

Azim Premji's Speech at Conference for E-9 Countries on ICT

Honb'le Minister for Human Resource Development and friends.

I feel honoured to be amongst you, and to be speaking on a subject that has a potential to change the face of the society in the 21st century.

To me, use of Information & Communication Technology (ICT) for literacy is almost intuitive, given the challenge of reaching out to large numbers which each of the E-9 countries face. ICT provides us an effective tool for connecting up with large number of remotely located learners at a low cost.

Recife Declaration

In this context, it would be appropriate to recount the challenges towards Quality Education that Recife

Declaration of the E-9 Countries recognized in 2000:

- Persistence of large numbers of illiterates in some countries
- Provision of access to basic education in remote and inaccessible areas
- Expansion of provision of early childhood education and development
- Further massive reduction of illiteracy and promotion of technological learning and life skills
- Improved quality and learning achievement in education
- Addressing adequately existing inequities in education, particularly in regard to girls' and women's education
- Mastery learning and excellence for all

I believe that ICT has a significant potential to overcome these challenges.

Our Perspective on ICT in Education

In Azim Premji Foundation, our perspective of use of ICT for education and literacy is based on our interaction with the parents and schools in over 1300 villages – way back in the year 2000. Through these interactions we gained the following perspective:

- i. Parental feedback indicates strong demand for computers to be included in the schooling process. They also consider computer interface as an enabler for knowing English language.
- ii. ICT can strengthen our efforts for universalising Primary education.
- iii. ICT could also be the solution to a uniform high quality of instructions without replacing the teachers.

The potential benefits of use of ICT are well known:

- Global access to knowledge.
- Instant sharing of experiences and best practices.

- Self paced and self based learning.
- Effective learning for solid fundamentals early in learning life cycle through virtual world of information.
- Simulations and Experiential learning.
- Information Technology makes distant education a reality through e-learning.
- Learning can become interactive and joyful through multi-media tools.
- Virtual tours can increase level of understanding -- flying an airplane or driving a car.
- Special learning tools for the disabled -- voice based learning for blind or speech recognition for physically challenged.
- Cost effective learning, and many more.

But more than that, for a country like ours, ICT also has a huge role in attracting children to the school, and creating excitement in and around the school.

To me ICT is not about the computers or the educational CDs or the internet or the specific device or medium we use. It is really about a different process that we deploy for the purpose of enhancing the quality of education. It is about providing alternative learning experiences to the children who currently do not have options other than the text book as a learning tool.

For me, technology must result in either higher convenience for the school, teachers, parents, education functionaries and children or more pleasurable experience - primarily for the children and the teachers.

If someone asks me what we are trying to do through ICT in the schools, I would have the following response:

- 1) A change of culture – openness, responsiveness and opening windows for new thinking, an atmosphere of innovation.

- 2) An alternative paradigm in pedagogy – interactive, away from usual text, away from the chalk and talk, enjoyable learning, non-threatening, self paced and contextualized learning.
- 3) An attempt to achieve equity – bridging the digital divides between rich-poor, urban-rural, same content for everyone.
- 4) Bringing excitement and motivation – joy of working on the latest, pride of owning the technology, feeling of in-a-way being ahead of times.

Mere introduction of ICT will not automatically create the kind of impact or change that we intend to cause. Technology will induce change only if accompanied by changes in ideas, processes and way of viewing things. Technology is likely to create bigger transformation where the current situation and culture are considered quite bad.

On the other hand, the chances are that the changes may be faster and better if the existing quality of the school is better. The implication for us is that there is a case for us to understand the overall – general quality of school – without technology – before we launch technology.

Critical Issues in Successful Use of ICT in Education

Based on our experience with the schools, I would suggest that we must address the following critical issues to enhance the effectiveness of ICT in literacy and education.

First is the challenge of making teachers a partner in this effort. Time and again we have seen that a typical teacher sees use of ICT as an add-on, extra work and not really a help in her work. I believe that we do not

have an option but to engage with teachers, especially in the case of young learners. If teachers do not see that ICT is helpful in their work, there is no hope for ICT turning out to be an effective tool in our mission for literacy. ICT must become integrated in teacher's repertoire of classroom practice. In our engagement with teachers through Computer Aided Learning Centres, less than 10% of the teachers have been able to integrate ICT into their teaching strategy. Therefore the task is enormous.

Second is the challenge of deciding what to, and what not to, deliver through ICT. The usual tendency is to try to deliver every learning item through ICT. It amazes me when governments roll out a large scale program to introduce ICT in schools and villages without an adequately thought out long term plan of how ICT will be utilized. This leads to a number of knee-jerk responses – such as mere digitization of text books, a teacher speaking to children through the ICT medium

instead of a live teacher in the class, unguided placement of hardware, sub-optimization of resources etc. I believe we must use ICT to deliver that which is best delivered through it, and use other pedagogical tools wherever they are more effective. For example, ICT is most effective when the learning item requires visualization or simulation. Or where multiple exercises can be randomly designed to provide options to the learner to best suit her current preparedness. There is no point in using an expensive computer screen as a replacement for the blackboard.

Third is the challenge of enhancing the vision of a typical teacher of what learning experience could be. A teacher will set out to do what she thinks is worth doing. For instance, if she thinks that learning is all about memorizing a few answers then that is what will get done. Therefore, the challenge for all of us, who are concerned about literacy, is to ensure that an average teacher relates to the broader definition of literacy, and not merely reading and writing.

Fourth is the challenge of building teacher capacity. While building vision of learning is necessary, it is not sufficient. For a teacher to translate this vision into reality she needs to acquire capability in discipline area, teaching methods or pedagogy, and use of ICT. Our challenge is to build this capability in each of our teachers, which is a mammoth task given our large numbers. For instance, India alone has around 5.5 million teachers. Fortunately, we have ICT to reach out to these large numbers and train them. Being adult learners, I believe, it is possible to train them using ICT if we put our heads together.

Finally is the challenge of building teacher motivation. A good vision and capability requires motivation to actually make it happen. It is our challenge to create a motivating environment for them so that schools truly become centres of learning. I believe that good vision

and capacity to translate it into reality by itself raises the intrinsic motivation. However, it needs to be nurtured through an enabling environment. I suspect that this is going to be our biggest challenge.

I see ICT as a tool which will be effective only in the hands of a motivated and a capable teacher who is convinced that it can help her in doing her job better. While many of us are working on sharpening this tool, we need to simultaneously work with teachers to help them use it effectively. At the Azim Premji Foundation, we are in the process of kicking off a thoroughly conceived Computer Aided Learning action research to deepen our understanding of both these aspects.

I am sure this Conference will discuss many of these challenges over the next three days in the context of experiences across the nine participating countries.

Thank you for giving me the opportunity to share my thoughts.