

# ICT Use by students of the Higher Teachers Training College Yaounde: are there Gender Differences?

By  
Nkehsera Claire Ndangle

## Abstract

One of the main problems to be solved in Africa if the EFA goal quality education for All is to be achieved by 2015 is without any doubt the taking into consideration good educational policies. The final report of UNESCO's Teacher Training Initiative for Sub Saharan Africa that held in Dakar 2006 with BREDA, held that it is necessary to assist sub-Saharan African countries in restoring their education system both by putting the appropriate infrastructure in place and by introducing policies and programs that take national EFA priorities and the MDGs into account (BREDA, 2006). Harnessing all their human potential, from both men and women, is the only route to meeting the educational and developmental needs of Africa. Benchmarking participation and use of ICT in the sector, almost absent until recently across Africa, is critical to establishing the status and progress of ICT access, usage and production and ultimately the success and failure of ICT policies aimed at promoting ICT uptake.

In this article therefore we assumed that, there are gender differences in the usage of ICTs, and the productions done by students of the higher teachers training college Yaounde. It also draws on a wide range of global indices and evidence that indicate that, there are some socio-cultural factors that contribute to the gender differences in ICT usage in this higher institution. This article aimed to provide the kind of disaggregated data, analysis and proposals required to identify areas of inequity in access to ICTs between men and women and any differences in their usage at the national level. This should provide a basis for policy makers to develop interventions aimed at ensuring greater gender equity in relation to usage of ICTs.

We therefore sought to find out whether there are gender differences in ICT usage in the Higher Teachers Training College (E.N.S) Yaounde. Data from indicator 4 of the PanAf observatory was be used for this study. Data was analyzed descriptively using tables, graphs and percentages. The results showed that as far as ICT based productions are concerned, there are no gender differences in the use of ICTs. Both male and female students use these tools to type their work, project their exposés and dissertations. On analyzing data for socio cultural factors that bring in gender differences in ICT use, a slight difference was gotten from interviews and group discussions. Females like their male counterparts, use ICTs to send e-mails freely but not to participate in social internet based networks and also not to chat. This is due to the female perception of themselves and what the society holds about these activities. We proposed that parents should be sensitized: on the importance of education and most especially the pedagogical integration of ICTs; and also on the MDG goal 3 and EFA goals by 2015 so that they understand the importance of providing ICTs to their female children.

## **Introduction:**

The greatest challenge facing developing countries is the development of the human capital required to operate a modern economy and society effectively. That ICTs play an important role in African development is now well documented. The use of wider access to ICT services to enable social inclusion through employment generation and improvements in social services, has been documented (de Silva et al 2009, Jensen 2007). Evidence can be found that access to ICTs (such as telephones) can break down the isolation of individuals, enhance their chance of economic inclusion and thus 'provide diverse avenues for women's social, political and economic empowerment' (UNDAW 2003).

Most of the studies in recent years on women's access to and usage of ICTs argue that there is a significant gender divide in ICT access and usage, particularly in developing countries. A study carried out in 2005 by the Gender and ICT Network (Reseau Genre et TIC), reveals that, globally, women's chances to benefit from the advantages of the information society are one third less than men's (Mottin-Sylla 2005).

In this paper therefore we assume that, there are gender differences in the usage of ICTs, and the productions done by students of the higher teachers training college Yaounde. It also draws on a wide range of global indices and evidence that indicate that, there are some socio-cultural factors that contribute to the gender differences in ICT usage in this higher institution. This paper aims to provide the kind of disaggregated data, analysis and proposals required to identify areas of inequity in access to ICTs between men and women and any differences in their usage at the national level This should provide a basis for policy makers to develop interventions aimed at ensuring greater gender equity in relation to usage of ICTs.

## **Objectives:**

- Identify gender differences in ICT productions by learners of the Higher Teachers Training College Yaounde.
- Identify gender differences in ICT use by learners in Higher Teachers Training College in Yaounde
- Examine socio-cultural factors influencing gender differences in access and use of ICT

## **Theoretical framework and literature review**

The Feminism Standpoint Theory of Sandra Hardings and Gender Symbolism of scholars like Herbert Mead (1863- 1931) and Connell, 2002; Heath, 2003 will be used in this study to better explain the gender differences in ICT use in higher institutions.

## **Feminist Standpoint Theory**

In the mid-1970s and early 1980s, several feminist theorists began developing alternatives to the traditional methods of scientific research. The result was a new theory, now recognized as Standpoint Theory, which caused heated debate.

Feminist Standpoint theory is a feminist epistemological theory (Nsibirano, 2009) that has been of interest to scholars who wish to give voice to the voiceless since it is a knowledge creation stand that aims at empowering the marginalized. From this we learn that all individual experiences are significant and if understood contribute to an understanding of the disparities existing between males and females. The central tenet of feminist epistemology is “situatedness of the knower and hence “situated knowledge” (Harding, 1991). Standpoint theory takes clear account of how knowers experience and respond to power in society.

I am suggesting the significance of involving users in the efforts to understand their relationships with ICTs. Such an analysis requires a clear focus on the university students users as situated knowers (Harding 1986; Harding 1991; Haraway 1991;) This will assist in the attempt to understand gendered differences in the use of ICT. The students will have an opportunity to contribute to knowledge concerning computer and internet use in university education. Students have a wealth of untapped knowledge basing on their experiences with computer and internet use. It is the individual student's standpoint in a university society; that will shape an understanding of issues about gender symbolism and ICT use. It is also possible to interrogate students' social and demographic differences and how they influence different experiences in the relation to ICT use.

The view of the students as “situated knowers” is not innocent. Rather it has been created out of the different individual experiences. At this point, it is not clear what the role of students has been in the processes of ICT integration in University education, not only in the Higher Teacher Training College Yaounde-Cameroon but Africa as a whole. However it is in the interests of all stakeholders in the drive to integrate ICT in University education that we draw on contributions from students viewpoints as situated knowers so that we can begin to understand issues of ICT use by students.

## **Gender Symbolism**

Gender Symbolism starts with the perspective of scholars like Herbert Mead (1863- 1931) and others (Connell 2002; Heath 2003) who have commented that humans are symbol using beings. For all the symbols that are known to them, humans have a tendency to assign meanings to each one of them. The “Gender” in the gender symbolism is simply to appreciate the fact the men and women have differences in the way they define and assign meanings to these symbols.

Gender symbolism refers to how gendered meaning and value are assigned to everything in the world, but in this case to Information and Communications Technologies. It is from the different positions and perspectives that each user holds that meanings are defined and assigned. Differences in experiences based on the positions held usually tend to create differences in meaning. With each perspective, individuals' create meaning and this is the process of Gender symbolism. Gender symbolism and standpoint theory are related in the sense that meanings are derived from the experiences of a situation. Administrators in a university community for example will define different meanings to the use of ICT from those assigned by students.

Therefore, in seeking to understand the gender differences in ICT use in universities, a review of the Gender symbolism is helpful. An analysis of meaning, builds an understanding of the differences that abound in the use of ICT. Clear understanding of what meanings exist and how they are defined and attached to the use of ICT is still missing. It is not for example clear how males and females create and assign meaning to the use of ICTs in Universities. This knowledge gap, it is hoped will be enriched with the forthcoming research that will be done to interrogate the influence of gender Symbolism on ICT use in Universities in Cameroon.

### **Critical IS theory**

The focus of Critical IS theory is not merely an attempt to describe or observe gender differences or document how they come about but is a way of investigating why an inequality exists, and to search for underlying causes. This moves the research away from an exclusive focus on individuals, situations and local meanings to the systems of relations which make the meaning possible (Trauth and Howcroft 2006). Thus attention is focused on power relations, marginality and dominant discourses in a broader organisational and societal context. Critical IS theory has explicitly been used to understand issues related to women and IT: for example, women's recruitment and retention in the IT field (Trauth and Howcroft 2006), and the digital divide amongst women minorities (Trauth, Kvasny et al. 2007). It seeks examples of individuals' overt and covert power plays as well as indications of resistance, solidarity and support, thereby illustrating how people are challenging and transforming what is taken for granted.

### **Literature Review**

During an ICT capacity building workshop in Palestine(2007), it was agreed that Information and Communication Technology (ICT) can sustain or deepen the power imbalance between men and women, rich and poor, the North and South. Those unfamiliar with ICT, and its use, making, or deployment, do not reap its rewards and are unable to compete successfully. We recognize the strategic potential of appropriate technologies to diminish the marginalization and isolation of women whose

education is restricted by providing access to ICTs through, computer, internet, telephone, e-learning online public spaces. Not only do we think that giving women access to ICT can build their capacity, improve the representation of females in higher institutions but we also believe it will help develop relevant content, to increase women's ICT skills and confidence, and to extend their participation as producers of content and ICT technicians, and to the development of the nation.

Computer literacy is defined as “an understanding of computer characteristics, capabilities, and applications, as well as an ability to implement this knowledge in the skillful, productive use of computer applications suitable to individual roles in society” (Simonson, Mauer, Toradi, & Whitaker, 1987). Computer proficiency is the knowledge and ability to use specific computer applications (spreadsheet, word processors, etc.). Computer literacy and proficiency are often used interchangeably; however, it is our belief that increasing computer proficiency positively impacts computer literacy. Educators recognize the need to increase the proficiency skill levels of all students especially females pertaining to information technology. Most courses now strive to incorporate information technology into all aspects of the learning continuum. Girls often report that they enjoy studying ICT. In countries where this is not the case, it is typically due to an over-emphasis on pure programming skills in the curriculum – which is typically less attractive to girls compared to e.g. multimedia skills.

The computer knowledge, access and use is therefore very vital to females as it can cover up for the time they mostly complain of not having to further their studies. In the modern university milieu, computer literacy is one of the most frequent prerequisites for putting together relevant material gotten from the internet, typing assignments and dissertations (Simonson, Mauer, Toradi, & Whitaker, 1987).

### **Internet skills**

The strength of the internet is that it provides an excellent platform where students can collect information in multiple formats and then organize, link, and discover relationships between facts and events. An array of tools for acquiring information and for thinking and expression allows more students more ways to enter the learning enterprise successfully and to live productive lives in the global, digital, and information-based future they all face. But one of the frames through which the context needs to be understood is gender (Marcelle 2000).

### **One will ask why internet for women?**

- Internet can provide access to resources and contribution to knowledge which will help in building their capacities better in higher institutions and consequently increase their number.
- Emergence of new roles (of women).

- Indirect impact of internet and access to income, knowledge, education, etc. on self-confidence and self-esteem. The internet has an impact on empowerment, in changing relationships, in the families, in the learning milieu and in the development of every nation. Reason for which every country strives to include internet use in all developmental issues.

### **Socio-Cultural factors that bring in gender differences in ICT use**

The following are some socio-cultural factors that impede women's use of ICTs:

Cultural attitudes discriminate against women's access to technology and technology education.

- Women are less likely to own communication assets – radio, mobile phone than men.
- Women in poor households do not **have the income to use public facilities like cyber cafés than men.**
- Information centres may be located in places that women are not comfortable visiting.
- Women's multiple roles and heavy domestic responsibilities limit their leisure time. Centres may not be open when it is convenient for women to visit them than men.
- It is more problematic for women to use facilities in the evenings and return home in the dark.

If the expected benefits of the extension of communication networks and access to a wider scope of information are to be realised, strategies that address the specific cultural context are needed to remove barriers to women's access (Marcelle 2000). The Internet population, in most countries, is overwhelmingly male. Even in those developing countries where women seem to be catching up, the number of Internet users is generally less than 10 percent of the population. (CIDA 2009)

MINERVA (2001) in carried out a survey on ICTS use in learning and teaching in some European Universities and reported that, in general, the students had good skills with different applications. The sample of students in this study were similar to those obtained in much larger samples from four of the universities (Åbo, Bergen, Edinburgh and Groningen) during an earlier study of student ICT skills (SEUSSIS – URL) which were found to have good representation of age, gender and subject of study of the population as a whole. This suggests that the samplings in this study, at least at these universities, were fairly representative of the whole student population. The highest abilities were with e-mail and word processing with which over 80% students reported being able to use without help. A slighter lower ability to use on-line bibliographic databases was reported. Presentation managers were the software with which students had least skill, one third of the respondents indicated that 'they would need some help' to create a short talk with slides using them and the highest percentage of students reporting that they had never used the application.

While the potential of ICT for stimulating economic growth, socioeconomic development, effective education and training, and good governance is well recognised, the benefits of ICT have been unevenly

distributed within and between countries, regions, sectors, and socioeconomic groups (United Nations, 2005). Moreover, women often have complex relationships with technology and machines as a result of being socialised over time to believe that machines and technology are men's domain and not for women and girls. This perception generates gender bias attitudes towards studying or using information technology that produce gender differences operating in both institutional and informal settings. In some societies like in parts of Cameroon, cultural norms and practices discourage interaction between women and men outside the family, and women may be uncomfortable in situations where men are present either as trainers or as peers (Fraser- Abder & Mehta, 1995; Liverpool, 2002; Mottin-Sylla, 2005; Munyua, 2005; United Nations, 2005 as cited by Tchombe ?, 2008). Consequently, women are more likely than men to lack the basic literacy and computer skills that would enable them to take advantage of new global communication opportunities on this account. Attitude is a deterring factor here and must be addressed with urgency. In a study carried out by ROCARE (2005) it was affirmed that girls become more focused than boys when they are correctly introduced into ICTs.

The skills of a child are usually and basically shaped through gender roles in society as the child grows up until he/she really becomes a mature man or woman. Considering this and looking at gender roles in the African context during childhood, girls through engagements in family activities such as cooking for example, acquire very early the concept of quantity through skills in measurement. These activities are extremely scientific because they have to be accurate in determining the amount of water, salt and other ingredients to put in the food that will produce the desired taste. Many discriminatory decisions are made and with little difficulty by girls demonstrating the degree of their scientific skills they acquire through engagements in family chores . Very early in life, boys are given the opportunity to become more exploratory and instrumental than girls. They are allowed more than do girls to be involved in play activities outside the home. Such variations in what boys and girls are allowed to engage during childhood in cultural milieus determine the degree to which they can be encouraged to participate in scientific and technological activities later in life. There is need to change mindset about societal perceptions of gender differences and competency (Tchombe, 2008) which are the root cause of the gender differences found in the use of ICTs in universities.

## **Methodology**

The study is qualitative and so the case study research methodology will be used.

This research has the following as a design:

PanAf has as objective to collect pertinent data from ten schools in some twelve African countries. The goal is setting up an ICT PanAfrican observatory ([www.observatoiretic.org](http://www.observatoiretic.org) ) which will permit interested persons to understand better how the pedagogical integration of ICTs can ameliorate the quality of teaching and learning in Africa.

## **Research setting**

The study was conducted in the Higher Teachers Training College (E.N.S) Yaounde, the capital of Cameroon. This institution admits holders of the General Certificate of Education (GCE) Advanced Level or the Baccalaureat for the first cycle and holders of Bachelor's Degrees for the second cycle. E.N.S Yaounde admits and trains Anglophones and Francophones of both sexes.



## Population

Table 1: Number of students in the institution by departments (2009/2010 academic year).

| Series                        | Level 1 |         | Level 2 |         | Level 3 |         | Level 4 |         | Level 5 |         | Total |
|-------------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
|                               | Males   | Females | Males   | Females | Males   | Females | Males   | Females | Males   | Females |       |
| <b>German</b>                 | 23      | 14      | 7       | 26      | 17      | 11      | 22      | 10      | 38      | 44      | 212   |
| <b>Biology</b>                | 49      | 26      | 35      | 31      | 23      | 31      | 26      | 27      | 28      | 31      | 307   |
| <b>Chemistry</b>              | 46      | 27      | 47      | 26      | 41      | 28      | 34      | 29      | 44      | 29      | 351   |
| <b>Guidance Counsellors</b>   | --      | --      | --      | --      | --      | --      | 40      | 35      | 22      | 53      | 150   |
| <b>Spanish</b>                | 19      | 18      | 13      | 20      | 10      | 21      | 16      | 16      | 20      | 24      | 177   |
| <b>Geography</b>              | 46      | 39      | 26      | 39      | 26      | 29      | 34      | 31      | 44      | 36      | 350   |
| <b>History</b>                | 44      | 41      | 25      | 48      | 27      | 29      | 40      | 25      | 49      | 35      | 363   |
| <b>Bilingual Letters</b>      | 19      | 43      | 15      | 32      | 8       | 21      | 18      | 19      | 27      | 21      | 223   |
| <b>English Modern Letters</b> | 23      | 61      | 28      | 59      | 32      | 39      | 8       | 34      | 19      | 51      | 354   |
| <b>French Modern Letters</b>  | 22      | 64      | 26      | 62      | 24      | 67      | 37      | 43      | 36      | 66      | 447   |
| <b>Maths</b>                  | 74      | 12      | 64      | 51      | 94      | 22      | 47      | 3       | 54      | 8       | 429   |
| <b>Philosophy</b>             | 33      | 14      | 35      | 12      | 35      | 16      | 23      | 9       | 26      | 15      | 218   |
| <b>Physics</b>                | 52      | 12      | 52      | 12      | 31      | 7       | 43      | 10      | 63      | 6       | 288   |
| <b>SCED</b>                   | --      | --      | --      | --      | --      | --      | 22      | 58      | 24      | 45      | 149   |
| <b>Total</b>                  | 450     | 371     | 373     | 418     | 368     | 321     | 410     | 349     | 494     | 464     | 4018  |

The population of this research comprised male and female students of the Higher Teachers Training College Yaounde. This is one of the institutions selected by the Cameroon PanAf team for the PanAfrican Research Agenda on the Pedagogical integration of ICTs. One of the parameters for choosing the schools for the PanAf project was the acquisition of computers to identify leading practices on the pedagogical integration of Information and Communication Technologies (ICTs).

## Research Instrument

Three instruments – questionnaires, interviews schedule, and focus group discussion guide, were developed and validated by the PanAf team. Secondary data was also collected from documents and other scientific research work done in this domain.

## Data Analysis

Data analysis was determined by the research objectives and related literature review on previous works in the same domain. The qualitative method through the use of descriptive statistics was used. Data was analysed through the presentation of tables, graphs and use of percentages.

## Presentation of Findings:

Table 2: Number of male and female learners in the institution (2009/2010 academic year).

| <b>Institution</b>                       | <b>N° of male learners</b> | <b>N° of female learners</b> | <b>Total</b> |
|--|----------------------------|------------------------------|--------------|
| Higher Teachers Training College Yaounde | 2095                       | 1923                         | 4018         |

Table 3: Number and percentage of learners having access to ICTs

| <b>N° of males who have access to ICTs</b> | <b>N° of males who have access to ICTs</b> | <b>% of males who have access to ICTs</b> | <b>% of males who have access to ICTs</b> |
|--|--|---|---|
| 2095                                       | 1923                                       | 100                                       | 100                                       |

Table 4: Types of ICTs use and productions by learners ( category 4)

| <b>Types of ICT use by learners</b>   | <b>Examples of ICT based production by learners</b>  |
|---|--|
| Students use ICTs to: <ul style="list-style-type: none"> <li>- learn how to use the computer</li> <li>- do research ;</li> <li>- do assignments ;</li> <li>- type assignments and dissertations;</li> <li>- present their work;</li> <li>- present dissertations;</li> <li>- share learning resources.</li> </ul> | <ul style="list-style-type: none"> <li>- typed and treated word documents</li> <li>-Presentation of an end of course dissertation [247] (2008-09-03)</li> <li>- Presentation of a lesson [248] (2008-09-03)</li> <li>- Group work presentation [249] (2008-09-03)</li> <li>- Student's production with ICTs[251] (2008-09-03)</li> <li>- Student's production with ICTs [258] (2008-09-09)</li> <li>- Student's production with ICTs [259] (2008-09-09)</li> <li>- Student's production with ICTs [260] (2008-09-09)</li> <li>- Student's production with ICTs [261] (2008-09-09)</li> </ul> |

From table 4, we conclude that Students of this higher institution of learning use Information and Communication Technologies to do research. They use these tools to search for information on some topics, after which they do discuss on the topics, then, type assignments or dissertations from their findings. These students also present works like exposés in class through the use of ICTs.

Table 5: Gender differences in ICT use. (Group discussions)

| <b>Female Use</b>  | <b>Male Use</b>  |
|--|--|
| <ul style="list-style-type: none"> <li>- Much more for pedagogic reasons:                             <ul style="list-style-type: none"> <li>o Assignments</li> <li>o Research</li> <li>o Presentation of assignments and dissertations</li> </ul> </li> <li>- For social reasons                             <ul style="list-style-type: none"> <li>o Mails</li> <li>o Social network (at times)</li> </ul> </li> </ul> | <ul style="list-style-type: none"> <li>- For pedagogic reasons:                             <ul style="list-style-type: none"> <li>o Assignments</li> <li>o Research</li> <li>o Presentation of assignments and dissertations</li> </ul> </li> <li>- For social reasons                             <ul style="list-style-type: none"> <li>o Mails</li> <li>o Chat</li> <li>o Social Networks</li> </ul> </li> </ul> |

From table 5 we identify two reasons for ICT use by female and male students of this institution. We have the pedagogic and social reasons. For pedagogic reasons, both boys and girls use ICTs for some reasons, but for social reasons we realize that the girls do not use ICTs to chat like the boys.

## Discussion of Findings

Objective I: Identify gender differences in ICT production by learners of E.N.S Yaounde

In the Higher Teachers Training College Yaounde, both male and female students use Information and Communication facilities. They both have access to ICTs and use them in the school campus for various reasons.

On finding out whether these students use ICTs for pedagogic reasons, that is, in any of their productions, it was realized that they both do. Our findings tie with Simonson, Mauer, Toradi, & Whitaker (1987) who say learners use these tools to learn how to type and treat word documents, type their work, to do research on the internet while some use these tools to present exposés. The male and female students of this institution think the presentation of lessons they have prepared is easier as they use Information and Communication Technologies. These results also take us to the findings of Marcelle (2000),

The strength of the internet is that it provides an excellent platform where students can collect information in multiple formats and then organize, link, and discover relationships between facts and events.

Learning resource is also not a big problem to these students as they pass on valuable resources they get from sites like Google to their course mates and others through e-mail addresses. This is also in line with MINERVA (2001) report which states that the highest abilities of students of some European Universities were with e-mail and word processing with which over 80% students reported being able to use without help.

Data gotten from group discussions show that only students in the Department of Computer Sciences and Educational Technology use the multi media centre in school. The rest of the students use their lap-tops or those of their course mates with the wireless internet connection in school.

**Objective 2:** Identify gender differences in ICT use by learners in E.N.S. Yaounde

Results from analysed data show that there is no gender difference in the pedagogic use of ICTs in E.N.S Yaounde. From the group discussions, we realized that both males and females mostly use the ICTs for pedagogic reasons like typing of the assignments, presentation: of exposés; lesson notes; and end of course dissertations.

On looking at the data analysed on gender differences in the social use of Information and Communication Technologies, the results tie with Marcelle (2000) who says if the expected benefits of the extension of communication networks and access to a wider scope of information are to be realised, strategies that address the specific cultural context are needed

to remove barriers to women's access and use. Females of this institution use ICTs to send mails freely but they only use ICTs to participate in internet based social networks at times, and do not use ICTs to chat because of public opinion that holds that females who use the internet for these purposes are loose and irresponsible.

Objective 3: Identify discriminatory socio-cultural factors in ICT use by learners (indicators 4.4.3-4.4.6)

Qualitative data gotten from group discussions and interviews reveal that female students in E.N.S Yaounde do not use ICTs for social reasons that much. Girls fear to chat on the net because of their reputation, men will always want to go out the topic to suit themselves with some topics that the ladies feel uncomfortable with (as the girls put it). This falls in line with (Fraser- Abder & Mehta, 1995; Liverpool, 2002; Mottin-Sylla, 2005; Munyua, 2005; United Nations, 2005 as cited by Tchombe, 2008) who all hold that in some societies like in parts of Cameroon, cultural norms and practices discourage interaction between women and men outside the family, and women may be uncomfortable in situations where men are present either as trainers or as peers

One of the female students revealed to us during interviews that her parents did not see the need for her to own a desktop at home, talk less of a laptop which is more expensive, reason being that too much money should not be spent on something that will lead to her eventually knowing much about the world, be too confident about herself and no men will be coming for her hand in marriage. Female students say they feel uncomfortable using the internet because public opinion holds that it is for those who are looking for husbands abroad (Indicator 4.4.5). The female students in E.N.S Yaounde also say they have problems using the computer and the internet because they are not as free as boys are. According to them the boys will feel free in visiting whatever site, while the girls choose sites before visiting them (Indicator 4.4.5). They also give reasons like, not having free access to these facilities in school and even when they have, the time is limited and they are not free to get into whichever site they want to. Some of the female students think the subjects they offer do not require the use of the computer and the internet (Indicator 4.4.3).

The above views tie with Tchombe (2008) who stipulates that women's access to ICTs and their effective use of it are constrained by factors that go beyond issues of technological infrastructure and socioeconomic environment. Because ICT plays a major role in development, and women constitute about half of the world's total population, she feels that if

women do not actively participate in ICT development, nations will be limiting the scope of the impact that ICT could have on their economies.

### **Conclusion**

The main objective of this paper was to find out whether there were gender differences in the use of ICTs in the Higher Teachers Training College Yaounde. We conclude that as far as ICT based productions are concerned, there are no gender differences in the use of ICTs. Both male and female students use these tools to type their work, project their exposés and dissertations. Analysed data reveals that there is no gender difference in the pedagogic use of ICTs in this institution as all learners are free to use their laptops and the wireless internet connection in the school campus. On analyzing data for socio cultural factors that bring in gender differences in ICT use, we realised a slight difference that was gotten from interviews and group discussions. Females like their male counterparts, use ICTs to send e-mails freely but not to participate in social internet based networks and also not to chat. This is due to the female perception of themselves and what the society holds about these activities.

### **Recommendations**

This researcher proposes the following recommendations to:

#### **PARENTS**

- Parents should be sensitized on the importance of education and most especially the pedagogical integration of ICTs.
- Parents should be sensitized on the MDG goal 3 and EFA goals by 2015 so that they understand the importance of providing ICTs to their female children.

#### **ADMINISTRATORS OF E.N.S YAOUNDE AND HIGHER INSTITUTIONS**

- Ensure that there are a good number of seminars and workshops held with experts like guidance counselors to change the negative perception that female learners still carry about themselves

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