

Maximize the Use of ICT Labs with Chromebook-Based Digital Library For Schools

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Discover how Chromebook-based digital library simplifies school education, with an easy-to-use ICT Lab setup, and seamless access to a K-12 learning platform.

The adoption of technology has experienced a swift evolution in recent years, spanning from traditional computer labs to projector-equipped smart classrooms, PC-Free smart classes, tablet-based learning, digital libraries accessible via tablets, and beyond. Despite these advancements, many teachers remain hesitant to fully embrace technology in their daily routines.

A recent news article from Kashmir reveals a concerning trend: only 15% of teachers in Jammu and Kashmir (J&K) are trained in using computers for teaching. This limited training raises serious questions about the quality of education within public institutions. Out of 167,000 teachers in the Department of School Education, a mere 26,180 were trained in use of computers. Official figures reveal a huge lack of computer-based education training for teachers in pre-primary through higher secondary levels. Only 2037 pre-primary teachers are able to teach through at computers. This number increases slightly for upper primary (7852 teachers), but declines at the secondary (5083 teachers) and higher secondary (2272 teachers) levels.

In Addition, the research highlights:

Nearly 5000 government schools situated in remote and mountainous regions of Jammu and Kashmir face infrastructural gaps. The 'JK Vision document 2047' highlights that "Infrastructure gaps exist in 5000 schools located in remote and hilly terrain."

Through our extensive work with teachers in schools across various districts of India, we've identified three reasons contributing to this resistance:

- Difficulty in managing and using computers and its interconnected hardware devices
- Lack of familiarity with technological devices
- Insufficient training in incorporating technology into daily teaching practices

We've also built insight into how we can fix this.

The challenge extends beyond Jammu and Kashmir to all public schools in India, especially the ones located in remote regions. Many teachers face difficulty in managing and using computer-like devices, leading them to avoid regular usage. This issue is compounded by the necessity for interconnected devices, stable internet connections, uninterrupted electricity, and ongoing maintenance of the devices.

Therefore,

The aim should not be just to introduce teachers to new devices, but also to make sure they're familiar with the ones they already use. Teachers have mostly switched from watching TV to using smartphones. They have not experienced using desktops or laptops in between. Many went straight from TV to smartphones, while some used basic phones before upgrading. So, most of them are comfortable with Android devices. That's why our focus should be on enabling technology such as Android-based smart classes, or Tablet/Notebook/Chromebook-based digital library that they'll find easy to adopt and use.

One way to achieve this is to set up a Tablet/Chromebooks-based Digital Library for Schools!

Why?

Ease of Use:

Chromebook Laptops are designed with an intuitive and familiar interface and are low maintenance compared to computers. Further, the Chromebook can be enabled in an ICT Lab setup which is a Chromebook-based digital library that can be set up/moved to any classroom, hall, or lab.

Long Battery Life

Chromebooks have long battery life and once charged, can be used for 7-8 hours, that is for the entire school duration without needing a power supply. This eliminates the need for continuous electricity, allowing for uninterrupted learning. Additionally, the Chromebook-based digital library is set up with a charging rack that can simultaneously charge 20 Chromebooks using a single power plug. This capability allows the Chromebook-based digital library to be set up without requiring extensive wiring in any classroom.

Integration with Google and Android Apps for Education:

Chromebooks seamlessly integrate with Google's suite of productivity and collaboration tools, such as Google Classroom, Google Drive, and Google Docs. This integration simplifies tasks such as sharing assignments, collaborating on projects, and providing feedback to students. Further, Chrome OS, supports Android applications, offering versatility not found in Computer-based ICT Labs reliant on paid Windows operating systems.

Offline/Online access to K-12 learning platform

Each Chromebook in the digital library comes equipped with the iPrep learning platform and preloaded offline K-12 content, ready for immediate classroom use. This offers schools a comprehensive digital library solution that seamlessly addresses the needs of students and teachers alike. This integrated approach empowers students with offline access to a multi-category curriculum-aligned content, fostering a joyful personalized learning environment in schools. Teachers benefit from a centralized resource hub, streamlining their lesson planning and enabling richer teaching experiences in classrooms.

Collaborative Learning

Individual Chromebooks at home or Chromebook-based digital library in schools support collaborative learning environments, where students can work together on projects in real-time using Google's collaborative tools. This fosters teamwork, communication, and problem-solving skills among students.

iDream Education is a leading provider of Digital Libraries in India. If you wish to setup the best digital library solution, get in touch with iDream Education today.

Customization and Control:

Chromebooks offer features that allow teachers and administrators to customize and control the devices to suit their specific needs. For example, schools can manage device settings, install or block apps and extensions, and enforce safe browsing policies through the Google Admin console.

Long-Term Affordability

Chromebooks are generally more affordable than traditional laptops or desktop computers as these are very low maintenance. This makes them more accessible to schools, education programs for corporates, and NGOs. We designed the Chromebook-based digital library to be easy to setup and use, making it suitable for schools with limited infrastructure, electricity, and internet.

Chromebook-powered iPrep Digital Library

We've tested our iPrep learning platform on Chromebooks, ensuring smooth and seamless operation. Additionally, our new Chromebook charging rack solution simplifies setup, making Chromebook-powered iPrep digital libraries a viable option for schools across India.

The Chromebook-based digital library is designed keeping in mind the revision of ICT lab@Samagra Shiksha. It offers an affordable and highly effective way to personalize learning experiences in schools. By eliminating the complexities of computer-based ICT labs, teachers are empowered to focus on instruction, facilitating a more engaging, creative, and impactful learning environment.

As a final note, we'd like to draw attention to

We digitized 128 classrooms in 10 Army Goodwill Schools in collaboration with the Indian Army (Northern Command). This digitalization included the implementation of smart classrooms, tablet-based digital libraries, and access to the iPrep mobile app for home learning. We also gave students access to the app for home learning during the COVID-induced lockdown when they could not attend school. With minimal training, teachers are consistently utilizing tablet-based smart ICT labs. This indicates that simplifying digital learning solutions according to teachers' familiarity can reduce the necessity for extensive training. This further ensures consistent use of technology in classrooms. Further, we have a dedicated team in Jammu and Kashmir that continuously trains, coordinates, guides, and assesses the use of these digital learning solutions for teachers and students. They also measure the impact of digital content on the learning outcomes of students by conducting baseline and endline assessments.

iDream Education will be happy to contribute to Jammu & Kashmir's vision for enhancing school infrastructure.

If you're planning to enhance the ICT Lab infrastructure of the school's ICT, our Chrome-based digital library can be an ideal solution. Plan your education program with iPrep by writing to us at

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