

Sharing the Story of Impact: Philadelphia Innovative High Schools

Science Leadership Academy Case Study

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THE BARRA FOUNDATION

The Barra Foundation’s mission is to invest in innovation to inspire change that strengthens communities in the Greater Philadelphia region.

Through the Catalyst Fund, The Barra Foundation (Foundation) invests in ideas that tackle problems or seize opportunities in new, different, better and significant ways. These timely and novel approaches push boundaries and have the potential to inspire change. We recognize the need to provide financial support for risk-taking, challenges to old assumptions, and new models for accomplishing important work in the social sector. We also value learning as an important part of the innovation process.

In reviewing its portfolio of grants, the Foundation began to recognize that over the years it had funded several schools that were now part of the Innovation Network of The School District of Philadelphia (District). The Foundation invested in each of these schools—Science Leadership Academy, the Workshop School, Building 21 and Vaux Big Picture High School—early in their development because we believed that their creative new approaches had the potential to not only change the lives of students, but also help inform and advance the field of education.

Given our desire to share learning as part of the innovation process, the Foundation decided to embark on its first “thematic review” to look back across these four grants to capture learnings from these highly innovative schools in the District that have been supported by the Foundation.

Over the last year, ImpactED, in partnership with the Foundation, has engaged in an intensive year of learning about these models. We wanted to learn from this work and explore the

necessary conditions (at the school and system level) for fostering school innovation. We hope that by sharing these findings others will be inspired to think differently. To help readers consider how these models might be adopted and adapted, ImpactED has included a Recommendations section at the end of the report.

We thank the school leaders and their staff for their thoughtfulness and willingness to share openly during this process and for the important work they do every day to awaken students' potential through new approaches. The District was a valued partner in this exploration as well. We also extend our thanks to our partner ImpactED for their enthusiasm for taking on this opportunity to explore what makes these models work—and what holds them back.

*To view the reports and accompanying videos for all of the schools,
please visit:*

www.barrafoundation.org/phila-innov-hs/

*To learn more about The Barra Foundation and our work supporting these schools and other
innovative approaches in the areas of Arts & Culture, Education, Health and Human Services in the
Greater Philadelphia region,*

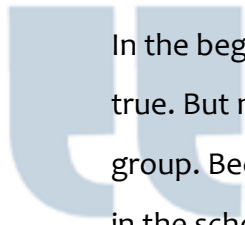
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THE BARRA FOUNDATION

OVERVIEW



In the beginning it was trusting you with my child - to some extent still true. But now we have an active home and school which is an engaged group. Because of the advisory system, they know they have an adult in the school who is looking out for their child...the way we talk about, track, monitor success for kids, and ways we need to support individual kids says a lot to parents. They see us as a partner and we see them as a partner.

- SLA Teacher

Background

Science Leadership Academy (SLA) opened its doors on September 7, 2006, as the first partnership high school between The School District of Philadelphia and The Franklin Institute. Eleven years later, SLA is still an inquiry-driven, project-based magnet high school focused on 21st century modern learning. SLA serves about 500 students from across the city.

Over the last few years, SLA has opened two additional campuses in Philadelphia. The first, Science Leadership Academy at Beeber opened its doors on September 9, 2013, as a high school and will welcome the first class of 5th graders in September 2018. The second, SLA Middle School (or SLAMS) opened in 2016.

All three of these campuses ground learning in five core values - inquiry, research, collaboration, presentation, and reflection - and provide a rigorous, college-preparatory curriculum with a focus on science, technology, mathematics, and entrepreneurship.

SLA's three driving questions form the basis of instruction:



How do we learn?



What can we create?



What does it mean to lead?

Demographics

35% Black/African American	9% Multi-Racial / Other	11% Asian	3% English Language Learners
34% White (Non-Hispanic)	11% Hispanic/Latino	50% Economically Disadvantaged	12% Special Education (IEP)

SLA is considered one of the pioneers of the Education 2.0 schools movement and has received numerous awards. Most recently, SLA won the 2016-2017 Pennsylvania College and Career Transition Award, was named as a “Breaking Ranks” school by the National Association of Secondary School Principals in 2016, named the Dell Center of Excellence in Learning (2013-2017), and named an Apple Distinguished School (2009-2013).

Over the years, SLA has been able to sustain its approach by building human-centered systems and structures that reflect its core values. At SLA, policies are developed intentionally and with an eye towards students as people first. For example, students have longer class periods to allow for performance-based learning, internships, and dual enrollment programs; longer school days two days a week allow for advisory time. Teachers are provided with mentors to support their transition to SLA, and structures exist for teachers to engage in consistent and meaningful collaboration throughout the year.



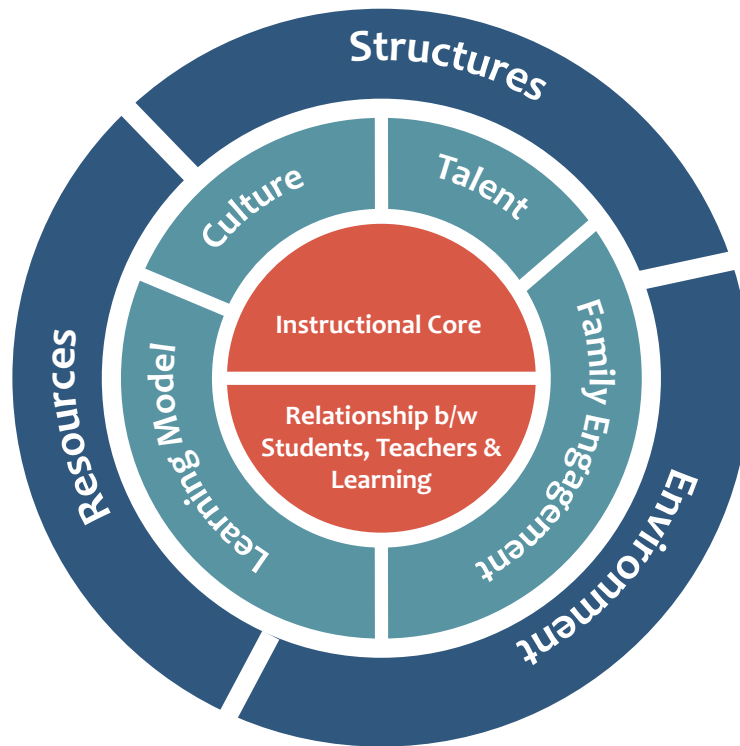
all photography by Andrew Gormley - andrewgormley.com

Methodology

The Barra Foundation contracted with ImpactED to learn more about how the Science Leadership Academy model has been sustained over time. Between December 2017 and March 2018, members of our team immersed themselves in the school and collected data through the following sources:

- ✔ **Meetings with Key Stakeholders:** Formal and informal meetings with a variety of stakeholders, including the principal, teachers, parents, and community members/partners
- ✔ **Observations:** Observations of classrooms and teacher professional development
- ✔ **School and Community Events:** Attendance at school and community events, including internal events like presentations of student work and external events like school advisory council meetings

After several months of data collection, we systematically analyzed our results, identifying trends and variation. We shared our results with school leadership to ensure our findings accurately captured their experience. Our results are reported to align with the following framework:



Instructional Core. This section describes how the school builds relationships between students, teachers, and instructional content and how student success is defined/measured.



School-Level Features. This section describes how the school design supports the instructional core and discusses strengths and challenges associated with implementation.

- ▶ **Learning Model**
Approach to curriculum/instruction
- ▶ **Culture**
Elements and strategies for building culture among students and teachers
- ▶ **Talent**
Processes for recruiting and supporting teachers
- ▶ **Family & Community Engagement**
Strategies for engaging families & community



Conditions. This section explores the conditions that support/inhibit the school model.

- ▶ **Structures**
Formal and informal structures that support or inhibit the learning model
- ▶ **Resources**
Financial, human, and community resources that support or inhibit the learning model
- ▶ **Environment**
External factors that can have an impact on strategy, operations, and performance

SUMMARY

Science Leadership Academy takes a human-centered approach to education where people come first. Core values are ubiquitous at SLA and serve as the school's unifying guidelines, as well as the foundation for a school-wide rubric. All teachers at SLA utilize Understanding by Design (UBD) as the structure by which all curriculum is developed. Taken together, the core values, the rubric, and UBD ensure consistent expectations across the school. Through the use of technology and carefully planned learning experiences, teachers provide students with meaningful opportunities to pursue their own inquiry. Over the years, SLA has been able to sustain its approach by building human-centered systems and structures that reflect its core values.



Instructional Core

- ▶ SLA's core values are unifying guidelines that drive the school's inquiry approach to learning and serve as the foundation for a consistent school-wide rubric.
- ▶ SLA takes a human-centered approach to education, prioritizing the "ethic of care."



School Features

- ▶ Teachers at SLA work to carefully plan meaningful learning experiences that allow students the space to pursue their own inquiry.
- ▶ Strong relationships and trust, built through advisories, are the key ingredient to SLA's cultural fabric.
- ▶ Teachers employ and value formal and informal means of teacher-led collaboration to plan, troubleshoot challenges, and iterate on lessons learned.
- ▶ Family engagement opportunities allow parents to contribute to SLA in the way that is best for them.



Conditions

- ▶ SLA has institutionalized intentional and interconnected systems and structures which provide educators with support and promote needed accountability.
- ▶ SLA's technological resources, including software like Slate and Canvas, and hardware like the 1:1 student to laptop ratio, facilitate 21st century learning.
- ▶ SLA has cultivated a consensus-driven environment where staff have permission to fail and learn from that failure.



INSTRUCTIONAL CORE

At its core, SLA approaches its work with a strong commitment to “inquiry and hugs.” Students engage in rigorous and modern inquiry-driven learning experiences, which emphasize the process as much as the outcomes. Equally important is SLA’s commitment to students as people first. In the early years of the school, leadership shared that they thought of these dimensions in parallel, but has come to understand how deeply intertwined they are in realizing the vision of the school.



✔ SLA’s core values are unifying guidelines that drive the school’s inquiry approach to learning and serve as the foundation for a consistent school-wide rubric.

It’s typical to enter a school and see values posted on classroom walls. At SLA, however, core values are more than just posters on the wall that serve as a passive reminder of the school’s vision. Leadership, staff, and students are constantly asking how what they are doing fits with these values and ensures they are practicing what matters most. Leadership shares that an inquiry-driven approach is not devoid of content. To the contrary, students must have strong foundational knowledge to tackle meaningful and complex problems they confront in their communities. Across every classroom and subject the same rubric is used to assess student work on the following criteria, which builds off of these values: **design, knowledge, application, presentation, and process**. These structures demystify the learning process, and SLA students report that it’s clear what’s expected of them regardless of the class because in their words, “it’s all in the rubric.”

SLA’S Core Values

Inquiry

What are questions we can ask?

Research

How do we find the answers to those questions?

Collaboration

How can we make those answers deeper, richer, better?

Presentation

How do we show what we know?

Reflection

How do we step back and learn from what we’ve done?



✔ **SLA takes a human-centered approach to education, prioritizing the “ethic of care.”**

When you speak with any teacher at SLA about their approach to student learning, you hear the same thing: “students come first as people” and “practice the ethic of care.” This is why teachers, when asked what they teach, always respond with “I teach students math,” or “I teach students science.” Staff report that caring for students means listening to - and learning from - them. As a result of this ethic, students build strong relationships with staff and feel comfortable hanging out in the office during breaks and lunch or talking about personal challenges with their teachers. In the words of one student, “at SLA they care about us as humans and we’re part of a family.” At the end of staff meetings, teachers discuss students’ needs both in and out of the school. As one leader shared, “we teach the whole child and that may mean one day you don’t get to a math lesson. We believe that taking care of the child first will ultimately support the child to learn.”



SCHOOL-LEVEL FEATURES

Learning Model

To fulfill the belief that inquiry is the foundation of the learning process, SLA uses an inquiry driven project-based curriculum that exists within a culture of caring. Students use technology to facilitate learning through a 1:1 laptop program and demonstrate progress through authentic student-centered assessment.

- ✔ **Teachers at SLA work to carefully plan meaningful learning experiences that allow students the space to pursue their own inquiry.**

Leadership believes that an inquiry-driven approach to learning should be driven by rigorous content, as represented in the quote from SLA leadership. Teachers at SLA use the Understanding by Design (UBD) framework to create units aligned to an essential question that deepens students' understanding of content. To achieve vertical alignment of skills and competencies, teachers communicate within discipline and across years. Since every teacher utilizes UBD, the framework for inquiry-driven project-based learning is uniform across classrooms. While the framework is consistent, teachers are empowered to supplement the common core standards with their own expertise, which can lead to variation in the content being covered across classrooms.

The whole point of projects is that students have space to pursue their own inquiry at the same time teachers have carefully planned out experiences they are going to facilitate. When a student is doing a project at SLA, they are not just being left to their own devices, but grounded in something they need to learn in specific subjects - specific skills, understanding, standards they need to know.

- SLA Co-Principal

- ✔ **SLA is committed to providing students with voice and choice, which can be challenging to implement in a way that builds content knowledge and is differentiated to meet students' needs.**

Prioritizing student voice means acknowledging students' identity and passion, while incorporating student choice requires ensuring that students take ownership over their work. While all staff at SLA are clearly committed to these principles, several teachers share that it can be challenging to facilitate truly student-led inquiry when students have more limited content knowledge. For example, in history, teachers may need to introduce key principles and students need to be open to learning what has happened, not just exercising their own voice. In these instances, teachers discuss how students can exercise their voice and choice through how they display and present their learning. Given that SLA does not offer Advanced

Placement courses, teachers must also navigate differentiating content to create access points for students who require advanced, as well as remedial, support.

✔ **SLA prioritizes creating real-life, personalized learning experiences.**

SLA believes that learning should be grounded in the real-world. Teachers report that they try to design curriculum that helps students understand the impact they can have on the world around them. Students share that at SLA they are like “researchers” asking questions and making connections to solve real problems. To operationalize personalization at SLA, each student has an individualized learning plan (ILP) which provides increasing choice and autonomy in the upper grades in how students demonstrate their learning. During sophomore and junior year, ILP’s include internships across the city and participation in Career and Technical Education, while seniors work independently on senior Capstone projects of their choice. Students’ Capstones have culminated in a variety of products, including public service campaigns and original films; for example, one current senior is making a film on criminal justice system reform by profiling his uncle who was recently let out of prison after being sentenced to life without parole at age 14. Seniors also have the opportunity to participate in the Student Assistant Teacher (SAT) program, where they act as a teaching assistant for underclass courses.

We’re progressive education, more concerned with kids learning how to learn than learning discrete facts. We try to make projects that have them do things that adults might do in a work or a school environment. When it comes to science, no one really needs to know to be a functioning human, what xx does but you do need to know how to evaluate scientific statements for accuracy and think about sources and decide what bias is.

- SLA Co-Principal



Culture

Three simple rules guide the culture at SLA: “Respect yourself, respect the community, and respect SLA as a place of learning.” All students and staff are interviewed at SLA as part of the admissions process. One of the key questions asked of both groups during the interview process is how they would make SLA a better place, reflecting the community’s commitment to continuous improvement.

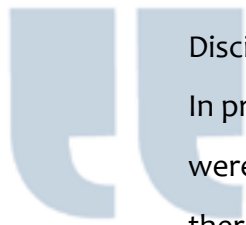


✔ Strong relationships and trust, built through advisories, are the key ingredient to SLA’s cultural fabric.

Advisories are a priority at SLA. Rather than scheduling them at the beginning of the day when they are easy to skip, advisories are held twice a week in the afternoon. To start freshman year, advisories are intentionally created to represent a diverse cross-section of the student body, and all students are in the same advisory for their full time at SLA. This structure ensures that every student has at least one adult in the building who is looking out for him/her. Given that all teachers are also advisors, advisories also serve to remind every teacher not to see kids as just students of a subject in their classes. In the upper grades, advisors lead students through the college application process and leverage their relationships to produce meaningful recommendation letters. Relationship building goes beyond advisories to ensure that lines of communication are always open and that students feel safe to be themselves. The student body is anything but cookie cutter, with student fashion ranging from tie dye shirts and blue hair to leggings and sweatshirts. Perhaps the best symbol of SLA’s quality relationships and level of trust is the dent in Principal Chris Lehmann’s door entry, where countless students and staff lean for a quick daily chat.

✔ **Staff work hard to ensure that student empowerment doesn't lead to entitlement by creating a "negotiated space."**

In the words of leadership, empowerment is the best thing about SLA, but it can also be the worst thing about SLA. In other words, the challenge is when students feel so empowered that it starts to turn into entitlement. SLA provides students with an increasing amount of trust and autonomy throughout their tenure. However, students sometimes use this empowerment to make bad choices (e.g., skipping class or being on their phones in class). To address these challenges, staff at SLA talk about the importance of creating a "negotiated space" where students recognize the needs of their teachers and realize that their needs are not more important than the needs of others.



Discipline, for lack of a better word, the approach is different here. In previous schools adults always approached kids assuming they were doing something wrong. If you were in the hall why are you there. It is assuming the best, but also the structure of the school is different, this doesn't mean that discipline is not a problem, but usually when students are in the hall they are doing work or collaborating. This is a part of treating kids like people. We ask a lot of them and they have a lot of responsibility. We ask them to do stuff and trust them to do a lot.

- SLA Teacher

✔ **Staff have created an SLA-specific approach to restorative practices and worked to intentionally roll this approach out over time.**

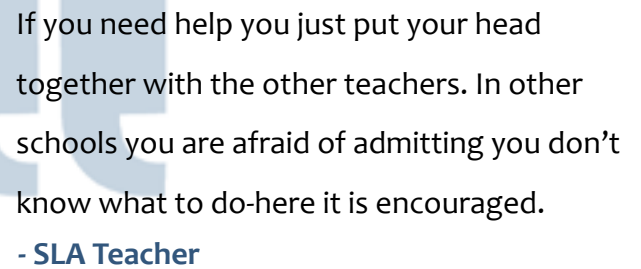
When SLA staff was considering how best to implement restorative practices, leadership initially shared the San Francisco School District model, which was quickly rejected. As one school leader explained it, teachers at SLA are creators so they preferred to deeply study restorative practices and create a unique model customized to meet the needs of the SLA community. To determine the SLA approach, a small group of teachers and parents reviewed materials and presented a strategy for rolling out restorative practices to SLA students and the community. Importantly, staff learned that "you can't go from 0-60 all at once" and instead, focused on starting with smaller practices, such as having students email advisors restorative questions when they had violated expectations. Another major part of this roll out was considering how to build student investment. Students were introduced to the idea of restorative practices in their advisories, a safe space for students to hear about a new aspect of the school.

Talent

Inquiry and hugs are not just for kids. Indeed, SLA's staff culture mirrors its student culture. Just like students, teachers engage in meaningful inquiry through teacher-driven faculty meetings, and leadership values teachers as people through promoting the ethic of care.

✔ Teachers employ and value formal and informal means of teacher-led collaboration to plan, troubleshoot challenges, and iterate on lessons learned.

Formal and informal teacher support is a highly valued resource at SLA. Teachers meet weekly with others who teach the same subject (e.g. science, math) and lead Professional Development (PD) sessions on Wednesday afternoons. PD time is often spent in small Professional Learning Communities (PLCs), which are intentionally grouped to ensure a diversity of teachers' experiences and a balance across grade levels and subject areas. During this time, teachers grapple with larger questions and challenges, such as how best to cultivate voice and choice, and are constantly iterating on their approach. Like students, staff are engaged in constantly reflecting on how to make their work better. This culture allows teachers to feel safe in admitting failure and seeking advice from their peers.



If you need help you just put your head together with the other teachers. In other schools you are afraid of admitting you don't know what to do- here it is encouraged.

- SLA Teacher

✔ SLA has developed intentional structures that support teacher hiring, onboarding, and development.

Working at SLA requires a certain mindset. According to leadership, teachers must believe in the pedagogical approach, love kids more than content, and see themselves as curriculum designers and scholars of practice. Hiring and onboarding processes are critical for getting the right people in the door and setting them up to succeed at SLA. Every new teacher is required to read *Understanding by Design*, *Authentic Learning in the Digital Age*, and *Building School 2.0*, attend a robust onboarding, and work with a mentor teacher. During the year, SLA employs a tiered approach to support teacher development, which is differentiated to meet the needs of new teachers, teachers in need of additional support, and more experienced teachers.

✔ Teachers are empowered and given high levels of autonomy, though work/life balance can be challenging.

Teachers design their own curriculum through project based learning, are entrusted with instituting new policies, are provided with time to learn and collaborate with one another, and act as mentors to new teachers. In turn, these responsibilities create demands on teachers' time. Teachers report that figuring out what a healthy amount of work is and setting clear boundaries can be the hardest part of working at SLA. SLA is mindful of each teacher's work/life balance and has encouraged teachers to backwards plan their own wellness and come up with a concrete annual goal to balance their work-life integration.

Family & Community Engagement

SLA has successfully cultivated strong relationships with parents and provides multiple opportunities for engagement. SLA also has strong partnerships across the city, including its key partner in The Franklin Institute. As part of SLA's focus on 21st century modern learning, these partnerships provide every student with an internship and thus, a real-world learning experience in a student's area of interest, further enhancing each student's learning experience.

✔ Family engagement opportunities allow parents to contribute to SLA in the way that is best for them.

SLA recognizes that families come from a variety of communities and, in response, intentionally provides multiple opportunities for family engagement, from volunteering at EduCon (described below) to donating money to serving on the School Advisory Council. All parents are engaged in their children's learning process through narrative report card meetings twice a year with families. Students co-lead these conferences and share rich quantitative and qualitative data with their families to demonstrate their learning progression. Given the strong relationships that exist between teachers and students at SLA, teachers will step into the role of parent if a parent is unavailable to attend. This means that even in the absence of a parent, students are still given the opportunity to present their work, and reflections, to a trusting adult.

✔ Each student's Individual Learning Plan is anchored by a partnership with The Franklin Institute and supported by strong partnerships across the city.

SLA's most coveted partnership is with The Franklin Institute which provides all freshmen with STEM learning once a week on Wednesday afternoons. The afternoon consists of visiting permanent and traveling exhibits, watching educational IMAX and 3D films, and participating in "Mini-Courses." Courses are short, one-to-two months long, once-a-week workshops in a variety of topics from medicine and immunology to engineering and astronomy to computer programming. In the sophomore and junior years, SLA's program manager matches every student with an internship that provides a real-world learning experience in a student's area of interest. Students have interned in hundreds of sites across Philadelphia.

✔ EduCon has built a community invested in SLA's work beyond Philadelphia.

Annually, SLA hosts a conference open to educators from across the country called EduCon. EduCon is both a conversation and a conference. It is an innovation conference where local and national educators can come together, both in person and virtually, to discuss the future of schools. Every session is an opportunity to discuss and debate ideas — from the very practical to the big dreams. Teachers and school leaders who attend are introduced to guiding principles and brainstorm how these principles live out in their own schools.

Guiding Principles Behind EduCon

Our schools must be inquiry-driven, thoughtful, and empowering for all members.

Our schools must be about co-creating - together with our students - the 21st Century Citizen.

Technology must serve pedagogy, not the other way around.

Technology must enable students to research, create, communicate, and collaborate.

Learning can - and must - be networked.



CONDITIONS

Over the years, SLA has been able to sustain its approach by building human-centered systems and structures that reflect its core values. Leadership has also been intentional in creating an environment that promotes consensus-based decision-making and builds meaningful community.

✔ **SLA has institutionalized intentional and interconnected systems and structures, which provide educators with support and promote needed accountability.**

SLA leadership considers the explicit reason for each school system and structure to ensure that it is in service of the school's core values. The most notable structure is the schedule. As discussed above, students spend two days a week in advisory to build school culture, and teachers teach one fewer course than in the district to ensure that advisory is not an afterthought. Full-credit courses meet four times a week and bump up one class period every day so students can experience subjects at different times of the day. The schedule also provides teachers with consistent time each week to engage in meaningful collaboration. Leadership shares the importance of making implicit systems into explicit systems to ensure educators have the capacity to implement changes and are held accountable to implementing the vision as intended. These systems and structures also serve to create a culture of sustainability and to prevent mission drift.

✔ **SLA's technological resources, including software like Slate and Canvas, and hardware like the 1:1 student to laptop ratio, facilitate 21st century learning.**

Every student at SLA is provided with a laptop. To ensure this valuable resource is utilized appropriately, every student is required to take a digital ethics course that reviews, amongst other things, how to maintain a responsible online presence. Teachers take advantage of each student's access to a laptop by more efficiently providing feedback via Google docs and adding digital elements to projects. For example, students recently used their class website to feature candidates' profiles for mock campaigns along with video footage from a debate. SLA also employs both Slate and Canvas software programs. Canvas is student facing and the primary learning management system, while Slate is used to enter and track narrative report cards. Taken together, these software programs provide a digital platform to support SLA's learning model.

✔ **SLA has cultivated a consensus-driven environment where staff have permission to fail and learn from that failure.**

At SLA, leadership works to break down the concept of positional authority and ensures that everyone attached to the school feels it is a place of learning. This emphasis on distributive leadership ensures that all stakeholders take ownership over the implementation of the school's vision. It also cultivates a growth mindset in staff, giving them permission to try new things and constantly iterate on their approach. Leadership shares that successful implementation can take time and it's important to provide staff with this freedom to fail and support to stay disciplined to change over the long-term.

RECOMMENDATIONS

For Science Leadership Academy

- ✔ **Continue to create space for teachers to engage in conversations about student voice, choice, and empowerment.**

At SLA, teachers strive to provide students with voice and choice in their learning. Doing so, however, can prove challenging to implement across all content areas. Additionally, with a focus on student ownership, teachers must navigate how to ensure that this empowerment doesn't turn into entitlement. SLA is currently rolling out restorative practices to students and staff, which provides an opportunity to continue to engage staff in these important conversations.

- ✔ **Consider how to ensure the systems and structures of SLA are maintained as the school moves to a new building.**

Many of SLA systems and structures are tied to its physical space. For instance, a large table in the main office acts as the de-facto teaching lounge, where teachers gather throughout the day to build relationships, share ideas and get feedback from peers. Similarly, Principal Chris Lehmann's office opens directly into the hallway. He is mindful to keep this door open as much as possible to ensure an open line of communication to anyone who seeks one. SLA should think strategically about how to preserve these cultural aspects in a new environment.

- ✔ **Promote strategies for work/life balance among staff.**

Teachers are essential to the successful implementation of the SLA model and are clearly quite invested in the approach. However, given this level of investment, teachers report that what's most challenging about working at SLA is prioritizing their own wellness. SLA leadership has already initiated conversations about work/life balance with staff, which are important to revisit on an ongoing basis to ensure teacher longevity.



For Other Schools

✔ Develop a common language/set of shared values.

At SLA, the core values act as an anchor for the school community and ground teachers' and students' work. These unifying values and corresponding rubric create a common language that outlines expectations and demystifies the learning process for students. When SLA developed its core values, leadership used a consensus-based approach that meaningfully involved multiple stakeholders in the process. Bringing the full community together to develop a set of core values and then integrating those core values into school culture is key to successful implementation of innovative models.

✔ Develop systems and structures that align with the school's core values.

SLA intentionally creates systems and structures to support the school's commitment to inquiry and the ethic of care. Specifically, the schedule is used to create time for advisories, real-world learning through internships, and meaningful teacher professional development. At SLA, advisories and teacher professional development time are foundational to cultivating a culture of trust and care and ensuring that every student's and teacher's needs are met. Implementing these types of systems is a way to ensure schools are practicing their vision.

✔ Cultivate meaningful teacher leadership and create an environment that allows for continuous improvement.

At SLA, teachers are creators. Leadership provides staff with autonomy over their work and permission to try to new things, learn from their experiences, and iterate on their approach. This philosophy of teacher-driven work is supported by systems of teacher-led professional development, open lines of communication, and intentional time in the schedule for collaboration and learning. Implementing one or more of these strategies at other schools would help to cultivate teacher leadership and investment in the school's approach.

For Districts

✔ Consider incorporating the advisory structure into all schools by allowing scheduling and rostering flexibility.

Advisories at Science Leadership Academy have laid the foundation for meaningful, trusting relationships between students and staff. District schools could benefit from this structural shift shown to be successful in practice both nationally and at SLA. To implement advisories, districts would need to grant school leaders autonomy to alter daily schedules and rosters to create the time and value for daily advisories. Districts should work with school leaders to create an overview of the essential criteria necessary for a successful advisory to support high quality implementation.

✔ Consider how to make learning of the real world.

At SLA, students engage in meaningful real-world learning experiences where they see the direct impact of their work. Districts should consider the best way for students across the district to navigate success in the real-world and what opportunities - such as internships or college classes - bolster those experiences. This will require technical considerations such as scheduling, transportation, and training for things like

internships, field trips, and college courses. More challenging, however, is the type of support staff would need to ensure effective and rigorous real world learning activities. Districts should consider what implications this has for teacher onboarding and ongoing development.

✔ **Use the Innovation Network as a laboratory for innovation in the district.**

SLA has been successful over the years in part due to its ability to innovate through an iterative approach and empower stakeholders to take ownership over that improvement process. Innovation schools would benefit from a level of autonomy that allows for this type of continuous learning. To ensure that needed autonomy is balanced with clear accountability, districts should involve innovation schools in the creation of accountability metrics which would allow for effective monitoring, but also provide the necessary freedom to try new approaches.

For Funders

✔ **Be prepared for iteration.**

New school models aren't always fully formed and typically evolve, not just when they are being designed and initially implemented, but over time. This iteration can be uncomfortable for many funders who want to understand their grantee's work. Funders should prepare for the reality that the work of innovative schools can look messy and keep an open - and ongoing - dialogue with their grantees. They should create a space where it's OK for grantees to share risks, failures and changes associated with implementing their model.

✔ **Give it time and look beyond common metrics of success.**

Because innovative schools are creating new models that take time to build, it also takes time to produce results on traditional metrics of success (e.g., test scores). Funders need to be patient and not expect to see these types of results in the early years of implementation. It's also critically important that funders support a broader definition of student success that captures soft skills (e.g., growth mindset, collaboration, resilience) and interim measures (e.g., student attendance). If these skills are cultivated and students feel safe, comfortable, and heard, there is a good chance higher scores will follow.

✔ **Remember that innovation requires R&D dollars and schools need funding beyond what is provided by their districts.**

Successfully implementing an innovative school model requires strategic and thoughtful design. However, some of the hardest funding to get is funding associated with designing and implementing new programs. While district funding meets the basic needs of schools, many schools have nonprofit affiliates that fund-raise for R&D and additional programs or resources (e.g., one-to-one tech or non-required staff to implement trauma informed approaches or makerspaces). If funders want to support the type of work that challenges existing models, they should consider taking on some of the risk of investing in new work— particularly at the planning stage. They should also consider supporting districts in their efforts to create the conditions necessary for success (e.g., high quality instructional materials, coaching supports).

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