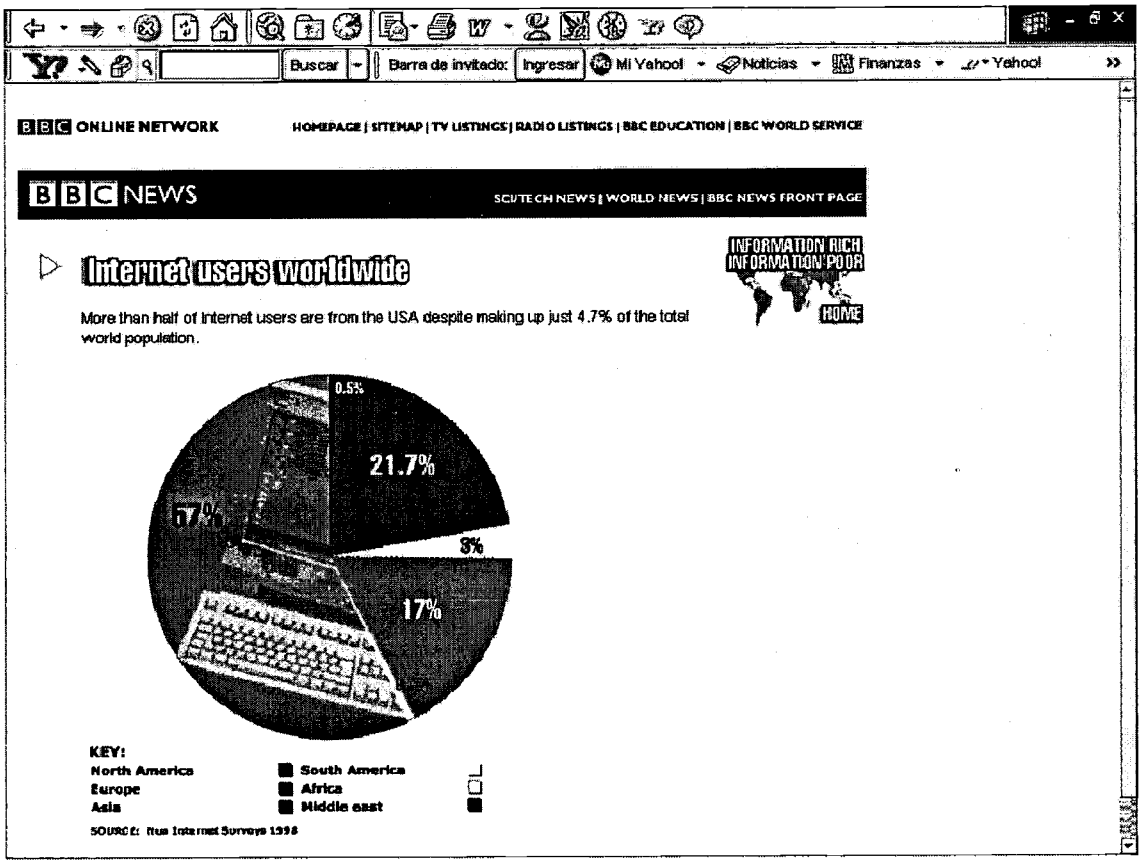
This differential access is not new, and its not created from the "digital divide" , users have different information supply, opportunities of use and ability to use the materials. That's why this phenomenon results relevant, and deeper than specialists taught at the beginning. Those old expectatives that the use of technology would finish with the differences, not only are unclimbed but deeper and hard shaped now. Inequity and disparity in using information technology is larger every time. The rhythm of having access and improving technologies make those people who do not have opportunities, unprotected, isolated, facing a wider and deeper divide, plus the social, health, and educational divide, as always.

Last report from United Nations above human development in 1999 shows that in industrialized countries, with only the 15% of world population, hosts the 88% of the users of internet. (cited by Jane Black. BBC news online 15/01/01 p.1)

Under this point of view, problems with reference and access, are related with differences in tech-infrastructure among countries. Between a country and another there may be a lack of infrastructure, that makes the digital information unapproachable. And I refer to elements as simple as having electric energy and telephone lines, this, in developed nations, are subjects already solved.

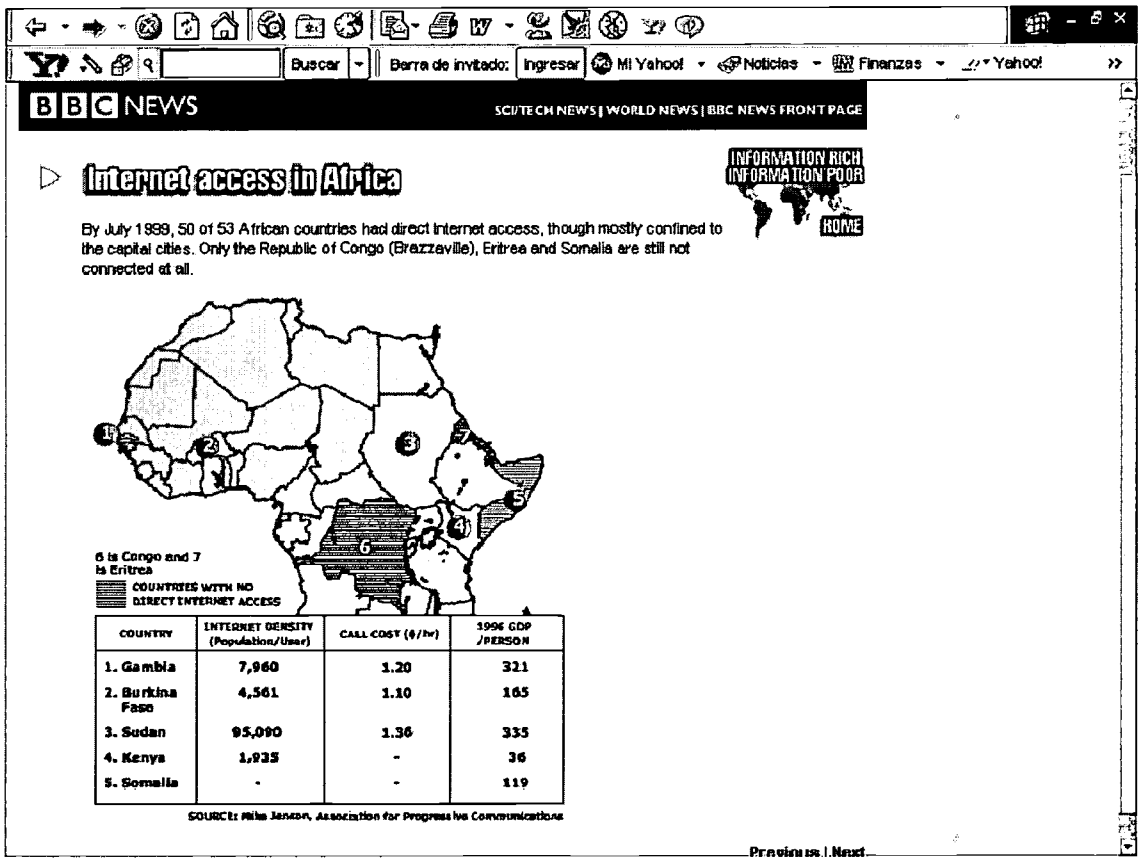
While electric infrastructure in some countries is in XXI century, some other countries are starting to enjoy the electric energy by lightening their homes as we did two generations behind. This is the size of the divide, widening trough the days.
Developing countries have priorities before bridging the digital divide and make investments on internet access resources. " Our needs are health, water quality, dealing with higher rates of child mortality..... how could fast access to *Internet* change or improve that?" Argued Supatra Koirala, Director of Institute of Childhood
Protection in Katmandú, India. (cited by Jane Black. Ib Id. P.2)

Fig.1
More than half of Internet users are from the USA despite making up just 4.7% of the total world



In a recent study published by BBC on April 2001, statistics are dramatic, as previous graphic shows U.S owns 57% of *Internet* users and has only the 4.7 % of total population in the world. Meanwhile in Latin America, with a superior population than U.S. owns just the 3% of *Internet* users. This is serious, but situation in Africa
and Middle East is even worse .

fig. 2. Internet Access in Africa.



COUNTRY	INTERNET DENSITY (Population/User)	CALL COST ($/hr)	1996 GDP /PERSON
1. Gambia	7,960	1.20	321
2. Burkina Faso	4,561	1.10	165
3. Sudan	95,090	1.36	335
4. Kenya	1,935	-	36
5. Somalia	-	-	119

SOURCE: Mike Jensen, Association for Progressive Communications

It is possible to see in fig .2 That there are some countries in Africa with direct Internet Access and some other have a low internet density. We should see the low income per person as part of the GDP

Intel Company, announces that in 2004 will be connected 1.3 billions of people, without using cable. (Newsweek, Special Edition, December 2000 p.21).
But results evident that not only INTEL, but all the infrastructure in telecommunications, needs develop in harmony, and no pieces be left.

Besides the develop of infrastructure is the issue that lack of specialized people causes that rich countries open up their borderlines, and those few specialists emigrate in order to get higher levels of income and better standards of living and professional improvement. Such as the measures announced by Germany in March of 2000 about this. Anyway, most of the specialists from developing countries wish moving to U.S. cause they feel that may have better choices there. (Rod Nordland, "The missing W on Web". Newsweek. Special edition p 72).

The industry sector creates hundred of jobs on information field, and government also contribute to this, in his last message to the nation , President Clinton confirmed his concern about information technology and its relevance, then announced his proposal for 2001 national budget, where he submit funds for *Internet* connection in libraries and classrooms in all the states, training programs for teachers and creating 1000 community centers with informational technology. (Goldsborough, bridging the digital divide. *Link up*, vol.17, Issue 3 may 2001 p.1).

In 1999, federal, state and country expenses were of seven billion dollars for buying computers and software, after this, there are many schools with wonderful equipment, and modern materials doing a good job for community, but some others are unusefull, nobody know how to handle, Teachers have no training programs and can't transfer the abilities to their students, they are still "informatics illiterates".

The access to internet has differences and inequities among connections to the net and number of equipments, for instance, some Sates like Idaho has 88% of its schools connected to the web, and some others like North Caroline have only 56% connected. Some States has 3.5 students per every PC equipment and others like Alabama with 7 students per computer.

Fig.3 number of students per computer and number of school with Internet access in different States of US:

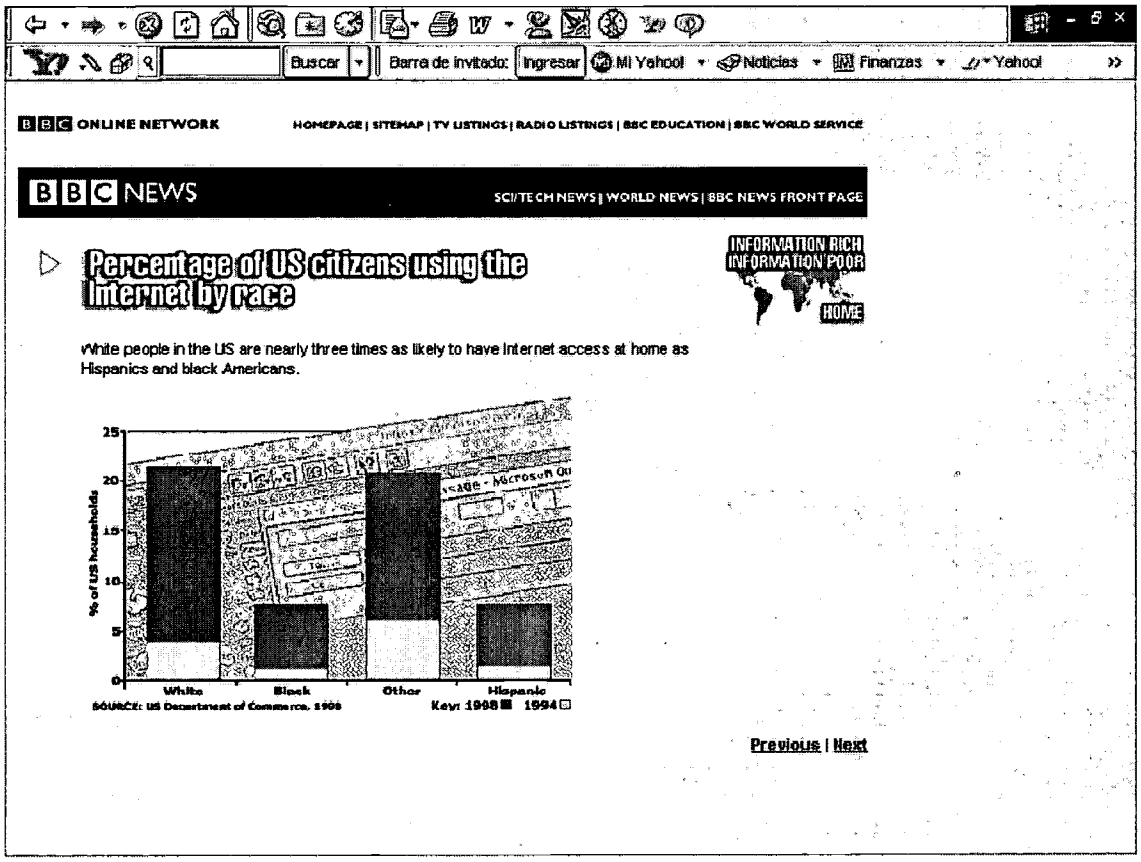
(Source: *Education Week Report*. Citado por Gordon op.cit

	Number of students per computer	Number of schools connected To internet
Alabama	7.0	53
Alaska	4.5	88
Arizona	5.6	67
Arkansas	5.6	66
California	6.1	67
Colorado	5.3	75
Connecticut	5.9	60
Delaware	5.3	91
Distrito de Columbia	5.4	70
Florida	5.0	66
Georgia	5.5	64
Hawaii	6.7	82
Idaho	5.3	88
Illinois	5.9	71
Indiana	4.5	74
Iowa	4.7	80
Kansas	4.3	65
Kentucky	5.3	76
Louisiana	7.4	83
Maine	5.8	85
Maryland	6.6	82
Massachussetts	6.1	65
Michigan	5.9	65
Minnesota	4.9	84
Mississippi	7.0	60
Missouri	5.2	74
Montana	44	78
Nebraska	3.8	87
Nevada	7.3	61
New Hampshire	6.8	79
New Jersey	5.7	66
New Mexico	5.3	62
New York	6.3	60

North Dakota	4.2	85
Ohio	5.4	78
Oklahoma	5.6	56
Oregon	5.6	83
Pennsylvania	5.5	60
Rhode Island	7.5	73
South Carolina	5.6	82
South Dakota	4.2	83
Tennessee	6.7	85
Texas	5.1	68
Utah	6.0	84
Vermont	5.6	78
Virginia	5.4	72
Washington	5.0	84
West Virginia	4.7	81
Wisconsin	4.6	70
Wyoming	3.5	79
Unites States	5.7	71

The United Nations Program for the Development, holds that only the 20% of richest population, owns the 93% of the access to the *Internet.* South Asia, which has the 23 % of the population of the world owns only !% of the users of Internet, more than a half of population in United States and a third of Europeans has internet access , in comparison with less than the 3 % of Latin-Americans and Caribbean people, mainly because of the high cost of the equipments. As an example, a common worker in Bangladesh needs 96 month of salary to buy a computer, in comparison with one-month salary of a north American citizen to acquire the same equipment. An interesting issue is the dramatic situation that almost half of total world population have never done a telephone call. (Conhaim, Wallys W. "The internet Digital Divide" *Link up* vol.17 issue 4 july/august 2000)

Fig. 4 Internet access by race



If we compare data between United States and the rest of the world, we realize that digital divide is huge and makes a difference in net using. But the problem of digital divide is also recognized as an internal issue in US, when the Trade Department accepts that inequity is a reality and is caused by inequities among American people. "The digital divide... is now one of America's leading economic and civil rights issue" . many individuals has no access to *Internet,* specially poor and or not educated, and those who live in rural or segregated areas, so, the divide is widening instead of bridging. We talk about civil rights because some authors mention that people have the right to live, and also the right to navigate on net, this is not only a simple comment, but the access to the net is gradually necessary for democratic ways of life in a country and the rest of the world.

This approach to the use of net in democratic processes is found in Arizona, where primary elections for the Democratic Party were conduced by web-based elections, participation was consistent, but many Indian citizens couldn't join to the on line event, due to the lack of *Internet* access (Davis Thomas "Ending the Digital Divide" *Educase review* january, 2001 p.2)

In this sense, democratic processes are part of globalization that the whole world is living. However, some countries have a tight control on web access, perhaps because they are afraid of the influence of some ideas and styles of living that they consider dangerous for the stability and permanence.
In an article from Chicago Tribune on 1st. march of 2001 fond a clear sample of this: "beleaguered by poverty, a lack of infrastructure, and a tight governmental control, Cuba's citizens face an uphill

battle to get online. According to government figures, Cuba has about 3,600 legal internet accounts, half of which have access to networks outside Cuba.
Many of Cuba´s legal *Internet* accounts are owned by government ministers and business, joint-venture corporations, and foreigners. While *Internet* is provided by universities, hospitals, and youth clubs, strict limitations are placed on the type of content users can access. Cuba´s only Cyber-café is not available to Cubans. Even the government relaxed its control of the *Internet,* the expansion of Cuban on line population is severely limited by the lack of Internet infrastructure in the island, it has only one phone line for every 23 Cubans . Power outages are common, and computer modems are difficult to obtain. With such limitations, the general consensus among Cubans is that future Internet access will be restricted to public cyber-cafes rather than private homes. (Chicago Tribune. "Bleak future for Cuban Internet". Mar 1st. 2001 nua internet suveys. P. 1)

Nothing can justify the limitations for the information and ideas fluency , that, goes against those people, whose rights to refreshing their knowledge, and confront their opinions with others, is actually denied, and have no choice in order to enrich their thoughts and receive democratic values background.

The Group of Eight had a meeting in Okinawa past 2000 year and paid special attention to digital divide and ways of bridging it, they didn´t reach an agreement at all but they pointed out two tendencies: the first one says that the divide can be solved by riching out technology and infrastructure, on the other hand, that digital divide will reduce if social and economic differences are supported, in that way, developing countries would enjoy the benefits from information technology .(Harrington J. Problems of Post-communism jan-feb 2001 vol.48 issue 1 p 65)

Some people add that digital divide is not correctly explained, it should be seen as
the difference between those who have access to the net and those who will have access later, as it shows in the study by University of Wisconsin
And Consumers Federation of America, entitled " Disconnected, Disadvantaged and disenfranchised: Exploration in Digital Divide" They found that half of the surveyed individuals were not connected at home and were not expecting to do in next 4 years. They were people with lower salaries, less educated, generally older and with no kids at home, and specially, belonging to some minority group,.

The often reasons for not being on line were the high costs and that they don´t know how to use it, neither its benefits, such as, participation in social activities, buying things easily, or being in touch with pubic servers. (Test Inform Project, Consumers union in Action. Exploring the digital divide. Consumers report february 2001, p. 69).

Some topics of the digital divide are of special interest, such as the information on line about medical and health issues, preventive measures, new discoveries or use and abuse of substances. It is an advantage count with these elements, it makes a great difference between own them and do not. Obviously a citizen can get the same information by other means but, as economists say "it has a lower benefit in the relation cost-opportunity ".
Is also interesting see how users quick to the on line services, there is a significant degree of desertion in this area. As it shows Katz and Aspeden study in 1998, they found that 8% people surveyed, deserted from using internet, the same percent that people connected in 1996.

	1995	1996
No acknowledge of internet	15%	10%
Know about Internet but not a user	69%	60%
Users of Internet	8%	19%
Deserted from Internet	8%	11%

Main reasons for quick:

1. They lost the access at jobs or schools	36%
2. Are not interested any more, is bored,.	23%
3. Troubles in using equipments	18%
4. Costs are high	7%
5. No reasons given	16%

source: (Katz &Aspeden "Internet dropouts in USA". *Telecommunications Policy.* Vol. 22 no. 4/5 1998 p 327-339)

Is interesting when we observe how statistics change depending on the sources and criteria of surveys, if come from trade or busyness agencies, we found differences in number of users or in population with access to new technologies, also when the studies are made from government agencies. So is important mention the source and criteria when we talk about statistics in technology of information

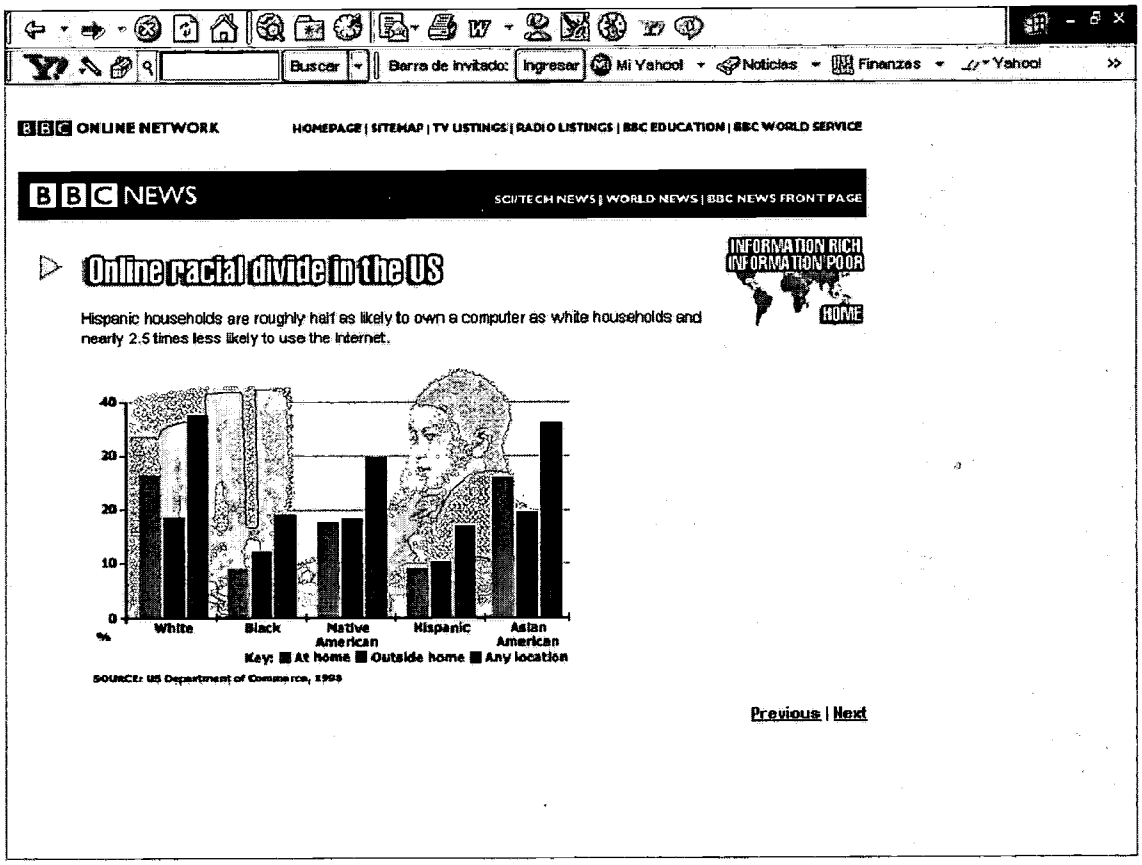
Grossman (2001), in his article at New York and *Internet* are falling in a waste, because now a days *Internet* using is far from enclose the users to the information, culture and knowledge of scientific disciplines, the real boom of internet is the use of chats, porno Times assure that digital resources sites and "cybersex", and unfortunately this matter is increasing faster than the attempts for spread educational contents to all social levels, as was planned first. Dealing with this reality the author says that fortunately federal budgets for educational programs on line increase every year and there is a proposal named "A present for Nation" is a 18 million dollars program with a public portal and based on National Science Foundation model. (Grossman, Laurence. And Newton, Minow, New York Times. April 10 2001)

It would include on line literature programs, connecting people with "reading tutors" in a virtual one to one relation , offer universal access to most important manuscripts, art , pictures and treasures from museums in the world.

The idea of investment in educational and cultural programs in order to give a better use to information technology and electronic infrastructure , comes from teachers, librarians, scientific officers and even from young businessmen from computer field like Microsoft and Novell. Investments in this area do not change the *Internet* vigorous commercial mission, but let on line services carry on a more substantial work for individuals. If Congress approve this proposal on information and education field, then results might be observed in a medium term.

In 1998, US Department of Commerce made a study "Online racial divide in US" and results interesting how Hispanic population had half access than the other minority groups. It shows more than online possibilities, shows social-economical-educational conditions

Fig. 5 shows Hispanic householders are roughly half as likely to own a computer as white households and nearly 2.5 times less likely to use internet. (Source: BBC news online networks. "information poor...p.1)



Now, let´s see what happens in and Latin America

Is important to say that variations in data depends on the source who gives the information, the purposes of the surveys and criteria of universe selected. In this sense we can explain variations and disparity in statistics data.

According to NUA Internet Surveys firm , which design studies and surveys for several countries, Digital divide persists in Latin America, On the other hand, based on "Dataquest report" on April 2001 owned by Gartner assure that digital divide is widening too; in that report, studied the access to basic telephone services and to broad band internet access services, while 80% of US consumers have telephone connections, only 24.5 % of Chileans do, and Chile has the highest number of phone connections per capita of the Latin-American countries studied. (NUA Internet Surveys. www.nua.com/surveys april 4 2001 p.1)

Latin America also trails far behind the US in terms of broadband use. Over 6 million Americans have broadband internet access, while only 53,000 Brazilians,38,000 Argentineans, 22,000 Chileans and 20,000 Mexicans do. There are no broadband subscribers in Colombia, Venezuela and most of the rest of Latin America (Dataquwest. www.nua.com/surveys/ 6 may 2001 p.1)

On the other hand, Reuters, a press agency says that IDC has predicted that there will be 75 million of users in Latin America by 2005 up from 15 million last year. An analyst from IDC said that Internet audience would grow by an average of 40% each year between now and 2005.
Internet users grew by 136% in Latin America last year, but the medium remains largely the preserve of the elite of the region, according to Yoshio Utsumi, The Secretary- General of the International Telecommunications Union .

In a speech at the Telecom Americas Conference on April 13 of 2000, Utsumi warned that Latin-American and the Caribbean could be left behind in the new economy. Only about 2.7% of the 500 million strong population owns a computer that can access *Internet.*

Utsumi fears that *Internet* penetration growth in the region is not happening quickly enough to catch up with developed countries. Computers and telephone line penetration need to increase rapidly and a dedicated *Internet* backbone for the region is also direly needed. The prognosis is not entirely bad: The booming cellular phone market in Latin America could help to increase internet penetration, said Utsumi. Online trade in the region is expected to be worth USD 72 billion by 2005 and this trade will be largely dominated by Mexico and Brazil (Reuters. Apr 04 2001 in NUA Internet Surveys. www.nua.com/surveys)

Mexico Facing Digital Divide.

Mexico is a country of contrasts, official data shows that in 1998 5.7% of the families had a computer, only 34% had telephone line and 86% of homes had Television. Now in 2001 exists many sources and firms making surveys and giving information about users. The latest for instance is from Nielsen NetRaitings who assure that Mexico is now the second largest market with *Internet* access, there are 6 million people online and make us own the second place after Brazil with 10.4 million home *Internet* access.

3.3 millions of the total in Mexico are active users spending an average of 8 hours each one at month. Over 87% of *Internet* Mexican users visit search engines or portals and 80.6 visit the sites of telcom and *Internet* providers. Even Mexico has the second place in on line access this firm found that spend more time navigating than Brazilians per month and visiting more sites and web pages every time we go on line, which results interesting. (Nielsen Netraitings NUA Internet surveys. Jun11 2001. P1).

Chairman of IBOPE e-ratings, Gerardo del Pozzo, presented de preliminar results from a study about people on line in Mexico. And is coincident with Nielsen Netritings, Mexico have 6.7 millions of internet users, 3.3 millions are active users. The report from IBOPE sounds optimistic among investors and *Internet* Industry in general due to market is wider than they expected . 57% of Mexican users are males and female 43% . The sample for this study was of 5,000 individuals aleatory selected but only with home access to net.

On the other hand. National Institute of Geography and Statistic (INEGI) registered in 1998 only 55% of 22 million of homes had residents who know how to use the computer. While U.S owns the 54% of internet users Mexico only has 0.31% of users in the world. And while Canada has 260 equipments for every 1000 citizens Mexico has 65 computers for the same amount of people. And the major part of them are concentrated in the capital and big cities.

Fig. 6 EQUIPAMIENTO DE LOS HOGARES

	1992 #	%	1994 #	%	1996 #	%	1998 #	%
Hogares con computadora	349,443	2.0%	640,224	3.3%	643,660	3.1%	1,262,884	5.7%
Hogares con teléfono	3,870,127	21.7%	4,974,705	25.6%	5,271,599	25.8%	6,735,874	30.4%
Hogares con televisor	14,735,101	82.7%	16,519,714	85.0%	17,682,026	86.4%	19,113,407	86.2%
Hogares con TV por cable	nd	nd	1,196,079	6.2%	1,012,154	4.9%	1,363,222	6.2%
Hogares con videocasetera	5,276,316	29.6%	6,631,096	34.1%	6,519,537	31.9%	7,178,685	32.4%
Total de hogares	17,819,414		19,440,278		20,467,038		22,163,568	

Fuente: Encuesta Nacional de Ingresos y Gastos de los Hogares 1992, 1994, 1996 y 1998. INEGI.

Dealing with this situation Mexican government announced a project which principal target is provide to 950,000 professors in basic schools of an equipment and training in order to use it daily. It is true that this is not the solution for the lack of infrastructure and trained people in access to the new technologies but is a modest effort trying to solve the wide digital divide and delaying in educational field. (Carlos Reyes. *Reforma.* Nacional. May 4th 2001 p.11)

Access to information as we can see is seriously affected, specially for those people poor and with lower income or for those who work in institutions with limited resources.

Fig.7 HOGARES CON COMPUTADORA POR ESTRATOS DE INGRESO

1996 1998										
Rangos de salarios mínimos mensuales	Hogares por estrato		Hogares con computadora		Acumulado en orden inverso	Hogares por estrato		Hogares con computadora		Acumulado en orden inverso
	#	%	#	%	%	#	%	#	%	%
De 00.00 a 04.00	9,621,737	47.0%	6,699	1.0%	100.0%	10,410,484	47.0%	21,596	1.7%	100.0%
De 04.01 a 08.00	6,335,657	31.0%	78,787	12.2%	99.0%	6,706,355	30.3%	175,570	13.9%	98.3%
De 08.01 a 12.00	2,215,921	10.8%	99,211	15.4%	86.7%	2,379,134	10.7%	244,873	19.4%	84.4%
De 12.01 a 16.00	987,532	4.8%	97,234	15.1%	71.3%	1,053,595	4.8%	203,039	16.1%	65.0%
De 16.01 a 20.00	491,375	2.4%	106,530	16.6%	56.2%	524,261	2.4%	163,036	12.9%	48.9%
De 20.01 a 24.00	225,405	1.1%	71,868	11.2%	39.6%	363,758	1.6%	117,169	9.3%	36.0%
De 24.01 a 32.00	240,613	1.2%	53,294	8.3%	28.5%	317,278	1.4%	134,843	10.7%	26.7%
De 32.01 y más	348,798	1.7%	130,037	20.2%	20.2%	408,703	1.8%	202,758	16.1%	16.1%
Total	20,467,038	100.0 %	643,660	100.0 %		22,163,568	100.0 %	1,262,884	100.0 %	

Fuente: Elaborado con datos de la Encuesta Nacional de Ingresos y Gastos de los Hogares 1996 y 1998. INEGI.

In a short telephone-survey made by the "Reforma" Newspaper found that more than half of children between 8 and 11 years old have used the computer as a tool for school activities, only a 40% of them have navigate in on *Internet* The sample was of 522 children from all country and from those who has used it only 54% has it at home, the rest in school , relatives or and internet-cafe. About the use they found that 40% of the children use it for playing games. Plus than only 27% owns an e-mail address.

Fig. 7 HOGARES CON RESIDENTES QUE SABEN UTILIZAR COMPUTADORA

SI SABEN	44.6%
NO SABEN	55.4%
TOTAL	100.0%

Resultados del Módulo de Computación aplicado en la Encuesta Nacional de Empleo Urbano en 44 áreas urbanas del país. Periodo de levantamiento del 13 al 26 de julio 1998.

At this point we can analyze the example of access to the information at National Autonomous University of Mexico, specially access to data bases and full text publications. The Institution has made a huge effort in order to make this an easy and inexpensive process for students. Access to information in National University can be via Intranet or via *Internet,* for that purpose, counts with a large number of computers distributed in libraries, laboratories, classrooms and offices. On the other hand there is a wide and significant data base collection covering all the areas and fields, number of journals and periodical reviews are more than 5000. If we compare this collection with other Institution it is possible to notice that users at UNAM are in better conditions for access to information than other users, from smaller universities do . Even inside the National University there are differences in type and quality of access to information since some of the students have *Internet* at home and others do not . We must remember that most of our students are the first generation of professionals in their homes, due to that many of them do not count with an educational background and support in buying or using the equipments at home. And commonly, they live in small houses with only one or two rooms, and they have to do their homework in the same place where family eat, iron and watch T.V. . As we can see differences among those who have access and those who do not, is common to all the countries and Mexico is not an exception, by contrast, number of users of Internet at home is increasing faster than we can preview. As surveys pointed it out.

Fig. 8 HOGARES CON COMPUTADORA POR ESCOLARIDAD DEL JEFE DE FAMILIA

1996 1998								
	Total de hogares	**Hogares con computadora**	**Distribución porcentual**	**Acumulado en orden inverso**	**Total de hogares**	**Hogares con computadora**	**Distribución porcentual**	**Acumulado en orden inverso**
Ninguna	3,316,532	19,876	3.09%	100.0%	3,515,976	12,265	1.0%	100.0%
Primaria	9,369,266	53,147	8.26%	96.9%	10,045,097	145,931	11.6%	99.0%
Secundaria	3,572,480	50,142	7.79%	88.7%	4,067,053	142,304	11.3%	87.5%
Preparatoria	1,909,133	103,694	16.11%	80.9%	2,012,865	182,355	14.4%	76.2%
Licenciatura	2,077,707	326,020	50.65%	64.8%	2,329,721	665,677	52.7%	61.8%
Postgrado	221,920	90,781	14.10%	14.1%	192,856	114,352	9.1%	9.1%
Total	20,467,038	643,660	100.00%		22,163,568	1,262,884	100.0%	

Fuente: Elaborado con datos de la Encuesta Nacional de Ingresos y Gastos de los Hogares 1996 y 1998. INEGI.

We can assure that digital divide is not only widening or bridging but is going in many directions and dimensions, has distinctive signs related with local conditions and also owns general characteristics common to almost all societies and countries, besides of this, when we observe, governments and citizens generate several actions in order to bridging it, but when we get deeper in this phenomenon we discover more and more variables and conditions over it.

Is important to assume that as specialists in information and new technologies field, knowing, and understanding of all those factors involved in digital divide, represent an engagement of refresh and keep in touch with our realities.

The expectatives are not pessimistic and we are sure that people will rich out the access, but when it happen, those who were enjoying technology and internet benefits before, must have advanced steps below and the divide keep existing and even wider. Our mission then, would be trying to stretch it, or at least, understand the differences . Government, professors, librarians, technologists, specialists in computers and whole society must do an effort for seeing technology as part of the solution instead of seeing it as a problem. Access to the net and the benefits beside it is a challenge that information technology has offered to us.

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