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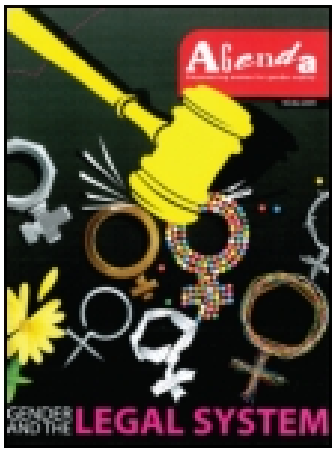

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Challenges to women's empowerment through ICTs: the case of Makerere University

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Challenges to women's empowerment through ICTs: the case of Makerere University

Aramanzan Madanda, Consolata Kabonesa and Grace Bantebya-Kyomuhendo

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abstract

Access to and use of Information and Communication Technologies (ICTs) is believed to hold a promise for women's empowerment and social change (Isaacs, 2002; Hawkins, 2002; Aloo, 1995). In higher education, computer technology and the internet have enormous benefits including: access to cutting edge educational materials, flexible distance learning suitable to time-constrained women, enhancement of academic outcomes, promotion of self-esteem and attainment of marketable skills. This *profile* examines challenges of using ICTs in higher education for women's empowerment through training and access to physical facilities. It is based on an empirical study conducted in the 2005/6 academic year at Makerere University in Uganda. The results indicate that enrolment of women in ICT courses has risen from about 15% to 40% by the end of 2006, and there is increased use of internet, email, networking and research. However, there are challenges of empowering women through access to ICTs. Obstacles largely emanate from patriarchal, institutionalised work and programmatic ethics, limited physical ICT facilities as well as individual characteristics, perceptions and attitudes. We conclude that skills and physical access alone are insufficient to bring about women's empowerment.

keywords

empowerment, Uganda, access, education, policy

Introduction

ICT is shorthand for infrastructure that brings together people in different places and time zones with multimedia tools for data, information, communication and knowledge management to expand the range of human capabilities (Rathgeber and Adera, 2000; Beebe et al, 2003). Uganda's ICT policy defines ICTs as technologies that enable the development of applications for generation, transmission, processing, storage and dissemination of information in all forms including voice, text, data, graphics and video (ROU, 2002:8).

Access to and utilisation of various ICTs varies worldwide. Gender research examining access to and use of ICTs in wealthy and poor countries has indicated that women have less access to ICTs, less ICT skills than men and fewer opportunities to learn how to use ICTs. Women also have their number decreasing with increasing skills complexity, face cultural and social barriers to acquire access and lack time to learn and use ICTs (Hafkin and Taggart, 2001; Hafkin, 2002; Whittenburg, 2003).

In education, ICTs hold the promise of

transforming learning in new and powerful ways (Beebe et al, 2003). Makerere University recognises ICTs' importance and has designed a policy and 'master plan' which acknowledges that 'any modern institution of higher learning is critically dependent on the smooth functioning of ICT and ICT services' (Makerere University, 2001:1). Recognising the difficulty of introducing ICT, the policy notes that 'implementation of ICT is not simply an introduction of new technology, but a complete re-thinking of how the institution's functions are achieved' (Makerere University, 2001:5).

The university's strategic plan prioritises gender mainstreaming, and the ICT policy was expected to take into account gender concerns. Infrastructure (for example a university-wide fibre optic cable), training and acquisition of hardware and software and general expansion of ICTs have been realised since 2000. However, the policy had never been assessed for gender sensitivity and contribution to women's empowerment before a study in 2005/2006 did exactly that.

Methodological and theoretical framework

The study adopted a cross-sectional design to capture the different parameters and attributes of students and staff that have a bearing on access to and utilisation of ICT within the university. The study combined quantitative and qualitative research methods, which included structured interviews, in-depth interviews and observation of facilities. Interviews were held with female/male staff and student users and non-users of ICTs, drawn from all academic and administrative units of Makerere University. The respondents were identified using a stratified, simple, random sampling technique. A total of 410 members of staff, of whom 138 (34%) were female, and 1,887 students, of whom 889 (47%) were female, were interviewed using a structured questionnaire. Furthermore, in-depth interviews were conducted with university managers, administrators and ICT coordinators to capture their understanding of ICT dynamics and women's empowerment. This was supplemented by a content review of the university's ICT policy.

This *profile* uses Longwe's Women's Empowerment theoretical model and 'lens for seeing the process of women's empowerment' (Longwe, 2005:36). Longwe's model provides a non-linear five 'level' framework for 'seeing' the process of empowerment as a form of women's action by which a gender issue can be confronted. The levels are welfare, access, conscientisation, mobilisation and control (Longwe, 2005:36). In our study, Longwe's framework was conceptualised and applied in assessing and linking the extent to which provision of ICTs as an intervention in an institution like Makerere University affects women's empowerment. In this framework, we focus on levels of accessibility in terms of space and time, physical facilities and control and decision making.

Access is defined as the first level of empowerment where women improve their own status, relative to men, by their own work and organisation arising from increased access to resources (Longwe, 2005:37). The important aspect in our study was the extent to which women's own actions have increased their access to ICT facilities and programmes. The aspect of the framework that was important was control. Control is the level that is reached when women have taken action so that there is gender equality in decision making over access to resources, so that women achieve direct control over their access to resources (Longwe, 2005:37). We utilise Longwe's model to examine the extent to which women access ICTs and the degree to which they are engaged in decision making and in control of ICT infrastructure, systems and facilities.

Our research shows various challenges at various levels, including policy, facilities, skills acquisition, utilisation and institutional support.

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MORGUEFILE

Awareness of ICT policies is crucial, as students and staff cannot demand for what they do not know.

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Makerere University ICT policy: Does gender count?

The Makerere University ICT policy provides for end-user training, ICT systems and services, network architecture and an ICT implementation strategy named the Master Plan. The vision of the policy is 'university – wide access to and utilisation of information and communication technology to enhance the position of Makerere University as a centre of academic excellence…' (Makerere University 2001:2). The policy aims to promote office computing, particularly in form of desktop computers, for clerical and secretarial work, management, research and teaching.

Our analysis of the policy focused on identifying gender gaps in terms of provision of ICT facilities, skills and training, management and institutional support for both females and males. A gender analysis shows glaring gender gaps in almost all the policy components. In general terms, the policy itself is couched in a non-gender-inclusive language, contrary to what is stipulated in the country's national ICT policy which recommends use of 'non-discriminative gender-sensitive language in information and communication programmes' (Objective 10c)[1]. It is also not in tandem with the university's strategic plan which prioritises gender mainstreaming alongside ICT.

The Longwe (2005) framework cited above points to control as the highest 'level' where women achieve direct control over resources. While women are represented on the Makerere ICT Committee, which is responsible for overall guidance and supervision, only two out of the ten members are women. In terms of the structures proposed for implementing various policy components, there is no indication of how gender will be mainstreamed. No suggestions

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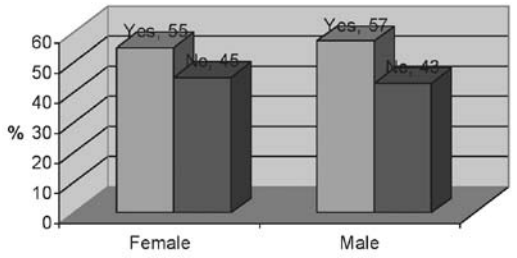
are made to include a gender and ICT expert in the structures, how end-user training is to be made gender-sensitive, and no provision is made for training ICT implementers in gender skills. The Makerere policy lays more emphasis on technological and technical issues, ignoring human and gender relations.

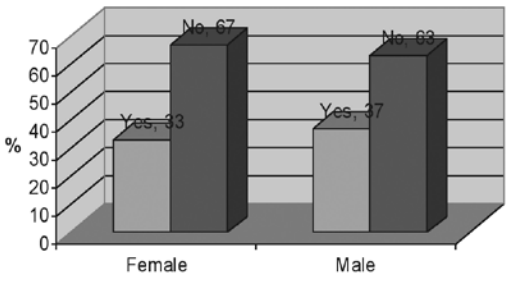
In terms of awareness, the study reveals that though the ICT policy was passed in 2001 and placed on the university intranet, 45% of the female staff and 43% of males were not aware of the policy as shown in figure 1.

Staff Awareness of ICT Policy (Figure 1)



On the other hand, there were more students than staff who were unaware of the university ICT policy. Of those interviewed, 37% of male students as compared to 33% of female students were aware of the policy, as shown in figure 2 below.

Student Awareness of ICT Policy (Figure 2)



In terms of knowledge of the content, 56% of academic and administrative staff, who said they knew about the policy, had vague ideas about its contents, with more females than men failing to state what is in the policy. On the other hand, students who were aware of the ICT policy were more specific on its contents, such as training students in computer skills and access to the internet (63.2% of females and 61.5% of males), integration of ICT in the university education management system (29.3% of females and 32.5% of males) and easing communication and work (13.2% of females and 22.6% of males).

The majority of staff and students did not articulate the broader concerns of the university ICT policy and implementation plan, namely the Academic Registrar's Information System (ARIS), the Financial Information System (FINIS), the Library Information System (LIBIS) and the Human Resources Information System (HURIS). The above situation is problematic given that the policy documents have been loaded on the university intranet for more than three years. It also poses questions regarding the way ICT-related information could be disseminated and the need to use multiple information channels to enhance access (Madanda et al, 2007). Awareness of the ICT policy is crucial, as staff and students cannot demand for what they do not know.

Access to ICT facilities

The university ICT policy proposed a ratio of one computer to two members of staff and one computer to five students. The computer to staff/students ratio remains unachieved for most of the university units. It is estimated that of the 4,000 computers in the university, about 3,000 are located in the Faculty of Computer Science alone – this number must be compared to the current university population of over 35,000 students and more than 1,000 staff. The findings indicate that shortages are even more severe in faculties dominated by women, namely arts, law and education.

To enhance access, one of the 14 projects proposed in the implementation plan was to set up

AGENDA FILES

Fewer women at Uganda's Makerere University have access to physical ICT facilities and spaces than men.

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university information kiosks in locations inside and outside the university. Whereas on campus, internet kiosks have been established, including one in the Department of Women and Gender Studies, none has been set up in off-campus residences where most female students and female staff reside. Evidence shows that of the members of staff who reside on campus, 70% are male. Furthermore, of students who reside on campus, 55% are male. Residence on campus places one in an advantage of accessing ICT services longer, including late hours of the night.

In terms of access to computers, more female (62.7%) than male (50.7%) staff reported having limited access as the principle constraint. Other challenges related to access were high cost of ICT programmes, multiple regulations governing access, the unstable local area network (LAN) and limited training. In some faculties, there were policies which indirectly excluded women by providing computers to staff with a rank of associate professor and above, yet, according to the university staff profile, less than 15 women fill those ranks.

ICT skills acquisition

Proficiency is crucial in harnessing the benefits of ICT for empowerment. A number of challenges to acquisition of ICT skills were reported by respondents, including cost, time, quality of trainers, unclear staff training procedures and limited ICT facilities. Further analysis indicated that 32.2% of women found acquisition of skills expensive, while another 16.9% were frustrated by the limited scope of ICT skills on offer. A proportionately larger number of women reported limited time for ICT training (23.4% females compared to 19.1% males).

More females than males said they were constrained by limited ICT facilities (11.7% females

compared to 4.6% males). Time, mentioned by women as a key limitation in acquiring skills, is attributable to the multiple roles that women play, hence finding it difficult to schedule ICT training.

Other factors that emerged included the perception that ICT courses were difficult to stick to. About 38% of female students and 29% of male students think that 'it is hard to pursue ICT training', and this limits their ability to attain skills. There was also an apparent discrimination between academic and administrative staff in terms of access to ICT facilities and training. The skewed focus on academic staff, where women constitute about 30%, excludes the administrative staff, where women constitute over 60%. This situation is compounded by presence of outdated and damaged computers in units where female staff and students dominate.

Utilisation of ICT facilities

Often, the relationship between access to and use of ICTs is not automatic (Czerniewicz and Brown, not dated). Similarly, staff and students with access to physical facilities were faced with multiple challenges to fully utilise them. Tables 1 and 2 below highlight utilisation-related challenges for staff and students respectively.

Utilisation challenges faced by staff (Table 1)

	FEMALES		MALES	
CONSTRAINT	NO.	%	NO.	%
Restricted access & bureaucracy	15	33	37	33
Unavailable ICT materials	7	16	20	18
Limited time	6	13	9	8
Limited user skills	6	13	7	6
Damaged/outdated computers	6	13	20	18

The biggest proportion of staff (33%) finds access restrictions and bureaucracy to be the biggest obstacle. Other key challenges are damaged, outdated or limited number of computers and time limitations. Female staff is more constrained by limited skills than males are. Student-related challenges are shown below.

Utilisation challenges faced by students (Table 2)

	FEMALES		MALES	
CONSTRAINT	NO.	%	NO.	%
Restrictions on accessing ICTs	43	8.87	61	10.50
ICTs not available to students	53	10.93	61	10.50
Limited time	71	14.64	84	14.54
Too many formalities involved	28	5.77	35	6.02
Limited ICT user skills	82	19.91	99	10.04
Damaged computers	70	14.43	92	15.83
Outdated computer	67	13.81	61	10.50

As table 2 illustrates, one important constraint for students in using computers is the high student-to-computer ratio. This situation is worsened by computers being damaged or outdated. Increasing supply of computers, especially for student use, is one of the single, most important things that students hope to see.

Together with the above, restrictions and what students say are 'too many formalities' involved make access difficult. Like staff, students report corruption among ICT attendants. While such allegations were not frequently stated by most of the respondents, one senior academic staff noted as follows:

> 'You see… we… really lack… integrity and proper use of money… We are ethically

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backward. Actually, ethically, we are like animals; we don't care about other people...'

It will be important to address issues of misconduct among those in charge of ICT if constraints of access and utilisation have to be addressed.

Obtaining institutional ICT support

In terms of institutional services, such as providing information, end-user support, common services and maintenance, the study showed that there were a range of constraints. There was limited awareness about available ICT support services, which emerged as the biggest constraint (34.5% of females and 43.1% of males). A significant number of staff (20.7% of females and 14.6% of males) argues that the inefficiency of ICT managers explains the difficulty of accessing institutional support. They argue that ICT staff and the overall university management are unresponsive to staff needs and demands.

Furthermore, some of the staff thinks that there are limited numbers of skilled trainers to help (10.34% of females and 5.69% of males). Another 25.9% of the female staff and 15.5% of the males argue that the support facilities are either limited or costly. Generally, there was a feeling that university faculties and departments had been left by central management to maintain and run computer facilities on their own.

Conclusions and recommendations

The study has shown that the policy, the major instrument for implementation of activities, is not gender-inclusive. Consequently, there are marked differences in terms of accessing physical ICT facilities depending on gender in terms of training, management and institutional support. Male staff have more advanced skills and greater access than female staff. The same scenario is replicated among students, though in a lesser magnitude.

Female students dominated in basic applications and email use, while male students dominate in professional skills. The limited space and equipment exacerbate the gender differences in that fewer women have access to physical facilities and spaces. The limited space and facilities, given the high student and staff population in Makerere, compound these problems. In relation to Longwe's framework, it can be argued that provision of ICT infrastructure and training at Makerere University may not lead to women's empowerment.

Other factors, like participation in decision making and access that takes into account the different time demands of women and men, need to be considered if ICTs are to contribute to women's empowerment. There is also need for multiple ways of dissemination of ICT policies and information to effectively reach both males and females. All the above not withstanding, we can argue that ICT access has potential for effectively contributing to women's empowerment if it is contextualised within the broader parameters of institutions and if it is cognisant of the gender barriers affecting women and men.

Notes

1 See http://www.ucc.co.ug/nationalIctPolicyFramework.doc for Uganda's full National Information and Communication Technology Policy.

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