



IT@SCHOOLS IN KARNATAKA

INDUCTION – 1

REPORT FOR THE YEAR 2017-18

INTRODUCTION

The *National Policy on Education* 1986, as modified in 1992, stressed the need to employ educational technology to improve the quality of education. The policy statement led to two major centrally sponsored schemes, namely, Educational Technology (ET) and Computer Literacy and Studies in Schools (CLASS) paving the way for a more comprehensive centrally sponsored scheme – Information and Communication Technology @ Schools in 2004. Educational technology also found a significant place in another scheme on up-gradation of science education. The significant role of ICT in school education has also been highlighted in the ***National Curriculum Framework 2005 (NCF 2005)***.

With the convergence of technologies, it has become imperative to take a comprehensive look at all possible information and communication technologies for improving school education in the country. The comprehensive choice of ICT for holistic development of education can be built only on a sound policy. The initiative of *ICT Policy in School Education* is inspired by the tremendous potential of ICT for enhancing outreach and improving quality of education. This policy endeavors to provide guidelines to assist the States in optimizing the use of ICT in school education within a national policy framework.

What is ICT?

Information and Communication Technologies are defined as all devices, tools, content, resources, forums, and services, digital and those that can be converted into or delivered through digital forms, which can be deployed for realizing the goals of teaching learning, enhancing access to and reach of resources, building of capacities, as well as management of the educational system.

These will not only include hardware devices connected to computers, and software applications, but also interactive digital content, internet and other satellite communication devices, radio and television services, web based content repositories, interactive forums, learning management systems, and management information systems.

These will also include processes for digitization, deployment and management of content, development and deployment of platforms and processes for capacity development, and creation of forums for interaction and exchange.

Competencies defined in the National Policy on ICT in School Education

I. Stage 1: Basic

Basics of computers and basic use of tools and techniques operate a computer, store, retrieve and manage data, use a computer to achieve basic word and data processing tasks; connect, disconnect and troubleshoot basic storage, input and output devices. Connect to the internet, use e-mail and web surfing, use search engines; keep the computer updated and secure; operate and manage content from external devices (sound recorders, digital cameras, scanners etc.); connect, disconnect, operate and troubleshoot digital devices.

II. Stage 2: Intermediate

Create and manage content using a variety of software applications and digital devices; using web sites and search engines to locate, retrieve and manage content, tools and resources; install, uninstall and troubleshoot simple software applications.

III. Stage 3: Advanced

Use different software applications to enhance one's own learning { database applications, analysis of data and problem solving, computing, design, graphical and audio-visual communication; undertake research and carry out projects using web resources; use ICT for documentation and presentation; create and participate in web based networks for cooperative and collaborative learning; become aware of issues of cyber security, copyright and safe use of ICT and take necessary steps to protect oneself and ICT resources.

IT@Schools in Karnataka

Background

ICT education in the schools has been practiced for many years. The major short comings observed in the previous approaches were

- a. The projects were implemented by instructors hired from the market and hence ownership of the teachers was minimal.
- b. Many times the schemes ended up with procurement of the hardware which was not properly used due to the lack of ownership in the school.

Considering these factors, Karnataka has restructured the ICT programme and integrated all technology based programmes under the umbrella of Technology Assisted Learning Programme (TALP). TALP comprises of EDUSAT, Computer Assisted Learning Centres under SSA, Tele-Education, Radio programmes and IT@Schools in Karnataka.

The IT@Schools in Karnataka project is modelled after the IT@Schools in Kerala. This project aims at paradigm shift in the approach towards ICT education in three ways.

- a. It emphasizes on ownership of the ICT education by the teachers.
- b. The implementation sequence is put as content development, teachers training and hardware procurement.
- c. Using Free and Open Source Software's (FOSS) – Operating System and Software Applications in order to expand the range of learning, creation and sharing.

The programme was conceived and implemented during 2016-17 in 1000 Government Secondary Schools of the State.

PROGRESS DURING 2016-17

Selection of Schools

As the first phase, the programme was proposed to be implemented in 1000 schools which were selected based on the availability of a motivated and willing teacher, space for establishing a computer lab and feasibility of broadband internet connection.

PROGRESS DURING 2017-18

I. Selection of Schools

In second phase 750 High Schools and 250 PU colleges were selected on the basis of availability of a motivated and willing teacher, space for establishing a computer lab and feasibility of broadband internet connection.

The following table shows number of selected schools in each Educational Districts.

Sl. No.	Educational Districts	No. of Schools Selected
1	Bagalakote	31
2	Ballari	28
3	Belagavi	21
4	Bengaluru North	9
5	Bengaluru Rural	5
6	Bengaluru South	25
7	Bidar	25
8	Chamarajanagara	36
9	Chikkaballapura	42
10	Chikkamagaluru	9
11	Chikkodi	28
12	Chitradurga	16
13	Dakshina Kannada	31
14	Davanagere	25
15	Dharawada	24
16	Gadaga	25
17	Hasana	41
18	Haveri	25
19	Kalburgi	44
20	Kodagu	13

Sl. No.	Educational Districts	No. of Schools Selected
21	Kolara	21
22	Koppala	8
23	Madhugiri	12
24	Mandya	18
25	Mysuru	30
26	Raichuru	25
27	Ramanagara	23
28	Shivamogga	22
29	Sirsi	4
30	Tumkuru	18
31	Udupi	42
32	Uttara Kannada	8
33	Vijayapura	10
34	Yadgiri	6
TOTAL		750

II. Training Content

ICT Curriculum for Teachers developed by CIET of NCERT was adopted by the State. The ICT curriculum has been developed for three levels, which is scheduled to be completed in 105 days. The training programmes for teachers are being scheduled accordingly. Teachers who complete Induction-1 and Refresher courses will function as a trained IT teacher at level-1. Teachers completing Induction-2 course will function as a school IT coordinators and teachers completing Induction-3 and Refresher courses will function as designated District IT coordinator.

The CIET-NCERT Content for Induction-1 is as follows:

Session 01: Accessing the web I – introduction to the browser and browsing
Session 02: Accessing the web II – introduction to the web
Session 03: Familiarity with the ICT environment – connections and connectors
Session 04: Inputting in Indian languages – fonts and keyboard
Session 05: Creating with ICT – handling text
Session 06: Creating with ICT – handling data
Session 07: Creating with ICT – handling media
Session 08: Operating systems and its requirements
Session 09: Bringing together hardware and software

Session 10: Internet to access information I – exploring web resources
Session 11: Internet to access information II – exploring web resources
Session 12: ICT in the classroom – hardware and software
Session 13: Assistive technologies
Session 14: Working with data I – exploring spreadsheets
Session 15: Working with data II – exploring spreadsheets
Session 16: Email and web based forums
Session 17: Transacting through the web – exploring e-commerce applications
Session 18: MIS systems for educational management
Session 19: Exhibition and peer evaluation
Session 20: Evaluation and portfolio submission

III. Training of Teachers

Teachers training is the most crucial part of the implementation as they are owners of the programme. 90 PU Lecturers from across the state are identified as MRPs and all MRPs given training at Divisional level for ten days. The training details are as follows

SI No	DIET	Target	Achievement
1	Bangalore Rural	38	37
2	Mysuru	26	26
3	Dharawada	26	25
Total		90	88

These 88 MRPs intern gave training to lecturers from all 250 PU Colleges.

Each DIET Identified about 8 to 10 MRPs and Induction 1 training was given to English and social science teachers from all 1000 selected schools in 2016-17.

Sl. No.	Division	No. of Schools Selected in 2016-17	Total Teachers Trained	Gender		Category			
				Male	Female	SC	ST	Minority	Others
1	Belagavi	258	463	279	184	55	17	49	342
2	Bangalore	327	602	326	276	99	36	33	434
3	Kalburgi	105	178	106	72	32	22	19	105
4	Mysore	310	552	279	273	85	14	46	407

Total	1000	1795	990	805	27 1	89	147	128 8
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750 High schools are selected for the year 2017-18 and DSERT Gave 10 days Induction - 1 training through respective DIETs to Science, Mathematics, Social science & English teacher from each school. 5 days Induction – 1 training also given to Head teachers of these 750 schools.

The training details are as follows

Sl. No.	Division	No. of Schools Selected in 2016-17	Total Teachers Trained	Gender		Category			
				Male	Female	SC	ST	Minority	Others
1	Belagavi	176	789	477	312	106	38	63	582
2	Bangalore	218	971	557	414	190	50	53	678
3	Kalburgi	136	552	353	199	98	28	29	397
4	Mysore	220	1017	529	488	157	28	60	772
Total		750	3329	1916	1413	551	144	205	2429

Totally this year we have trained 5124 teachers from 1750 selected schools

Sl. No.	Division	No. of Schools Selected	Total Teachers Trained	Gender		Category			
				Male	Female	SC	ST	Minority	Others
1	Belagavi	434	1252	756	496	161	55	112	924
2	Bangalore	545	1573	883	690	289	86	86	1112
3	Kalburgi	241	730	459	271	130	50	48	502
4	Mysore	530	1569	808	761	242	42	106	1179
Total		1750	5124	2906	2218	822	233	352	3717

Subject wise teacher details are as follows

2017-18 Training Year			
		Target	Acheivement
Of 2016-17 Schools	Eng.	1000	793
	SS	1000	904
	Other Subjects		98
Of 2017-18 Schools	HM	750	650
	PCM	750	735
	CBZ	750	641
	Eng.	750	555
	SS	750	654
	Other Subjects		94
TOTAL		5750	5124

Monitoring training outcome:

As training is given for 5 teachers from each 1750 selected schools, now its up to the responsibility of DIET and DSERT to monitor the outcome of training. So from DSERT, we have given a monitoring format (Google form) to all DIETs so that after their visit to school they have to fill the google form there itself. As on today we have got 734 responses from various DIETs. By keeping this we analysed as follows :

No. of Visitors (Lecturers) visited : 290

No. of Schools visited : 710

DIET wise no. of visits/responses : 734

1. whether laptops provided or not ?

For this 75% schools answer yes and 25% no because for

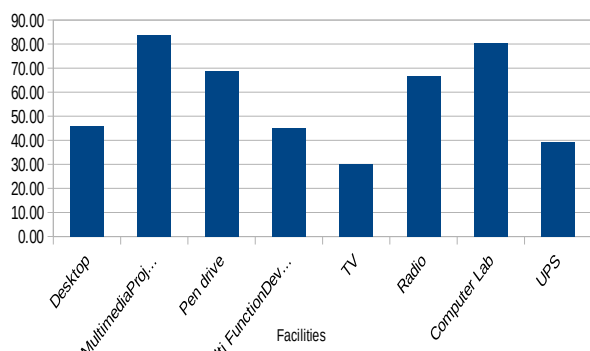
2017-18 selected schools, now only we are distributing laptops

2. Operating system installed in Laptop :

Operating System installed in the TALP Laptop

Out of 734

Windows	338
Linux	76
Both	197
No Response	122



in 2016-17 Laptops supplied with windows 10 OS

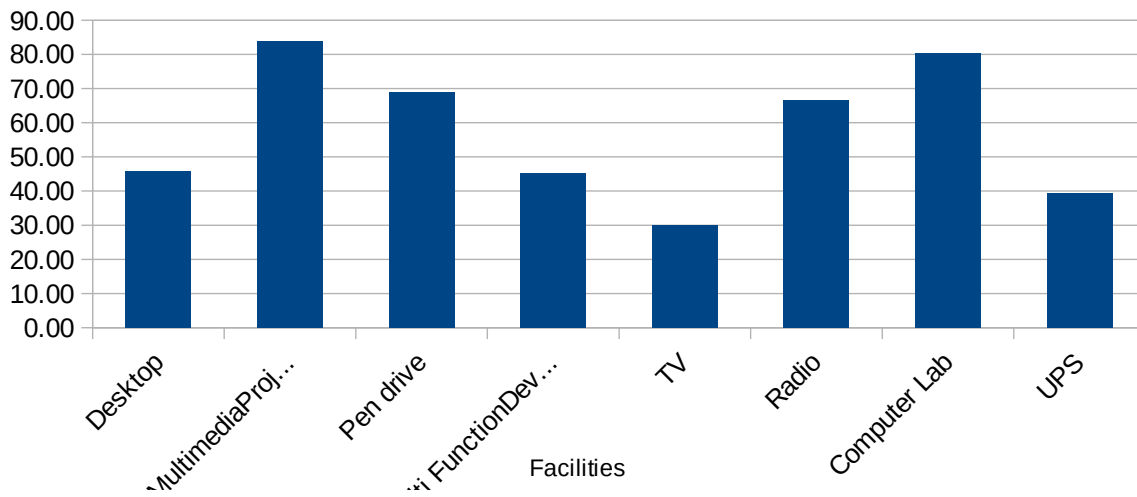
and some teachers installed Linux also to it

but the response showing only linux and no

response are from the schools selected in 2017-18 and they are awaiting laptops.

3. Which of these Facilities available in the school ?

Sl No	Facilities	No. of Responses	Percentage
1	Desktop	344	45.87
2	Multimedia Projector	629	83.87
3	Pen drive	516	68.80
4	Multi Function Device (Printer)	340	45.33
5	TV	226	30.13
6	Radio	499	66.53
7	Computer Lab	603	80.40
8	UPS	296	39.47



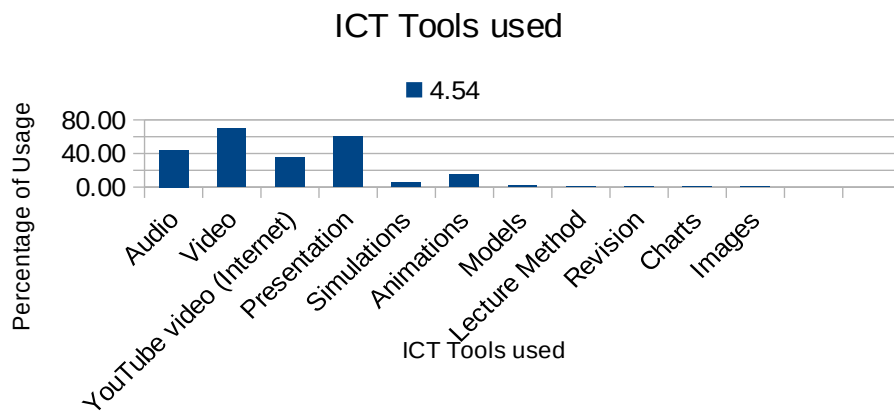
4. Number of teachers using ICT in their regular classes

No. of Teachers	Percentage	No. of Responses
0	2.54	19
1	1.34	10
2	6.94	51
3	12.42	91
4	42.06	309
5	15.89	117
6	9.75	72
7	3.07	23
8	2.94	22
9	0.67	5
10	1.47	11
11	0.40	3
12	0.27	2
16	0.27	2

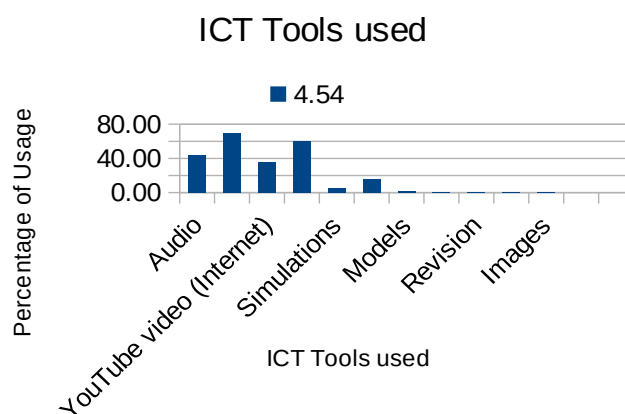
In 42% schools 4 trained teachers are using laptops for their classes and in some Composite junior colleges more than 7 teachers using laptops which intern is a good sign

5. ICT Tools used

This shows about 70% of teachers using video and presentations as e content in their classes and few teachers using different tools also.



6. Whether used ICT tools are relevant to topic or not ?



For this maximum answer is ICT tools used are relevant to the topic.

So by this we assume that our teachers are using ICT Tools more effectively and properly so that our main objective will fulfil.