

# ICT in Teaching and Learning

# ICT

It is an umbrella term that includes any communication device or application, encompassing: radio, television, cellular phones, computer and network hardware and software, satellite systems and so on, as well as the various services and applications associated with them, such as videoconferencing and distance learning.

# What is effective ICT

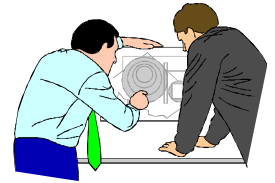
- Engage & enthuse learner
- Raise achievement
- Enable better understanding
- Foster improved communication
- Have a positive impact on workload

# Necessity of ICTs

- Globalization of
  - Economy
  - Information
- Tech Innovations
- Knowledge-based
  - Economy
  - Society
- Escalating Demand for Education



**Effective Learning**



**For All**

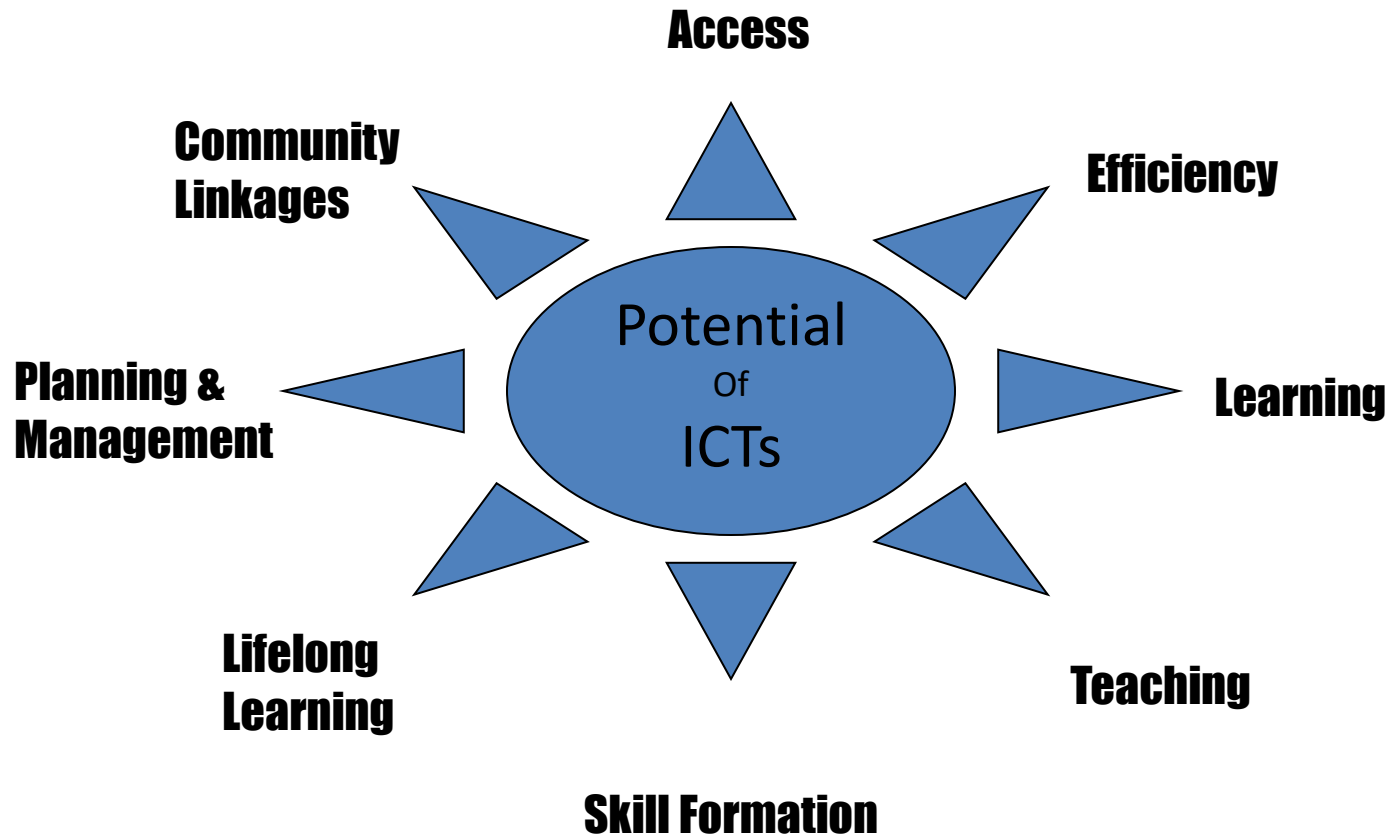


**Anytime**



**Anywhere**





# VIRTUAL EDUCATION

It is instruction in a learning environment where learner & teachers are separated by time & space and teacher provide course content through internet

# VIRTUAL EDUCATION

- VIRTUAL CLASSROOM
- AUDIO BASED COURSE
- VIDEO BASED COURSE
- ANIMATED COURSE
- WEB SUPPORTED TEXTBOOKS
- PEER TO PEER COURSE

# The Role of Teachers in ICT Education

- Teachers are indispensable for successful learning about ICT, and learning and teaching through ICT.
- Empirical studies have established that teachers' ability and willingness to use ICT and integrate ICT into their teaching is largely dependent on the professional development they receive
- Teaching through ICT entails the development of nationally relevant context software for school use.



# Functions of ICT

- Speed and automatic functions:  
monitoring, controlling and feedback
- Capacity and Range:  
richness of resources, the power of  
communication
- Interactivity:  
dynamic feedback and immediate response to  
changing inputs
- Learners to progress at their own pace
- Motivate learners

- Solve the problem that where you live may determine what you can study
- Reduce teachers' workload
- Link schools/teachers with parents
- Line students to world experts

# Advantages of ICT for Teaching

- Presenting information and ideas in a dynamic, attractive and exciting way.
- Explaining some difficult concepts and knowledge easily
- Ensuring clear delivery of teaching points
- Assisting in the preparation of teaching materials

# Advantages of ICT for Teaching

- Assisting with time management in class
- Helping to cater for students with difficult abilities
- Helping to develop students' co-operative learning skills
- Assessing students and using the information gained to extend their learning
- Sharing ideas, communicating with the outside world and getting new information about the subject being taught

# Advantages of ICT for Learning

- reinforcing students' learning in a variety of ways
- Allowing students to change things easily if they make mistakes, want to add or delete something, try out ideas or make improvements
- Enabling them to learn by themselves at their own pace
- Saving time
- Allowing students easy access to a wide range of information

# Advantages of ICT for Learning

- Helping them to interpret data and communicate what they have found out
- Enabling them to learn subjects that are difficult or dangerous to teach
- Enabling them to connect with the outside world
- Being patient with students when they make mistakes or do not understand
- Improving their thinking

# Learning is Effective when students:

- acquire new knowledge or skills and increase understanding of the subject
- apply intellectual or creative effort to work
- are productive and work at a good pace
- show interest, sustain concentration, think and learn for themselves
- understand what they are doing, how well they have done and how they can improve

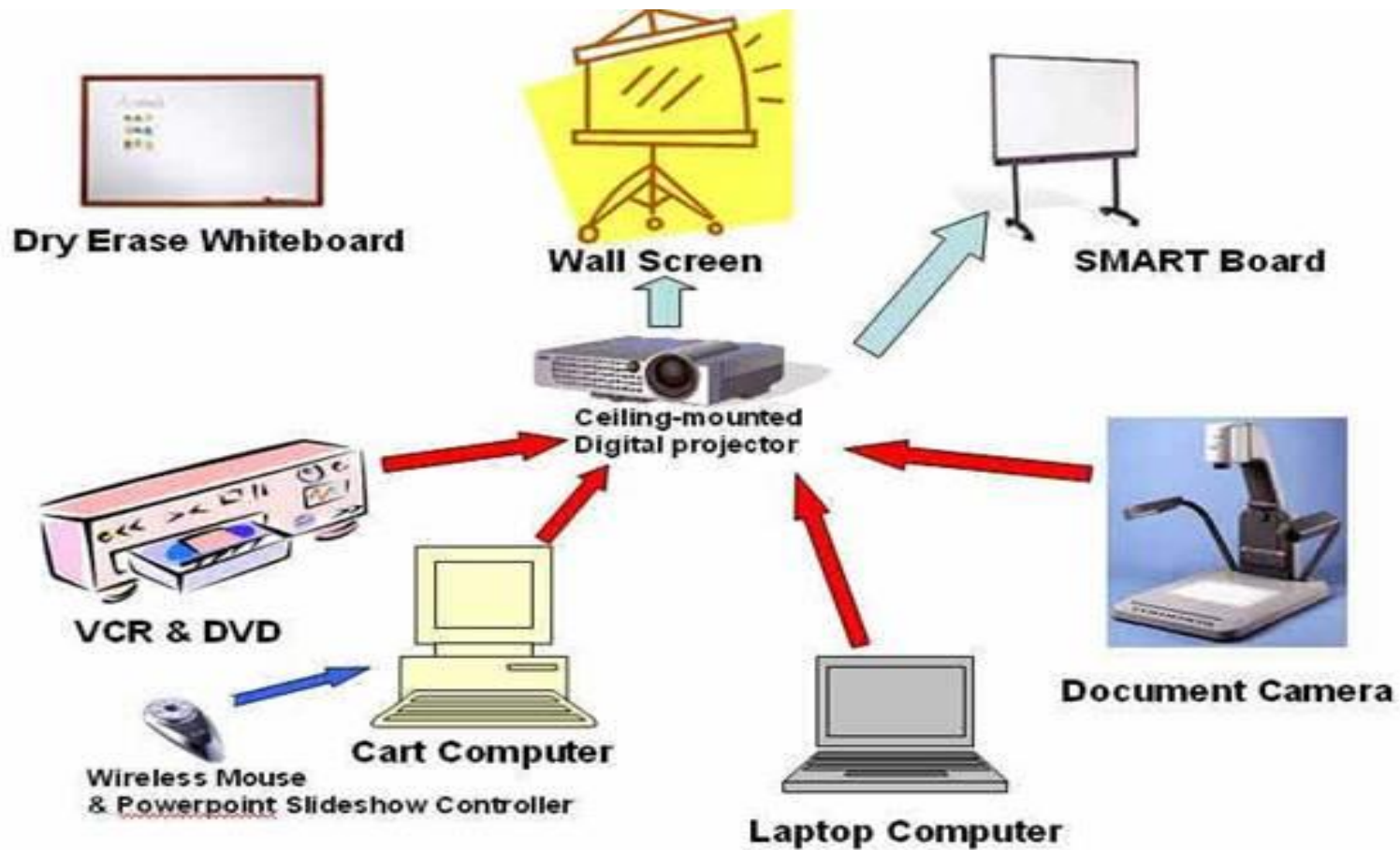
# Smart Classrooms

Smart Classroom contain the following items such as:

- ✓ Furniture (Collaborative furniture),
- ✓ Computers,
- ✓ Photocopiers,
- ✓ Scanners,
- ✓ Lighting Accessories,
- ✓ Projectors,
- ✓ Speaker,
- ✓ Screens, etc.



# Examples of the Typical Smart School/Classrooms



**Typical contents of a Smart Classroom**

## Examples of the Typical Smart School/Classrooms



**Typical Teaching and Learning session in a Smart Classroom**

## Examples of the Typical Smart School/Classrooms



**Sample of Collaborative Furniture**

# Examples of the Typical Smart School/Classrooms



**Lighting in a Smart Classroom**

# Examples of the Typical Smart School/Classrooms



**Projectors and Screens locations in a Smart Classroom**

# Challenges

the significant advantages, adoption and integration of technology into our educational system make a positive change but still very low. In institutions where technological facilities are provided, for several reasons are either not functioning or functioning below expectation.

**Thank you**