

Background

Ministry for Human Resource Development (MHRD) has asked the Global e-Schools and Communities Initiative (GeSCI), a UN-affiliated institution, to help frame the 'National Policy on Information and Communication Technology (ICT) in School Education' for the country. GeSCI has taken the support of the Centre for Science, Development and Media Studies (CSDMS), a Delhi-based NGO, and they have held consultations to create this policy and prepare a policy workbook.

See <http://www.csdms.in/gesci/pdf/gesci-histroy.pdf> for more information on the process followed. This is an interesting document explaining the nature of the interactions between MHRD and GeSCI and GeSCI and CSDMS in the drafting of the National Policy.

Issues Substantive

1. A 'National Policy on Information and Communication Technology (ICT) in School Education' document needs to be drawn from the education policies of the country, however, the policy document drafted has no reference to any education policy document of India, including the NPE or the NCFs. Secondly the elaboration of the **guiding principles** as well as the **thematic objectives** discussed in the policy are based on technological parameters rather than on academic or pedagogic principles.

2. The stated mission of the policy is *To integrate and leverage ICTs in School Education for improved quality, delivery and administration of primary and secondary education and to build national capacities for the development of an **efficient workforce which can contribute effectively to the global knowledge economy***¹ .

This is a rather narrow interpretation of educational aims. Basically, the document views education **exclusively** as a process of producing workers for the economy rather than as thinking, feeling citizens of a democratic society.

3. The policy appears over optimistic, *Governments across the world are eager to adopt ICTs as the most viable vehicle to address the problems of Univeralisation of education **and have made good strides in that arena.***

4. *All teachers will move from a teacher-centric to learner-centric education system* .

Why teacher centric is different from learner centric education system is not explained.

¹ All emphasis ours

(A few specific instances are mentioned here, for details read excerpts from the workbook provided in Annexure A to this note or the Policy Workbook itself)

Issues Procedural

Policy making needs widespread consultation and the participation of relevant people; an education policy necessarily needs to involve those who work in the education domain. However, the group making this policy document hardly has any educationists, for example, those involved in preparing the NCF 2005). On the other hand, it has a significant membership of technology vendors (manufacturers of computer hardware, software and applications). **As a principle, policy making should avoid groups that can have a conflict of interest.** While in other sectors, this is a given (**no public health policy making body will have pharmaceutical companies as members**), in ICTD arena, technology vendors are often given an important role in policy making, perhaps on the premise that their expertise ought to influence policy². However, as the experience in the business world itself indicates, real and meaningful appropriation of ICT happens only when the design of the policy and program is led by domain experts and users rather than by technologists .

Why is this issue important?

Few will insist that new ICTs have no role to play in school education, yet, the nature of such role needs to be carefully arrived at. Studies on large scale deployments of computers in schools suggest that more involved design and planning by pedagogues is essential for meaningful appropriation of technology. It will be difficult to argue that high school students should not have exposure to computers or the Internet, but more thought on the nature of this interface is required. For instance possibilities relating to teacher networking, supporting Teacher Education and academic support institutions to become digital resource centres, digitising local knowledge and pedagogical practices, collaborative platforms as portals, blogs and wikis etc are areas that need to be explored.

ICTs have the potential to support centralised systems as well as democratic/decentralised systems; the direction of their appropriation will be depend on who influences the process at both policy and program levels. **Hence the sustained engagement of those who have worked in the education domain** is essential if the changes in information and communication processes and structures are to actually support real and meaningful decentralisation on both academic and administrative aspects of education.

² The document itself does not really reflect any 'technological expertise' that would have warranted such membership

This dilemma is relevant in education as it is in other areas as well governance, health, gender etc. with respect to information society possibilities and challenges. Often the lack of involvement of the traditional actors creates a vacuum that is filled up by technology experts or vendors . Hence the education community needs to get involved in this process of policy making and work with the government to create spaces for open consultations across the country to evolve an ICT in School Education policy that is firmly grounded on the principles outlined in the NCF 2005 and similar documents. Such policy can provide meaningful support to the appropriation of ICTs for achieving education aims.

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Annexure A - Some excerpts from ICT policy workbook

ICTs have made a huge impact on Education in most countries in the World³. Substantive investments have been made to put new era technologies in classrooms so that every citizen is equipped with the skills needed to live and work in the new Information World. Technology in School Education will provide India an **opportunity to leapfrog inherent limitations** and acquire new resources to formulate innovative strategies.

SECTION 1. VISION

To empower a whole generation of Indians with ICTs and to gear to engage constructively with the knowledge driven economy.

SECTION 2. MISSION

To integrate and leverage ICTs in School Education for improved quality, delivery and administration of primary and secondary education and to build national capacities for the development of an efficient workforce which can contribute effectively to the global knowledge economy.

SECTION 3. GUIDING PRINCIPLES

1. 3.1 Self-Learning (Learner-centric)

To increase the flexibility of learners and educators to address individual needs and preferences in school education.

2. 3.2 Accessible

To use ICTs to expand access to education opportunities of blended learning (Text book based and ICTs) to each child, including girls, physically challenged children, learners residing in remote areas and those belonging to socially disadvantaged sections.

3. 3.3 Equitable

To use ICT infrastructure and technology applications in schools to leverage the delivery of quality education to all.

4. 3.4 Accountable

To use ICTs to increase the flexibility of educators and administrators in the school education system and **enhance efficiency and performance in education delivery.**

5. 4.1 Rationale for ICTs in School Education

ICTs have the potential to contribute to different facets of educational development in schools; revolutionizing the delivery of quality education, teacher training, and students achievements towards a new paradigm of effective learning for all, any time, anywhere.

³ Emphasis ours

ICT literacy to all school students will make each student competent with 21st century skills. ICTs as a tool for effective classroom teaching will make learning fun and prepare today's students to be tomorrow's workforce.

SECTION 6. GOALS

- ICT literacy for all, including ICT as a tool for basic literacy
- Every school teacher to be **ICT literate**

SECTION 7: OBJECTIVES AND TARGETS

7.1 ICT literacy for all

- Every child leaving high school will be **ICT literate**
- Every child will be introduced to the basics of computers by class VI onwards. Targeted achievements of computer literate students will be attained at least 25% by 2012, 50% by 2015, 100% by 2017.

7.2 Ubiquitous ICT-enabled schools by 2012

- All high schools will have basic ICT infrastructure installed by 2012. Basic ICT infrastructure is defined in Annexure I.
- **All teachers will move from a teacher-centric to learner-centric education system, where the teacher would act as a facilitator.**

SECTION 8. THEMATIC/STRATEGIC OBJECTIVES

8.1 Infrastructure

8.1.1 Connectivity

8.1.2 Electricity

8.1.3 School ICT Infrastructure

Thus, the school infrastructure will be accessible to communities, **which can also ensure sustainability of ICT infrastructure so created in schools.**

8.3.3 Capacity building of School Principals in ICTs

The States will see to building capacity of school principals in ICTs as pivotal leaders to ensure educationally sound, well-planned and sustainable ICT-integration plans.

8.3.7 Neighbourhood Schools Network

Different schools are at various levels of ICT-readiness. Networking of schools will be promoted, wherein the schools will build knowledge sharing partnerships with each other to support the **comparatively lesser-abled schools.**

SECTION 10: PUBLIC PRIVATE PARTNERSHIPS (PPP)

10.1 Public Private Partnership to leverage economies of scale: PPP will be encouraged at all levels of ICT in education delivery mechanism to provide quality education to all by leveraging economies of scale through channelisation of the social responsibilities of private companies in the education sector. **PPP is fundamental to the integration ICT in education sector, as it will create an ecosystem for private sector to work with government and development organisations to extend the benefits of technologies to schools.**