



INTERNET AS A TOOL FOR COMMUNICATION, INFORMATION AND PARTICIPATION

The case of tertiary students in Namibia

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Between July and August 2001, I set out to investigate the conditions for Internet as tool for information and communication among tertiary students in Namibia: to what extent they had access to what back then was still a new tool, and what they used it for. In the longer perspective, I wanted to explore Internet's potential to become a tool for participation in the democratic process in the hands of Namibian students. This article includes an update of the situation of the national ICT projects I studied during my field work.

The field study on which this article is based took place in Namibia during July and August 2001 as part of my Master course in Communication for Development at Malmö University, Sweden. In the context of the conditions of international development and the inter-relationship and dependency between the industrialized and the so-called developing world, I was interested in the potential of Internet as a tool for enhanced communication, networking and participation in cultural, political and democratic processes. The field study was partially funded by the Swedish International Development Cooperation Agency (Sida). The Danish NGO Ibis provided boarding and access to their offices in Windhoek.

My study concerned the extent of Internet access among tertiary students in Windhoek, Namibia. I consider the young to have a particularly crucial role in the development of Internet communication as a tool for increased participation in democratic processes.

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CONTEXT

Internet in Africa

In a comparison between OECD countries and Southeast Asian countries, Francisco Rodriguez and Ernest Williams found that the average OECD country has 40 times as many computers, 146 times more mobile phones and 1,036 as many Internet hosts (Rodriguez and Williams, 2000). According to International Data Corporation, in February 2002, of the world's 544.2 million Internet hosts, 4.15 million were situated in Africa. In February 2000 the numbers were 275,54 for the world and 2,46 for Africa. The increase for all regions is remarkable, but the speed at which it happens remains slow in the African region.

The cost of a new technology, at an initial stage, is high. Public investments in infrastructure need to be extensive: everything from electricity and bandwidth to hardware, software and know-how must be implemented. Once the infrastructure is there, the Internet may well prove to be a factor that narrows the gap between rich and poor, provided that access is kept at a reasonable cost. However, in many developing countries, the growth of the telecommunication sector tends to be hampered by state monopoly. This factor, which significantly increases the cost of connectivity, seems to be a limiting issue in the Namibian context.

Real access

In the developing world, a critical factor regarding Internet concerns real access: "Computers and connections are insufficient if the technology is not used effectively because it is not affordable; if people do not understand how to put it to use or if they are discouraged from using it; or if the local economy cannot sustain its use". This is the view of Bridges.org, an international non-profit organisation based in Cape Town, South Africa, combining ground-level ICT initiatives with ICT policy to help span the digital divide (www.bridges.org/). According to Bridges.org, answers to the following questions help analyse determining factors regarding real access to technology.

Is technology available and physically accessible? (physical access)

What is the appropriate technology according to local conditions? How do people need and want to put it to use? (appropriate technology)

Is technology access affordable for people to use? (affordability)

Do people understand how to use it, and its potential uses? (capacity)

Is there locally relevant content, especially in terms of language? (relevant content) Does the technology further burden people's lives or does it integrate into daily routines? (integration)

Are people limited in their use of technology based on gender, race, or other socio-cultural factors? (socio-cultural factors)

Do people have confidence in and understand the implications of the

technology they use, for instance in terms of privacy, security, or cyber crime? (trust)

How do laws and regulations affect technology use? What changes are needed to create an environment that fosters its use? (legal and regulatory framework)

Is there a local economy that can and will sustain technology use? (local economic environment)

Is national economic policy conducive to widespread technology use, for example in terms of transparency, deregulation, investment, and labour issues? (macro-economic environment)

Is there political will in government to do what is needed to enable the integration of technology throughout society? (political will)

These factors have crucial implications in terms of the possibilities for utilizing Internet as a tool for participation in the democratic process.

Political and social situation

Namibia is comprised of many ethnic groups. All ethnic groups speak their own language as well as English in many cases (which is the official language), Afrikaans, and sometimes one or two languages similar to the mother tongue.

In 2001, the government was running a market-oriented economic policy in which private enterprise and foreign investment were encouraged. Society was characterized by an extremely uneven distribution of income, mainly between the white and the black population. Namibia was considered the country with the largest income gaps in the world. Sixty per cent of the population lived in absolute poverty. Formally, 20% of the labour force was unemployed, and it was estimated that perhaps another 40% was underemployed. The government was attempting to bring about economic and social equality by extending social services rather than by means of the redistribution of economic resources.

The national leaderships in power in 2001 originated from the liberation movements. Namibia's first democratic elections were held in 1990, when South Africa left the country after years of occupation. The South West Africa People's Organisation (SWAPO) won a significant majority. Political development since then had been characterized by the government's attempts to bring about national reconciliation after years of apartheid. SWAPO's dominance was further secured at the elections of 1994 and 1998, although participation was low -perhaps suggesting an increase in dissatisfaction.

The constitution was based on democratic ideals and founded on respect for human rights. However, SWAPO's strong position, in combination with the weak opposition, led in practice to a one-party state. This tendency was intensified after a number of corruption scandals within the administration. The country's independent media, in spite of its small distribution and size, played an important part in the scrutiny of the political system. In the ruling SWAPO state apparatus, there was a tendency towards a growing intolerance against opposition, and violations of the right to free expression were frequent. Because most party officials had a background in the liberation struggle, there was a relatively high tolerance among the public concerning the government's shortcomings in vital aspects of democracy such as corruption scandals and infringements on press freedom. The lack of an active political opposition and popular participation in the political process and public debate constituted a manifest threat to democratic development.

The low educational level was another obstacle, though Namibia had since independence in 1990 used 25% of its yearly GNP on education. The literacy rate was high: 80 % for the total population and 90% for ages 15-24 in 1998. School enrolment increased to 95% in 2000 (SIDA, 2001). Still, most people did not have the fundamental skills needed to act in a modern democracy (UNDP, 2000).

The HIV/Aids pandemic was another limiting factor, and an issue of great concern for students at all levels. The disease had become the main cause of death since 1996. According to data published in 2001, about 20% of the population aged 15 to 49 was infected (SIDA, 2001) and the number of orphans was growing at a rapid pace.

ICTs had not reached the broader segments of the population. The gap between rich and poor, the informed and the uninformed, increased. "Any major new technology introduced into a society which is not, by its nature a 'just' society will exacerbate the gap between rich and poor" (Mooney, 1999). Initiatives to link up broader sectors to the Internet were limited both because of the enormous resources required and of the lack of educational skills.

METHOD

I examined the use of Internet among tertiary students in Namibia by conducting structured interviews with students organized in focus groups at five tertiary educational institutions in Windhoek: University of Namibia at Windhoek (UNAM), Polytechnic of Namibia (PN), Windhoek College of Education (WCE), Institute for Higher Education (IHE) and

Windhoek Vocational Training Centre (WVTC). I posed questions about the individual students' access to Internet -how, where and why- and the nature of students' communication (if any) with Southern African Students' Union, SASU. I also made personal interviews.

In addition, I attended the Executive Council Meeting of SASU in Windhoek in July 2001, with student leaders from most of the sub-region, and participated in a workshop concerning their communication strategy in which nine students were present: four from Namibia, and one each from Botswana, Malawi, Mauritius, South Africa and Swaziland.

Focus groups

Interviews were set at the students' educational institutions. In no instance did we have a representative from the school management present. I contacted the Students Representative Council (SRC) at each institution, and each SRC asked a group of 6-8 students to participate in the focus group interviews.

At the first interview I did at UNAM, all participants were male. I asked the organizer why. He claimed that women were not interested in attending meetings of this kind, and in fact did not enjoy speaking in large groups. The fact that all participants were male could be related to the traditionally patriarchal culture among the majority in Namibia, where women in general had less access to education and power (Jönsson and Laskar, 2000). Most students in political power are men, and student organisations have failed to facilitate women's participation at power levels. In preparation of the subsequent interviews, I always asked for a balance in number between women and men.

Regarding the courses and study subjects represented, I limited my selection by asking the SRC not to focus on computer and media students, since I assumed that they might have been more acquainted with different aspects of Internet than students in general.

Tertiary students in Namibia have to pay a rather high tuition fee. High fees mean that many young people are entirely excluded from tertiary institutions. Students attending the more expensive tertiary institutions presumably come from families with a relatively solid financial background. My focus groups seemed to consist largely of students from the middle and upper classes of the Namibian society.

Personal interviews

I made personal interviews with representatives of the Namibian College of Open Learning (NAMCOL), David Bezeudenhuit High School, local and regional media, the Namibian and Media Institute of Southern Africa, representatives of IT projects such as SchoolNet and NOLNet, government officials, and the NGO World Teach. All interviews were made at the respondents' locations, with the exception of a few telephone interviews.

FINDINGS AND ANALYSIS

Internet use in the Namibian context

In 2001 there were interesting and promising developments in the area of ICT taking place in Namibia.

SchoolNet was a locally initiated project, aiming at computerising and connecting Namibia's 1,500 schools to the Internet before 2005 (www.schoolnet.na). By 2001, it had connected 15% of Namibia's primary and secondary schools at a rate of approximately two schools per week. Funded half-and-half by local businesses and corporations and by national and international foreign donors, the project seemed to have a national base, which is a crucial prerequisite for a sustainable future.

More important than financial sustainability was perhaps the human capacity-building aspect of the project. Following the initial installment and computer training by SchoolNet technicians, training was performed locally on a peer-to-peer basis. This setting consolidated the ground for sustainable computer and Internet capacity. Joris Komen, Director of SchoolNet Namibia, stressed that e-mail communication was a major force behind self-training and development of local knowledge in the use of Internet. Enhanced interpersonal communication and awareness of the potential of Internet as a tool were incentives for individuals to further explore it as a medium [1]. Schools were requested to sign contracts to ensure that students gained access. In cooperation with NANSU and the Polytechnic of Namibia, SchoolNet was setting up a communication resource centre in central Windhoek, planned to become self-sustained once the equipment was in place [2]. The SchoolNet project was also expanding the possibilities for sustainability and access to electricity and telecommunication in rural areas by installing solar power plants and satellites [3].

Other national and international initiatives regarding web-based open and distance learning also posed an interesting possibility of students

accessing Internet in subsequent years, given its potential where conventional means of communication face infrastructural constraints: vast geographical distances between people as well as a lack of roads, transportation, telephone lines and electricity, which made transportation expensive and complicated for individuals.

The Namibian Open Learning Network (NOLNet) was a network comprised of four major Open and Distance Learning (ODL) institutions in Namibia: Centre for External Studies at the University of Namibia, Centre for Open and Lifelong Learning at the Polytechnic of Namibia, Namibian College of Open Learning, and National Institute for Educational Development. In 2001, NOLNet was in the process of establishing open learning centres in the capital cities of all 13 political regions in Namibia, equipped in some cases with Internet access, available with minimal charges.

Namibia College of Open Learning (NAMCOL) was an educational institution providing courses for adults and out-of-school youths that planned to initiate Internet based long-distance education.

In 2001, the government of Namibia was involved in many ICT development projects. There were EU-based projects in the realm of the Ministry of Basic Education, Sports and Culture concerning Community Development Centres and Multipurpose Centres [4]. The Ministry of Foreign Affairs, Information and Broadcasting (MFAIB) was also allocating funds for fee-based Multipurpose Community Centres, one in each of the 13 regions, containing computers, Internet, audio visual-equipment and photocopiers [5].

CONSTRAINTS

In 2001, the possibilities of getting and staying online in Namibia were rather limited. There was political will to facilitate widespread use of ICTs, though financial constraints and "competing" national priorities tended to slow down the process. There was also the concern, as expressed by Dr Robert West at MBESC and Wilma Deetlefs at MFAIB, that all ICT projects combined -state initiatives, international donor organisations, national and international NGOs, private enterprise and others- lacked a certain amount of national coordination [6].

The major physical infrastructural constraint for increased connectivity was back then a lack of lines. Ritva Niskala, NOLNet librarian at the Community Library Service, claimed that private lines were more efficient than the lines of large institutions such as UNAM and the Ministry of

Basic Education [7]. According to Rui Correia, Managing Editor at MISA, Media Institute of Southern Africa, the main limitations were posed by system breakdowns -which could last for weeks- and by lines that functioned irregularly. Local personnel were shut off until breakdowns or lines were repaired. Internet activities remained vulnerable to external infrastructural factors [8].

The American volunteer teacher organisation WorldTeach participated in an eight-week teaching program run by SchoolNet in the summer of 2001 concerning various aspects of Internet training. One teacher, who took part of the program in the village of Tsumeb, north of Namibia, said that during the eight weeks she spent in the village the school never had access to Internet. The cost of staying connected was too high, according to the responsible villagers, even though they had physical access [9]. This is a problem SchoolNet was aware of and trying to solve by striving to establish fruitful agreements with the telecom industry in Namibia to lower the costs of subscription as much as possible.

A final constraint was general poverty among the population. If computers and other infrastructure are installed in an environment where the average person does not have access to the basic necessities -water, health care, electricity and other components of a decent life, there is a discrepancy between the needs of the local population and the new technology: people find it difficult to see the benefits of the technology.

STUDENTS' ACCESS TO INTERNET

I learnt during my study that Internet access in fact was rather extensive in Windhoek, and at several locations, one could freely access the Internet frequently. Still, most of the students claimed to have little or no access. I propose that the IT awareness of my target group not necessarily reflected the reality of the IT landscape at that moment. At some level, students seemed to perceive Internet access as more limited than it necessarily was: IT development may have occurred so fast that students might have partly failed to realise the actual degree of access, or the potential of that very access.

Physical access

Students at UNAM and the Polytechnic claimed there were few computers with Internet access in their respective institutions, ten and three respectively. Subsequently, waiting lists were very long. There was additional access in courses and departments where use of computers was

integrated, such as the School of Engineering and Information Technology at the Polytechnic and the Faculty of Science at UNAM. At the Institute of Higher Education, students had no general access. Students at the Windhoek College of Education said there was one computer with Internet connection in the library, but "The librarians don't know how to use it so it's kept covered up".

The WVTC had no computer with Internet access available to students, according to focus group participants. At UNAM and PN, students used the libraries to access Internet and went to Internet cafés to some extent. Students at IHE knew of many places with free access and claimed they accessed Internet "everywhere". By contrast, students at WCE and WVTC claimed they did not use Internet much. They estimated that about 5% of the students used Internet cafés.

When I asked if they knew about the resource centre that SchoolNet and NANSO were putting up in the city centre, one student at WCE exclaimed: "Schoolnet, you could be speaking Chinese! What is Schoolnet?". It is certainly a challenge also to inform about access to information. Some students claimed not to be using Internet at all, while some said they did as often as three-four times a week. Again, there was a distinct difference between UNAM, PTN, IHE and WCE & W VTC.

The technology was to some extent physically available at most educational institutions, but not always accessible to the students. There was physical access for the staff at most institutions, but the capacity to use IT seemed to be lacking. Knowledge of where to access Internet varied widely. At the IHE, students informed me of six locations in Windhoek with free access to Internet [10]. I did not receive this information from any other participants in the study.

Affordability and socio-cultural factors

There are several Internet cafés in Windhoek. Their high cost, about 20 Namibian dollars per hour (25 SEK), was very expensive for most students. Subsequently, they are not useful for research, which requires a lot of time. The cost of buying computers is also high, and most students do not have access at home. Internet subscriptions are also expensive, and very few students can afford them. Computers and Internet use at the educational institutions are free of charge, but at WCE, the students claimed they had to pay for printing costs by bringing their own cartridges -expensive indeed.

The varying levels of access seemed to correlate to the variance of social

realities of the students. In general, students at institutions with higher fees of tuition -UNAM, PN and IHE - knew more of how and where to access Internet than students at WCE and WVTC. It seemed that students who could afford to attend the former educational institutions came from social backgrounds that in some way stimulated knowledge of, and facilitated, actual Internet access. Only one student in my study had private access at home: someone enrolled at a relatively expensive, private higher education institution.

Relevant content

Students mainly used the Internet for e-mail interpersonal communication as well as for reading local and global news. Answers suggested that interpersonal communication was prioritized rather than web browsing and information seeking.

Though English was not the first language of most students, all students in my study spoke fluent English (which, as I mentioned before, is Namibia's official language). Students found information published on the web relevant, and were well aware of the possibilities of using the net for finding information of their choice. Some students expressed skepticism about the general content on the web being controlled by western companies. Still, they found the local newspaper sites relevant and considered international news sites important sources of information.

Capacity and trust

Students at UNAM, PTN and IHE had the capacity to search the web, and computer/Internet literacy was partly included in the curriculum, whereas students from WCE & WVTC lacked this capacity.

Regarding the evaluation of online information, students discussed the web version of local newspapers and whether information published on the Internet could be trusted. It seems to me that they were quite unaware of the importance of evaluating sources in connection with research, perhaps because the Internet was relatively new as a source for research, and a critical mindset in connection with Internet research had not yet developed.

All students were well aware of the political colour of the various national and local newspapers, and some read both independent and government mouthpieces. They expressed a healthy critical attitude to the information they found in the local papers. Although they all read the papers, many claimed it was too expensive to buy them every day. Some of them accessed newspapers in school libraries, but at some libraries, it took days

for copies to arrive. Many students preferred the web version as it was cheaper and more up to date.

CONCLUDING REMARKS

In 2001, Internet access among tertiary students in Namibia was limited, mainly due to lack of technological infrastructure and the high cost of use. Seemingly, there was a weak basis for the use of Internet-based communication in the SASU context, as well as for the use of the Internet as a tool for enhanced participation in general. However, students' use of e-mail and the Internet constituted a starting point for the development of a more strategic application of the medium that could become instrumental in a participatory process. SASU had the potential to be a mobilizing force in this context, provided that it increased the use of Internet for relevant information, campaigns and networking.

While Namibian students had a low possibility of participating directly in Internet based activities, initiatives in the area of increased Internet connectivity, the setup of resource centres where access was expected to be free or low-cost, and the increased use of Internet in long-distance education, provided relatively good conditions for the future use of the Internet as tool for participation.

An important factor was training in computer and Internet literacy: learning how to use the tool effectively and strategically. The proposals of the Ministry of Basic Education, Sports and Culture in the Strategic Plan 2001-2006 regarding "equitable access" as a national priority area were a crucial condition in this context. So were the Ministry's objectives: "To ensure that learners and school communities have access to, and use, modern information technology and communication technology and relevant sources of information" (Ministry of Basic Education, Sports and Culture, 2001). In addition, the Ministry of Basic Education, Sports and Culture and the National Institute for Educational Development had proposed guidelines for computer literacy to be incorporated into existing courses. All these factors combined constituted a platform for future real access to Internet and increased possibilities for the medium as a tool for participation.

Additionally, the Internet held the potential to be used for enhanced participation in the democratic process, e.g. by researching and publicising information on relevant topics such as HIV/Aids, students' and gender rights, the Southern African Development Community (SADC) educational protocol, by and lobbying and campaigning in relevant students' issues. Moreover, the Internet's unique quality as an

autonomous publishing tool held the potential to allow students to bypass all traditional channels for information and communication, a possibility particularly relevant in a context where freedom of expression was limited and tolerance to opposition was low. Finally, the Internet held the potential to become tool to mobilize students on a national and regional basis. Human rights alerts and the strategic use of e-mail, e.g. for disseminating protest letters to relevant bodies, are examples of possible applications of Internet as a tool for participation by students.

The organisational value of Internet and its role in civic action and networking held immense potential to empower the students in Namibia as a crucial and instrumental tool for the realization of participatory democracy.

AN UPDATE: THE SITUATION IN OCTOBER 2005

In the process of preparing this article, I have learned that SASU is not operational to date. On the other hand, SchoolNet Namibia continues to provide Internet access to Namibian schools. To date some 250 schools have benefited from its activities and services, including: management of computer network installation projects on behalf of the Ministry of Education, NGOs, donors and corporate endeavours (e.g. NOLNET); provision and implementation of low cost networking options to schools and educators; use of new and refurbished equipment and stable open source (free) software; provision of affordable, subsidized Internet to schools and educators; basic training on system administration.

In August 2005, SchoolNet Namibia and the Swedish International Development Cooperation Agency (Sida) signed a new cooperation agreement, which will allow SchoolNet Namibia to extend Internet access and decentralize technical support services to underserved schools throughout the country, in line with the new national ICT Policy for Education and Namibia's Vision 2030 Policy Framework for Long-term National Development. The primary goal is to transform Namibia into a knowledge-based economy, where ICT plays a vital role.

Also in August 2005, the Ministry of Education launched its Information and Communication Technology Policy. The overall objective is to meet the country's developmental goals of Vision 2030, which has identified information and communications as areas with a crucial impact in the delivery of education in Namibia at present and in the future. Pressing challenges that need to be addressed include equipping schools with some 78,000 computers and the improvement of infrastructure, particularly schools in rural areas.

Today Namibia has an active e-governance program, aimed at closing the gap between elected officials and constituents. With a 100% fiber-optic backbone, Namibia has one of Africa's most sophisticated information and communication technology infrastructures.

[1] Interview with Mr Joris Komen 01.08.06.

[2] Telephone interview with Haroldt Binda, Information Officer at NANSO, 01.08.06.

[3] The Swedish Development Cooperation Agency (Sida) was to provide support for essential infrastructure and internet access development at 500 disadvantaged schools in Namibia over the following three years. The support was targeted towards installing Internet-connected Local Area Networks (LANs) at 500 schools, provide training and enable Internet usage (e-mail and web-browsing) by learners and teachers at the connected schools.

[4] Telephone interview with Benny Watson, H.O.D. Community Library Service, Windhoek, Namibia. 01.08.15

[5] Telephone interview with Wilma Deetlefs, Head of Department, Ministry of Foreign Affairs, Information and Broadcasting, 01.08.15

[6] Interview with Dr Robert West at MBESC and phone interview with Wilma Deetlefs, Head of Department at MFAIB, 010815

[7] Telephone interview 010815

[8] Interview with Rui Correia at MISA Regional Office 010801

[9] Interview with Hilary Wilder, WorldTeach. 010708

[10] Some examples are the British Council, the National Youth Council and the UNESCO office.

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