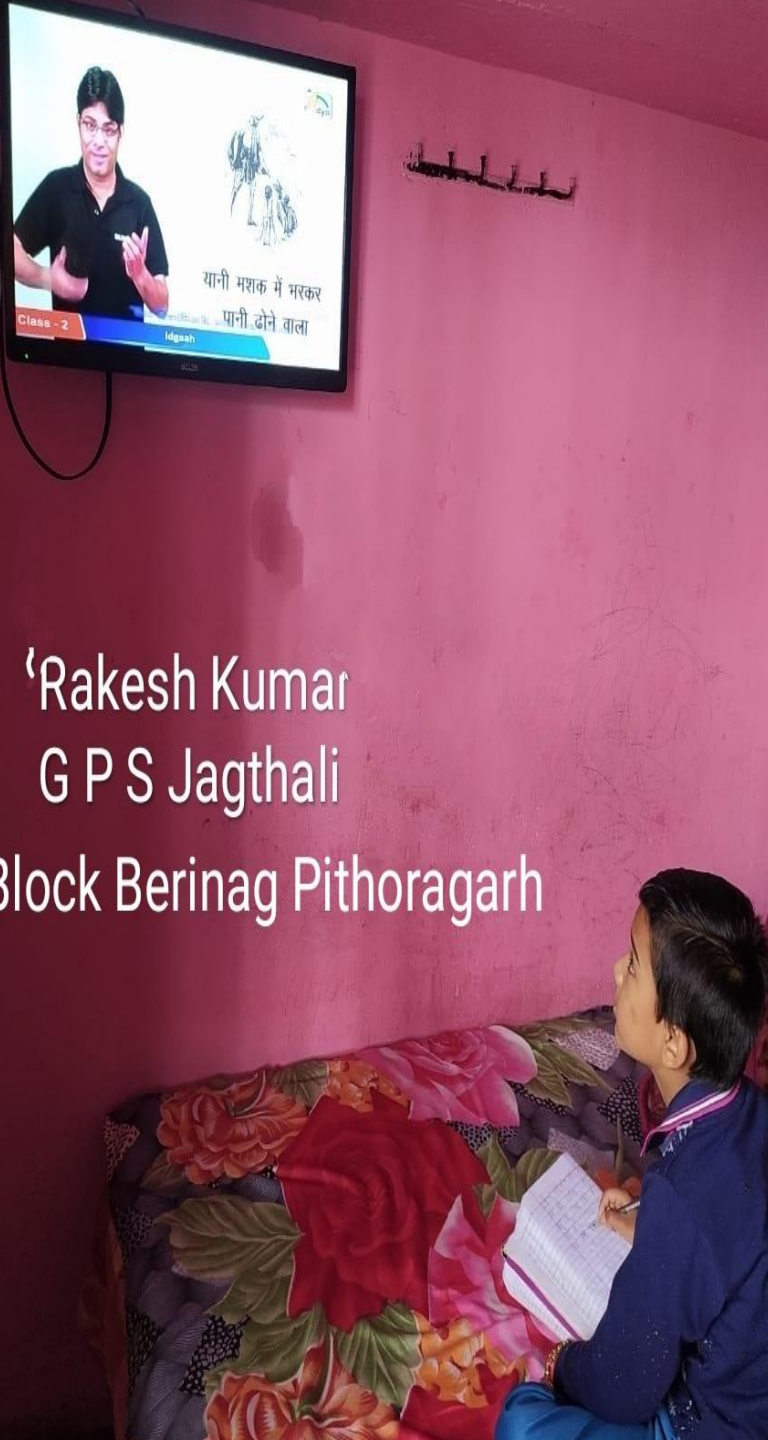
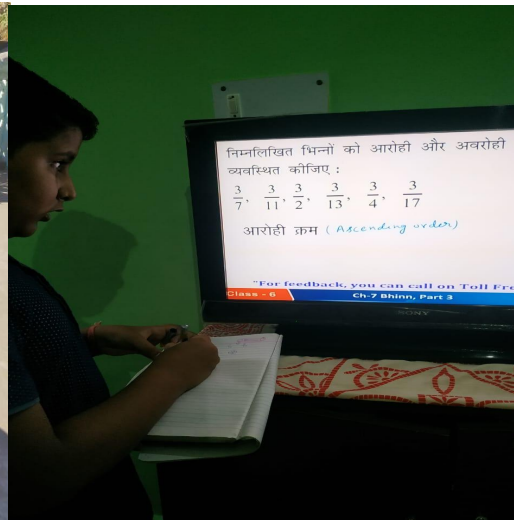


Digital Initiatives in Education Uttarakhand



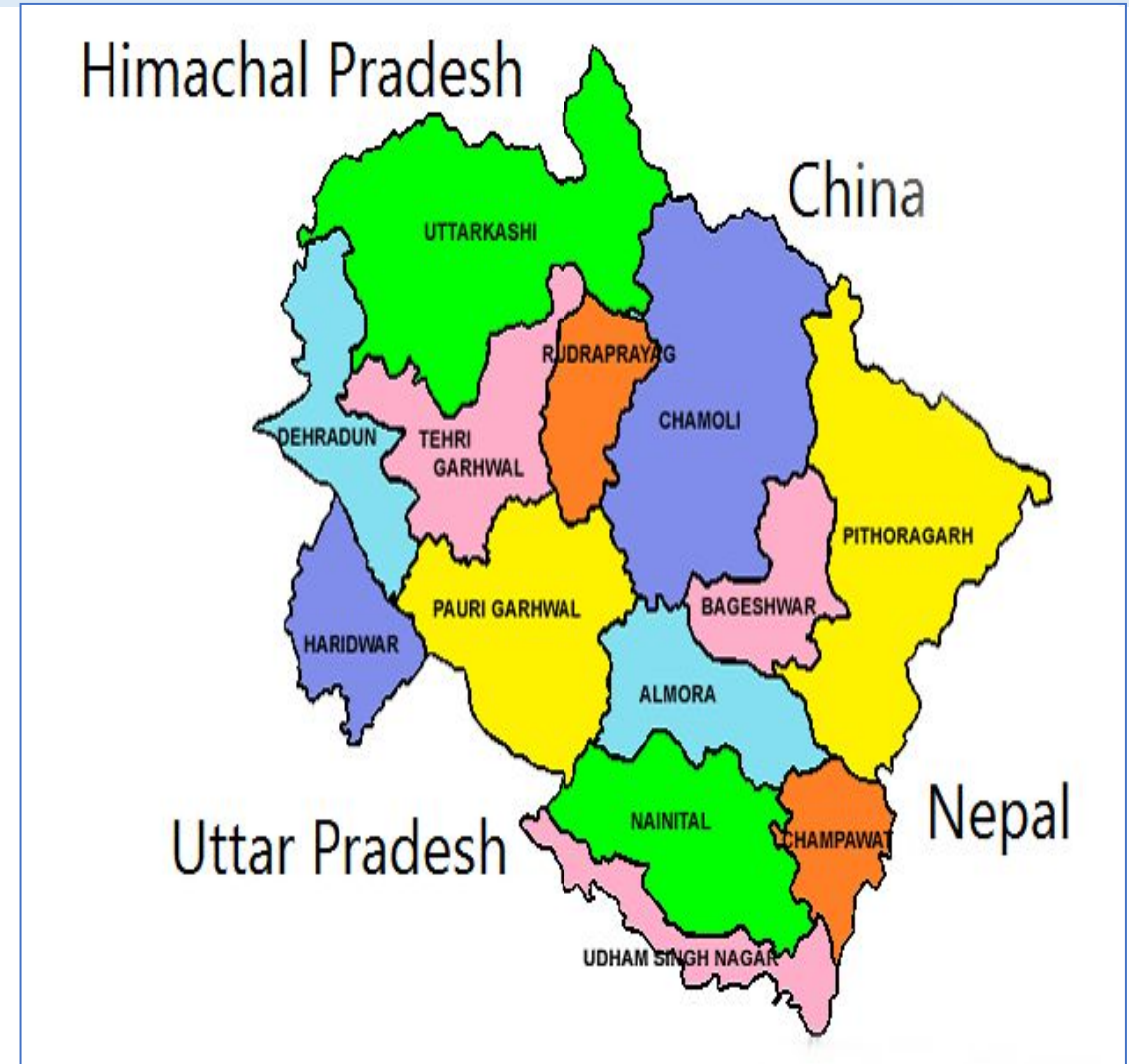
'Rakesh Kumar
G P S Jagthali
Block Berinag Pithoragarh



Presented by-
State Council of Research and Training
Uttarakhand

State Profile - Introduction

Uttarakhand state was created on 9th November 2000, carved out from UP as 27th state of India. It is a hilly state. It shares its international borders with Nepal and China. Its surrounding states are Himachal Pradesh and UP.



Uttarakhand with its units (Districts)

State Profile - Census figures & Administrative constitution at a glance

Description	2011	2001
Population	10,086,292	8,489,349
Male	5,137,773	4,325,924
Female	4,948,519	4,163,425
Population Growth	18.81%	19.20%
Percentage of total Population	0.83%	0.83%
Sex Ratio	963	962
Child Sex Ratio	890	967
Density/km2	189	159
Area squ. Kms.	53,483	53,483
Total Child Population (0-6 Age)	1,355,814	1,360,032
Male Population (0-6 Age)	717,119	712,949
Female Population (0-6 Age)	638,615	647,083

Administratively, the state has following constitution:

- **02 Administrative Divisions**
- **13 districts**
- **670 Nyaya panchayats**
- **110 Tehsils**
- **95 development blocks**
- **7791 Gram panchayats**
- **16793 revenue villages**
- **15745 inhabited villages**

Town/Urban Agglomeration

- **08 Municipal Corporation**
- **41 Nagar Palika Parishads**
- **42 Nagar Panchayats**
- **09 Cantonment Boards**
- **41 Census Towns**
- **02 Industrial townships**

School Education : State Profile

School Management	Schools					
	Elementary (Class I-VIII)		Secondary VI_XII		Total	
	Number	Share %	Number	Share %	Number	Share %
Government	14183	73.7	2318	59.0	16501	71.2
Govt. Aided	214	1.1	400	10.2	614	2.7
Other Govt. Schools	64	0.3	81	2.1	145	0.6
Private Unaided Schools	4778	24.8	1131	28.8	5909	25.5
Total	19239		3930		23169	

School Education : State Profile

School Management	Enrolment					
	Elementary (Class I-VIII)		Secondary IX_XII		Total	
	Number	Share %	Number	Share %	Number	Share %
Government	560621	34.1	297125	43.0	857746	36.7
Govt. Aided	53952	3.3	97859	14.2	151811	6.5
Other Govt. Schools	36310	2.2	21034	3.0	57344	2.5
Private Unaided Schools	992929	60.4	274235	39.7	1267164	54.3
Total	1643812		690253		2334065	

School Education : State Profile

School Management	Teacher					
	Elementary (Class I-VIII)		Secondary VI_XII		Total	
	Number	Share %	Number	Share %	Number	Share %
Government	31054	47.2	25855	44.5	56909	45.9
Govt. Aided	805	1.2	4334	7.5	5139	4.1
Other Govt. Schools	180	0.3	1864	3.2	2044	1.6
Private Unaided Schools	33761	51.3	26026	44.8	59787	48.3
Total	65800		58079		123879	

Digital/Online Initiatives- State Level

Background-

- **Corona virus pandemic affected education severely. It posed a big challenge to continue the education while schools were closed .**
- **The closure of schools not only hampered the normal teaching learning process but also resulted in learning loss and social-emotional problems among children .**
- **To continue the educational process and preserve social-emotional well being of students, a new strategy and plan were needed.**
- **Thanks to digital facilities available such as internet, mobile, TV and radio, virtual labs etc. through which State Education Department intervened appropriately.**
- **State Education Department intervened effectively resorting available digital facilities .**

Challenges of Education Vide Digital Mode

- **Problem of connectivity, limited availability of digital devices, supply of appropriate digital content etc. are some of the challenges before education department and SCERT.**
- **Communication with teachers, students and parents is also a great challenge.**
- **Social-emotional well being of students was also a big challenge during pandemic.**
- **Teachers are not properly trained to impart education through distant digital mode.**

Digital initiative for education in Uttarakhand

Facing all these constraints Education Department of Uttarakhand intervenes appropriately for cause of education through digital mode.

USE of Online/Digital Resources

- Online training/orientation of Teachers/Head Teachers through virtual classes/zoom/Google meet, PM-e Vidya Channels, DIKSHA. WhatsApp group .
- Lectures (subject specific) recorded at virtual studio during COVID pandemic and relayed through Doordarshan (Gyandeeep Programme) During school closure.
- Community Radio used for skill development programme for girls and Early Reading Writing FLN.
- SCERT developed an app named "Paragati" to perform assessment of children especially for FLN competencies..
- Tablets for 1.59 lakh students (Class Xth & XIIth) studying in Govt. schools through DBT.
- Restructuring of syllabus for class 9 to12 with the help of Board of education Uttarakhand, availability of Worksheet for children not having any digital device, etc.



Honorable CM distributing Tablets to students

▪ **Continuous Learning Plan (CLP) was developed and provided to schools to ensure the teaching learning during the closure of schools due to COVID.**

▪ **It included teaching –learning, evaluation processes and strategy for students having -**

□ Access to internet facility and digital devices.

□ Limited access to internet and digital devices .

□ Student without any access to internet and digital devices.

▪ **Teachers, DIET faculties and educational officers were oriented online on the use of CLP.**

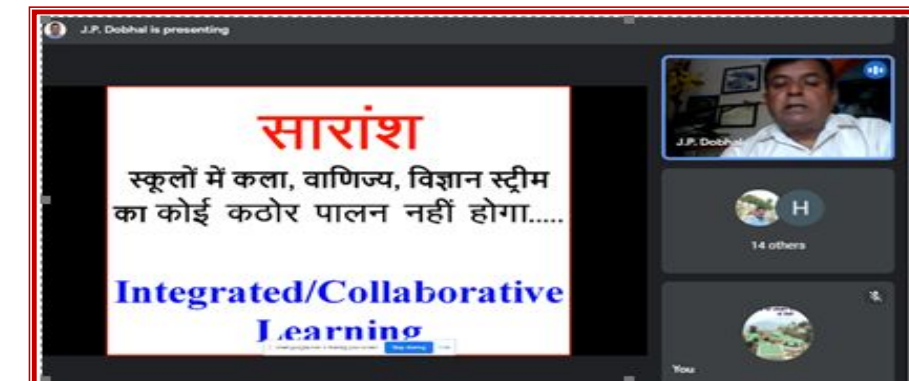
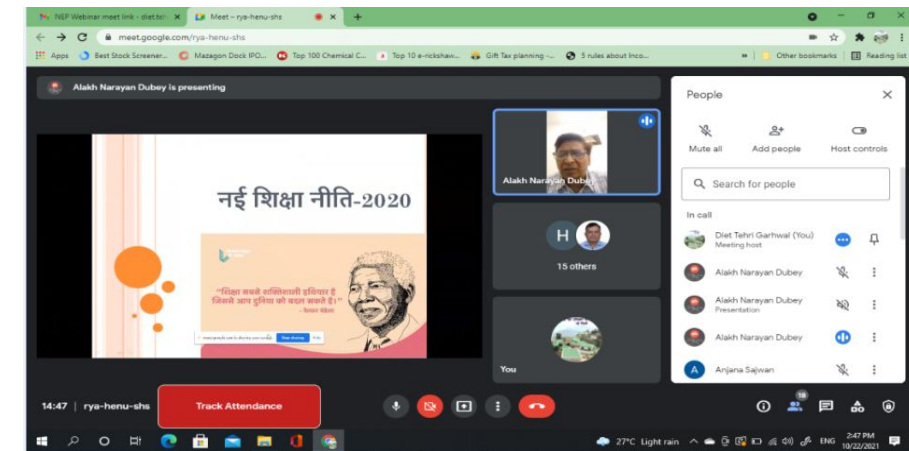
▪ **Monthly Online evaluation is being conducted through DAKSH online software developed by SCERT. With the help of this software assessment of children class1 to 8 is performed at school level. Reports are available in the Link- <https://educationportal.uk.gov.in/Guest?action=MonthlyTestAssessmentDashboard>**

▪ **Google form are being used for online attendance of teachers training and its evaluation .**

Continue-----



- SCERT oriented DIET faculties for the use of online platforms to the teaching – learning and evaluation; in continuation they further oriented school teachers.
- Teachers formed Whatsapp groups of students for their educational guidance and provided worksheets, short concept based videos and audios digitally to ensure learning by students at their home. Teaching – learning was ensured as per the alternative academic calendar developed by the NCERT.
- Home assignments were provided to the children and the same were evaluated accordingly.
- **Online Capacity Building-** SCERT conducted online training programme.
 - 1638 L.T. Science teachers, 1573 lecturers (Chemistry/ Biology) and 1896 lecturers of Hindi/ English were trained through virtual classes.
 - From Block to State level 300 Education Officers were oriented online on revised syllabus and Alternative Academic Calendar 2020-21 in the light of COVID-19.
 - 570 Principals were trained on online teaching and monitoring.



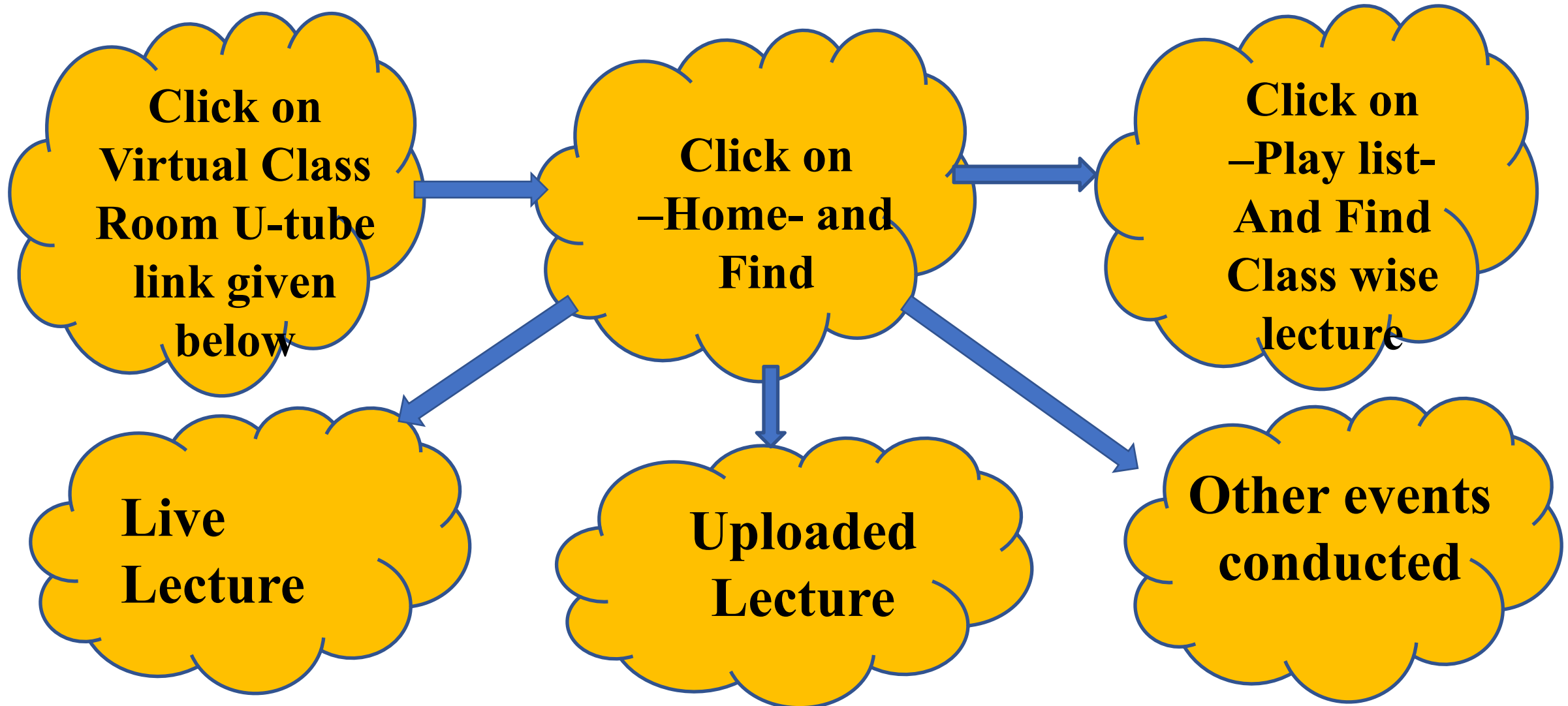
Some other Digital initiatives for Continuous Learning

Use of Virtual Studio-

- At State level there are 4 centralized studios and 500 virtual classes established in schools across the state.
- Use of Virtual classes for online training of teachers, recording subject specific lectures for relay through Doordarshan.
- Regular lectures were relayed through virtual classes in the academic year 2019-20 from Nov. 2019 to the mid of the March 2020, when COVID pandemic started.
- Virtual classes are useful especially in schools where post of teachers are vacant.



How to Access Uttarakhand virtual class room U-tube link



U-tube link -

https://www.youtube.com/channel/UCItGvellido_eNn0py3qnadrw/live

Training and Events executed through Virtual Studio

- ◆ SCERT trained the teacher for ICT uses and DIKSHA portal.
- ◆ Capacity Building- SCERT conducted a series of capacity building programmes through digital modes including virtual labs. [link Video](#)
- ◆ To improve the social emotional learning and life skills which is an integral part of holistic education and human development. Anandam (vkuOne) programme is being executed in Uttarakhand , 18909 head teachers and assistant teachers were trained through 500 virtual labs. [linkAnadanm vedio.mp4Anadanm vedio.mp4](#)
[Video](#)
- ◆ Samagra Shiksha (Secondary education), Uttarakhand has launched [SUPER-100](#) program for coaching Physics, Chemistry, Maths, Biology (Botany and Zoology) for 50 selected (Meritorious) girls and 50 selected (Meritorious) boys of class 12th of Govt. Secondary schools, aiming to prepare them for medical and engineering entrance exam. [Link Super 100 JEE & NEET Class.mp4](#) [Video](#)



Gyan Deep: Relay of Lectures through Doordarshan-

- ❖ Uttarakhand state has its own geographical difficulties and still there are some areas where net accessibility is not available.
- ❖ Due to net accessibility problem online coverage of students from these areas cannot be ascertained and students could not get benefited by online teaching-learning.
- ❖ Keeping in view of these issues State Government initiated relay of record lectures through Doordarshan having its reach up to remote areas in the state and due to free of cost accessibility all section of people can view it.
- ❖ At state level MoU is signed with Doordarshan authorities to relay recorded lectures on payment basis. Since 24th April 2020 continuous relay is being made through Doordarshan in three slots (i.e. 1:00 Pm to 2:30 PM) each day.
- ❖ Relay is being made through DD Uttarakhand/UP Platform and is also available on DD Free Dish-41, Dish TV-229, Den-137, Airtel-400, Videocon-889, Tata Sky-1195, Hathway-483, City cable-671, Lucknow-237, Big TV-250, Net Vision-138. Relay is also made available on You Tube link of Doordarshan (<https://www.youtube.com/channel/UCx55tefMzKkaA0uDmj9g2XA>).
Link [Dutdrshan GyanDeep Program.mp4 Video](#)



Community Radio Programme, Digital Quiz Competition, Online /Digital Orientation on Vidya Setu-Learning Recovery Programme

- ◆ Community radio is also being used for online learning. In the state at present 10 communities radio in 05 districts are being operated. With the help of NGO partner (Room to Read) early reading is being facilitated through 2-3 minutes broadcast. [Link Community Radio.mp4 Video](#)
- ◆ Quiz competition programme for children is also executed through Virtual studio for 500 school. [Link Uttarakhand Quiz Event.mp4 video](#)
- ◆ Uttarakhand State initiated the academic year 2022-2023 as a year focused on Learning Recovery. The program will be known as Mission Koshish -2 / Vidhya Setu. More than 6000 Education Officer, Principal, Head teachers of the school oriented through Virtual Studio for the effective implementation of the programme.

[Link Video Vidaya Setu Event.mp4](#)



Synergy with national digital initiatives

PM e-Vidya Programme-

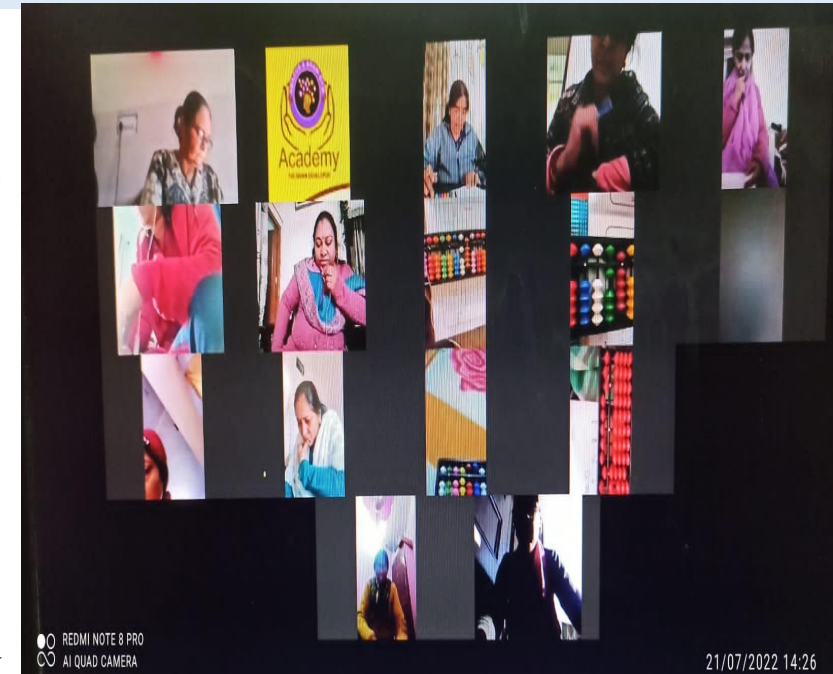
- Overall 47000 Teachers were trained online on PM e- Vidya (dedicated TV channels for classes from 1 to 12).
- Officers and officials were oriented Online/ Digitally at different level for the execution of the Programme at state/district/ Block/CRC and school.
- Coordinators were also appointed for the effective execution and implementation of the PM e-Vidya Channels at state/district/Block/CRC and school.
- Under Samagra Shiksha, during SMC/SMDC members training, at CRC level, 06 members from each Govt. PS&UPS i.e. $\{(14183 \times 6) = 85098\}$ were trained for the effective operation of PM e-Vidya Channels.
- Online/Digital Training Program were also executed at Block Level for orientation of PTA/SMC members and Continuous monitoring from state and District was also done for effective Implementation.
- For the students who did not have TV at home, the concerned District Magistrate/MP/MLA etc. was requested to install TV in the Panchayat houses.



[Link](#)

DIKSHA, Online/digital training on ABACUS-Making Mathematics Interesting

- The quality of e-content is equally important for the effective use of ICT in teaching-learning process and thus the development of e-content in itself is a very crucial task.
- DIKSHA platform is widely used by the state for effective digital learning. Around 1400 digital contents are developed in 2021-22.
- Making Mathematics interesting through Abacus, during corona pandemic training was given in online mode with a specially designed software. 585 teachers (45 from each district) were trained centrally at state level. [Link video](#)
- The mathematical ability of students has increased. 15 to 20 thousand students in more than 1000 schools across the state are benefiting from this program.



District Specific Digital/ Online Initiatives

German Language (DEUTSCHE SPRACHE)- DIET Pauri

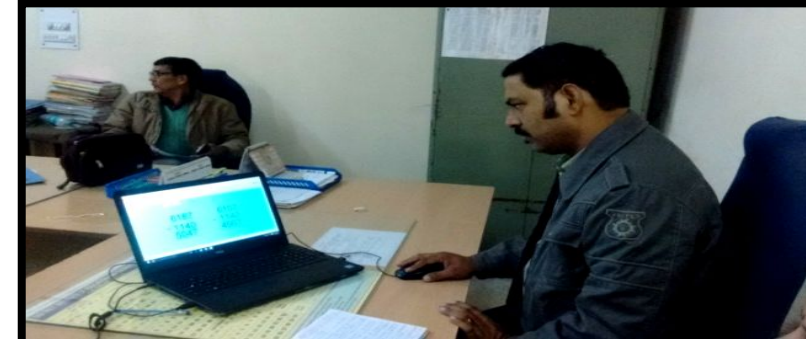
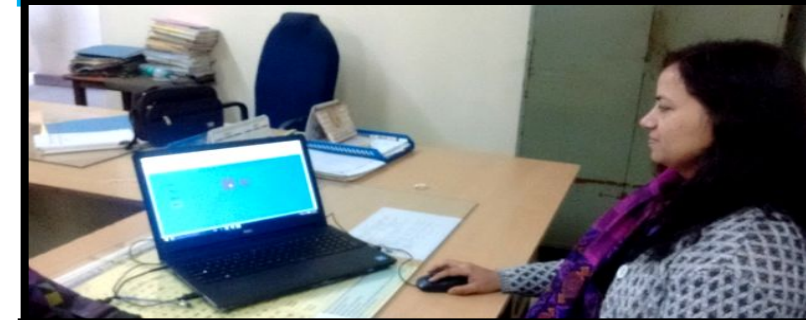
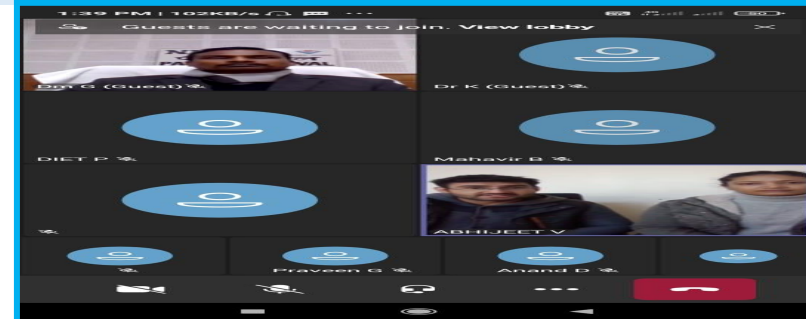
- Online German language program is being conducted by the DIET Pauri Garhwal in 30 government schools of district Pauri. In which one teacher and students of class 11th of every school is being provided a course of German language.

Link [Inauguration Of German Language Program.mp4 Video](#)

- Online evaluation and Assesment was also executed By DIET using Google form. The detail process adopted for the same is Can be seen in link <https://youtu.be/oTnV6V1v81Q> here.

APPLICATION OF GEOGEBRA- DIET U.S.Nagar.

- Geo Gebra is dynamic mathematics software for all levels of education that brings together geometry, algebra, spreadsheets, graphing, statistics and calculus in one easy-to-use package.
- During the session 2020-21 in Covid-19, DIET U S Nagar conducted online training on the basic use of Geogebra in which 70 teachers and teacher educators across the state participated. Learning digital materials prepared by and disseminated among teachers.

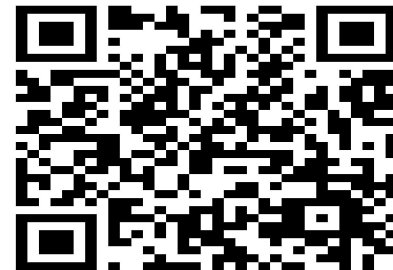
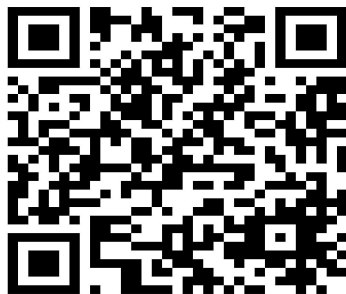
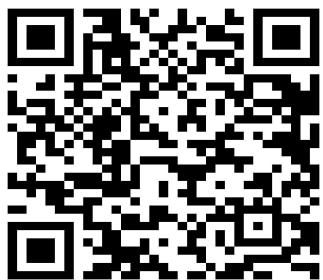


District Specific Digital/ Online Initiatives

Science Learn with Fun- gekjk viuk foKku] gekjk liuk foKku

DIET Rudaraparyag:-

- Online National level Webinar was organized by DIET Rudaraparyag on Exprimental Science with the participation of highly educated proffessionals from IIT kanpur Padmshri Proffesor H.C. Verma , Mechanical Engeneer Abhisek Das etc.
- The U-tube link and the QR code are as under for the details of the all



Other Volunteer Digital/ Online Initiations by Teachers

- ❑ Teachers also took initiatives to continue digital/online teaching for children.
- ❑ In district Haridwar, despite lack of digital resources a group of teaches in the leadership of Mr. Hemendra Chauhan, Acting Head Teacher, GPS Chauli took the task to be done.
- Mr. Hemendra Chauhan shared this project with Jubilant Bhartiya Foundation and Exide India Ltd. and asked them for the help.
- Jubilant Bhartiya Foundation and Exide India Ltd. agreed to offer one of its high-tech learning bus . It has 25 computers with Wi-Fi facility and a smart board-cum-LED screen. Exide India Ltd agreed to offer a DSLR camera, tripod and lights to shoot the videos.
- 25 teachers of Bhagwanpur prepared their videos in this hi-tech bus.



• In this exercise, videos for a total number of 63 lessons of Hindi, English and mathematics subjects of class I were prepared.

• After this, all videos were sent to other teachers and schools.

□ Group of volunteer teachers created a platform called "Mission Shikshan Samwad" for the availability of online/Digital education..

• Teachers and subject experts can share the digital/ online materials prepared by them on this platform for the convenience of other teachers.

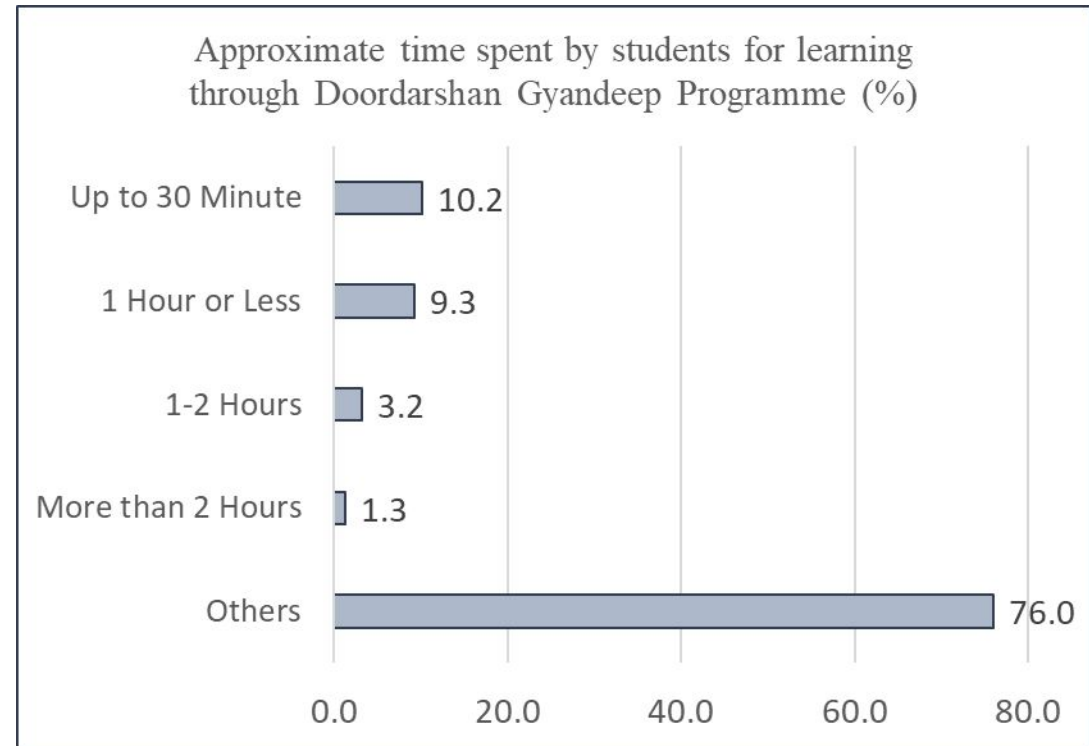
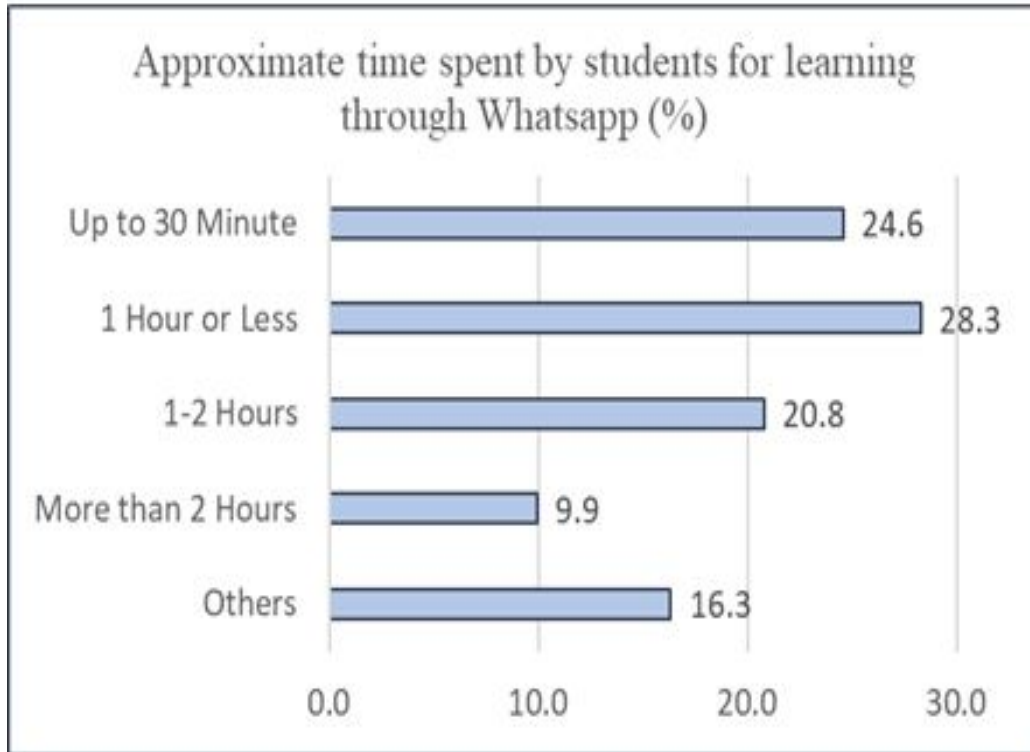


Digital Resources : Availability & Usage

- State conducted a survey on pilot basis through DIETs to assess availability and usage of digital learning resources.
- More than 1550 students interrogated (Class VI, VIII, IX & XII) from across the state (all blocks) including student from remote areas and different category.
- Almost 82% student uses smart phone. 58.6% students reported only one smart phone and 54% student share it with siblings.
- WhatsApp is being used by more than 86% students. However more than 70% students reported learning time less than 1 hour per day.
- Desktop/Laptop is available with 1.3% students, Only 0.5% students have Tablets and nearly 34% students have access to cable network/DTH/Doordarshan.
- 55% students admitted network problem and 36% students admitted that they have data pack problem.
- Approx. 24% student either viewed Gyandeeep (relay of lectures through Doordarshan) and Swayam Prabha channels.

Digital Resources : Time Spent for Learning

Online Learning Resources and Time Spent by the Students



[Link](#)

Thanks