

# **Gender Experiences in IT@School, an ICT enabled education project of Kerala, India**

The turn of the century saw the emergence of a global partnership committed to time bound goals for poverty eradication and sustainable development. The Millennium Declaration signed by over 147 nations recognises the pivotal role of information and communication technologies in accelerating the development process and it resolves to make its benefits available to all. It was followed by a spurt of Information and Communication Technology (ICT) based activities across the world. The Indian state of Kerala broke new ground with the launching of IT@School, a project for ICT enabled education in schools and Akshaya<sup>1</sup>, a project for e-literacy.

## ***Kerala and women***

Kerala, the south western state of India is well known through the writings of the Nobel Laureate Amartya Sen which discussed its experience of development. The state's performance in social development which is on par with the developed countries has led to countless research.

The gender development indicators of Kerala, such as sex ratio (1058 females for 1000 males), life expectancy for women (73.1 years) show that the women in Kerala have a better status. When we look into women participation in the work place (15.8%) or their political presence (less than 10%), we find that the situation is far from equal<sup>2</sup>. The norms and restrictions on women make them disadvantaged when it comes to their participation in the social, economic and political spheres. Expectations of women to nurture the family through housework, care for the children and the elderly etc. are very rigid in Kerala society. Reflections in this article need to be read in this social context.

## ***Gender divide and IT@School***

The Government of Kerala launched projects like Akshaya and IT@School with the objective of addressing the digital divide in the state. Although there was no perspective on gender, these projects were expected to enable women's access to information society and the information economy.

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1 Akshaya is an e-literacy programme of Government of Kerala, India launched in 2002. Under this project, one person from every family in Kerala will be familiarized with the basic use of computers. Around 2000 community telecentres called Akshaya e- kendras have been set up across Kerala, to provide this training. These centres also act as access points for various ICT based services. Each centre caters to around 1000-3000 families.

2 Census 2001; Economic review, Government of Kerala 2002 & 2003; NFHS-2

In terms of numbers, both projects show high level of women participation. But what quality of change this has brought about needs to be analysed further. This paper specifically looks into the experience of women in IT@School project.

IT@School is the largest ICT education project in India. It was launched based on the recommendations of an expert committee. The recommendation was to empower teachers to use ICT as a tool to assist education. Since IT skills were lacking among teachers and students, the project was started with extensive training programmes for teachers and IT was introduced as a subject of study at the high school level. Over 80,000 teachers have been trained and each year half a million students are introduced to ICT<sup>3</sup>. The project is also noted for its deployment of Free and Open source software (FOSS)<sup>4</sup>.

IT@School gave women unprecedented entry into ICT by virtue of the fact that women constitute 67% of the teachers in Kerala. It was mandatory for all the teachers to gain ICT skills. This in turn gave an impetus to the ICT awareness and skill development of women teachers in Kerala.

Table 1: Gender disaggregated data of high school teachers in Kerala (2002-2003)

	Male	Female	Total
Govt. high schools	12335	19919	32254
Govt. Aided schools	15507	35080	50587
Private schools	1333	4583	5916
Total	29175	59582	88757

Table:2 Gender disaggregated data of high school students in Kerala (2002-2003)

Boys	Girls	Total
802454	785484	1587938

## ***Purpose and methods***

The high level of enthusiasm and involvement shown by women teachers created an interest in studying the gender dynamics of IT@School. The study looks into the changes that the project brought in the women teachers and the challenges they faced.

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3 IT@School project imparts skills in office productive tools like open office, Internet based communication tools like browsers, mail clients, edutainment applications and computer programming.

4 IT@School and free software in education: the Kerala model/Biju Prabhakar and Arun M: Information Society and Development- The Kerala Experience- Antony Palackal, Wesley Shrum 2007

Interviews and group discussions were held with 22 teachers who are involved in the project. The teachers are in the age group of 30-50 years. Discussions were also held with the project leadership. Documents relating to IT@School were also reviewed for this study.

### ***Managerial Structure and participation of women at different levels***

Kerala state is divided into 14 regions or revenue districts. IT@School Project is head quartered at the capital city of Trivandrum. The project has a pool of school teachers as Master Trainers (MT) who have been given advanced training in ICT. They lead the implementation of the project in different districts under the direction of the State office. Each school has designated a School IT Coordinator (SITC) and a Joint School IT Coordinator, to implement the project at the school level.

Master Trainers have skills that are on par with those of IT technicians. Their skill sets include basic administration of computers with GNU/Linux operating systems, installation and troubleshooting of computer hardware and software, setting up of small office network, connecting to the Internet and using various specialised software. They have also developed strong managerial capacity as each of them manage IT implementation in 22-30 schools, arrange and execute training programmes for teachers and support the implementation of various e governance programmes of the Education Department. Often they have to plan and execute these activities against great constraints of time and they also feel responsible for all possible outcomes.

In terms of skills, SITCs are on par with the MTs. They provide the same level of support as that of MTs at the school level. While MTs work full time in the project, for the SITCs, their responsibilities in the project are in addition to their regular responsibilities in school.

### ***Reflections***

*My life has totally changed by way of learning computers. Earlier, words like computer, printer, CD etc were mere jargons for me . Today these are part of my daily life. I go to my class and use them to introduce my students to great poets and writers in Malayalam.*

-Sujatha, a School IT Coordinator and Malayalam<sup>5</sup> teacher

This is not an isolated statement. All the teachers we interacted with shared this excitement that IT@School had brought into their life.

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5 The language used in Kerala and Lakshadweep

## Getting into the project

*Frankly, I came to this project without interest. A senior officer proposed my name for computer training when I was on leave. After I came back to school I heard the shocking news that I should attend a computer training program at Trivandrum for 12 days. I had the desire to learn computer but as a woman it was difficult for me to stay out of my family. So I requested him to send some other person but he refused. So I had to attend that program .*

-One of the early Master Trainers of IT@School

In the initial phase of the project, the teachers were hand-picked by the authorities based on the leadership skills they had exhibited. Given an option, many of the women would have opted out for reasons similar to that described above.

This comment of a woman teacher illustrates the position of an average woman of Kerala regarding acquiring ICT skills, *In my home we have a computer and my husband and children know how to use it. My husband used to call me several times to teach me but I always escaped.*

Though the recruitment of teachers by the project can be perceived as undemocratic, this mandatory<sup>6</sup> requirement led to more women teachers entering the project.

## Reclaiming technology

As the statistics shows (Table 3) over 50% SITCs are women. The general notion among the Master Trainers-male and female- is that women SITCs perform much better than their male counterparts. This clearly debunks the popular myth that technology is for men.

The statistics also bring our attention to the regional variations in women representation, particularly the fact that in the northern districts women participation falls far below 50% mark. At the same time, in central Kerala, women participation is over 70%. The social and cultural differences in these regions may account for the difference. This requires further analysis and intervention.

It is also noted that among Master Trainers, women participation is very low. In the early phase of the project, women participation was limited. Even though more women were trained in the later phase, they could not become MTs because there was no further recruitment at the MT level.

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<sup>6</sup>To achieve the vision of IT enabled education, it was necessary that all teachers have basic IT skills. This made it mandatory for all teachers to participate in the project. IT education programmes in schools elsewhere in India do not have this mandatory feature as they don't share the vision of IT enabled education.

Table 3: District wise representation of women at SITC and MT levels

Districts	Women SITC	SITC (Male & Female)	Total	Women SITC percentage	Women MTs	MT (Male & Female)	Total	Women MT percentage
Kasargod	23		130	17.69	0		12	0
Kannur	35		101	34.65	2		11	18.18
Kozhikode	55		143	38.46	1		14	7.14
wayanad	7		73	9.59	0		7	0
Malappuram	15		226	6.64	2		27	7.41
Palakkad	53		183	28.96	6		14	42.86
Trissur	192		266	72.18	2		16	12.5
Ernakulam	300		350	85.71	3		15	20
Idukki	82		139	58.99	1		9	11.11
Kottayam	198		247	80.16	1		10	10
Alappuza	121		196	61.73	1		18	5.56
Pathanamthitta	33		171	19.3	1		11	9.09
Kollam	127		225	56.44	0		13	0

Despite all this evidence that women can perform equally if not better in using ICT, the myths continue. In my class, boys are better than girls when it comes to solving technical problems, is a common comment heard from teachers. They are not able to understand the reason for this difference.

## Powered by ICT - Improving self confidence and self esteem

*Earlier my son would not let me tamper with the computer, saying I might do some damage and this greatly disappointed me. When I learnt Linux based applications from the project, it was my turn to teach my son how Linux works. I felt proud seeing the surprise on his face when I installed Linux at home .*

*-An SITC and mother of an Engineering student*

This interesting quote is not isolated. It illustrates the existing gender relations in Kerala society. IT@School greatly contributed to creating a leadership quality in women teachers. My stage fright was cured, my patience improved, I got the courage to organise training programmes, I get more respect from my colleagues including men were some of the statements made by the women teachers.

## **New age Ada Lovelace - Building role models**

All the women teachers narrated how they were inspired and attracted by the work of women Master Trainers. The women Master Teachers enjoy better recognition and respect among their peers. The teachers realise that they too can handle technology and aspire for the same level of recognition. Although women are few in number among Master Trainers, the example set by them has created confidence among other women teachers leading to the very high level of participation of teachers at the school level. Given the socio cultural context in Kerala, many women teachers have inhibitions in seeking the support of male Master Trainers. Having greater women representation at the Master Trainers level could address this issue.

## **Sailing against the wind - The challenges**

*My children would be waiting for me at the doorstep in the evenings, hungry and famished when I'm busy attending to computer work in my school, because there is no one else to do it .*

The biggest challenge for the Master Trainers and the SITCs lies in striking a balance between the demands of home and work. IT@School demands more time including weekly holidays of teachers. They are often held up in the evenings with training or providing service support that returning home at an assigned time is impossible. Safe transportation is an issue for those who don't have their own vehicles. Arriving late invites the displeasure of the family.

For a professional this may be a routine situation. But in the case of women school teachers who supposedly have regular hours of work with lot of free time for the family, this becomes problematic. Teaching is perceived by the family and the society as suitable for women because it fits in with the gender stereotype of women as home makers. In this scenario, IT@School presents more challenges for women.

*I cannot switch off the phone even when I am at home. I keep receiving calls day and night from teachers. I cannot ask them to call me in the morning. I feel awkward attending to calls related to work from male teachers at night. It is all it takes to start a quarrel in the family .*

While the project helped to expand the network of teachers by making them leaders in the project, it has also led to erosion of their privacy. The civic sense regarding privacy is so weak that the teachers feel bound to attend to phone calls at odd hours. Prevailing social norms regarding friendship between opposite sexes also adds to the problem.

Another serious challenge is that of overburdening of teachers particularly SITCs. Since they are not exclusively working for IT@School project, they have to manage their regular teaching activities along with additional responsibilities of the project. All computer related activities including data entry are assigned to these teachers. The feeling that they are responsible for the entire IT infrastructure in schools, places a mental burden on them.

Mobility is a concern of the Master Trainers who have to travel extensively across the district for training and support. Leaving families behind for days together and their personal safety while having to use public transport system at odd hours are some of the serious concerns which the project has not addressed.

## ***Conclusion***

IT@School has played an important role in bridging the digital divide in Kerala. Beyond ICT awareness, the project has created a situation where ICT has become a part of the daily activities of the beneficiaries. Although the project did not have a women focus, women became its main beneficiaries. The project also tremendously benefited from their participation. This has been acknowledged by most of the Master Trainers including men and women. It is important that the project leadership recognises this fact and communicates it to the larger society.

The experiences of women in IT@School shows that ICT projects that aim to build a knowledge society cannot afford a gender blind approach. From the experiences shared by the teachers it is clear that the existing social norms and gender constructs pose additional challenges to them.

At a time when even the trade unions of teachers have poor representation of women, IT@School project has created 2000 plus future women leaders. The experience from IT@School should serve well in the design of ICT4D projects and public policy formation. The women teachers of IT@School would be rewarded for their pain and trouble if the state would only consider the existing gender divide in the society while planning and implementing its ICT4D programmes.