KENDRIYA VIDYALAYA SANGATHAN

ICT in KVS

Background

- ICT infrastructure with appropriate technology and its seamless integration with curricular transaction: crucial for a rich enabling environment for collaborative learning, multidisciplinary problem solving approach and promotion of critical thinking.
- Continual support and training of teachers and staffs on ICT to keep them abreast of new developments.
- 1093 KVs (11.5 lacs students & over 56000 teachers and other staffs) with 25 Regions and 05 Zonal Institutes of Educational Training
- Rich enabling environment in schools in terms of infrastructure and facilities
- Integration of curriculum and its transaction with ICT

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- NCERT & CBSE, has also highlighted the need and impact of technologies in curricular transaction.
- ICT Policy of the Government of India also underscores the need to prepare youth to participate creatively in the establishment, sustenance and growth of a knowledge society leading to all round social economic development of the nation and global competitiveness.

The policy envisages three stages of ICT implementation at school:

- ICT literacy and Competency Enhancement
- ICT enabled teaching
- Introduction of ICT related elective subjects at Senior Secondary level

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Beginning with ICT

Under ICT infrastructure development KVS has made an advance way back in year 1994 in which through CLASS Project 291 KVs were provided BBC Computers. Then Smart School Scheme was implemented in 31 KVs during the year 2005 in which ICT infrastructure was created. Thereafter computerization is being done continuously in Phased manner. At present KVS has achieved an appreciable child computer ratio (22 :1) with 51,692 Computers.

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Setting up of E-Class room

- Based on the recommendation of the Technical Committee constituted by MHRD, KVS has established interactive E-class rooms in 50 KVs located in 10 regions. To begin with, in each KV, one section in each class from class 3-12 was equipped with the necessary gadgets including Interactive Board, Multimedia Projector, Visualizer and a PC.

- Progress is being made to provide similar facilities in five KVs of each of the 25 Regions of KVS besides other multimedia devices in smaller schools

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E-Content Development

KVS with its huge pool of qualified and competent teachers has attempted to develop content/materials to be used in its technology enabled E-classrooms and quite a good amount of such content materials for almost all subjects and stages made by teachers is already available to facilitate its use by the teachers and students.

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These content development tools will also provide an opportunity to our students for creating there own assignment, lesson plan etc. during there formative assessment.

KVS has a vision to have large repository of e-content which will be available online to the student community across the country. A good quality content is being developed by the NCERT and CBSE. KVS will leverage on these resources for e-content.

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Empowering Students with Animation & Design tool

In both the secondary and post-secondary education markets 3D technology is fast becoming an essential tool for inquiry-based learning, advanced research, and collaboration within the Science, Technology, Engineering and Math (STEM) community.

KVS has provided digital design & Animation softwares for KVs which also includes a certification for students which will tremendously increase employability of KV students.

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Mailing solution

In order to have the seamless communication and futuristic outlook wherein paper work can be reduced, KVS decided to go for a secured mailing solution for its schools, ROs, ZIETs and headquarters covering 30,000 users across the organization.

Secured mail solution will reduce paper work & will help in effective collaboration among users.

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MIS/ERP Solution for KVS

1093 KVs with more than 11.5 lakh students and over 50000 teachers across the country needs management of huge data/information among KVs, Regional Offices and to KVS headquarters.

ICT intervention is crucial for this and technology based MIS/ERP solution will facilitate students & teachers activities including admission, fee, training, evaluation etc.

KVS in collaboration with NIC is in the process of development of a dedicated MIS solution for KVS.

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Future Road Map

KVS is looking forward to bring down the child computer ratio from 22:1 to 10:1 in next five years. It may require large number of PC's (more than 70,000)

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Future Road Map

KVS has more than 20,000 class rooms, with the modest vision to provide exposure of all its students to E-Class room we may have to develop about 8,000 more class rooms in next 3-5 years.

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Future Road Map

E-content Development is a continuous process and every teacher should be provided with an opportunity to develop her own E-content so that a kind of ownership is created in the mind of the teacher. However, it is seen that in the absence of E-content development tool the process of E-content development is slow and unfocused. To meet this challenge KVS is looking forward to provide proper softwares to its teachers so that quality content may be developed.

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ICT Initiatives to be taken in future

1. **Digital Labs** - As KVS is implementing E-classrooms in a big way we may be utilizing this infrastructure as Digital Labs by providing appropriate software for Mathematics Lab, Science Labs and Language Labs. In Digital labs experiments are conducted in virtual environment and are of great help for learning of the students.

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3. Empowering Visually Challenged Children – KVS is exploring the possibility in which technology can be used to help its visually challenged children by providing Brail Software or some similar system which can help them to learn in better way.

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4. Virtual Classrooms - Scarcity of teachers is a global phenomenon. KVS is also suffering from large scarcity of teachers. in order to meet this challenge KVS is looking forward for various softwares like Microsoft Link, Adobe Connect or any other Video conferencing System. So that a real time classroom transactions can be broadcasted to all those schools where there is scarcity of teachers.

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5. Better Internet Connectivity and Virtual Private Network (VPN over Broadband) – Almost all KVs are having broadband connectivity having at least 2MBPS connection. However, it is seen that rarely they are getting this much speed because it is not a dedicated bandwidth provided to them. Attempts are being made for a dedicated bandwidth for internet usage in all KVs.

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It will not only provide a virtual private network for the users of the KVS but also provide a dedicated lease line to the schools with surety of services upto 99.5 uptime. It will also reduce the cost of networking and will provide single window to interact with BSNL.

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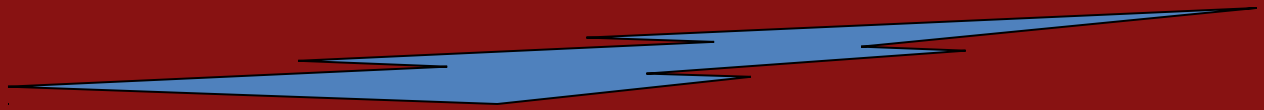
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