

A Guide on How to Set Up a PAL Lab for Schools

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The concept of "one-size-fits-all" learning is becoming obsolete. This became clear during the post-COVID era, with the abrupt shift to digital learning. Millions of students during the COVID-19-induced lockdown did not have access to digital learning. This resulted in noticeable learning gaps among students when they returned to school after 2 years.

With the social sector prioritizing adaptive learning solutions in schools, the Haryana Government became one of the first states to adopt PAL software. For over 500,000 students in government schools of Haryana under the e-Adhigam initiative. The vision was to empower students to address the two-year learning gap while continuing in the same grade. Under the initiative, the government provided individual tablets with internet access and preinstalled PAL software.

Considering the growing need for adaptive learning to reach even the most remote learners, we are now enabling our PAL solution both online and offline. Further, our PAL solution can be accessed on tablets, Chromebooks, and other devices.

This is now a part of our ICT Lab solution, known as PAL Lab. The model is designed for schools, simplifying the process for the social sector and government to implement adaptive learning systems.

From our extensive work with government schools, we came to an understanding that the major reason for stagnant learning outcomes is unaddressed historical learning gaps. Some reasons for these learning gaps are irregular attendance, absenteeism, and lack of interest. Therefore, schools need a solution that helps students bridge both the learning gaps caused by COVID-19 and long-standing educational deficiencies. The need is also emphasized in the NEP 2020.

Why PAL Labs Matter for Schools?

Access to Individualized Learning Devices

By setting up PAL labs, we can equip each student with their personalized tablet or device. Having access to personalised learning fosters a sense of ownership and allows for truly individualized learning experiences in school. This centralized approach reduces the need to equip every student with a personal device while ensuring equitable access for all. Schools can integrate PAL Labs into

their timetable, allowing students to use the devices on a rotational basis. This approach optimizes resource utilization. Additionally, it creates a non-judgmental environment where every student has an equal opportunity to address their individual learning needs and cover historical learning gaps.

Flexible Implementation of digital learning solution

PAL labs can be set up in any existing classroom or lab space, eliminating the need for costly infrastructure changes. With just a power plug, we can turn any room of the school into a personalized adaptive learning setup.

Adaptive Content

The guided mechanism of PAL is developed both online/offline. Therefore digital content on PAL Software adjusts in real-time based on a student's performance in the diagnostic tests. If a student struggles with a concept/topic, the system provides additional support through remedial video lessons or practice. Based on their scores and learning levels, students advance to grade-level proficiency.

Cost-Effective Solution

PAL labs are a budget-friendly way to bring personalized adaptive learning to every student. By setting up a charging and storage rack that can centrally manage and charge all tablets or chromebooks, you can avoid costly infrastructural upgrades in schools.

By addressing the challenges of individualized learning, accessibility, and cost, PAL labs offer an adaptive learning solution for schools. This is designed to empower social sector education and government to enable equitable learning opportunities for all with minimal setup.

Let's take a closer look at how to set up a PAL Lab For Schools

While the infrastructure of schools may vary, the need for quality education is universal. As recommended in ICT@Samagra Shiksha, upgrading ICT Labs has created opportunities for EdTech providers and the social sector to develop and set up user-friendly digital learning solutions for schools. ICT Lab-like solutions such as PAL Lab are easy to implement and manage and require no additional infrastructure. Let us know how can you set up a PAL Lab For Schools:

Infrastructure

PAL Labs, unlike traditional computer labs, are designed for easy setup and management, requiring no dedicated staff. This ICT lab model functions as a charging and storage rack that can accommodate 5 to 40+ tablets, Chromebooks, or notebooks. It's ideal for schools with limited resources or in remote areas as it does not require any extra wiring, furniture, or space to keep. Devices in PAL Labs get charged simultaneously on a single power plug for 3-4 hours, lasting the school day. PAL Labs are suitable for schools with grades 3-12 and social sector education programs focusing on enabling adaptive learning to help students cover the historical learning gaps.

Personalized and Adaptive Learning (PAL) Software

PAL Software is an essential part of the PAL Lab setup. It is designed to ensure a smooth transition to grade-level proficiency by addressing learning gaps without letting students feel bad about moving to grades below. With a guided mechanism, PAL creates personalized learning paths tailored to each student's current grade and learning level. Students begin by taking diagnostic tests within the PAL software, which assess their understanding of subjects and chapters. Based on their responses, PAL guides them through foundational learning content and practice exercises, gradually building their proficiency until they reach grade-level expectations. Further, PAL App is pre-installed on all devices in PAL Lab, which can be accessed by students through their unique login details. This fosters a non-judgmental learning environment where students can address their learning gaps at their own pace.

Learning Management System with PAL

PAL lab setup in schools enhances learning through a Learning Management System (LMS) installed on student devices, offering a rich array of curriculum-aligned resources such as video lessons, syllabus books, notes, and practice materials. The PAL software enhances the personalized learning experience by creating personalized learning paths for each student, which is a combination of practice sessions and remedial video lessons tailored to their needs. Beyond adaptive learning on devices, students have the freedom to explore a wider range of learning resources, including books, notes, and practicals, fostering a holistic and self-directed approach to learning.

Content for Life Skills and Value Education

You can customize the content on the LMS with PAL to meet the unique needs and holistic growth of students in your education program. The customization ensures age-appropriate extracurricular content that keeps young learners aware of their surroundings from the start. The content covers a diverse range of topics, from moral values and Indian festivals to stories of Indian leaders, climate action, health, safety, and sanitation. By offering such comprehensive and engaging content, the learning platform empowers students to explore their interests, learn essential life skills, and develop into well-rounded individuals.

Ongoing Reporting

Establishing an effective adaptive learning solution such as PAL Lab necessitates more than just implementation. PAL LMS with reporting is vital to ensure its usage and keep track of improvement in learning outcomes. Therefore, our focus has always been on integrating a learning management system (LMS) equipped with offline reporting on the PAL App. This enables us to collate comprehensive usage data offline, making it suitable for schools located in areas with limited internet connectivity. This PAL app records usage data based on categories, practice, and subjects, and seamlessly syncs to project dashboards and command centers. This offers valuable insights into daily usage patterns on students' interests, learning patterns, and scores. This is designed and developed to empower project officials to get data-driven insights to achieve measurable outcomes.

A compelling example of how to set up a PAL Lab for schools is the implementation of PAL Lab at iMpower clubs of Aide et Action.

Facilitators and coordinators at iMpower centers work to provide educational, health, and nutritional support to children of construction workers. Their children often accompany their parents to work due

to frequent changes in their place of employment. The children's transient lifestyle often leads to discontinuity in learning, limiting them from enrolling in school and ultimately leading to significant learning gaps.

To address this, facilitators at the iMpower Clubs, try to involve students in continuous learning through textbooks, playful learning resources, and so much more but there is no specific solution to address learning gaps. Learning gaps persisted, but this year, a collaborating social sector organization, dedicated to supporting these centers, established PAL Labs with 10 tablets in partnership with us. Previously, teachers could only estimate a child's learning level based on their age, limiting their ability to address individual needs effectively. However, with PAL software, students can now log in with their personal and grade details, allowing the system to identify their current learning level and provide personalized learning paths. *"When students learn and practice simultaneously, they get involved in learning more"*, -said one of the facilitators of iMpower Club. [Read More](#)

The PAL Lab setup at the iMpower clubs includes a charging and storage rack, 10 tablets pre-installed with PAL software, a K-12 Learning Management System for formal learning, and an LMS with PAL for grades 3 to 12. Both LMS versions feature offline reporting capabilities to track usage and drive measurable learning outcomes.

If you found this relevant for your remedial learning school education program or looking for information on how to set up a PAL Lab for schools, please contact us at +91 7678265039. You can also email us at share@idreameducation.org, or share you details [here](#).