

QUICK START GUIDE FOR IT

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On a mission to provide a free, world-class education for anyone, anywhere

WELCOME TO KHAN ACADEMY!

Khan Academy is a non-profit that provides FREE, high-quality online learning resources and real-time data about learners so that teachers more effectively spend their time targeting student needs and engaging with them

IT is the most critical building block to a Khan Academy implementation at scale. Your work enables students to have an even better education. This guide is geared to help technology or IT staff of a school, university or organization prepare to use Khan Academy at scale.

Students learn best in environments that are:

- **Personalized** for students to move at their own pace
- **Focused on mastery** to build strong foundational understanding of concepts
- **Interactive and exploratory environments** to encourage applied learning and projects



With Khan Academy, teachers get...

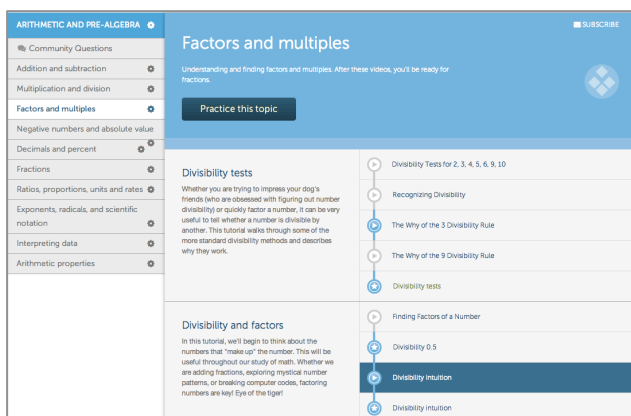
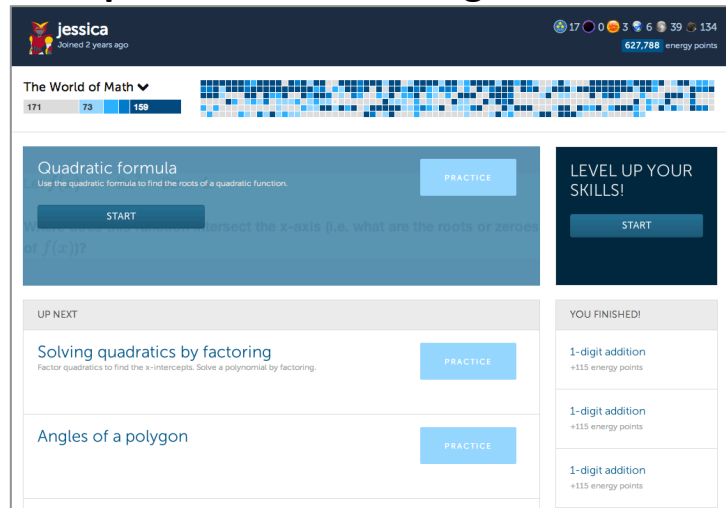
- ✧ A complete self-paced learning tool
- ✧ A dynamic system for providing students initial help
- ✧ Individual and class reports for all students
- ✧ Better intelligence for doing targeted interventions
- ✧ A platform that frees up time so to focus on activities like peer-tutoring, small groups and time for projects

Access is completely FREE.

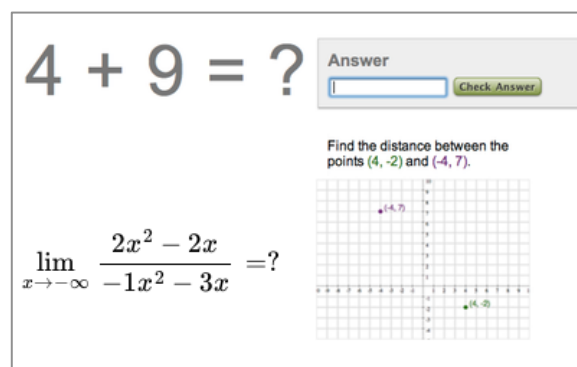
*No contract is required to use, even at a school or district level.
There is no spam and no ads on our site.*

HIGHLIGHTS OF KHAN ACADEMY

A personalized learning dashboard



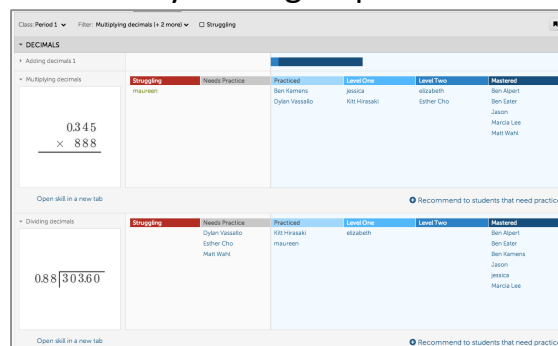
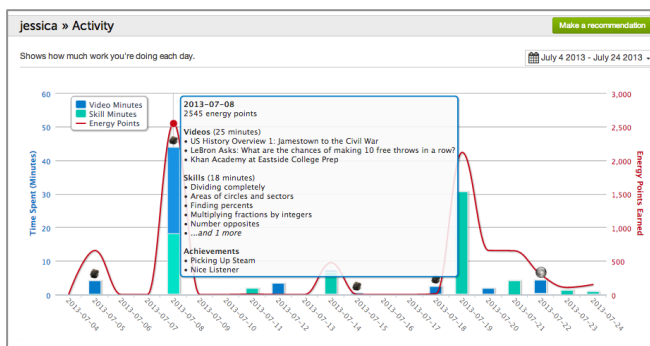
Curated tutorials across subjects with lessons, skills practice, and explorations



A galaxy of Infinite practice from basic addition to calculus



Real-time individual and class data at your fingertips



STEPS TO START

STEP 1: Decisions, devices, decisions

STEP 2: Get connected

STEP 3: Align on the approach

STEP 4: Test, test, test

STEP 5: Plan for long-term success

STEP I: Decisions, devices, decisions

Selecting a device

Schools use a wide variety of devices when using Khan Academy. Each device has pros and cons outlined on the next page for the most common devices to help you decide what works best for your organization.

Generally laptops or desktops work best. Tablets are okay but some of the data report functionality and a few interactive skills may not work as well. E-readers are *not* recommended.

EXPERT TIPS

- **Get the conversation started:** If you're not already talking to teachers and administrators about WHAT devices and HOW MANY are needed, start now! Talk with teachers about how they will use Khan Academy in their classrooms to understand how you can support the technology.
- **Try before buying:** If possible, test Khan Academy on the device prior to purchasing. Get a free account at www.khanacademy.org to try out all the functionality for skills practice, reports and lessons.
- **Extra, extra:** If funds are available, consider ordering extra devices to supplement the inventory when there are issues with devices.

Charging devices

If your school is investing in many devices, figuring out how to charge all of them is another discussion point. **Computer carts** are a common way to charge many devices simultaneously. When selecting a cart, besides looking at how many devices it will charge, also consider how long it'll take the cart to charge all the devices and whether it charges all the laptops at once or rotates through them.

Securing devices

Where will devices be stored and who will have access to them?

STEP I: Decisions, devices, decisions

Device	Pros	Cons
Windows or Mac laptops: A flexible solution in terms of available compatible software.	<ul style="list-style-type: none"> * Excellent support for all KA features * Larger screen and keyboard make using Khan Academy easier * Easily usable in other classes for writing essays and doing research * Can run Microsoft Office and other desktop applications 	<ul style="list-style-type: none"> * Expensive * Lower battery life * More manual maintenance required, antivirus software often needed * Less mobile (tends to force students to work at desks)
Chromebooks: These devices run the Google Chrome browser and can access any website or online application, including websites that use Adobe Flash.	<ul style="list-style-type: none"> * Affordable * Excellent support for all Khan Academy features * 6+ hours of battery life * Larger screen and keyboard make using Khan Academy easier * Automatic software updates, minimal maintenance required * Secure by default, management console allows centralized control of device settings * Easily usable in other classes for writing essays and doing research 	<ul style="list-style-type: none"> * Less mobile (tends to force students to work at desks) * Does not have access to non-Google apps
iPad: This particular tablet can download a wide variety of rich educational content from the App Store to complement KA.	<ul style="list-style-type: none"> * Sturdy and harder to damage * Good support for Khan Academy videos and most exercises * Students can move around more easily while working * Supports a wide variety of educational apps from the App Store 	<ul style="list-style-type: none"> * Moderately expensive * Some interactive Khan Academy content, including coach reports, is harder to use or unavailable * Harder to use for writing essays and other papers
Other tablets: Most other tablets have less advanced web browsers and some KA features may not work correctly. On newer Android tablets, the Chrome browser works best.	<ul style="list-style-type: none"> * Affordable * Support for Khan Academy videos and most exercises * Students can move around more easily while working 	<ul style="list-style-type: none"> * Some interactive KA content, including coach reports, is harder to use or unavailable * Harder to use for writing papers * Fewer available educational resources and apps * More manual maintenance required

STEP 2: Get connected

Connecting all the devices to the internet is the next step. Consider:

BANDWIDTH

- **Check that internet bandwidth is sufficient to handle all devices being online.** Identify how much additional bandwidth is required.
- **We recommend ~1.5 Mbps per machine** viewing standard definition video as a very safe bet. Talk to teachers to understand how they will be using Khan Academy to determine how likely all students will be streaming video simultaneously (skills practice is significantly less bandwidth).

FILTERS

- **If filtering is needed, many schools choose an ICSA certified firewall with content filtering** to access custom filter settings to screen potentially offensive or harmful materials. Work with your filtering provider on how to set-up appropriate filters.
- **Khan Academy communicates with YouTube and Facebook.**
 - **If your school blocks YouTube,** consider YouTube for Schools. Find out more info about this by going to www.youtube.com/schools. YouTube is necessary to access video content.
 - Facebook is a login option, as well as an option for users to share their accomplishments but is not needed for core functionality of the site.

ACCESS POINTS

- **If your organization is using wifi, place one access point in each room using Khan Academy to be safe.** Consumer grade access points (e.g., Linksys, Netgear) may have limited device capacity and wireless coverage for a school environment. Consider enterprise grade wireless (e.g., Ruckus Wireless, Cisco, Meraki). When investing in wireless technologies, look at the most current and widely adopted wireless networking standard IEEE 802.11. Published standards provide guidance that address both wireless speed and security.

STEP 3: Align on the approach

In education, everyone is focused on student success, but there may be different perspectives on how to best support that. Bring together your administration, teachers and IT to discuss and align on your organization's vision and approach.

EXAMPLE DISCUSSION TOPICS INCLUDE:

- ❑ **What will the implementation look like?** Understand who will use Khan Academy and how (e.g., how many classrooms / students will be streaming video simultaneously). This will inform what technology will need to be set-up.
- ❑ **How will the group communicate?:** Set a meeting cadence for relevant parties to communicate progress, share best practices and refine the process.
- ❑ **What IT systems and procedures are needed** to facilitate the use of Khan Academy given the resources available? For example:
 - **Provisioning:** How will devices be inventoried and distributed?
 - **Maintenance:** How will updates, security patches, etc. be installed? What are response times for technical issues (e.g., password resets, broken devices)?
 - **Support / training:** How should teachers / students contact IT support when in need? How will basic troubleshooting info be provided and to whom?
 - **Account creation:** Align on any guidelines for email / username creation and who will be responsible for account creation (student, teacher or IT).
 - **Other topics** will vary by organization, but may include BYOD (bring your own device) policies or filtering

STEP 4: Test, test, test

Before starting the implementation, test everything. This list is not exhaustive but covers the most important test points:

- ❑ **INTERNET CONNECTION:** Ensure students can access the internet simultaneously. For wireless, check that devices can connect from every seat in the classrooms using Khan Academy.
- ❑ **DEVICES:** Try using Khan Academy lessons, skills practice, and reports on the devices to ensure that settings, filters and browsers are set-up properly.
- ❑ **ACCOUNTS:** Check that student and teacher accounts work.

EXPERT TIPS

Test from multiple perspectives. Test for performance from your perspective, but also test the experience from the perspective of a teacher, a student and a parent. Test, test, test!

On Launch Day: When the devices are used the first time, coordinate with teachers to communicate what support will be available and how they can troubleshoot and/or contact IT support.

STEP 5: Plan for long-term success

In the most successful Khan Academy implementations, the IT team has been as integral as the teachers and administrators. When everyone is invested in the same vision and approach to education, that's when things work best.

To that end, below are key questions that are helpful to align on when developing a long-term strategy.

VISION

- What is the purpose of technology in the classroom? How will it enhance how learning occurs?
- What are benefits to using this technology versus other technology or other techniques?
- What is the tradeoff we are making in investing in this technology versus another?

PROFESSIONAL DEVELOPMENT AND INTEGRATION

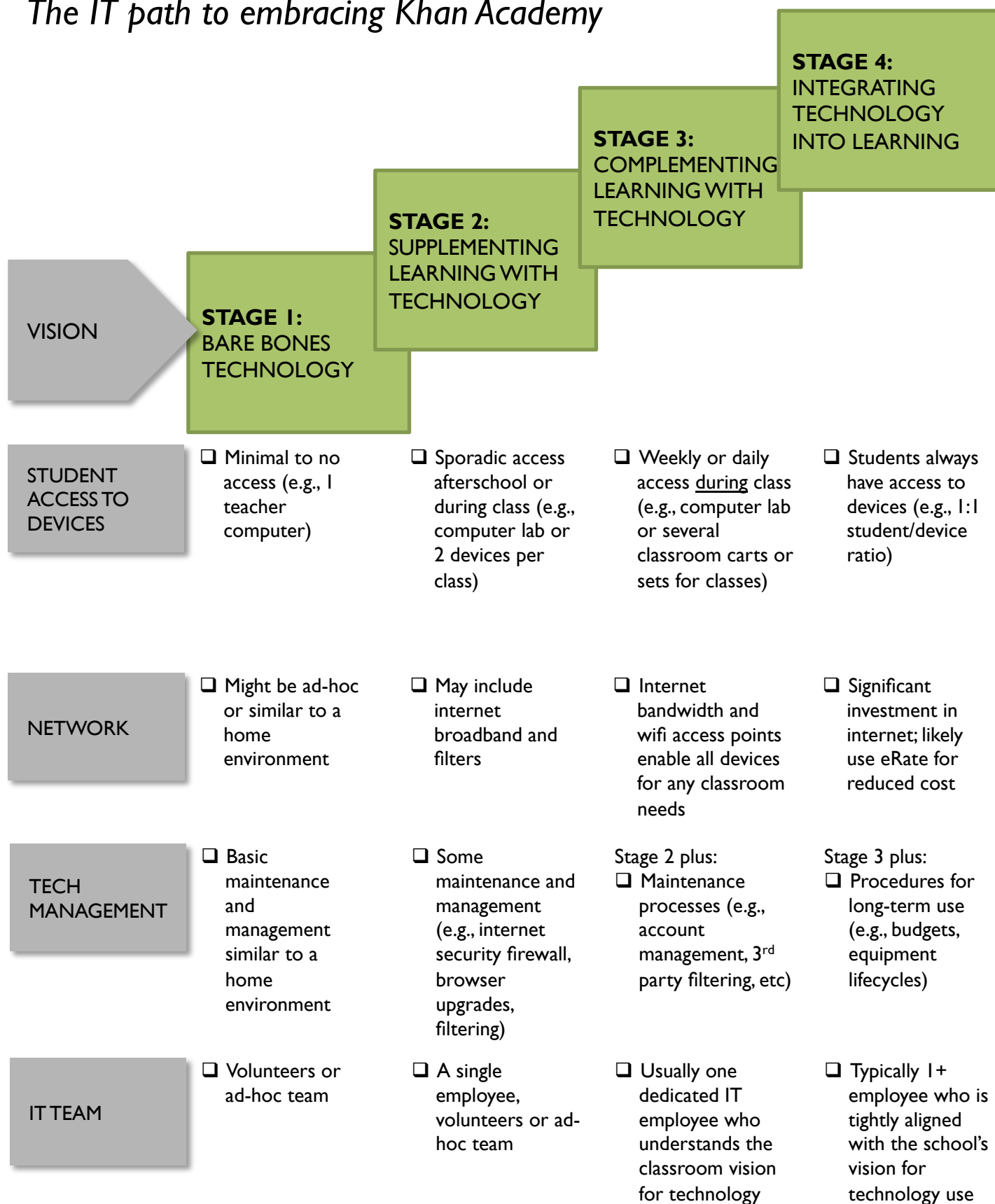
- What is the plan for professional development to ensure new technology is effectively used?
- How will technology be integrated into the curriculum?
- Who will support our staff in this technology venture?

DEVICES, EQUIPMENT AND MAINTENANCE

- What are our learning aims? What technology best suits our needs?
- What is the lifecycle of the device? 3 years, 5 years? When a device is nearing or at the end of its lifecycle, what happens?
- What internet bandwidth and access will support our needs? Will we need significant bandwidth where we consider eRate?
- What is the tradeoff between upfront investment and long-term maintenance?
- What happens to accounts and devices when students join or leave the school?
- Should we invest in an insurance policy on these devices?

STEP 5: Plan for long-term success

The IT path to embracing Khan Academy



APPENDIX: Sign up your students

Accounts allows users to log in to save and track progress. Sometimes teacher will create accounts for their classes, sometimes it is IT and in some cases, students create their own accounts.

There are a few considerations if you are tasked with creating accounts:

If students create their own accounts, they will need an email address. It is recommended to provide username guidelines. From the coach perspective, consistency of account names makes it easier to recognize everyone on your data reports.

If students do not have an email address, here are 2 options:

- a) **Create child accounts** for users under age 13 with parent permission and an email address. These accounts are privacy protected.
- b) **The school can provide one either via it's own service or using Google Apps for Education**, a free service. Learn more at www.google.com/enterprise/apps/education.

Additional resources available at:

www.khanacademy.org/coach-res/for-teachers

Resources include a sample parent permission slip, differences between child accounts and regular accounts, and videos on how to add a coach & create class lists.

Creating accounts for a school or district

While Khan Academy makes it easy for teachers to add a class full of students, if you are looking add your entire school or district quickly, you may want to consider Clever.

Clever is a company that enables syncing of your rosters automatically with Khan Academy. This service is provided FREE.

For more information, check out:

- **Coach Resources:** <https://www.khanacademy.org/coach-res/addl-resources>
- **For details / to sign up at:** <http://getclever.com/signup/khanacademy>