KHAN LAB SCHOOL

Khan Lab School Vision: 10th Anniversary Update

Learner-centered
Students are given the space and encouragement to take control of their own learning, acknowledging that each learner has a unique set of strengths and challenges. Teacher-guides create an environment conducive to student independence. They achieve this by nurturing student motivation, addressing academic and social-emotional obstacles, and facilitating student-driven active learning experiences. Instead of relying on traditional lectures, teacher-guides employ questioning techniques, offer prompts, and provide concise explanations when necessary, fostering a more engaging and personalized learning process.

Mastery learning
Students have ongoing opportunities and incentives to address learning gaps and demonstrate mastery. This approach solidifies foundational knowledge and minimizes the need for later remediation. Students can continually improve their academic standing, fostering a growth mindset and lifelong learning attitude. This system not only allows for grade improvement but, more importantly, ensures students build a robust and comprehensive academic foundation.

Personalization of Pace with High Expectations
Students can fill gaps, refresh knowledge, or advance at a pace suited to their individual needs, regardless of age. Through targeted use of technology and personalized approaches, students are empowered to achieve mastery at a higher level than in traditional settings. We embrace the concept of 'personal par,' recognizing that excellence manifests differently for each student. While we set ambitious target paces for most cases, we understand that progress varies. If a student falls behind these paces, the school collaborates with families to address concerns and provide additional support where possible.

Content Knowledge and 21st Century Skills Matter
Both skill development and content knowledge are crucial. Students with a solid foundation of knowledge will be more culturally literate and have a fact base from which to draw connections and develop higher order insights. We also emphasize critical thinking, creativity, collaboration, and communication skills essential for success in the modern world.

Well-being, Independence, and Purpose
Social and emotional well-being and resilience are important for developing a healthy sense of self. Khan Lab School intentionally emphasizes student mindfulness, character development, and individual passions. We also believe that nurturing independence and personal responsibility is crucial for student growth, which is why we strive to offer students more freedom than typically found in traditional schools. This includes increased unstructured time and greater flexibility in and out of class, tailored to each student's readiness for independence.

Everyone's a student; everyone's a teacher

Students and teachers alike have opportunities to learn from and teach one another. Teacher-guides embrace learning and teaching new domains and create ways for students to step in as peer teachers. Likewise, students are encouraged to lead classes and initiatives both within the school and in the wider community.

Learning is not bound by time or space

Learning can take place at any time and in any place, including outdoor classrooms, field trips, internships, travel, or specialized off-campus programs in academics, arts, or sports. While not always feasible, the school aspires to this ideal and prioritizes flexibility in learning environments.

Students advance in their educational journeys as mastery allows

Students with a strong foundation can master college-level content while in high school, often learning and retaining the material more effectively than traditional college students. This achievement earns them dual high school and college credit, potentially allowing advanced placement upon college entry. Similarly, elementary and middle school students, when ready, can tackle and often earn credit for high school-level work.

Using online tools to unlock experiential learning

Leveraging online tools for core skill development and mastery, such as Khan Academy for STEM subjects, accelerates students' learning and frees more time in the school day for experiential learning. This approach, including peer-teaching, Socratic dialogues, games and simulations, allows students to build a portfolio of meaningful work, service, and experiences that complement their academic mastery.

Less is more

Khan Lab School classes focus on essential content and skills, creating time and flexibility for students to achieve core mastery and explore areas of personal interest. Essential skills are those crucial for success in college and the real world, assessed for admissions, or prerequisites for these.

While ensuring all students master these core skills, the School supports deeper exploration in individual areas of interest. For instance, while basic number theory concepts are essential, a deep dive into the subject would be supported only for interested students. Similarly, while a broad understanding of world history is crucial, in-depth study of specific events like the War of the Roses would only be encouraged for those passionate about it. This approach allows students to build a strong foundation while also pursuing their unique interests, whether through current coursework or future opportunities in entrepreneurship, research, or work experiences.

An affordable, replicable model

Khan Lab School avoids the inefficiencies that drive up costs in many private schools by being intentional about its focus. While supporting athletics and language learning, we don't offer extensive facilities or immersive programs in these areas. This focused approach allows us to offer high-quality education at a price point accessible to a broad range of families. We excel in our core priorities: academic mastery, character development, and supporting student passions.

Fostering Critical Thinking

We develop critical thinkers by fostering an environment where diverse viewpoints, both liberal and conservative, are welcomed and safely explored. Our school doesn't align with any particular political ideology. Our teachers engage with ideas from across the spectrum - left, center, and right - challenging students' thinking while remaining open to challenges themselves. This balanced approach makes it difficult for students to discern their teacher-guides' personal political leanings.

Frequently Asked Questions About Mastery-Based Learning

Does mastery mean that a student can't progress unless they have mastered the material?
No. In many cases, it makes sense for a student to progress as long as they have reasonable proficiency in underlying prerequisite skills. Mastery learning should not be a "gate" to progression. Instead, it is about having the opportunity and incentive to improve one's understanding/skills.

In *The One World Schoolhouse*, I write a lot about how difficult it is for a student to progress once they've accumulated Swiss-cheese gaps in prerequisite topics. This is sometimes incorrectly interpreted to mean "don't let students advance unless they've mastered the topic." The reality is that there is a real tension between mastery and coverage/exposure. If the lack of mastery isn't debilitating, progressing to more advanced topics could be in the best interest of the student, as long as they have the opportunity and incentive to get to mastery later.

What about deadlines vs personalized-pace/mastery?
Deadlines can be important ways to help students pace their work and ensure that teacher-guides can more efficiently do things like grade work and know that all students have reached a certain place by a certain date. Making deadlines is also an important executive functioning skill for college and life. Also, students should not expect to get "infinite" tries on assignments that are resource intensive to grade (like papers, etc.). This is especially the case when they clearly don't make a best effort by the initial deadline. For example, teacher-guides should give 1-2 attempts to revise/improve a paper as long as students are making an honest effort and communicating with their teacher about their struggles, questions and needs.

Teacher-guides should ideally publish all the deadlines and the outline of their course for the term/year ahead of time so that students can plan accordingly and do assignments ahead of time if they are so inspired.

How do we reconcile personalized/mastery/active learning with more traditional dual enrollment courses?
Contrary to our core vision, many (not all) of the dual enrollment courses at Foothill and other community colleges are lecture driven and not mastery-based. With that said, for prepared students it can be a strong bridge to what they will experience in college and a valuable way to earn transferable college credits (which also tend to be favorably viewed in college admissions). Because of this, we aim to provide dual enrollment options–some more traditional and synchronous and some more flexible and asynchronous.

What do we think about Advanced Placement (AP) tests and courses?

AP tests can be valuable ways to showcase mastery/competency because they are broadly respected by colleges and universities. The experience of preparing for and taking a "high-stakes" test can also be a powerful learning experience that prepares students for what they will see in college. In many ways, AP tests are more consistent with our mastery/competency philosophy than dual enrollment (since the assessment measures your mastery versus how long you took a course).

This is different from AP courses at traditional high schools which tend to be more fixed-paced, lecture driven. oftentimes overburdening students with stressful busywork unconnected to the competencies core to the exams (and where the students often don't even take the AP assessment at the end). We aim to not do this. Instead, taking an AP exam is a choice for a student and the school will provide support/flexibility so that the student can prepare. KLS students also spread their AP assessments throughout their upper school experience. Some students even take APs in middle school. Note that some colleges only accept scores taken from the last four years). This avoids the hyper stressful scenario of the bulk of AP work being done Junior and Senior years which are also loaded with college applications and leadership in extracurriculars. For the right students, 1-3 AP exams per year can be very reasonable.

How is our mastery-based grading system different from letter grades?

KLS does grade student work, we just use different language for assessment (e.g., competencies and mastery rubrics) and allow students more chances to improve on their grade. In theory, an A-F grading system could be consistent with our ethos as long as there are clear, transparent mechanisms for students to improve their grades.

How do we think about seat time requirements (e.g., A-G requirements for the UC system)?

While as much as possible, we avoid seat time requirements, on our transcript, the school records mastery in a way that *equates* to seat time requirements. For example, if a student is able to prove mastery of Algebra I in two months, the transcript will record that the student has "1 credit" which is equivalent to "1 year" of Algebra I.

If a student has mastered Geometry before the 7th grade, do they need to retake it in high school to meet University of California A-G requirements?

KLS aims to never make the student do significant rework that does not benefit them. For students who mastered Geometry prior to 7th grade, they need to demonstrate course equivalency. One way to do this is to certify themselves in geometry at KLS by receiving a 90% or higher on a KLS proctored course exam, or by taking a KLS proctored Schoolhouse.world certification sometime in middle school. This credit for Geometry will be noted on their high school transcript. Under the UC and corresponding KLS policy for course equivalency, this process meets the University of California A-G requirements for taking geometry in middle school.

Are we a "project-based learning" (PBL) school?

A project based learning school is one where the curriculum is *primarily* organized around *extended*, student-centered projects. While students undertake work that are considered projects at KLS, they are not the *sole* context for learning core skills. Mini-lessons, personalized practice, group problem solving and Socratic

dialogue are major areas of focus at KLS. Also, unlike many conventional PBL schools, we believe that being able to achieve mastery through more traditional practice and assessment (e.g., Khan Academy, APs, SATs, dual enrollment courses) is also essential.

AP exams, for example, are designed to assess a student's mastery of college-level material, typically covering the content and skills taught in freshman and sophomore-level courses at rigorous colleges. Similarly, the SAT measures base level of proficiency in reading and math that has been shown to correlate with success in college.

That said, students will do projects at different levels of depth while at KLS. Writing (and other forms of communication) and labs are significant parts of the KLS experience, both of which could be considered projects. Group projects, often involving presentations, can be valuable for developing collaboration and communication skills. Some classes may have projects as a method of demonstrating mastery, but, even there, they integrate other forms of summative assessment as well. There is no requirement that courses must have a core project component, and we are careful to ensure that course-specific projects do not overwhelm students and take away from their time to master content, develop skills, or pursue their passions.

As students get more independent, especially in high school, projects should become increasingly student-driven and open-ended, focusing on areas of particular student interest. Student-directed projects–supported by mentors or faculty outside the constraints of a particular class–are valuable both for a student's development and their ability to showcase their work to outside parties like colleges and employers. These projects tend to be much closer to authentic projects in the real world. They also tend to be more multi-disciplinary than ones limited to part of a specific class, which are typically short and constrained to class-specific learning objectives. KLS directly supports this through our Applied Learning Program. Examples of exemplary real-world student-directed projects from the past include:

- Starting a business with significant revenue
- Writing, producing and performing a play/performance
- Creating and teaching a course
- Developing an app/invention with real utility (in several cases as part of an internship for a major organization/company)
- Doing substantive research in an internship

We recognize that not every student will be ready for these deep authentic, student-driven experiences, even by high school. Faculty may design some optional, more predictable projects for students who are struggling to find direction here. Also, if a student is still struggling with core academic competencies, they are likely to be better served spending more energy on those core skills.

How do students advance out of courses?
It depends on the course. Math is where advancing out of courses has been most relevant. It is appropriate for

students who are truly ready for more advanced material. We are generally supportive of it as long as the motivation is primarily coming from the student and the advancement is setting the student up for success.

When a student advances, there are important trade offs to consider. For example, we will try to accommodate students who are ready for the "next" class, but, because of schedules, it might not be possible until a future term or the student might have to make tradeoffs with other classes to make it happen. When we can't immediately place a student into a more advanced course, they might have to do more independent work if they want to continue to progress in their math (still having access to faculty to check in on their progress and answer questions). There may be hybrid opportunities where a student is able to take on a leadership role in their current class while also doing more advanced independent work. We have seen cases where, even though the student is ready academically, they still do not have the maturity/executive-skills to thrive in an environment with older students. Last, but not least, when a student skips a class, they do miss out on some experiences that could be very valuable—like group problem solving, simulations, more open-ended tasks, etc. This can be ok if the student will experience these modalities in more advanced courses, but it is important to take into consideration. Our role as a school is to lay out the options and let families decide what is best for the student (ideally the student has a viewpoint here as well).

There are several methods for students to accelerate out of math courses and/or receive credit for them:

- **Proctored Khan Academy assessments** - *At least* once a term, the school allows students to take Khan Academy unit tests and course challenges in a proctored environment. If a student receives a 90% in all of the units of a course OR a 90% on the course challenge, they will receive "mastery" for that course and be allowed to move onto the next course (logistics permitting). A student can also advance with an 80% on the proctored course challenge (since we do not want them to repeat a course where they already know the bulk of content), under the provision that the student retake the assessment until they achieve 90%. We will start each school year with several administrations to ensure that students are placed appropriately.
- **Schoolhouse.world** - Students who are 13 or older can certify their mastery on the Schoolhouse.world transcript (also in Khan Academy courses). KLS will provide credit on the KLS transcript for a course that they are certified in. Starting the Fall of 2024, please complete a KLS Self-Paced Study Request form in advance. This coordination with KLS ensures that students use their school email address for the course and helps the school effectively plan for future teacher-guide coverage. This process has the added benefit of being recognized by many of the top colleges and can lay the foundation for a student to be a tutor on Schoolhouse.world (which is very highly regarded).
- **3rd party courses** - This could include dual enrollment math courses and outside math courses (e.g., Russian School of Math) that are A-G approved and accredited. For programs the school is not familiar with, the family should provide the outline of the course taken as well as evidence of proficiency (e.g., a "B" in the course or other teacher assessment) so the school can determine equivalency and next steps.

  If a middle school student begins a self-paced math course and completes the material mid-year, it may be beneficial for them to continue along the self-paced pathway rather than joining a new course

mid-year for continuity. Students who complete a self-paced course (through Khan Academy or an external source) must still authenticate their readiness via proctored Khan Academy assessments or Schoolhouse.world certification, before advancing to the next level.

Advancing can be beneficial when it keeps the student stimulated/engaged, develops their agency as independent learners and liberates them later in high school to pursue their authentic passions. It is not beneficial when it is parent motivated or creates stress or students struggle in more advanced courses. As a school, we already target most of our students to be in position to do college level math work by their second half of high school, which is already advanced and more than prepares them for advanced rigorous work in college (or standardized tests to get into college).

Things are a bit different in non-math courses. In elementary and middle school, we do have many students who are reading and writing well ahead of grade level. But we find that we can accommodate this better in their age-cohort class (where we can push them wherever they are with potentially more complex texts or assignments) rather than a more advanced course where they aren't likely ready for more mature topics–imagine an 11-year-old reading texts about fairly mature topics (war, slavery, etc.) or in a socratic debate about reproductive rights or the death penalty with high school students.

For science, all of our classes do attempt to keep a student engaged at their learning level even when they are with their age cohort. With that said, we will explore ways that students who are ready can advance their content knowledge ahead of the class (e.g., leveraging Khan Academy high school biology, chemistry and physics courses while in middle school or KA middle school courses while in elementary school).

In general, our middle school humanities and science classes are similar to the rigor of an introductory high school class and our high school classes are the rigor of college classes.

Once students are in high school, it is very common for Khan Lab School students to take college-level courses in the humanities and science (either dual enrollment or taking the AP exam at the end). For example, it is typical for KLS students to obtain college credit for biology and chemistry their freshman year of high school. In most high schools college-level biology and chemistry work is reserved for only the most motivated students in their junior and senior years.

How do students place into courses?
For math, returning students are automatically placed into the next class (the one after the one that they completed the previous year), unless they decide to advance out of it (addressed in the advancement question above). For new students, we would automatically place them in the appropriate course based on their transcript from their previous school. We still encourage them to take the proctored assessment for the last math course they completed to ensure they have reasonable mastery.

My child has an opportunity for an enriching outside experience (e.g., travel, outside courses, internships) that conflicts with their class schedule.

We encourage these types of unique experiences and work with families to support them as much as possible. Receiving credit for a KLS class should not be based on seat-time/face-time. It should be based on mastery/competency. In certain cases where an in-person experience is considered crucial, the faculty/school will make reasonable accommodations for ways to make this up or substitute with another experience . When in doubt, we will err on the side of simplicity. We never want to create busy work for students just for the sake of it.

Do lecture based classes fit with the model?

Mini lessons (under 30 minutes) might make sense from time to time, but even these should be as interactive as possible (asking students questions, etc. vs lecturing). Most of class time should be active learning–problem solving, discussion etc. We recommend having a conversation with the teacher-guide to get more context (since students sometimes communicate an incomplete picture). If after learning the context from the teacher-guide, you still believe that the class is off vision, surface this to the school leadership. In parallel, the school continues to provide more professional development and evaluation to move closer to the ideal vision.

How do we help students have more agency on their pacing through a course? Do they have an opportunity to improve their grade?

Teacher-guides set expectations and timelines around learning pace. Ideally, they outline all the expectations for the term/year ahead of time so students have the flexibility to accelerate if they are so inspired. Also, within reason, students should have the opportunity and incentive to improve their mastery of the material. If you believe this may not be happening, we recommend having a conversation with the teacher-guide for further context as students may sometimes only share part of the picture. If after learning the context from the teacher-guide, you still believe that the class is not aligning with the school's vision, please bring this to the attention of the school leadership. Always encourage your student to exercise agency by speaking to their teacher-guide directly if they have questions about pacing.

How do I know if my child is being given enough freedom/independence for their age?

KLS strives to give students more freedom and independence than is typically offered in schools. This may include:

- More unstructured time
- Increased flexibility in and out of class
- Input on school operations and culture

We believe that students learn responsibility by being given responsibility.

That said, every student is different, even at the same age. Some younger kids use their free time really well, while some older ones might need more guidance. We don't believe in strict rules for everyone just because a few students struggle. Instead, we try to match independence to each student's readiness, generally leaning towards more freedom.

If you're worried about this, chat with your child's teacher-guide. They can give you the full picture, since kids sometimes don't see the whole story. If you still have concerns after that, please feel free to talk to the school leadership. We're always working on improving to get even closer to our ideal vision of student independence.

What should I do if I feel like my child is getting a biased/one-sided perspective on political/social issues?
This should not be happening. Because KLS Mountain View and KLS Palo Alto campuses are in a disproportionately liberal part of the country, we need to be extra careful that students aren't only exposed to center-left/left perspectives (or feel unsafe speaking to conservatives viewpoints). The role of the faculty/school/community is to push students' critical thinking with thoughtful and unbiased questioning so that students can weigh competing points-of-view themselves. If you think this might not be happening, we recommend having a conversation with the teacher-guide to get more context (since students sometimes communicate an incomplete picture). If after learning the context from the teacher-guide, you still believe that the class or a conversation if not aligned with the school's vision, surface this to the school leadership.

Does KLS's non-traditional assessment of mastery and transcripts put our students at a disadvantage for college admissions?
All evidence points to the opposite. As outlined in the College Admissions document I sent, KLS students seem to be outperforming here. We believe this is because they have strong academic readiness (which is evidenced in part by strong showing on SATs/APs and dual enrollment), are free to take challenging courses, are part of a collaborative community, get unusually personalized support from highly engaged faculty and have time/space to pursue authentic passions.

How can we work together to strengthen our school community?

Khan Lab School will never be perfect and will always strive to be better. This is only possible with open and healthy lines of communication. First and foremost, we want to be a place where students can advocate, take ownership and make positive changes themselves in the school and broader community. Our community also thrives from having engaged parents providing both positive and constructive feedback. With this in mind, we strive to provide many forums for open engagement and encourage direct communication between parents and the KLS team.

While community engagement is crucial, certain behaviors can be detrimental. Examples include groups using WhatsApp/Social Media to publicly share grievances about individuals—usually based on hearsay or very limited information—rather than engaging in healthy discussions directly with faculty or administration (or via Parent Association reps). This negativity impacts faculty's ability to serve our children. Additionally, parents who excessively advocate for their interests can divert time away from serving our children. Such behaviors can create anxiety among parents, faculty, and students.

So please provide feedback and advocate in ways that help us become a stronger community. Remember that teaching and running a school is hard work with very little "downtime." At KLS, this can even be harder because

we are also striving to innovate in the direction of our vision and some ideas/experiments will work better than others. Our team really is made up of some of the most passionate, innovative and caring educators around, but they are also human and won't be perfect all the time. Have empathy for what it feels like to serve our children all day. Be balanced with both positive encouragement and constructive feedback. By working together in this way, we can ensure that our children will have uniquely powerful educational journeys while setting an example for the world of what truly great schooling can look like!