

## BUYERS GUIDE FOR K-12

# Mobile Device Charging Solutions

Today's teaching and learning activities require digital tools. Ensuring that all mobile devices are charged and ready to go for each day's learning activities requires a systematic storage and charging solution. Does your district use best practices to ensure there is no down time for students and teachers?

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### Introduction: Today's Classrooms

Twenty-first century classrooms look very different from those in the past because mobile devices are enabling true interactive learning. Technology has changed how students and teachers do just about everything—and what they need to succeed. The goal for most districts is to institute one-to-one learning and provide one device per student. Some districts purchase devices for student use and others ask students to bring their own devices from home. Whatever choice a district makes, their teachers are using these devices to enable powerful models of student learning.

This guide explains the following considerations for mobile storage:

- Increasing the use of mobile devices in K–12 classrooms
- Exploring the storage, security, and charging options for these devices
- Understanding the challenges for teachers and districts
- Exploring the differences, options, and solutions from traditional storage carts and LocknCharge carts
- Using proven strategies for creating an RFP during the decision-making process.

## SECTION 1: MOBILE LEARNING

### Instructional Technology

The U.S. Department of Education's National Education Technology Plan is the educational technology policy document for the United States. The 2016 Plan, *Future Ready Learning: Reimagining the Role of Technology in Education*,

expresses a vision of equity, active use, and collaborative leadership to make accessible, 24/7 learning possible.

The plan states, "The timing has never been better for using technology to enable and improve learning at all levels, in all places, and for people of all backgrounds... the key pieces necessary to realize the transformations made possible by technology in education are in place."

The Anytime Anywhere Learning Foundation states, "As educators, we know the power of Howard Gardner's Theory of Multiple Intelligences. Technology facilitates our ability to meet the needs of all kinds of learners."

The Department of Education shows how this works: "...technology infuses classrooms with digital learning tools, such as computers and handheld devices; expands course offerings, experiences, and learning materials; supports learning 24/7; builds 21st-century skills; increases student engagement and motivation; and accelerates learning. Technology also has the power to transform teaching by ushering in a new model of connected teaching. This model links teachers to their students and to professional content, resources, and systems to help them improve their own instruction and personalize learning."

### Mobile Devices

School districts are adopting technology as a tool for teaching, learning, and testing. School leaders are choosing mobile devices for their versatility and cost effectiveness. A report by the Brookings

Institution notes, “Mobile learning represents a way to address a number of our educational problems. Devices such as smartphones and tablets enable innovation and help students, teachers, and parents gain access to digital content and personalized assessment vital for a post-industrial world.”

According to Project Tomorrow, most schools are using these devices for serious classroom work, including accessing class information through an online portal, taking tests online, using online textbooks, and watching teacher-created videos.

### Increasing Use

According to Project Tomorrow’s report, *The New Digital Playbook: Understanding the Spectrum of Students’ Activities and Aspirations*, there is a rapid increase of mobile device use in K–12 schools. The researchers for this report surveyed schools annually and found that between 2013 and 2014, the use of digital content in classrooms grew 45%; the use of digital textbooks rather than print textbooks grew 82%; and mobile learning through the use of tablets or other devices grew 41%.

Their research shows that almost all middle and high school students have access to mobile devices and are using them for schoolwork. Nearly a third of these students are using mobile devices issued by their schools. Students who are provided with a school tablet are significantly more likely to use emerging technologies to support their learning than students without regular daily access.

Pearson sponsored a survey that was conducted by Harris Polls last year. The report, *Student Mobile Device Survey: Grades 4 through 12 June 2015* states that tablet usage is growing higher for younger students.

Findings showed that 78% of elementary school students regularly use a tablet, which is up from 66% from the previous year. At the elementary school level, tablets have replaced laptops as the mobile device that students use most often (78% for tablets versus 66% for laptops). Middle school data show that 69% of students use tablets, which is up from 58% from the previous year. Forty-nine percent (49%) of high school students use tablets, which is up from 42% from the previous year.

Chromebooks were introduced in 2011 as an affordable alternative, and their use in schools is growing. According to a report from Futuresource Consulting, “Chromebook sales now account for more than half of all devices sold for U.S. classrooms.”

Official numbers from the market research firm IDC confirmed last December that Apple had shipped 702,000 iPads to educational buyers in the third quarter and Google partners had shipped 715,000 Chromebooks.

### Challenges

Having so many mobile devices in classrooms means there are new challenges. For example, districts must find a way to store the devices safely. At the same time, the devices must be fully charged and ready for learning every day.

The solution also has to be an easy-to-use part of equipment management as well as follow statewide and federal requirements for testing that are drivers in technology deployments.

## SECTION 2: MOBILE DEVICE CHARGING SOLUTIONS

A charging cart or charging station is the solution to charging, securing, and transporting iPads, tablets, Chromebooks, and other devices. Students put mobile devices into the cart and teachers lock it. The next day the devices are fully charged

and ready to use. Carts traditionally have looked like storage cabinets that have slots for students to shelve their devices. Newer technology from LocknCharge offers a variety of basket-based mobile deployment carts. As educators increase the use of devices in the classroom, districts have implemented more than one million of these carts to enable one-to-one learning. In addition, the technology leads to a time saving on average of two hours a week per teacher over cabinet-type carts.

### Essential Features

Around the country, school districts are

### Coachella Valley Unified School District

Coachella Valley USD, based in Thermal, CA, has a student population of 19,500 spread out over 22 schools. As one of the poorest school districts in the United States, 90% of students qualify for free- or reduced-priced lunches.

Superintendent Dr. Darryl Adams wanted to use technology to move from an industrial model to a 21st-century model of learning. The district passed a \$42 million technology bond in 2013. The district became the first in the U.S. to provide iPads to all Pre-K-12 students and teachers.

The first step was to start a pilot program. CTO Michelle Murphy says, "When we originally piloted iPads, we chose a different brand of cart; however, we realized we needed one that was easier and faster to set up. LocknCharge's baskets were a big factor for our elementary schools for ease of distribution and collection. The lock and chain at the bottom were stronger and thicker than other brands. Overall, the cart is built with a high quality and is great in classrooms."

The district purchased 20,000 iPads and LocknCharge carts for them. Teachers loved the baskets; instead of 30 kids getting up, it was only two or four students, which helped them get to instruction faster and end the class faster.

These carts meant that the iPads would be secure and ready to use every day. They've had only one break in since implementing their program, and the thieves couldn't break into the carts. The iPads were all safe and secure.

Using basket-based carts by LocknCharge, teachers can save up to 70 hours of class time each school year—per 30-unit cart—to use for instruction instead of deploying and collecting devices because of the basket system.

making decisions about the mobile devices they buy—recently among tablets and Chromebooks, but often they include other devices, too. Some school leaders select one type and standardize on it, and others purchase different devices for different purposes or grades. Some change from one to another type of device in succeeding years. Some school leaders even allow students to bring their own devices to school. Fortunately, there are storage, charging, and syncing solutions that will work for any mobile device choice, and there are universal solutions to charge and sync different devices. There are certain features that make sense for most mobile carts. When evaluating products, here are a few basic criteria to evaluate.

### Size Matters

Most classrooms contain a lot of people and things, and it often seems like there's not enough room. Luckily, mobile devices are small enough these days to fit easily on student desks or tables. When they require charging and syncing, it is best to have a mobile cart that takes up as little space as possible. LocknCharge carts have small footprints. For example, the Carrier 20 Cart™ takes up less floor space with its compact design.

Devices may be small but they are not all a standard size. Carrier carts and charging Stations are universal. They accommodate anything from small devices up to 13" laptops and have optional wire racks for even larger devices. The Carrier 10 and iQ 10 charging stations are wall or desk mountable, which saves valuable floor space in cramped classrooms.

If districts choose to put protective cases on classroom devices, a mobile cart should accommodate devices with and without cases. For example, the iQ 10 Charging Station charges, stores, and secures up to 10 iPads or tablets. It is also compatible with all iPad models and most tablets with or without cases. In addition, baskets enable devices to be easily deployed from a central location that has more space than a classroom.

### Security

Schools require a very different approach to security than other organizations do. For example, educators designed LocknCharge solutions specifically for the unique needs of classrooms. The combination of welded steel construction and a hardened steel padlock protects devices while they're not in use. It also has a two-point locking system to lock away the devices in the storage area. An optional anchor kit can secure the cart to a floor or wall for extra security. In addition, they are pry free and there are no edges to pry away from the frame.

### Quality

School life can be tough on carts. It's essential that carts have a heavy-duty, welded steel construction, are built to last, and come with a lifetime warranty.

Once purchased, a district never needs to spend more on fixing damages or replacing LocknCharge carts.

### Ease of Use

Carts are for storing, charging, and syncing devices. They need to be easy to use, easy to set up, and be almost an invisible part of a district's technology program. A few features can make this possible. The fast set-up and wiring of LocknCharge's carts take half as much time as cabinet-style carts. Their basket ecosystem allows for easy, fast, and safe distributing, collecting, and sharing of devices by more than one classroom. This system streamlines device distribution and saves precious classroom time.

### Flexibility

Mobile device carts should be designed to be flexible according to classroom needs.

A single cart can accommodate several device sizes and types.

### Power and Ventilation

Students need their devices to be fully charged at the beginning of the school day or classroom session. LocknCharge's proprietary power management assures that the right amount of power is distributed to devices when charging.

The Eco Safe charging system includes a remote to set a cycle to charge devices in groups or banks to assure all devices are charged when needed.

Cart ventilation assures that there is no heat buildup on the devices or cart whether it is charging just a few devices or as many as the cart will hold. The Carrier 30 has an LED status display to show charging status without opening up the cart.

## San Lorenzo Unified School District

San Lorenzo Unified School District in San Lorenzo, CA started Project Lean-In three years ago by asking teachers to commit to a technology integration program. This year, 25% of core academic subject teachers in from Pre-K to high schools are integrating 6,000 Chromebooks in this learner-centered program. The teachers get Chromebooks and LocknCharge Carrier carts along with professional development and support. They can move the carts to another district school if they transfer, which further encourages project ownership.

Technology Director Sharon "Sam" Sakai-Miller says she selected LocknCharge Carrier 20, 30, and 40 carts depending on class size because of the basket design. Teachers find they have more flexibility with up to eight points of distribution that helps them protect instructional minutes. If they had to give out devices one at a time, they would lose 10% of class time a day. They also like the better security and quality of the carts. Because learning is at the heart of this program, using the LocknCharge carts avoids wasted time by making distributing and collecting the devices quick and easy.

**Added Value**

A few other features, such as cable management, workspace, and status displays, add to the value of a mobile cart solution. Perhaps the most important feature is that teachers can save up to 70 hours of class time each school year—per 30-unit cart—to use for instruction instead of deploying and collecting devices because of the basket system. The cable management process on LocknCharge solutions takes a fraction of time compared to cabinet-style carts. There is also a separate compartment away from users to access and unplug devices.

**SECTION 3: WHAT YOU NEED IN A MOBILE DEVICE CHARGING SOLUTION**

Decision makers have to keep the needs of various stakeholders in mind when they

select products for use. Once the decision about mobile devices is final, the next concern is to choose the right storage and charging solution. They have to consider what is the best option from different perspectives and for different users.

From design to implementation and support, LocknCharge makes district decision makers' lives easier. There are advantages to a LocknCharge solution for every need and several options among their solutions.

Classroom teachers require solutions that are faster to use, safer, more efficient, and easier to manage. They prefer any solution that saves them time so they can focus on learning. Unlike every other solution for charging and storing devices, LocknCharge solutions have the ability to save real time in the classroom because of their baskets and top-loading design.

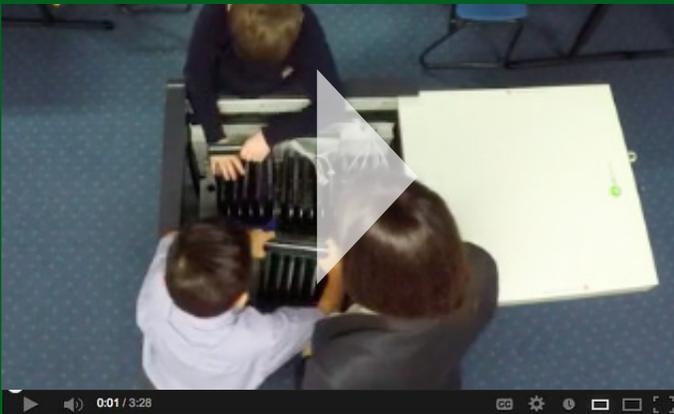
**Putnam City Schools**

Putnam City Schools in Oklahoma City, OK has more than 19,000 students in 29 schools. They passed a technology initiative bond based on the success of its pilot program to address the challenges they encountered. Teachers had to buy into the program and identify how they would integrate iPads into their classrooms. Charri Stratton, director of instructional technology, says they went with a ratio of one iPad for every 1.4 students. Since the iPads were not going home, they needed a cart-based rollout.

The quest for the right cart began. Their criteria were warranty, quality construction, price, and flexibility. The team looked at 20 different carts to see which one would address these issues, be user friendly, and easy to maintain. Stratton says, "After talking with various companies, reviewing our criteria and understanding the workflow around our deployment, the right cart for us was obvious. LocknCharge was the clear solution. The quality and baskets certainly make managing our iPad devices easier."

### Time Management

With so much to do every day, it's no wonder that teachers and administrators are looking for products that are not just cost efficient, but time effective as well. What would an educator do with an extra two weeks of instruction time? Up to 70 hours per year in a single classroom is often wasted when mobile devices are packed up and plugged in after a lesson in a cabinet-style cart. Using a LocknCharge top-loading cart with baskets saves an extra two weeks each school year. Watch this video to compare front-loading and LocknCharge carts. Educators estimate that using a LocknCharge cart can save them two hours a week. [Watch now.](#)



Students want to get to work as quickly as possible and clean up quickly, too. With LocknCharge solutions, they can get the devices faster, do their work, and put them back quickly. Baskets enable them to help distribute and return devices without idle waiting.

IT staff require solutions for iPads, tablets, Chromebooks, and laptops that are easy to deploy and manage. These solutions need to be tamper proof, turnkey solutions that are

simple and easy for users to learn. The IT staff also needs to ensure that the solutions are of superior quality, are theft proof, include ironclad warranties, and provide responsive customer service. IT administrators need to have solutions that are cost effective, efficient, include a lifetime warranty, and are time-efficient so educators will have more time to focus on student learning.

Because LocknCharge was created by an educator, the company thinks differently about their customers. Their solutions are designed to be safe, secure, fast, and easy for classroom use. These products are made by educators for educators.

## SECTION 4: BEST PRACTICES

### How to Select a Cart

Whatever device your district has chosen for its mobile solution, there's a charging cart that's perfect for all of your charging, securing, syncing and transporting needs. Even if classrooms aren't standardized on a single mobile device, there are universal solutions to charge devices.

Once the district has seen how LocknCharge carts address their criteria, there are four questions to ask to determine which cart is best for your specific needs.

1. *How many devices do you need to store?*
2. *Do you have Chromebooks, tablets, or iPads or a combination of these devices?*
3. *Do you need to charge only or sync and charge?*
4. *Will any of the devices be BYOD?*

**Chromebooks and Universal Solutions**

**Up to 10 Devices**

- Carrier 10 Charging station



**11-20 Devices**

- Carrier 15 Charging Station
- Carrier 20 Cart



**21-30 Devices**

- Carrier 30 Cart
- iC 30 Cart
- Carrier 30 Sync and Charge Cart if you have Chromebooks and Apple products that require syncing



**More than 30 Devices**

- Carrier 40 Cart
- Carrier 40 Sync and Charge Cart if you have Chromebooks and Apple products that require syncing



**BYOD**

**FUYL Tower:**

Available with 15 slots (one outlet and one USB charging in each slot). Includes an intelligent remote management web portal for administrators to manage unit.



**FUYL Cell:**

Available with five slots (one outlet and two USB charging outlets in each slot). Can stack up to three cells to equal 15 slots.



**iPads and Tablets**

**Up to 16 Devices**

- CarryOn for charging five iPads or tablets in an ultra-mobile unit

- iQ 10 Charging Station if your tablets or iPads don't need syncing



- iQ 10 Sync Charge Station if you need syncing and your iPads need to be locked up

- iQ 16 Sync Charge Box if you need syncing and your iPads don't need to be locked up



**Up to 30 Devices**

- iC 30 Cart if you need to store and charge other devices like MacBooks or Chromebooks with your iPads



- iQ 30 Cart if you need syncing for iPads



**Up to 40 Devices**

- EVO 40 Cart if you don't need syncing



- EVO Sync and Charge Cart if you need syncing



### How to Select a Company

When a school or district defines a crucial need requiring the products or services of a vendor, the first step is to create and distribute a Request for Proposal or RFP. There are two reasons to use an RFP. First, you will help the stakeholders focus their priorities and goals. Second, you will be able to clearly communicate these priorities and goals to perspective vendors. You will be able to see exactly how their product addresses your district's needs and how willing they are to help you address those needs. Here are some tips to help you write a RFP for a mobile charging cart.

### Before You Write the RFP

The key to developing an effective RFP is the time you invest before writing. This is the time spent conducting a needs analysis, evaluating, planning, and defining requirements, specifications, and features. For example, Michelle Murphy from Coachella Valley USD says, "Consider the grade levels in which the carts were going, ease of set up for the cart for cable management, how quickly can students get their devices and put them away to ensure the most instructional time. Choose a cart that is secure and strong."

### When You Write the RFP

1. Establish an evaluation team comprised of key stakeholders.
2. Define your school's or district's unique needs, situation, and context for the

*product, service, or solution you need clearly and comprehensively.*

3. Collect all of these elements and share with your team and stakeholders for feedback.
4. Incorporate the feedback into a document.
5. Share the document with any other decision makers who should give their approval.
6. Clarify additional criteria you need, such as a lifetime warranty and service.
7. Allow the team to analyze the draft and feedback.
8. Create the RFP.

### Ask Questions

LocknCharge is a company dedicated to the design, manufacture, and functionality of the highest quality security, charging, and transport solutions for mobile device deployments in education. Started by an Australian educator, its vision is to be globally recognized as the most innovative and trusted brand in developing solutions for managing deployments of mobile technology. Its mission is to make life easier for schools and organizations implementing mobile technology.

***For information, questions, or advice in deploying mobile devices, contact LocknCharge: [www.lockncharge.com](http://www.lockncharge.com) (888) 943-6803***