



**KENDRIYA VIDYALAYA SANGATHAN**

**USE OF INFORMATION  
COMMUNICATION TECHNOLOGY (ICT) IN  
CLASS ROOM TEACHING IN KVS**



# KVS-An Overview



**KENDRIYA VIDYALAYA SANGATHAN**



# KENDRIYA VIDYALAYA SANGATHAN

**A premier organization in India  
administering 981 schools with  
994730 students and 44937  
employees as on 01.07.2008**



# Central Schools- As centers of excellence

- Since inception in 1965, the Kendriya Vidyalayas (Central Schools) have come to be known as centers of excellence in the field of secondary and senior secondary education
- KVs are promoting national integration and a sense of "Indian ness" among the children while ensuring their total personality development and academic excellence



# Four-Fold Mission of Kendriya Vidyalayas

- To cater to the educational needs of children of transferable Central Government including Defence and Para-military personnel by providing a common programme of education.
- To pursue excellence and set the pace in the field of school education.



# Four-Fold Mission of Kendriya Vidyalayas

- 3. To initiate and promote experimentation and innovations in education in collaboration with other bodies like the Central Board of Secondary Education (CBSE) and the National Council of Educational Research and Training (NCERT) etc.**
- 4. To develop the spirit of national integration and create a sense of "Indian ness" among children.**



# Computer Infrastructure In Kvs

S. No.	Item	Number
1	Total no. of functional KVs	981
2	Total no. of computers available in KVs	37,139
3	Total no. of students in KVs	9,94,730



# Computer Infrastructure In Kvs

4	Student Computer ratio	27 : 1
5	No. of KVs with computer labs	922 (94%)
6	No. of KVs having Internet Connectivity	919 (94%)



# Computer Infrastructure In Kvs

7	No. of KVs having Broad Band Connectivity	695 (71%)
8	No. of KVs having their own Websites	954 (97%)



# Smart Classrooms with ICT – KVS

- **Global economies need educated people as citizens of today and tomorrow.**
- **In order to succeed in a rapidly changing world 21st century business needs graduates equipped with different, higher-order skill sets, and education systems are struggling to respond.**



# Smart Classrooms with ICT – KVS Contd..

- **The focus is on methods, and learning that promotes personal growth and critical thinking skills.**
- **Skills such as higher order thinking, problem solving, innovation and creativity have become critical in today's global economy.**
- **Knowledge-based economy cannot flourish without a proper education system.**



## Smart Classrooms with ICT – KVS Contd..

➤ In order to succeed in school, work and life, the core subjects like English, Mathematics, Science, Arts, Civics, History, Economics, Geography etc must be expanded to include 21st century subjects such as global awareness, civic literacy, health and wellness, business and entrepreneurial literacy.



# ICT in NCF-2005

- **NCERT** took cognizance of this fact and the outcome was the formulation of National Curriculum Framework 2005 which emphasizes on
  - **Child centered pedagogy**
  - **Lessons that encourage students to think beyond the four walls of the classroom**
  - **Interact with peers, teachers, older and younger people that can open up windows of knowledge**
  - **Learn from real life experiences**



# Importance Of ICT

- ❖ **Information and Communication Technology (ICT) is widely believed to be an important lever to introduce and sustain education reform efforts.**
- ❖ **In a digital world, no organization can achieve results without incorporating technology into every aspect of its everyday practices**



- ❖ **It's time for schools to maximize the impact of technology as well.**
- ❖ **In a 21st century education system, technology must be used comprehensively and purposefully for supporting how students learn with innovative teaching and learning practices.**



# Role of ICT in Classrooms

**The advent of ICT allows the teacher to**

- ◆ **Develop individualized approaches that can cater to the needs of the students.**
- ◆ **Facilitate communication, increase access to information.**
- ◆ **Model and simulate a range of scientific phenomena.**



# Role of ICT in Classrooms

- ◆ **Develop problem solving capabilities and aid deeper understanding.**
- ◆ **Learn beyond the textbooks/classroom through collaboration with on line experts, libraries, encyclopedias.**
- ◆ **Use dynamic images and animation that aid understanding of abstract concepts and enables visualization of processes either too small or too fast to be seen in real life.**



# Role of ICT in Classrooms

- ◆ Help shift from memory based learning to an education that can stimulate higher order thinking, creativity, problem solving, collaboration and active participation from the students.
- ◆ Energize classroom teaching.



# Requirements that would impact the creation of Smart Classrooms

- To ensure that teachers use the technology in appropriate ways,
- The different roles a computer can play in the classroom need to be considered together with how the teacher develops teaching strategies that support each role.



- 👉 Analyze 21st century skills and the impact of technology on essential skills development.
- 👉 IT Skills for Teachers and Students
- 👉 Innovative Teaching Methods (Computer Assisted Teaching , Computer Assisted Learning )



- 👉 Assessment Strategies
- 👉 Life skills and Thinking Skills Development
- 👉 Integration of ICT in Teaching – Learning Process



# Kendriya Vidyalaya's Initiatives in Transforming Classrooms of Today

## ➔ Objectives

1. **Kendriya Vidyalayas have been recognized as setting the standards for the secondary education in the country. Over the years, the number of Kendriya Vidyalayas are growing and almost nearing the 1000th mark**



- 2. These schools are being developed as quality Vidyalayas with some of the useful features of popular residential Vidyalayas.**
- 3. The mission of Kendriya Vidyalaya's is to cater to the educational needs of children of transferable Central Government employees by providing a common program of education**



4.To pursue excellence and set the pace in the field of school education

5.To initiate and promote experimentation and innovations in education in collaboration with other bodies like the CBSE and the NCERT etc.



## ➡ **ICT Initiatives**

1. Kendriya Vidyalaya strongly believes that technology in education can be a powerful catalyst to promote learning and that education changes lives, families, communities, and ultimately nations.
2. To promote I.C.T in Kendriya Vidyalayas, sincere efforts are on since November, 2005.



3. Additional computer labs have been setup and new computers have been procured.
4. During the last 32 months as many as 23,985 new computers have been installed in KV computer labs increasing the total number to 37,139.



5. Consequently the Pupil PC ratio has improved from 53:1 to 27:1 as on 30.06.2008.
6. 695 Kendriya Vidyalayas have Broad Band Connectivity which is almost 71%.
7. KVS is consistently striving to enhance the learning environment in schools by introducing progressive and forward looking teaching and learning processes.



7. A number of **Teacher Training Programs** are organized for the teachers to enable them to effectively integrate the use of technology in the existing syllabus, with a motive to foster a scientific temper in students and help them to become the next generation of cutting edge professionals thus enabling India to remain an IT powerhouse.



**8. Broadband Internet** is a powerful tool to spread education deep into the massive rural belt that India has. To exploit this vast potential and for providing anytime, anywhere access to educational services, Min. of HRD has launched the 'Sakshat' portal that is being extensively used by the Kendriya Vidyalayas.



# Active Participation of KVS in ICT Contests

KV schools also participate in **National and International ICT contests** and have won accolades and recognition for their performance par excellence.



# How Information & Communication Technologies can help to provide better education

- The Computer resources like hardware, software , data, information, networking etc can be used effectively for:
  - ◆ Lesson preparation
  - ◆ Student information-gathering (student research)
  - ◆ Student use of web browser software in lessons, by internet connectivity.
  - ◆ Student projects and publishing



## Use In Lesson Preparation

**Most teachers make use of the Internet in their professional activities. Internet has three professional uses in particular: finding information and other resources on the Internet; emailing with teachers at other schools; and posting information, suggestions, opinions, or student work on the World Wide Web.**



## Student Information -Gathering (Student Research)

Just as information gathering for lesson preparation is the most common use of the Internet by teachers, teachers have students use the Internet for "research," or information gathering, more than for any other purpose. Web searching has become the third most common use of computers by students at school, after word processing and use of CD-ROMs.



# Student Use Of Web Browser Software In Lessons, By Internet Connectivity

**Of course, with a limited number of computer stations in the classroom, the amount of experience that any one student may have had with Web-based research could be quite limited.**



# Student Projects And Publishing

**Beyond the traditional activity of using information sources to write reports, some teachers have had students use the Internet to contact other individuals, to collaborate with classes in other schools in joint projects, and to become experts on a topic and publish their findings on the World Wide Web**



# THANK YOU