



**LEARNING  
ANALYTICS  
COLLABORATIVE**



# LAC Playbook

**A GUIDE FOR BUILDING CULTURES OF  
DATA USE**

Compilation of Best Practices from LAC Schools by Suzie Boss

|   |           |
|---|-----------|
| <b>Foreword</b>   | <b>5</b>  |
| <b>Introduction</b>                                     | <b>8</b>  |
| <b>Chapter 1: Getting Started and Building Momentum</b> | <b>10</b> |
| Identify  | 10        |
| Gather  | 11        |
| Rollout   | 14        |
| Key Takeaways   | 19        |
| Reflect   | 20        |
| How does LAC support schools in this work?              | 21        |
| Suggested Resources                                     | 21        |
| <b>Chapter 2: Using Norms and Protocols</b>             | <b>23</b> |
| Impact  | 24        |
| Key Takeaways   | 27        |
| Reflect   | 27        |
| How does LAC support schools in this work?              | 27        |
| Suggested Resources                                     | 28        |
| <b>Chapter 3: Building a Collaborative Culture</b>      | <b>30</b> |
| Impact  | 30        |
| Key Takeaways   | 36        |
| Reflect   | 36        |
| How does LAC support schools in this work?              | 36        |
| Suggested Resources                                     | 37        |
| <b>Chapter 4: Questions for Shared Inquiry</b>          | <b>38</b> |
| Identify  | 38        |
| Rollout   | 39        |
| Impact  | 40        |
| Key Takeaways   | 44        |
| Reflect   | 44        |
| How does LAC support schools in this work?              | 45        |
| Suggested Resources                                     | 45        |
| <b>Chapter 5: Improving Student Outcomes</b>            | <b>47</b> |
| Impact  | 47        |
| Key Takeaways   | 59        |
| Reflect   | 59        |
| How does LAC support schools in this work?              | 60        |
| Suggested Resources                                     | 60        |
| <b>Chapter 6: Building Teacher Efficacy</b>             | <b>62</b> |
| Rollout   | 63        |

|  |            |
|--|------------|
| Key Takeaways  | 66         |
| Reflect  | 66         |
| How does LAC support schools in this work?                             | 67         |
| Suggested Resources  | 67         |
| <b>Chapter 7: Overcoming Challenges</b>                                | <b>69</b>  |
| Key Takeaways  | 72         |
| Reflect  | 73         |
| How does LAC support schools in this work?                             | 73         |
| Suggested Resources  | 74         |
| <b>Chapter 8: Professional Development that Builds Data Culture</b>    | <b>75</b>  |
| Key Takeaways  | 90         |
| Reflect  | 91         |
| How does LAC support schools in this work?                             | 91         |
| <b>Chapter 9: Trends to Watch</b>                                      | <b>93</b>  |
| Reflect  | 96         |
| Suggested Resources  | 97         |
| <b>Appendix</b>  | <b>98</b>  |
| Summary of results from the LAC Playbook PD survey and Acknowledgments | 100        |
| <b>References</b>  | <b>102</b> |

# Foreword

“Analytics can be a powerful tool in learner motivation — how do I compare to others in this class? How am I doing against the progress goals that I set?”

- George Siemens

For several years I'd been searching for a data platform or software that teachers could use to make sense of all the student learning data they collect. I've lost track of the number of demos I saw at numerous tech events. Almost all demos showed me an online version of what looked like Excel generated histograms. It was disappointing that no one had created a tool for the use of one of the most important persons in the classroom - the teacher. In spring 2015, Scot Hoffman, my colleague in the R&D department at the American School of Bombay (ASB), introduced me to Sujoy Chaudhury, a data geek. Sujoy had trained and worked as a data nerd, ecologist, corporate executive, and data scientist. He shared data visualizations that he had created and that modeled human wildlife conflict. Over the course of the next year, Scot and I shared multiple student learning datasets that Sujoy transformed into interactive visualizations. We collaboratively designed and prototyped the first LAC engine - the Student Data Profile - that has been the LAC's crown jewel. This was followed by several visualizations to tell stories with student learning data. Teachers at ASB began using these to inquire about their students' learning and academic growth, and to personalize student learning. Scot created a simple but powerful protocol called [Data WOCQ](#) to support teachers' inquiry. It continues to be one of the protocols that LAC schools use to guide teacher inquiry into data.

In fall 2015, we started the Learning Analytics Collaborative (LAC) with five schools. The LAC has become a partnership between data scientists and visionary leaders from schools around the world, seeking to share information about teaching and learning in ways that lead to better questions, deeper understandings and more informed decisions for successful teaching, learning and living. Our vision in creating the LAC was to empower teachers with information about student data that they could use to design the most relevant learning experiences for students. The LAC has grown to almost 50 schools and our Director of Learning Analytics, Piotr Olczak, is continuing to empower schools to build strong cultures of data use. The first edition of this *LAC Playbook* is an important step in capturing the best practices for building these cultures of data use. We hope it will guide your work. Thank you, Suzie, for capturing and compiling these practices so beautifully.

Dr. Shabbi Luthra

Founder/CEO, Consilience Education Foundation  
Founder, Learning Analytics Collaborative

We are delighted to bring to you the first edition of the LAC Playbook! It is a compilation of the knowledge, experience, expertise, and wisdom from school leaders in the LAC Schools community. A huge thanks to the LAC Schools for sharing their guidance. We hope it will serve as a guide for all member schools to build their school's culture of data use. One of the most important aspects of the Learning Analytics Collaborative is sensemaking of student learning data based on insights and outcomes. For the past couple of years, we have been collecting stories of the LAC schools' Learning Journeys and best practices for building data cultures. Earlier this year we sought the expertise of Suzie Boss, educational writer and consultant, to help capture these stories and practices in a publication that is accessible, practical, and updated annually. The sources for this publication include surveys and interviews with school leaders, posts on the [LAC Blog](#), monthly webinars, and Virtual Meetups. This resource will be helpful to all schools at various stages of their data culture journey.

Piotr Olczak

Director of Learning Analytics  
Learning Analytics Collaborative

# Introduction

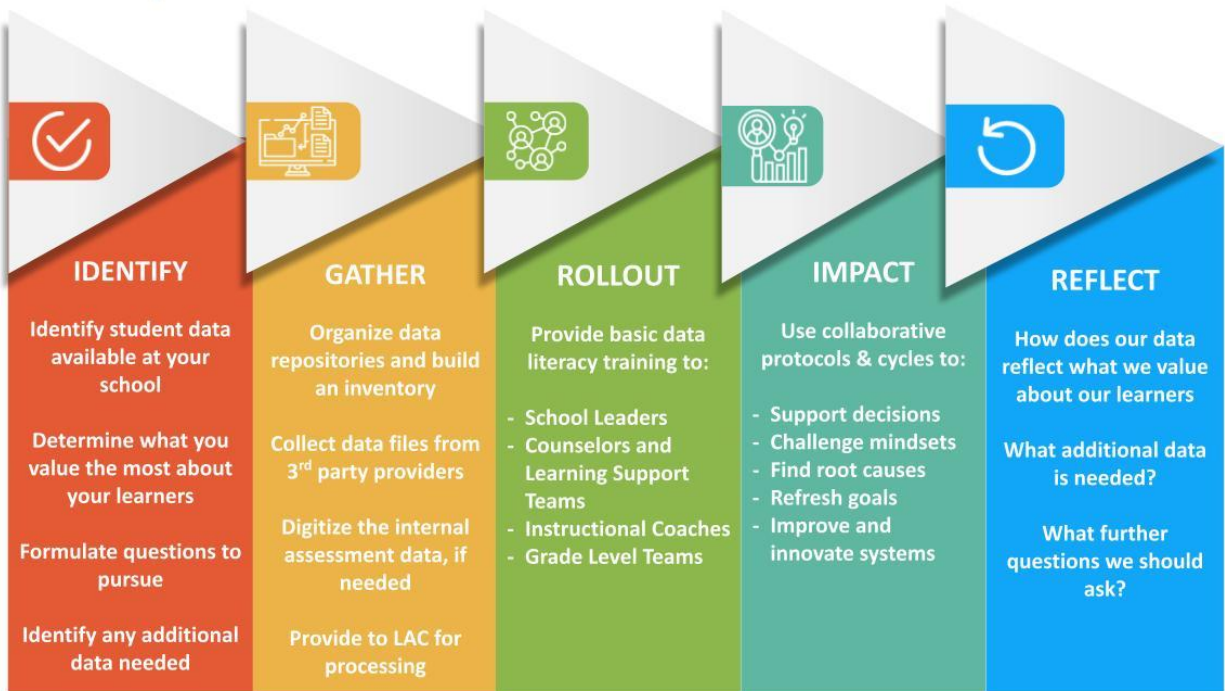
## ***How can we use the LAC Playbook to help build our data culture?***

Schools that build a strong data culture share a commitment to improving outcomes for their students. Despite this common goal, schools tend to start their data journeys at different places and with different catalysts sparking their efforts. Leaders and teachers bring a diversity of background experiences, data literacy, and insights to the process. By sharing best practices, schools that are engaging in this important work can accelerate progress across the Collaborative. That is the goal of the *LAC Playbook*.

This first edition of the *Playbook* shares insights from member schools in the Learning Analytics Collaborative. Over time, we plan to expand the *Playbook* with additional examples and case studies from within LAC, and eventually beyond.

The *Playbook* is organized around key themes that have emerged in our conversations with staff from LAC schools. Each chapter focuses on a specific question or problem of practice that international schools encounter as they establish and expand their data culture. Short case studies present strategies and stories from individual schools. Each chapter concludes with reflection questions to help readers connect contents to their own context along with suggested resources from LAC.

As you explore the chapters ahead, we encourage you to keep in mind the LAC Road Map to Building a Data Culture. Building a data culture is not an overnight process. Schools build their culture gradually, leveraging collaboration, inquiry, and reflection as drivers of progress.



The roadmap offers a general overview of the stages a school is likely to move through while leveraging the LAC to build and grow a data culture.

## Reflect

Take a close look at the Roadmap to Building a Data Culture. Where would you place your school at the moment? Why? What are the opportunities on the near horizon to deepen your data culture? What are the challenges?

At the end of each chapter, you will find more reflection prompts. We encourage you to use them to reflect on your own thinking and as conversation starters with colleagues. In addition, you will see the five icons from the Roadmap used throughout the *Playbook* to highlight examples of schools addressing particular questions at different stages in their data journeys.



# Chapter 1: Getting Started and Building Momentum

## ***What motivates schools to build their data culture?***

Schools embark on data journeys for different reasons. An effective catalyst can help to spark initial interest, build enthusiasm, and ensure a shared purpose for the long-term work of building a data culture.

### **Identify**

Most schools are already awash in data. Their initial step towards building a data culture may be a desire to identify existing data, which might be recorded on spreadsheets or tucked away in teachers' classroom files. "If it's all floating around, there's no way to consistently use data to make informed decisions," says Trina Cobbledick, Director of Student Services at the International School of Kuala Lumpur. That's why the data journey starts with identifying and organizing existing data.

Schools describe a variety of catalysts that help them move from identifying and organizing data to using it more strategically.

A change in school leadership can usher in a new focus on using data to improve teaching and learning. That was the case at the International School of Luxembourg. When David Condon became School Director in summer 2021, he brought with him extensive experience in the use of data to inform instruction. At his first address to the whole school, he shared his goals for the coming school year, including using qualitative and quantitative data to support learners. David Walker, Deputy Lower School Principal,

recalls how the staff heard the Director’s message as “an invitation for us to inquire, to pose new questions that will lead to improved student outcomes.”

Shanghai Community International School has had a long-term focus on students’ social and emotional wellness. “As a community school, we pride ourselves on knowing our students really well,” says Amy Valerio, Upper School Vice Principal. Using data analytics to better meet the needs of students “is in line with who we are,” she says, rather than a change in direction. When the school joined LAC, Upper School Principal Barclay Lelievre spoke with the staff briefly about the value of a data culture, and then invited faculty to explore different visualizations. His instructions were simple, recalls Valerio: “Just get in and mess around.” Later, in a debrief, teachers talked about how they might use this information in their classrooms. “So right away they’re seeing value. They’re seeing a purpose. They’re walking away with something useful.”



## **Gather**

Vienna International School began gathering data about technology integration when it implemented a 1:1 laptop program several years ago. Ben Hacking, Primary School Deputy Principal, recalls how the conversation eventually expanded beyond tech. “At the Academic Council level, we began having an existential conversation. What are we collecting? And for what purpose? We were running all these assessments and collecting data from different sources, but we weren’t using most of it. That led to deep conversations about what’s worth doing with data.”

For American International School of Lagos, the renewal of the mission and vision has been a catalyst for rethinking “our evidence collection and what we do with it,” explains Melissa Schaub, Deputy Superintendent of Learning. The initial challenge was not an

absence of data. Rather, there was an abundance of data going back years—much of it stored in file folders rather than digitally. “But there was no common practice in how anyone was actually using it,” Schaub says, “to guide students along their learning journeys.”

These stories from LAC schools underscore the importance of launching into data work with a shared purpose that permeates school culture. That’s a strategy that will help international schools maintain their data culture, even with anticipated staff turnover.

Starting with their common “why,” schools build momentum by emphasizing inquiry, attending to adult learning needs, and identifying and supporting their early adopters and data champions. The following case studies provide a look at these strategies in action.

### **Growing the Data Culture at I-Shou International School**

At I-Shou International School, Amanda Sunderman, Director of Teaching and Learning, has worked strategically with her team to build the school’s data culture. “This is not a task that can be forced or rushed,” she acknowledges, reflecting on three years of deliberate culture building.

The catalyst for her faculty was an accreditation process that included self-study. Among the conclusions: differentiation and the use of data were identified as significant areas for growth.

Sunderman can identify the stepping stones that have helped her school make progress:

- Start with innovators and early adopters.

- Look for leverage points, such as teachers identifying needs and asking for help.
- Offer voluntary workshops and respond to requests for more.
- Use surveys and observations to determine when an early majority is exhibiting basic data and differentiation strategies.
- Engage the late majority with customized and differentiated sessions.

There's more work ahead, Sunderman acknowledges, but adds, "Working slowly at first helps us go faster in the future."

### **Scaffolding Teacher Learning at International School of Beijing**

Laura Brown, Director of Learning at the International School of Beijing, is careful to remind herself that "not everyone loves data as much as I do. Some people find it intimidating." Building her team's data literacy has to start with the *why*. "It's about putting students first and responding to their needs," she emphasizes.

For her team, the catalyst for building a data culture was the self-study as part of accreditation. "We found that about 70% of our teachers felt that they didn't know how to differentiate the way their students needed. They weren't directly saying, 'We don't know how to work with data.' But that was coming through loud and clear," Brown recalls. In her efforts to cultivate a data culture since then, she has consistently reinforced teachers' recognition of their need for growth and professional learning around differentiation.

In her prior role as Primary Director, Brown helped to scaffold teachers' data literacy through observations, conversations, and connections. She explains: "Teachers use data all the time, often without realizing it. They make decisions to be responsive, to

differentiate. I would watch for teachers who responded comfortably [to data observations]. And I'd start to work that into the conversations more. Then I started to connect people. I'd ask a data question. Then I might say: 'Have you seen what so and so's doing with data?' One of my beliefs as an administrator is that no system should rest with me. I wanted to build connections so that if I leave, the culture continues."



## Rollout

In her current role, Brown is intentional about building the data literacy of her colleagues. A few key strategies that have supported the rollout phase:

**Choice:** International School of Beijing's data committee encourages teacher choice when it comes to learning about data. A survey might suggest a few options for workshops related to data, but also include an open response. From that feedback, the school has developed its own internal workshops tightly focused on teachers' interests. For example: "MAP data: How do we use it?" or, "Data and differentiation in the class breakdown report."

**Teacher leaders:** Brown is intentional about building teacher capacity to lead data work. She might co-plan and co-lead a data workshop with a colleague, for example, and then gradually decrease her own role. Once teachers are comfortable leading workshops on their own, "that's where we move into the early majority," she says.

**Effective facilitation:** Teacher workshops are thoughtfully designed and interactive, mirroring an effective classroom. Facilitators serve as coaches and guides, encouraging participants to collaborate and push each other's thinking. Seating assignments are purposeful. Depending on the topic, participants might be grouped by grade level, subject area, or language fluency. "The idea is, they walk away with something that they

could use the next day in the classroom. That’s embedded in all our workshops,” Brown says.

**Differentiation and scaffolding:** Adult learners start their data journeys at different places and benefit from differentiation and scaffolding to help them develop understanding. For example, an introductory workshop might be capped at a dozen participants so that participants know they will have plenty of time to ask questions and get individual support. If teachers seem reluctant to ask questions, Brown might use what she calls a “question assignment.” She explains: “Sometimes people feel nervous or vulnerable. To help them save face, I might say, ‘Before you take a break, use this poster to share two questions that you think need to be asked today.’”

Having multiple facilitators in a workshop—often a mix of administrators and teachers—also allows for more individualized attention. “It’s almost like having teaching assistants,” Brown notes.

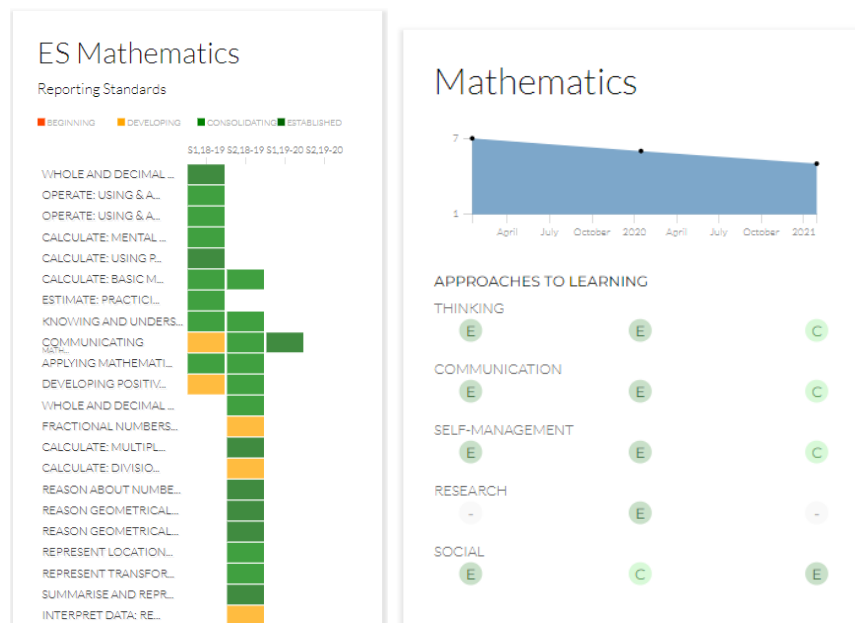
When participants have different levels of English fluency, it’s important to “set them up for linguistic success,” Brown advises. “They might want to say something in a really nuanced way, so they prefer to respond in Chinese.” In quick side conversations at their tables, participants can clarify their understanding and then refocus on the group task.

### **Leveraging Teacher Inquiry at Vienna International School**

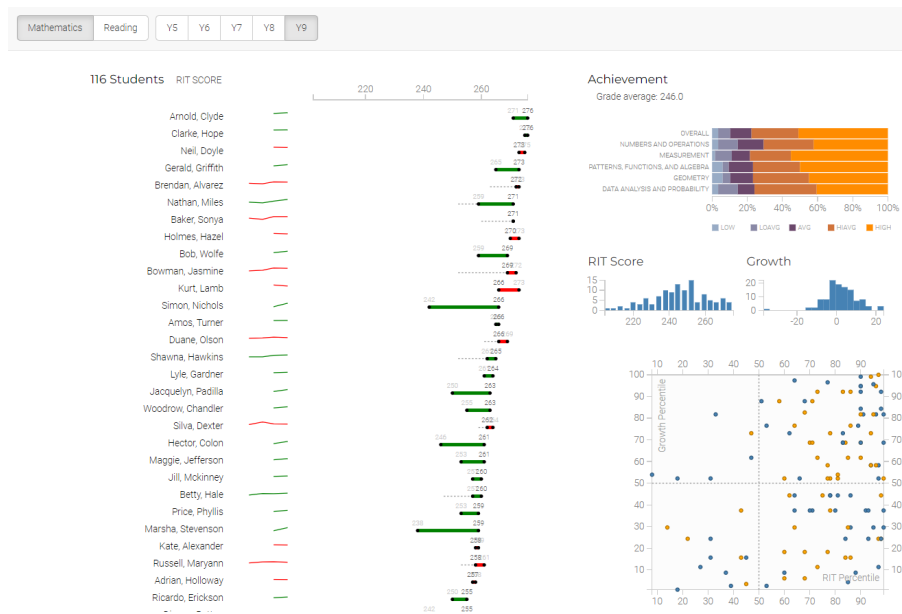
When teachers first encounter data visualizations, they may need time to ask questions and grapple with what they are seeing. “We do this with our students all the time, when we show them a graph and ask them to inquire into it,” points out Ben Hacking, Primary School Deputy Principal. “Teachers need to remind themselves of the inquiry mindset.”

He recommends starting with small data “slices” as a way to scaffold conversations. “We’ll take one or two views of some data that’s relevant to a team. Then we run through a process in which we look at the data, discuss it, and generate some questions and observations. For example, it could be slices about student achievement in maths, both individual and cohort level.”

## Student Level



## Cohort level



Along with the quantitative data, teachers might also share examples of work from students' digital portfolios. "You can triangulate with things that are not necessarily numerical to build a holistic picture of that student, rather than banking purely on the numbers," Hacking says.

Keeping the conversations positive helps to overcome potential teacher resistance. "If there's a class that's not doing particularly great on a mathematical concept, you need to reframe it so the teacher is not wondering, 'Does that mean my instruction's bad?' Instead, you want to point out a positive trend. You might ask, 'What are you doing in your classroom that you could share that's working so well?' It's positioning the questions in a positive way and turning it into people sharing good practice."

### Creating an Assessment Philosophy at American International School of Abuja

Elementary Principal Julie Cox arrived at American International School of Abuja at the same time as several other new leaders. As an initial step toward building a data culture, they engaged the entire faculty in co-creating an assessment philosophy and



handbook. “That was a deep dive in saying, what are we about? What do we use data for? What’s the importance of feedback, of triangulation?” She describes the result as “a beautiful document that was our starting point for growing a data culture.”

### **Cultivate Data Champions, Clarify Roles**

Once schools set a goal of building their data culture, it’s important to identify the champions for this work and to clarify roles and responsibilities. Among the insights from LAC schools:

**Build leadership capacity:** Leaders play a critical role in cultivating a school’s data culture. Other staff members can be more hands-on when it comes to coaching and guiding professional learning, but leaders make this work a priority by committing time, resources, and attention.

A consistent message about the importance of data culture “needs to come from the head of school, principals, and a team of people that really believes this is the right work,” says Maria Domingues at Nansha College Preparatory Academy (NCPA). Leaders may need to build their own data literacy to help champion the work. “It doesn’t mean you have to be an expert,” says Laura Brown at International School of Beijing, “but you need to put in the time and get comfortable with your data. You can’t fake it.” At the International School of Dongguan, “we got the leadership team on board first [with understanding LAC dashboards],” says Raedel Bagley, Director of Teaching and Learning. “Then they introduced teachers to it.”

**Recruit champions for IT *and* academics:** At International School of Luxembourg, David Walker leads data efforts on the teaching and learning side, partnering with a colleague on the IT side who is more hands-on with uploading data and generating

visualizations. “You need both,” he insists. This is a consistent message across the LAC network.

Similarly, NIST takes steps to ensure that both technology and academic agendas are addressed when it comes to building a data culture. Jay Priebe, Director of IT, works closely with the school’s Evidence-Based Learning Coordinator (typically, a teacher who receives a stipend for data responsibilities), who in turn supports facilitators in leading data meetings. The school recently added a Director of Teaching and Learning—another important data champion. “That has added more momentum on the non-IT side of things,” Priebe says.

**Prepare champions for new roles:** To build the data culture at NCPA, former science teacher Maria Domingues took on a new role as assessment coordinator. “I was excited, but didn’t know how to do the work at first,” she acknowledges, even though she was familiar with analyzing data from her science background. She took part in training from Data Wise, a project at the Harvard Graduate School of Education. “This helped me find the ‘why’ for doing this work. You need a structure in which teams of teachers look at data in a safe environment. It’s not just a technical shift—it’s a culture shift.” Her own professional learning has provided her with processes to bring to her colleagues.

## Key Takeaways

- Schools describe a variety of catalysts that launch them on data journeys with a shared purpose.

- The process of identifying and gathering existing data—the initial stages on the Data Roadmap—prompts schools to identify additional needs for building their data culture.
- Case studies in this chapter highlight strategies that schools have used to:
  - Attend to adult learning needs
  - Identify data champions and define their roles and responsibilities for building a data culture

## **Reflect**

As you consider the case studies and strategies in this chapter, ask yourself and your colleagues:

- What has prompted your school to cultivate a data culture? Can you identify a specific catalyst that is part of the data story at your institution?
- Does your entire team share the same “why” for developing a data culture? Do you use common language to talk about student data? Does data culture permeate all divisions and programs at your school?
- Who are your data champions? How do you identify and support them?
- How are you scaffolding adult learning when it comes to building data literacy?

## How does LAC support schools in this work?

LAC provides a wide range of tools and services to help schools to embark on the journey of building a data culture and focus on high-quality data and insights:

- We help schools to manage the data complexity to identify areas of improvement and set goals
- We provide best-in-class data visualization engines and data mappings
- We focus on security and integration with top student information systems
- We offer unlimited remote strategic and technical support
- We connect schools with other members of the Collaborative to benefit from their knowledge, experience, and expertise
- We provide access to our LAC Learning Space that is full of resources for leveraging the LAC
- We offer Learning Data Audits and Data Literacy Workshops

## Suggested Resources

### Webinars

- [Learning Journeys session at AAIE Conference 2022](#)
- [Developing a Data Culture- How UNIS Hanoi used Data Visualization to Improve Teaching and Learning](#)
- [Using Data to Empower Faculty and Staff to Better Understand Their Students](#)
- [Harnessing Analytics to Improve and Transform Your School](#)

- [Learning Journeys with the LAC - NCPA](#)

## Blog entries and Articles

- [Using Data to Support Teacher and Student Growth](#)
- [LAC School Spotlight - International School of Beijing](#)
- [Data Journey: Discovering Learning Analytics at Zurich International School](#)
- [Designing Best-Fit Classes with the Class Placement Engine](#)
- [Building and Leading a School Culture that Values Data Informed Dialogue to Improve Student Learning](#)

## Chapter 2: Using Norms and Protocols

### ***How do shared norms and discussion protocols take data discussions deeper?***

Shared norms and discussion protocols are effective tools used widely by LAC member schools to build their data culture and achieve positive impact.

Norms set positive expectations for how groups will work together. When developed through a collaborative process, norms reflect the voices of the entire staff. Establishing shared norms is just the first step; the real value comes in using them consistently to promote productive dialogue that honors all participants' contributions.

With norms in place, protocols and thinking routines provide a structured framework for data discussions. They help to keep conversations focused and ensure that meeting time is well spent.

LAC member schools take advantage of protocols from a variety of sources to facilitate data conversations, such as [“See/Think/Wonder”](#) and other Visible Thinking routines from Harvard Project Zero. Other protocols are specifically designed to facilitate data discussions, such as [ATLAS Looking at Data](#).

Choosing the right protocol requires thoughtful facilitation and an understanding of participants' data literacy. Explains Carol Jordan, Director of Teaching and Learning at American School of Warsaw, “You have to match the protocol to both what the group wants to find out, and also to their readiness. If it's a team that's never looked at data together before, you might start with a simple routine to help them talk about: What do you notice? What are the patterns and trends? What's coming up for you? What do you

wonder?” As participants become more data literate, they are ready for deeper dives (such as the peer learning labs or action research described later in this chapter).

## **Impact**

The following case studies show how schools leverage norms and protocols to deepen their data culture with the goal of improving teaching and learning.

### **Shared Norms at NIST International School**

At a retreat early in its data journey, the leadership team from NIST International School adopted a set of norms to guide data conversations. These shared beliefs underscore:

- That student learning is deepened when teachers use a variety of evidence;
  - In using a range of evidence that can be triangulated for informing decision making;
  - In beginning with the purpose/goal in mind when using evidence;
  - In using agreed, schoolwide protocols and processes to collect, analyze, take action, and reflect.
- That collaboration and trust are fundamental in the use of evidence.
- That educators should be empowered to engage meaningfully with evidence.

NIST has developed a facilitator guide for data conversations that reinforce these norms, with the shared goal of keeping data conversations focused on improving student learning.

### **Inviting Teacher Voice and Reflection at International School of Beijing**

The data committee at the International School of Beijing drafted norms early in its work. “Then we put it out to the teachers and got feedback,” says Laura Brown, Director of Learning, to ensure teacher voice and build buy-in. “For most meetings where we’re working with data, we pull up the norms again.”



Revisiting norms and shared goals can be a useful reflection activity. For example, a data team at Beijing set a number of objectives to guide its year-long work. “There was one objective we never got to,” says Brown, “and so we wrote reflections about that. I modeled that we shouldn’t just say, ‘We did a good job. We worked hard.’ We have to acknowledge what we didn’t accomplish, too. The minute you brush off one of your goals, then you show that your goals aren’t really important.”

### **Using Protocols to Achieve Goals at International School of Myanmar**

Protocols are used routinely in meetings at the International School of Myanmar. “They make meetings very efficient and help us reach the goal we want to accomplish,” says



Aloha Lavina, Director of Curriculum, who has received training in using protocols from Adaptive Schools. “To set the agenda, we ask ourselves, what is the protocol or process that would make this meeting yield what we want to have it yield in the time that we have? We’re all used to that.”

### **Discussion Protocols at Nansha College Preparatory Academy**

Discussion protocols such as Notice and Wonder Protocol may seem simple, but they serve an important purpose. “We all like to jump to conclusions,” acknowledges Maria Domingues, assessment coordinator at Nansha College Preparatory Academy. “The protocol is a way of controlling the brain to focus on the evidence. This becomes a habit of mind – even among those who are at first resistant. It takes repetition, facilitation, letting teachers work through any anxieties.” Consistent use of protocols ensures a more efficient use of meeting time, she adds, “by making sure that the objectives are met and that at the end we have something of value.”

If participants are unfamiliar with using structured protocols, invite their questions. Domingues explains: “At the beginning, protocols can seem artificial. Teachers might wonder about their purpose. They might ask why they have to start a sentence with ‘I notice.’ Some might be resistant. It helps to remind them that they are not being evaluated. The purpose of the protocol is to understand better, without jumping to assumptions.” Some teachers might benefit from individual coaching sessions to overcome any concerns and get comfortable with the use of protocols.

Teachers who have prior experience using norms and discussion protocols can provide effective models for their colleagues. For example, they can model using a protocol in a fishbowl setting.

## Key Takeaways

- By establishing shared norms and protocols, schools enable their faculty and leadership teams to use data for more productive discussions.
- Establishing norms should be a collaborative process that respects all voices in the school community.
- Discussion protocols can foster more efficient, equitable, and focused use of meeting time; however, staff who are new to protocols may need time and scaffolding to become comfortable with their use.



## Reflect

- How has your school developed norms for data conversations? Have all staff been involved in the process of establishing norms?
- How do you ensure that norms are reinforced through regular use? What happens if norms are not followed?
- Which protocols are you using currently for data conversations? How do you choose and introduce new protocols? Which protocols does your team plan to adopt next to deepen data discussions?

## How does LAC support schools in this work?

LAC provides a wide range of tools and services to help schools build a data culture:

- Via the LAC Learning Center, schools have access to collaborative protocols and cycles to Support decisions, Challenge mindsets, Find root causes, Refresh goals and Improve and innovate systems
- Via our regular webinars, where schools share the protocols they use and how they have applied them
- Facilitating training sessions with the faculty to introduce and rehearse the use of protocols

## Suggested Resources

### Webinars

- [Learning Journeys with the LAC - NCPA](#)
- [Developing a Data Culture- How UNIS Hanoi used Data Visualization to Improve Teaching and Learning](#)
- [Learning Journeys session at AAIE Conference 2022](#)

### Blog entries and Articles

- [Atlas Protocol - Looking at data](#)
- [Got Data? Now What?: Creating and Leading Cultures of Inquiry](#)
- [“See/Think/Wonder”](#)
- [Five Steps to Structuring Data-Informed Conversations and Action in Education](#)
- [Building and Leading a School Culture that Values Data Informed Dialogue to Improve Student Learning](#)

- [LAC School Spotlight - International School of Beijing](#)

# Chapter 3: Building a Collaborative Culture

## ***How can we encourage effective collaboration to expand and deepen our data culture?***

A collaborative culture goes hand in hand with a data culture. Across the Learning Analytics Collaborative, schools use a variety of structures and strategies to ensure that teamwork is well spent to inform and improve teaching and learning.

Using data collaboratively to support student learning “is not just a technical process,” emphasizes Maria Domingues at NCPA. “It has to be connected to our mindset, our beliefs, and our philosophies as educators.”



### **Impact**

Schools that already have a shared commitment to collaboration have an advantage when they begin working with data. They are better prepared to analyze data together, raise questions for shared inquiry, respond to problems of practice, and assess impacts on teaching and learning.

At the American School in Japan (ASIJ), for example, job descriptions for teacher leaders specifically emphasize collaboration. We want to emphasize this role as a learning leader, someone who is building that collaborative culture,” explains Jilene Murray, Learning Data and Assessment Specialist.

ASIJ also takes a collaborative approach to unit planning. When the school introduced data tools, content teams discussed how to incorporate data into unit planning. We consider students’ prior knowledge and interests, while also looking for evidence to help

them identify students' strengths and areas for growth. This could include student reflections from previous units, formative assessments, and student work samples and other qualitative data. As a result, learning design templates have been modified to include "How might this information be used to activate and increase the relevance of this learning?" At the end of a unit, teams use student evidence to reflect on the learning. That's the kind of shift in practice enabled by a collaborative culture.

The structure of professional learning communities (PLCs) offers another bridge to more productive data conversations.

International School of Dongguan, for example, builds time for PLCs into the weekly schedule. Explains Raedel Bagley, "Wednesday after school — that's PLC time. There's no faculty meeting, no coaching, no other activities then. We demonstrate that this is time we value by making sure teachers are free to do the work," she says. "This is where we place importance."

International School of Luxembourg has used PLCs for at least a decade, estimates David Walker, Deputy Lower School Principal. "PLC meetings have norms, agenda, minutes, and a leader responsible for ensuring that the team functions well. That's part of our fabric," he says. Within that existing structure, teams use LAC visualizations to look at relevant data together. "They can do so without having to do any of the number-crunching themselves and begin to draw out, what are we seeing here? It's easy for them to get into. It's actionable."

When PLCs work well, "there's not a person who doesn't think it's the most valuable PD they've had in years," adds Amy Valerio at Shanghai Community International School.

“Then when you bring data analysis into that, it’s another tool for your PLCs to use to investigate and explore.”

Admittedly, the disruption caused by the pandemic interrupted PLC efforts for many schools. Resuming PLCs post-pandemic can help to strengthen a collaborative approach to using data, while setting the stage for shared inquiry and action research (discussed in more detail in Chapter 4).

The following case studies provide more insights about structures and strategies to support collaboration, as well as barriers that may need to be overcome to enable more effective teamwork when it comes to using data.

### **Building Capacity to Collaborate at International School of Myanmar**

At the International School of Myanmar, knowing how to be an effective collaborator is a goal that extends across the entire staff. Professional development focused specifically on collaboration is an ongoing priority. “We have a mix of everyone across the school, including non-teaching staff, taking this professional development every month and then applying it in their team meetings on a regular basis,” explains Aloha Lavina, Director of Curriculum. The emphasis on collaboration skills happens in tandem with data conversations and curriculum development. “We say it’s embedded PD because it was tailored to our needs as a school with everyone’s input, and then we designed the sessions to reflect that,” Lavina says.

By building common language and practice around collaboration, the school ensures that everyone understands how to make teamwork more effective. Just as students often need explicit instruction in how to collaborate, adults may also need to develop their skill set. “You can’t just say, ‘Get in a group and collaborate.’ Collaboration is a

specific way of making sure that everyone's voice is heard, ensuring that the agenda honors everybody's needs, and that the time is very focused and aligns with our overall goals as a school," says Lavina.

One caveat when it comes to learning about collaboration: "Make PD an invitation rather than imposing it," advises Lavina. Buy-in grows when teachers and other staff members experience the benefits of more effective teamwork. "Make sure the meetings are productive and that everyone has equity," she says. The result should be "a lot of thinking going on together."

### **Going Deeper with Norms and Protocols at NCPA**

Norms and protocols, discussed in Chapter 2, are useful for starting to build a school's data culture. To deepen collaborative practice, schools need to continue to emphasize these tools and ensure that they are used as intended.

Maria Domingues at NCPA recommends specific strategies for using norms and protocols for greater impact:

**Assign a monitor:** Have someone serve as Norms Monitor or Norms Observer during data team meetings. When she is in that role, Domingues says, "I will spend a meeting taking notes about how the team is collaborating. Then the following meeting, I will provide feedback—here's what I saw. The team may think it's doing a great job collaborating, but then I can say, here's what I noticed." For example, the shared norm might be about everyone having an equal voice in the discussion. But her observation may be that only one person spoke for half an hour. "There's this gap—maybe they don't feel comfortable saying, 'Let's hear from another person.'"



**Refocus as needed:** Similarly, when using a discussion protocol, a facilitator may need to speak up if the discussion is getting off track. Domingues encourages facilitators to tune into team dynamics if they need to get a team to refocus on the protocol. “Sometimes you can use humor,” she suggests, “but not if team members seem nervous. You don’t want to raise anxiety.”

**Consider cultural and language differences:** The cultural and language diversity of international schools can lead to misunderstandings or even tensions when it comes to collaboration. Potential barriers can arise if individuals’ backgrounds and beliefs are not understood by colleagues. For example, teachers may have different understandings about when to speak up in a group or whether to challenge a colleague’s statement. For collaborative work to succeed, team members “need to feel included and represented from start to finish. When a negative mindset occurs, participants must stop to understand personal beliefs and attitudes and ensure all team members’ collective commitments from throughout the learning process” (Sherwood, Domingues, et al., 2021, p. 135).

### **Learning Retreats at United Nations International School Hanoi**

The establishment of quarterly Learning Retreats at UNIS Hanoi aims to address the need for teams of teachers to gather for purposeful inquiry around student learning. Data visualizations are useful at these events, but not the sole focus. “We have been mindful to manage the delicate balance between remaining data informed, and not being too data driven at the expense of all else,” explains Megan Brazil, elementary principal. Learning Retreats are opportunities to leverage both the art and science of teaching (Marzano, 2007).

Facilitated by members of the Elementary Leadership Team, with clear meeting structures and protocols in place, Learning Retreats focus on two goals:

- Build the capacity of teachers to analyze, infer, and take actions to improve teaching and learning for students based on a collaborative study of the learning data
- Develop strong, healthy teams who bring conversations about student learning into their regular, collaborative conversations.

Brazil shares specific strategies for effective teacher conversations in a [blog post](#):

- Create a safe and comfortable meeting environment
- Assign a facilitator
- Use protocols
- Start small
- Consider timing and workload
- Have the data already visualized
- Document the group's thinking publicly

“By working to develop ‘assessment literate’ teaching teams,” she adds, “our hope is that all teachers will feel empowered to use data in a way that helps them to celebrate success, student achievements, and create meaningful plans of action towards instructional improvement.”

## Key Takeaways

- Schools with a healthy collaborative culture and a tradition of professional learning communities (PLCs) are at an advantage when they begin their data journeys.
- Professional development focused specifically on collaboration skills can improve teamwork across the entire school community, including with data efforts.
- Schools may need to address cultural or language barriers to collaboration to ensure equitable participation.

## Reflect

- If you are in the early stages of your data journey, do you have collaborative structures (such as PLCs) in place that you can leverage for data discussions?
- How can you determine if there are barriers to collaboration that you need to address? What strategies will deepen your school's collaborative culture?
- If you are further along in your data journey, how might learning retreats leverage data tools to help you meet shared goals for improving student outcomes?

## How does LAC support schools in this work?

LAC provides a wide range of tools and services to help schools build a data culture, but foremost we nurture the collaborative culture within the schools:

- Via our regular webinars where schools share the protocols they use and how they have applied them

- By connecting schools with other members of the Collaborative either directly or indirectly to benefit from their knowledge, experience, and expertise
- Through the LAC Learning Space we share all the best practices, processes, and protocols to aid the built of the data culture
- By facilitating training sessions with the faculty to introduce and rehearse the use of protocols

## Suggested Resources

### Webinars

- [Learning Journeys session at AAIE Conference 2022](#)
- [Developing a Data Culture- How UNIS Hanoi used Data Visualization to Improve Teaching and Learning](#)
- [Learning Journeys with the LAC - NCPA](#)
- [Using Data to Empower Faculty and Staff to Better Understand Their Students](#)
- [Harnessing Analytics to Improve and Transform Your School](#)

### Blog entries and Articles

- [Using Data to Support Teacher and Student Growth](#)
- [Data Journey: Discovering Learning Analytics at Zurich International School](#)
- [Building and Leading a School Culture that Values Data Informed Dialogue to Improve Student Learning](#)

## Chapter 4: Questions for Shared Inquiry

***Which questions about teaching and learning do we want to investigate with data?***

Data analytics offer a useful tool for investigating problems of practice. This should be familiar territory for educators who put inquiry at the heart of learning. A data culture is a questioning culture.

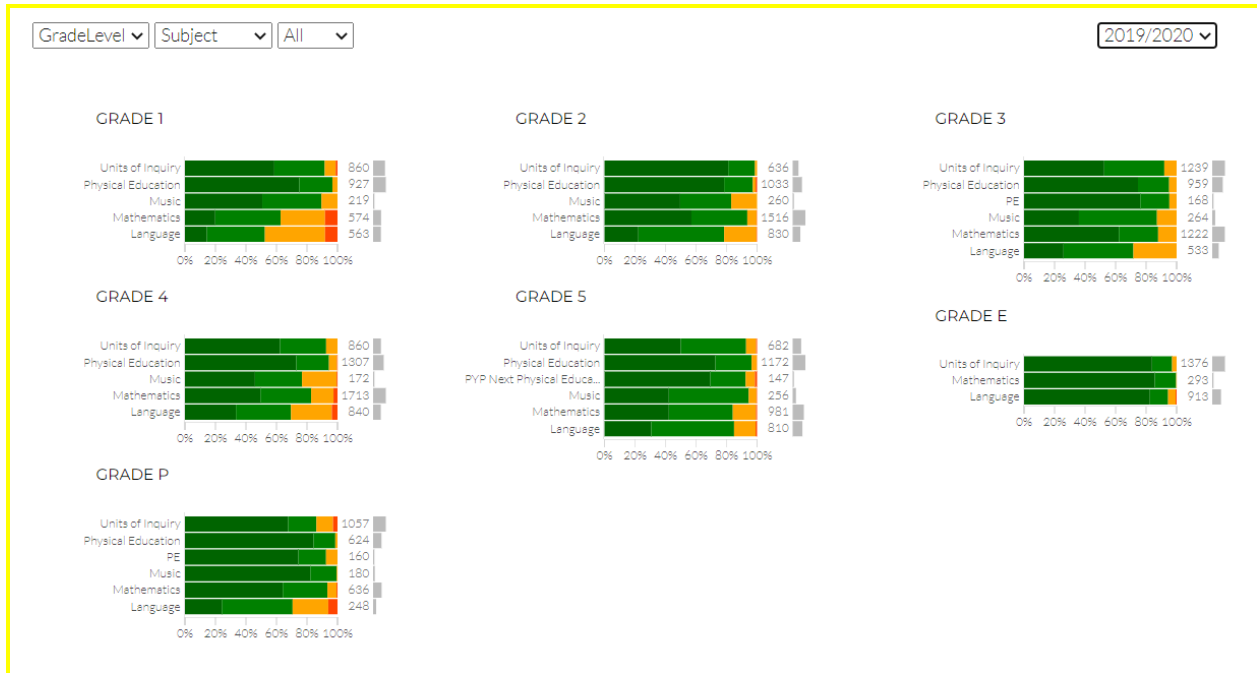
“It’s an invitation for us to inquire, to pose new questions that will lead to improved student outcomes,” says David Walker, Deputy Lower School Principal of International School of Luxembourg.

### **Identify**

Inquiring into data occurs throughout a school’s data journey, but often begins in the earliest stage – when schools identify existing data and begin to formulate questions to pursue.

In Chapter 1, you heard about the “existential conversation” about data that took place early in the data journey at Vienna International School. As Ben Hacking, Primary School Deputy Principal, recalls, “We had been having deep conversations about what’s worth doing with data. Are we over-assessing? What’s the purpose of collecting data?” Seeing examples of data visualizations from LAC helped to change the focus of those discussions. “They take the pain out of processing data,” Hacking says. The combination of data visualizations and protocols for shared inquiry “enable us to gather

people to focus on a specific question or curiosity before delving into the data. This has helped us hit the ground running.”



## Rollout

During the Rollout phase, schools build data literacy across their organization. At the same time, they may need to strengthen inquiry skills among teachers and leaders, leading to better questions to investigate with data.

Strategies that support student inquiry can also be useful for professional learning. At Nansha College Preparatory School, for example, teacher teams use a protocol called the [Question Formulation Technique](#) to choose which questions to investigate. “There needs to be strong curiosity about the question,” said Maria Domingues, assessment coordinator. Recent examples relating to reading include:

- What reading skills do students apply when analyzing multiple sources?

- What music vocabulary can students identify and understand when reading a piece of music?
- In Chinese language study, what reading skills do students struggle with the most?



## Impact

As schools proceed on their data journeys and build data literacy across their staff, they explore deeper questions and use both quantitative and qualitative evidence as they assess the impact of their work on teaching and learning.

International School Dongguan has collected assessment data since its founding a decade ago. The challenge has not been how to gather data, but deciding how to use it. “How can we look deeper at what the data tells us?” asks Raedel Bagley, Director of Teaching and Learning. “Over time, we have refined our practices.” Using LAC visualizations as prompts for inquiry, staff have investigated big questions such as, “Are girls generally doing better than boys, or boys better than girls?” Teachers use MAP and their own observations to triangulate where they think individual students are, then use that information to make groupings and focus on growth for each child. We’re not done,” she adds, “but LAC makes for a one-stop shop to make data more accessible.”

As the following case studies illustrate, a good question prompts a team to look at both quantitative and qualitative data from multiple sources (including from students themselves) to arrive at a conclusion.

## **Schoolwide Inquiry at American International School of Bucharest**

An annual focus on learning principles guides data inquiry at the American International School of Bucharest. During the 2021-22 school year, the schoolwide focus was concept-based teaching and learning. Within that broad topic, teachers were encouraged to propose more narrow questions to investigate, such as the role of feedback or student agency.

As teachers began proposing questions, like-minded groups naturally formed. Andrew Pontius, Secondary Leadership Team / IB MYP Coordinator, describes the use of what he calls an *expanding questions protocol*: “One person would share what he’s wondering about and then everyone would write a question to get them thinking at the next level.”

Once a research question was finalized through cycles of questioning, the next prompt involved data. “How will you collect indicators of success? Some planned to use learning analytics while others were looking for more qualitative pieces,” Pontius explains. Another provocation helped teachers think about the impact of their investigation: “What would it look like to know [the answer to your research question]? How is this impacting student learning in some way?”

## **Peer Learning Labs at American School of Warsaw**

At the American School of Warsaw, teachers and leaders engage in data discussions in a variety of formats, from team discussions about specific data using simple protocols to more intense data retreats to explore patterns and trends. Teachers who are ready to go deeper can choose to take part in peer learning labs to investigate specific problems of practice.



Trained teachers facilitate these events by helping individual teachers refine the focus question or classroom challenge that their peers will help investigate. “Framing the question is important,” emphasizes Carol Jordan, Director of Teaching and Learning. Before a learning lab, the PLL (Peer Learning Lab) facilitator spends time observing the classroom and talking with the host teacher about the specific challenge that they want to address. Once they finalize a question together, then peers observe the teacher and students in action, looking for information related to the focus question. A facilitated discussion follows, with peers using their observations to suggest possible strategies to address the specific problem of practice.

Peer Learning Labs are well-suited for teachers who want to use data to help them reach their own professional learning goals. “You get to a stage with data where you want to get beyond wondering,” Jordan says. “You have to be ready to say, I’m going to use data to make a change in my practice. I’m going to try something, then I’m going to come back and reflect. Did it make a difference? That’s the journey.”

For teachers who are ready for this stage in the journey, Peer Learning Labs provide a rich context for collecting classroom-based data, such as these recent examples of investigations from Warsaw:

- How can critical thinking tools and routines create opportunities for student choice and ownership?
- How can individual and small group conferring support diverse learners and allow for the development of academic discourse?
- What are specific structures and strategies that support the concurrent development of factual knowledge and critical thinking skills?
- How can we embed the subject objectives into lessons in an authentic, inquiry-based way to increase student agency and ownership of learning?
- What does it mean to take a constructivist stance towards building subject-specific knowledge in science?

- How can we build capacity for student support in a differentiated, inquiry-based classroom?
- How can we build structures and strategies to allow for deeper thinking about content and processes in order to create opportunities for students to capture their own thinking for future reference?

### **Action Research at LAC Member Schools**

In action research, teachers collaborate to improve their practice by focusing on their own classroom contexts to identify challenges or areas for improvement. They propose an action to make a change in pedagogy or practice, gather evidence, and reflect on implications for student learning. Several LAC member schools are engaging in action research or planning to do so in the near future, with data analysis embedded in the process.

At the International School of Luxembourg, an upcoming accreditation is an opportunity for a “deep dive” by a team of practitioners into a specific topic related to improving teaching and learning. David Walker expects data gathering and analysis to be an integral part of that self-study process.

At the International School of Dongguan, action research is conducted through professional learning communities (PLCs). Raedel Bagley describes the process that guides teachers’ investigations:

“Teachers work together across school levels. We start with their wonderings. Then we look at themes within those wonderings. Teachers rank what they most want to learn about, and we make groupings across grade levels based on their interests. Topics often begin with broad questions, such as: *What is the effectiveness of scaffolding? How can we improve classroom management?* Then we work with them to narrow their questions enough to actually get

answers. For example, one group is looking at academic language. *How can we get to deeper discourse with students?* Another wants to know how to promote internal motivation of students. *What strategies can we use in the classroom to encourage internal motivation?*”

Each action research team moves at its own pace. “There’s not a set timeline,” Bagley says. “It depends how long they need to get answers. Baseline data helps us know where we are starting. Then, after an intervention or action, how does data change?”

## Key Takeaways

- Inquiry should be embedded throughout each school’s data journey, as staff use data to pose questions, examine evidence, and evaluate impact.
- Use of protocols and questioning strategies can help to scaffold the inquiry process, enabling teams to move from broad topics to more narrow research questions.
- As staff become more comfortable with data analysis, they can take on deeper work, such as peer learning labs and action research.

## Reflect

- If you are at the early stages of your data journey, are you identifying questions that data will help you explore?
- As you build data literacy across your school system, are you scaffolding inquiry with protocols and questioning techniques that will lead to better research?
- Are your teams exploring questions that call for both qualitative and quantitative data to provide a holistic view of students?

- How will you determine your school's readiness to move into deeper work with data, such as peer learning labs or action research?

## How does LAC support schools in this work?

LAC provides a wide range of tools and services to help schools build a data culture, but foremost we nurture a culture of shared inquiry within the schools:

- Via our regular webinars where schools share the questions they investigate with their faculties on regular basis
- By running dedicated sessions focused on data conversations and common questions worth asking of data
- By connecting schools with other members of the Collaborative either directly or indirectly to benefit from their knowledge, experience, and expertise
- Through the LAC Learning Space, where we share a number of resources to facilitate data conversations
- By facilitating training sessions with the faculty to introduce and rehearse the questions about teaching and learning to investigate with data

## Suggested Resources

### Webinars

- [Learning Journeys session at AAIE Conference 2022](#)
- [Learning Journeys with the LAC - NCPA](#)
- [4th Virtual Meetup - Sep 25, 2021 - Learning Journey AIS Bucharest](#)

- [4th Virtual Meetup - Sep 25, 2021 - Learning Journey AS Warsaw](#)

## Blog entries and Articles

- [Using Data to Support Teacher and Student Growth](#)
- [Designing Best-Fit Classes with the Class Placement Engine](#)
- [Building and Leading a School Culture that Values Data Informed Dialogue to Improve Student Learning](#)
- [Making Student Data Part of the Conversation!](#)
- [Using data to inform decision-making within the Student Support Team](#)
- [LAC School Spotlight - American School of Bucharest](#)

# Chapter 5: Improving Student Outcomes

## ***How does a data culture make a difference for student learning and well-being?***

The strategies discussed in previous chapters — organizing data, developing teachers’ and leaders’ data literacy, adopting norms and protocols for collaboration — all contribute to building a strong data culture across a school system. In this chapter, we focus on benefits for students when their schools use both quantitative and qualitative data to support them as learners and attend to their social and emotional well-being.



Better access to information about students can contribute to stronger relationships, improvements in instruction, and student support tailored to individual needs. Simply put, using data “will change how you work with students,” says Andy Pontius of American International School of Bucharest. Data-informed discussions help to bring these benefits to light, with evidence of impact sustaining the data journey.

Although knowing students’ individual strengths, interests, and previous school experiences can lead to stronger teacher-student relationships, this can be challenging in international schools, where turnover in student enrollment and instructional staff is an ongoing factor.

The following examples illustrate specific ways that students stand to gain from a data culture.

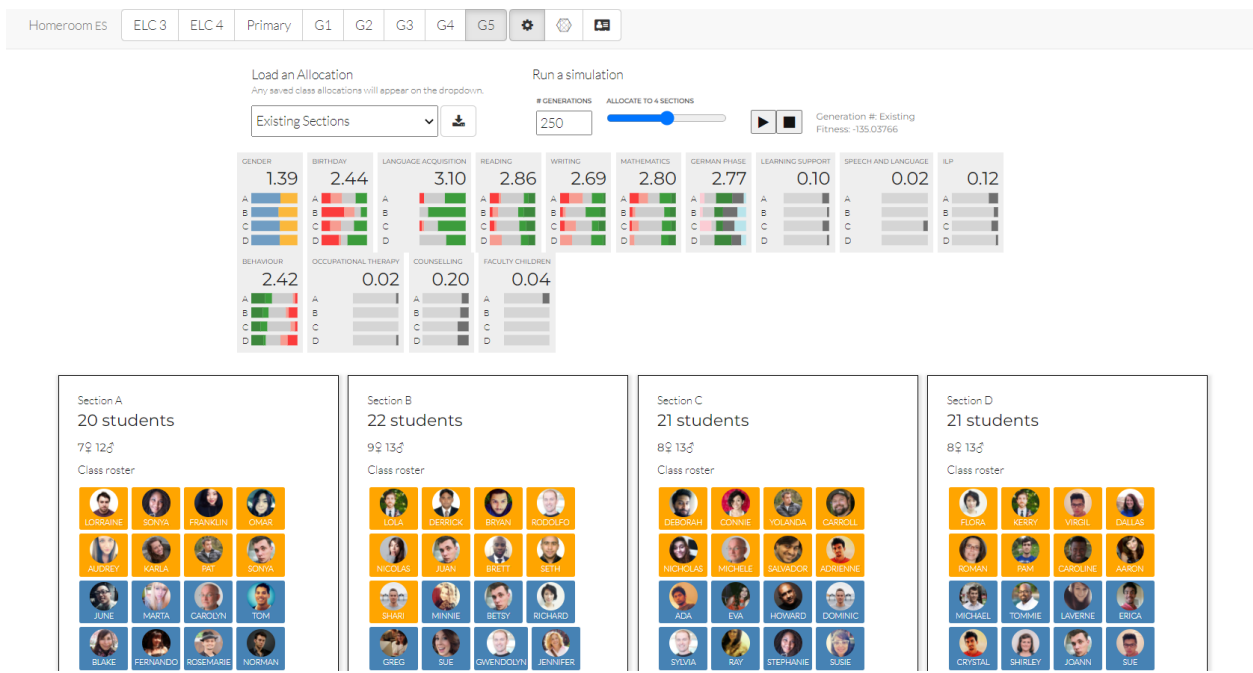
### **Class Placement Engine at Vienna International School**

Helping students feel safe and supported is a foundation for learning. At the Vienna International School, class assignments are intentionally made to support students' academic and social-emotional well-being. The goal is for each classroom to “have the highest potential to become safe, caring, and cohesive learning communities,” explains Ben Hacking, Deputy Principal.

In the past, faculty created paper “baseball cards” of each student with key demographic, academic, and social information. When it was time to make class placements, teacher teams moved cards around, attempting to create groupings that would emphasize positive combinations while avoiding negative ones.

“There were simply too many variables to consider,” Hacking says, resulting in some students unhappy with their placements and teachers looking for more effective strategies.

The screenshot shows a digital form for a student named Gerald Griffith. At the top, it identifies the user as 'Gerald Griffith Homeroom 1A, joined 2018-08-22 00:00:00' with a profile picture and the initials 'GER' and 'AT'. Below this, there are several checkboxes for support services: ILP, Counselor Support, Occupational Therapy, Learning Support Intervention, Speech/Language Support, and Faculty child. The 'Faculty child' checkbox is checked. Underneath are several horizontal progress bars for academic and behavioral metrics: German (Phase 3), ELA (Phase 2), Reading (Low Average), Writing (Low Average), Mathematics (Low Average), and Behaviour Needs (Low). At the bottom, there are two text input fields: 'Positive partnerships' containing 'Hardy, Krista', 'Fraser, Saul', and 'Palmer, Cecilia'; and 'Negative partnerships' containing 'Wies, April' and 'Estrada, Wendell'. 'Cancel' and 'Submit' buttons are at the bottom right.



Hacking approached LAC to develop a solution. The Class Placement Engine enables teachers to make assignments more effectively, using their own criteria along with individual student profiles as a starting point. Hacking describes how the process works in a [blog post](#):

Teachers simply select the number of sections to mix classes into, press play, and watch the engine generate class mixes automatically based on criteria we set. The algorithm is designed to achieve balanced sections with the maximum amount of positive partnerships and the minimum amount of negative partnerships per section. Once complete, teachers can click and drag students across sections to make minor changes based on their own professional judgment which an algorithm can never replace.

The American International School of Bucharest has seen similar benefits by using data to assign cohorts of students. Teachers who used data to inform those assignments saw “a huge impact,” according to Andrew Pontius, with one team reporting 57 positive



partnerships and zero negative partnerships. That's the kind of outcome that builds buy-in from teachers. "They can see the value of this. That gets more people to the table."

## **Empowering Learning Support**

To help all learners succeed academically, teachers, administrators, instructional coaches, and academic support specialists need access to real-time information about which students are struggling, and why. Issues affecting learning may be related to their English fluency, special education needs, emotional or physical health, or a host of other factors. Teacher observations provide important insights. When their qualitative assessments are combined with visualizations that draw on multiple data sources, teams can provide more effective and timely support tailored to individual student needs.

Schools are better able to differentiate how they identify and work with individual students when they have increased and more timely access to data. As the following examples illustrate, LAC schools are leveraging their data culture in a variety of ways to provide learning support.

At the Vienna International School, "a lot of difference is made in our work with students when supported by learning analytics," says Ben Hacking. "We use it to identify students in need of support (both remediation and extension), to help devise strategies for intervention, and to see how students have responded to intervention. It's the fuel in the RTI [Response to Intervention]/MTSS [Multi-Tiered System of Supports] car."

At the International School of Luxembourg, members of the Learning Support Team have been early adopters of data to guide their work with students. In the past, they

used a Google spreadsheet to collect data. LAC visualizations “provide them with a much more powerful way of looking at data to help them determine, ‘How do I best support this particular student?’” says David Walker, Deputy Lower School Principal.

Like many international schools, the International School of Luxembourg uses a Multi-Tiered System of Supports (MTSS) framework to identify students who are struggling and provide them with tailored, tiered support. “Data will help with this for individual students,” says Walker, “and we can also look at trends.” In the lower school, two academic leaders serve as instructional coaches (one for literacy, one for math). “They look at the same kind of data as the learning support teams, but they’re looking at all students.” Using data to analyze trends helps them determine where to put their coaching efforts, Walker says.

At the International School of Phnom Penh (ISPP), more timely access to individual data has enabled secondary teachers and support services team members to identify students in need of assistance or intervention. Student data dashboards provide a quick snapshot of each student’s progress. Jonathan Smedes, Director of Learning, Teaching, Innovation, and Impact at ISPP, explains the benefits in a [blog post](#):

Where once, the team may have leapt to a conclusion about a particular student based on current teacher feedback, they were now able to provide much more context with more specific sets of longitudinal data that inform more appropriate responses and interventions.

The American International School of Bucharest has developed a flow process, informed by data, to guide student support. Andrew Pontius describes how this system works:

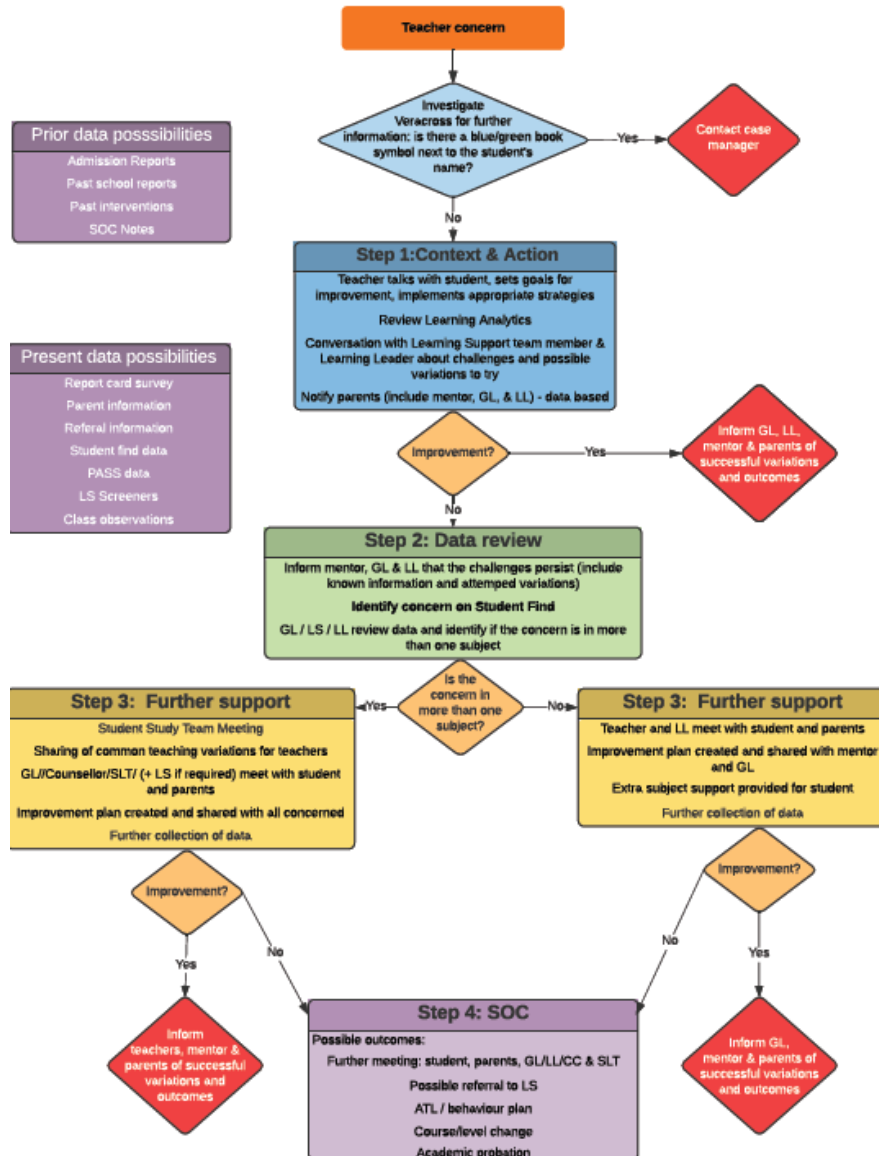
An eighth of a way through the year, teachers tick a box if a particular student is having trouble. If a student gets more than three ticks for different classes, then we have a grade-level chat about him or her. What strategies is everybody trying? What's working for them in other classes? If students are still struggling as the quarter continues, we'll have next-tier conversations. Do we need diagnostics for possible learning support? Do we need to get a counselor

involved? Or are the interventions working?

## Secondary Student Support process

David White | August 11, 2021

This support process is based on the belief that clear guidelines and consistency of practice are necessary for students, parents and teachers to feel secure and supported. While there will inevitably be some variation in process and outcomes depending on the needs of individual students, the purpose of this visual is to ensure clear, open communication and to enable supportive relationships between teachers, students and parents.



Having not only real-time data but also historical information about student progress “has definitely changed conversations around students,” Pontius adds, “as we can see patterns and trends. Sometimes we forget that while a student may still be struggling in

some areas, they are actually improving and need praise on that rather than being continually reminded of their struggle.”

## **Supporting English Language Learners**

Supporting English learners is another area where data can help to inform instruction. At the American School of Warsaw, students who are still working toward fluency attend an additional class to support their development of academic and social English. Carol Jordan, Director of Teaching and Learning, describes the questions that teachers grapple with: “When are students at peer equivalency and ready to be released from that additional class?” Analysis of reading scores and other measures of English language proficiency help teachers determine when individual students no longer need the support class. “That’s really important,” Jordan adds, “because you don’t want to hold kids back. In the past, you’d tend to keep students in the support class longer than they needed. Now we have the data *and* the teachers’ professional intuition to help us know when to take that scaffold away.”

As the previous examples illustrate, data culture is important for helping students get the support that they need when they need it. It’s also useful for identifying students who are ready to accelerate or extend their learning.

## **Supporting Highly Able Learners at American School of Warsaw**

At a data retreat, a third-grade teacher at American School of Warsaw raised a question about how to challenge a highly able young mathematician. “Her intuition was supported by the data. This child had clearly exceeded grade-level expectations,” recalls Carol Jordan. “The question was: Well, now what? What do we do with a child who’s off the

charts in mathematics?” An instructional coach collaborated with the teacher to take a deeper dive into the student’s learner profile and achievement scores. After analyzing the data, they used an adaptive tool for mathematics (IXL Math) to suggest specific questions and enrichment activities. Says Jordan, “It wasn’t just looking at the fact that he was in the 99<sup>th</sup> percentile. They really looked at that data and created activities that would push him in specific areas of mathematics.”

## **Personalized Learning**

International schools that are moving in the direction of more personalized learning leverage individual student data to support student growth.

Christopher Garden, Deputy Academic Director, ISS International School in Singapore, describes the close connection between personalization and the school’s use of data:

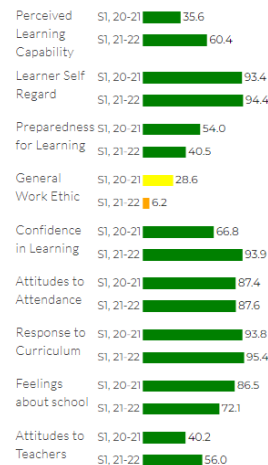
This is linked directly to personalized learning, with homeroom teachers using the data to create a student profile and support students in understanding their strengths and areas for development. This allows for students to drive their own goal setting and take more ownership of these goals. Along with building teacher confidence in this point, consistency is also important for students to be able to see their growth over time.

## **Supporting the Whole Child**

Schools globally are increasingly focused on students’ social and emotional learning along with their academic growth. Data tools can help to assess students’ attitudes towards school and support their development of non-academic but critically important competencies. Having a sense of agency or the ability to self-manage can seem

intangible and challenging to assess. Students’ development of those competencies “is easier to see now with LAC data,” says Raedel Bagley at International School of Dongguan.

PASS Percentile Score



At the International School of Kuala Lumpur, student support has expanded well beyond academics. Identifying students who are experiencing anxiety, and then providing support and monitoring their progress, is just one example of how the school’s social and emotional focus correlates with its data culture. “People are recognizing that we can identify and respond to social, emotional, and behavioral needs. In the past, we weren’t addressing them at such a broad scale,” says Trina Cobbledick, Director of Student Services. Data tools can help to identify concerns, but must be coupled with appropriate responses, she emphasizes. In order to address students’ emotional and mental health concerns, for example, the school has added a partnership with a psychological counseling service to provide on-campus evaluations and support services.

### Assessing Approaches to Learning at AIS Bucharest

“Our vision is holistic, focused on the whole child,” explains Andrew Pontius. In every class, teachers assess students’ growth in their Approaches to Learning (ATLs),

including organization, respect, engagement, and collaboration. Some teachers also ask students to assess themselves on ATLs.

“We can look at that data to have conversations about what’s going on with a particular student. Maybe a student seems disorganized. Is that happening in every class? We can quickly look across classes to identify trends. If needed, we can design short-term interventions to address the issue.”

### **Assessing the Learner Profile at American School in Japan**

The American School in Japan (ASIJ) has adopted a Portrait of a Learner that identifies key competencies that students need to develop to prepare for the future. Although still a work in progress, ASIJ teachers are identifying success criteria for each of the portrait competencies and helping students recognize their growth and challenges. That work aligns with the school’s strategic goal of measuring progress. “For every initiative, there is a way to measure progress. We are looking at various ways to gather data around the Portrait of a Learning competencies to incorporate student reflection and voices,” says Jilene Murray, Learning Data and Assessment Specialist.



# ASIJ's Portrait of a Learner

ASIJ's Portrait of Learner is a combination of transdisciplinary global competencies that our students will need to survive and thrive when navigating a complex world. They are common and consistent outcomes that, once fully embedded, will drive learning across content areas and over time at ASIJ. Our Portrait of a Learner is largely derived from the 6Cs developed by New Pedagogies for Deeper Learning.



## Mindset

- Self-directed learners
- An open, positive view toward learning and life
- Grit, resilience, and adaptability
- Empathy, compassion, and integrity in action



## Global Citizenship

- A global perspective
- Commitment to human equity and well-being through empathy and compassion for diverse values and worldviews
- Genuine interest in human and environmental sustainability
- Solving ambiguous and complex problems in the real world to benefit citizens



## Collaboration

- Working interdependently as a team
- Interpersonal and team-related skills
- Social, emotional, and intercultural skills
- Managing team dynamics and challenges



## Communication

- Communication designed for audience and impact
- Message advocates a purpose and makes an impact
- Reflection to further develop and improve communication
- Voice and identity expressed to advance humanity



## Creativity

- Economic and social entrepreneurialism
- Asking the right inquiry questions
- Pursuing and expressing novel ideas and solutions
- Leadership to turn ideas into action



## Critical Thinking

- Evaluating information and arguments
- Making connections and identifying patterns
- Meaningful knowledge construction
- Experimenting, reflecting, and taking action on ideas in the real world

“Teachers are starting to talk with their students about the portrait and what evidence [of growth] might look like in the classroom when it comes to grit, growth, mindset, social awareness, self-efficacy, self-management, and emotional regulation,” explains Murray.

The school is also working with [New Pedagogies for Deep Learning](#), a thought partner that emphasizes student-centered learning. “If we want students at the center,” Murray adds, “it can’t be adults doing all the measuring and tracking.”

## Key Takeaways

- LAC schools report a wide range of benefits for students as a result of using data to address problems of practice and provide more personalized and timely support.
- International schools, which experience transitions in enrollment and staffing, benefit from data tools that enable teachers to know their students better and make informed decisions regarding class placements and cohorts.
- Data-informed practices help teachers and specialists tailor student support to address individual learner needs. These practices align with frameworks for intervention, such as Multi-Tiered Support Systems and language support for English learners. In addition to supporting the academic needs of struggling students, data practices can also benefit highly able students.
- Data tools can be leveraged to assess students' social and emotional wellness and promote a more holistic approach to learning.

## Reflect

- How might teachers use engines like the Student Data Profiles to get to know students' strengths and interests early in the school term, or the Class Placement Engine to plan for high-performing learning communities?
- How can your school integrate data engines into existing systems of student support?

- How might you use data engines to address whole-child needs? How will you document evidence of impact with regard to social and emotional learning?

## **How does LAC support schools in this work?**

LAC provides a wide range of tools and services to help schools build a data culture:

- LAC offers a web-based, visual, student analytics platform for teachers and school leaders to learn from student data
- The platform presents instant, relevant, and interactive views of a student's academic and personal development
- All engines and data visualization have been developed in collaboration with schools in response to their requests and direct needs
- All your Data Visualized in one Place - single source of the truth to inform productive conversations about school performance and learners.
- International School Context providing evidence you need to support key decisions
- We help schools to manage the complexity around data and metrics to enable critical evaluation of systems and processes and identify areas of improvement and set goals

## **Suggested Resources**

### **Webinars**

- [Learning Journeys session at AAIE Conference 2022](#)
- [Harnessing Analytics to Better Understanding Learners](#)
- [4th Virtual Meetup - Sep 25, 2021 - Learning Journey AIS Bucharest](#)
- [4th Virtual Meetup - Sep 25, 2021 - Learning Journey AS Warsaw](#)

## **Blog entries and Articles**

- [How To Speak With Families and Communities About MTSS](#)
- [Designing Best-Fit Classes with the Class Placement Engine](#)
- [Using data to inform decision-making within the Student Support Team](#)
- [LAC School Spotlight - American School of Bucharest](#)
- [Social-Emotional Learning Is Important. But What Do All Those SEL Terms, Actually Mean for the Classroom?](#)
- [Rethinking Data: How to Create a Holistic View of Students](#)
- [The Simple Genius of a Good Graphic](#)

## Chapter 6: Building Teacher Efficacy

***How does a data culture help teachers improve their practice, reach goals for professional growth, and build collective efficacy?***

In schools that are building a strong data culture, teachers may be asked to take on unfamiliar roles, collaborate with colleagues in new ways, and set goals for their own professional growth. They may need to become more transparent about their classroom practices. They may have to address gaps in their own data literacy while continuing to trust their qualitative assessments and observations of students. For a data culture to truly take hold, teachers must see the value—for their students and for themselves.

Respecting teachers' professional judgment can be an important starting point for data discussions. "Some people have had bad experiences where data was used as a way to uncover weaknesses," acknowledges Carol Jordan at American School of Warsaw. "Teachers know a lot. They have incredible intuition. Starting there, and then bringing in quantitative data, can create wonderings. It changes the whole dynamic from data being the 'stick' to something really useful to you as a teacher."

"We want to see teacher teams empowered," says Aloha Lavina at the International School of Myanmar. Teachers will be empowered to contribute to the data culture "only if you give them the necessary skills and time to build their capacity to lead. Let them think through the problems that we are thinking through as a school. We know that teacher efficacy is going to be the source of energy for carrying this work forward," she says.

Increasing teacher efficacy yields benefits for adults and students alike. “Collective efficacy is the factor that has the most impact on student achievement,” notes Maria Domingues at Nansha College Preparatory Academy.



## Rollout

Teachers and instructional leaders strengthen their collective efficacy when they can engage with data to improve their practice. This requires an investment of staff time to identify and gather data, build collaborative structures, and increase data literacy so that teachers can engage in data-informed discussion with confidence. The following examples illustrate how schools are building teacher capacity for this work.

### **Sharing Strategies at International School of Kuala Lumpur**

At the International School of Kuala Lumpur, teachers meet monthly for Student Life meetings. These sessions focus on shared problems of practice rather than interventions for specific students. “These are strategy sessions. People choose which meeting to attend based on the topic, technique, or student case study that is being presented,” explains Trina Cobbledick, Director of Student Services. Teacher surveys determine the particular situations to be presented for collective problem solving.

For example, high school teachers raised concerns about incomplete assignments and missing student work. In their strategy session, participants categorized what they thought the root cause of the problem could be. Then their focus shifted to possible solutions. They discussed questions such as, “What are some of the Tier 1 systematic universal design practices that we can put into place? How can we make this specific for kids and teach those skills [of self-management]? When should we give students more independence so they’re managing their own deadlines?”

Along with brainstorming solutions, teachers focused on outcomes. “What data should we collect to see if the solution is working?” Using data to help teachers see that their solutions have produced tangible benefits makes them more likely to go through the process again, Cobbledick says, building their sense of collective efficacy.

### **Shifting the Conversation at International School of Myanmar**

At the International School of Myanmar, Aloha Lavina describes her colleagues as “a staff that loves to learn.” As teachers have learned more about data, they have become more confident about distinguishing evidence from opinion. They are combining quantitative data with qualitative observations to generate a more complete picture of where students are. “They have the craftsmanship to talk about teaching and learning,” Lavina says, and are using their voices to raise questions that they want to explore more deeply.

Elementary teachers, for example, wanted to evaluate their curriculum map from a literacy perspective. Instead of waiting for MAP results, which are provided twice yearly, teachers looked at data from a responsive platform that students use independently, generating nearly real-time results about reading comprehension. “Teachers wanted to take that data and reconcile it with the curriculum map. They wondered, are there any units that are not as robust as we thought they were? How did students respond? And at the end of the year, what did MAP tell us?” Teachers’ collective inquiry enabled them to “triangulate their own assessments on their own feedback on their own teaching,” Lavina says, leading to improvements in curriculum design.

Another benefit is worth noting. “When teachers understand the difference between opinion and evidence,” Lavina adds, “that trickles down. It’s something that teachers start to emphasize with their students.”

## **Deprivatizing Practice**

In schools that are developing their data culture, teachers need to be comfortable with sharing their teaching practices and student work with colleagues and leadership teams. It’s the opposite of teaching behind closed classroom doors.

“Deprivatization of practice is difficult for some teachers,” acknowledges Raedel Bagley at International School Dongguan. She acknowledges the personal and emotional investment that teachers make in their profession. “Teachers tend to be engrossed in their own students. It can be hard to see student performance objectively. It’s a big culture change.”

She encourages actively listening to how teachers describe their students. “There’s a difference between a teacher saying a student *can’t* do something vs. saying a student is not *yet* doing something.” Along with listening, it helps to drill down into objective evidence—without any judgment or blame for student outcomes. “It’s not about putting a teacher on the spot. It’s about understanding where students are and helping them move forward.” Data can also help teachers recognize what a seemingly struggling student is doing successfully. “Then how can we build on that? That’s a shift from a deficit mindset to a focus on assets,” Bagley says.



## Key Takeaways

- Building a data culture creates new roles and growth opportunities for teachers. To build buy-in, teachers need to see the value of this work. They also need to know that a data-informed culture will continue to value their professional judgment and intuition.
- Teachers are more likely to engage in data discussion when they can connect the work to relevant problems of practice and have choices about where to focus their attention.
- Sharing data about student learning with colleagues and leaders can be uncomfortable for some teachers. Deprivatizing practice is more likely to be successful if the focus is on evidence of learning rather than placing blame or making judgments.

## Reflect

- How can you ensure that teachers know their professional judgment, classroom observations, and intuition will be valued in data discussions?
- How can you encourage teachers to identify problems of practice that are relevant for them?
- What evidence will you look for to demonstrate how data discussions are building collective efficacy?

## How does LAC support schools in this work?

LAC provides a wide range of tools and services to help schools build a data culture, help teachers improve their practice, and reach goals for professional growth:

- Via our regular webinars where schools share the questions they investigate with their faculties on regular basis
- By facilitating dedicated training sessions focused on data conversations, use of the data visualizations and learning to investigate with data
- By connecting schools with other members of the Collaborative either directly or indirectly to benefit from their knowledge, experience, and expertise
- Through the LAC Learning Space where we share a number of resources to build teachers' capacity to work with data, such as our Data Literacy workshops

## Suggested Resources

### Webinars

- [Learning Journeys session at AAIE Conference 2022](#)
- [Learning Journeys with the LAC - NCPA](#)

### Blog entries and Articles

- [Using Data to Support Teacher and Student Growth](#)
- [Building and Leading a School Culture that Values Data Informed Dialogue to Improve Student Learning](#)



# Chapter 7: Overcoming Challenges

## ***What challenges can schools anticipate on their data journeys?***

As we've read in previous chapters, schools embark on data journeys for a variety of reasons. Catalysts can range from a change in leadership priorities to strategic planning that emphasizes evidence. Action research and self-study conducted as part of accreditation can also raise questions best investigated with data tools. Schools describe different levels of readiness and capacity for building their data culture. In this chapter, we highlight common challenges and offer solutions from across the LAC community.

### **Making Data a Priority**

Many leaders describe the challenge of making their data journey a priority when they have competing initiatives and responsibilities. “We recognize it’s important, but there’s too much vying for our attention,” one school principal explained. The challenges of dealing with the pandemic have exacerbated this situation. “It’s hard to focus on something new when you’re in a crisis,” another leader added.

Identifying early adopters within your school system is one strategy to keep the focus on building a data culture. “We need cheerleaders—academic leaders who can see the immediate benefits,” says David Walker at International School of Luxembourg. “We want to empower them to use data effectively and then use word of mouth to get others on board.”

Another strategy is to dedicate time for the work. “Time is the most finite resource we have,” notes Aloha Lavina at International School of Myanmar. Her school emphasizes data culture as essential work. “This cannot be added on top of everything else or we’ll have 20 different initiatives underway. Teachers will just be running from meeting to meeting without time to do deep thinking,” she cautions. The calendar reserves time specifically for data conversations, and expectations are clear that teachers will use that time to ask questions about data, explore visualizations, collaborate, and deepen their shared understanding of how to support student learning. Making these conversations a priority “also means we have to take some things away,” she adds, so that teachers can focus on this essential work.

### **Overcoming Resistance**

Early in their data journeys, some schools have encountered healthy skepticism from colleagues who resist what they describe as “reducing students to numbers.” Some teachers, drawing on their own deep experience, may trust their intuition or professional judgment more than data. A lack of buy-in can also come from concerns that student data will be used for teacher evaluation or “as a stick,” to enforce accountability.

“It comes back to how you talk about data,” says Ben Hacking of Vienna International School. “How are you facilitating meetings with positive framing?” When qualitative data—such as teacher observations—are included in data discussions, “you’re building a holistic picture of a student rather than banking purely on numbers.”

Earlier chapters described specific strategies to build teachers’ data literacy with scaffolds, protocols, collaborative structures, and strategies for adult learning. As teachers and leaders participate in data conversations together, it’s helpful to continue inviting questions and concerns. At Nansha College Preparatory Academy, every data

meeting concludes with a “plusses and deltas” prompt. Explains Maria Domingues, “A plus is what went well and a delta is what can be changed. Then we start every meeting with the plusses and deltas from the previous meeting.” It’s a concrete way to ensure that learning is ongoing and that all participants have a voice, which generates more buy-in over time.

Across the LAC, many schools also describe data culture taking hold in pockets rather than across the entire organization. One leader described his school’s data culture as having “islands of enthusiasm among faculty. We need to connect the islands.”

### **Anticipating Turnover**

Because international schools can expect a certain amount of staff turnover annually, they face unique challenges when it comes to maintaining the momentum for their data culture. Leadership changes or realignment of strategic priorities can also dilute the data culture, if it is not seen as a priority.

To address this challenge, some schools have been careful to document roles and responsibilities so that the data journey doesn’t end if a key person leaves.

When Jilene Murray took on the role of Learning Data and Assessment Specialist at the American School in Japan, she had the advantage of a detailed document created by her predecessor. “It maps everything out from month to month. It describes, here are the things you need to prepare for at the start of a new school year. Here’s when MAP testing is coming. Here’s when we gather perception data.” In addition, she was able to meet with her predecessor before taking on her new role. “He showed me how to pull information, where data is stored, how he had created in-house analytics using Google

Data Studio.” That enabled her to build on what had already been accomplished rather than starting over.

Some schools are creating video tutorials to help newcomers to data culture get familiar with using protocols or understand how to use different data tools.

At the International School of Beijing, Laura Brown and her team produced a short video of a teacher modeling a data conference with a student. “Their conversation was about growth – here’s how you’re growing as a learner,” she says, with the teacher providing concrete evidence of that learning. Seeing the video prompted other teachers to try the same approach with their own students. “It got us talking about what it means to be a school focused on growth,” she says. “We know that data is really important – but it’s important to remember that it’s only a snapshot,” she adds. For teachers, access to data offers one more tool in their toolkit for knowing and supporting each learner.

To ensure that a data culture won’t erode with staff or leadership changes, “we need to get to the point where we rely on it,” says Melissa Schaub at American International School of Lagos. “When you have a system in place, when you use data to create action plans, and when you see the plans come to life, then there’s that sense of ‘we need to rely on this’ rather than ‘it’s an option.’”

## **Key Takeaways**

- Building a data culture requires a commitment of staff time and resources.
- Overcoming resistance or a lack of staff buy-in can be overcome by identifying early adopters and encouraging them to take on peer leadership roles.

- Planning for staff transitions can help to maintain momentum for data culture.

## Reflect

- If you are early in your data journey, how are you connecting the work of identifying and gathering data to what you value as a school community? How are you inviting input from across your system to define your *why* so that there is shared ownership of this work?
- When data discussions lead to positive outcomes for teaching and learning, how are you celebrating successes?
- What systems can you adopt to ensure that your data culture is sustainable, despite future staff transitions?

## How does LAC support schools in this work?

LAC provides a wide range of tools and services to help schools build a data culture and overcome common challenges:

- We help schools to manage the data complexity to identify areas of improvement and set goals
- We offer unlimited remote strategic and technical support
- We connect schools with other members of the Collaborative to benefit from their knowledge, experience, and expertise
- We facilitate regular webinars where schools share their data journeys
- We provide access to our LAC Learning Space full of resources for leveraging the LAC



- We offer Learning Data Audits and Data Literacy Workshops
- The LAC blog offers a wide variety of articles about data literacy and beyond
- The monthly newsletter has a regular section where we promote best articles from around the world about building a culture of data use

## Suggested Resources

### Webinars

- [Learning Journeys session at AAIE Conference 2022](#)
- [Learning Journeys with the LAC - NCPA](#)

### Blog entries and Articles

- [LAC School Spotlight - International School of Beijing](#)
- [Designing Best-Fit Classes with the Class Placement Engine](#)
- [Building and Leading a School Culture that Values Data Informed Dialogue to Improve Student Learning](#)
- [Sharing Data to Create Stronger Parent Partnerships](#)
- [Using data to inform decision-making within the Student Support Team](#)
- [Using Student-Generated Questions to Promote Deeper Thinking](#)

# Chapter 8: Professional Development that Builds

## Data Culture

### ***How are schools designing and implementing professional development to build teachers' data literacy and, ultimately, improve student learning?***

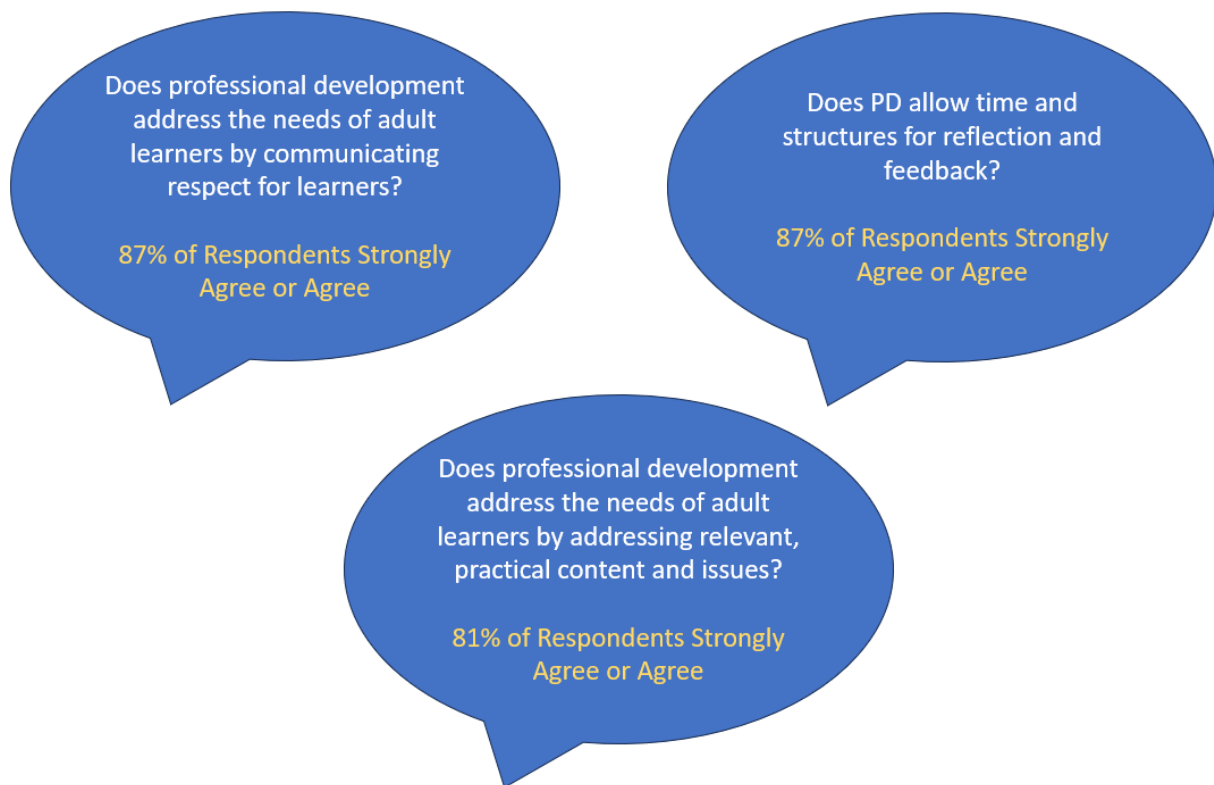
Teachers are becoming increasingly important consumers of data. Although we know that school leaders will continue to track schoolwide trends, teachers who are comfortable using data tools and protocols will be better able to support the diverse needs of individual students. They will also be prepared to discuss learning goals, supports, and outcomes with students and parents.

How are schools designing and implementing professional development to build teachers' data literacy and, ultimately, improve student learning? This question was the focus of a survey and follow-up interviews conducted in 2023 with LAC members. In this chapter, we share data-informed strategies that are building teacher capacity to improve teaching and learning.

### **Focus on High-Quality Professional Learning**

Broadly speaking, high-quality professional development produces a change in teaching practices and student outcomes (Archibald, Coggshall, Croft, & Geo, 2011). Our survey shows that LAC schools are attending to most indicators of effective professional learning as they work to build data literacy among their teaching staff (Darling-Hammond, Hyler, & Gardner, 2017; Gusky, 2003; Knowles, Holton, & Swanson, 2011).

In particular, collaboration plays a key role in professional development across the Collaborative. This is true for all schools responding to the survey. In addition, most schools surveyed (87%) focus specifically on the needs of adult learners by communicating respect for teachers. They allow time and structures for feedback and reflection as part of the learning experience (87%). In the majority of schools responding, professional learning addresses relevant, practical content and issues (81%).

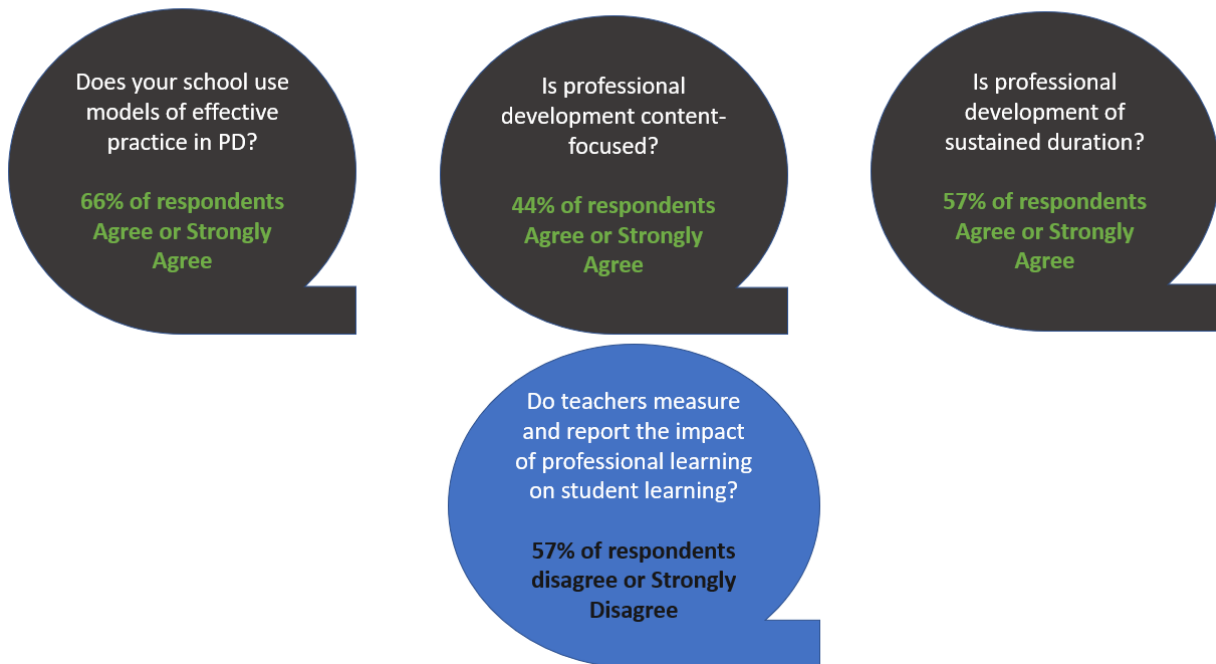


Other indicators worth noting:

- Teachers are afforded autonomy and self-direction when it comes to professional development in the majority of schools (69%).
- Slightly more than half of schools (57%) report sustained duration of professional development.

- Most schools (69%) incorporate active learning in professional development so that teachers engage in the same style of learning as they are designing for students.

## To What Extent?

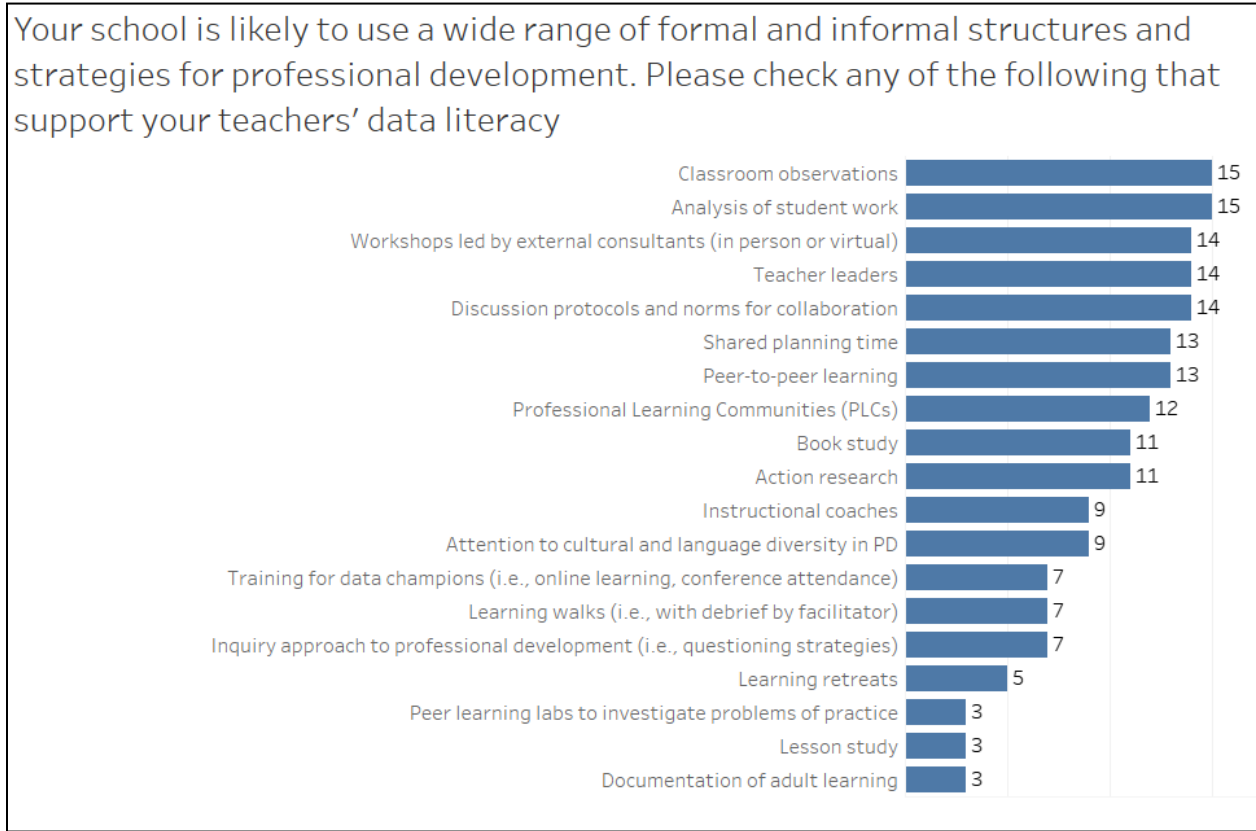


Despite these positive trends, no schools report having a formal process in place yet to measure and report on the effect of professional development on student learning. In many cases, student outcomes related to teacher development are captured anecdotally. As one school leader noted, “This rarely happens in a quantitative manner but does occur through reflections.” Similarly, another administrator observed, “Students complete surveys on teachers which the teachers have to reflect on, so in theory there is some data around this. But in practice it isn't used as a driver of changing student learning.”

Across LAC, schools report a wide range of approaches to building teachers' data literacy, from informal conversations to instructional coaching to more formal programs

of study. The figure below highlights the range of professional learning strategies schools identified that support teachers’ data literacy.

Here’s a visualization from survey responses to this question: “Your school is likely to use a wide range of formal and informal structures and strategies for professional development. Please check any of the following that support your teachers’ data literacy:”



### Commit Time

In both the survey and follow-up interviews, school leaders emphasized the importance—and also the challenge—of devoting sufficient time to building teachers’ data literacy. Several schools acknowledged the difficulty of finding time within teachers’ already busy schedules to commit to professional development. At least one

administrator suggested that the underlying issue isn't a shortage of time, but rather reluctance to make learning about data a priority.

In follow-up interviews, schools shared strategies that are helping to create more time and motivation for teachers to learn together about data-informed instruction.

American International School of Guangzhou has doubled time for professional learning since 2021. Eric Crabtree, Assistant Principal for Elementary, explained the rationale:

“We realized our teachers don't have enough time to do what we're asking them to do. If we were able to release an hour early one day a week, we would double our professional development and collaborative learning time.” With buy-in from senior leadership, school board, and parents, the plan was implemented two years ago. “It's been a huge pivot point for the school.”

At American International School Vietnam, teachers have voice and choice when it comes to professional development. This includes offering optional Q&A sessions, asynchronous sessions, breakouts, book study groups, and instructional coaching. “We usually give them the option of saying ‘I don't have capacity for this right now,’” adds Emma Burns, MYP Curriculum Coordinator, “to allow for well-being.”

### **Focus on Purpose First**

As emphasized in previous chapters, teachers bring different levels of understanding when it comes to using data to guide teaching and learning. For teachers who are new to learning about data, it's important to start with a discussion of purpose.

A faculty-wide discussion of “the what and the why” of data gives everyone common language and shared purpose early in the school year, according to Nancy Fairburn, Director of Teaching and Learning at NIST. This can be especially important in

international schools, where some staff turnover is expected. “To have data dialogues, you have to be literate in how to interpret and analyze,” she added. “We build that through spending time together in professional learning. It’s part of building the culture, doing this together. We’re all part of the team.”

Discussions of “the what and the why” also help teachers understand that data includes both qualitative and quantitative information, reinforcing the value of teacher insight and observations. Fairburn suggests having these culture-building conversations with colleagues from different grade levels and content areas. “Then they see the importance of data for all learners, from age 3 to 18.”

When teachers are first introduced to data analytics, some may respond with skepticism if they mistakenly think the goal is “to reduce students to numbers.” Others may worry about admitting what they don’t know. “Many of our elementary teachers just don’t feel confident about math,” said Eric Crabree. “Quantitative analysis and data analytics and the connection, real or perceived, to math is tenuous at best for these teachers.” His strategy is to “move slowly and carefully” to build teachers’ confidence. “Part of our challenge is to go back and define the words, define the purpose of these vocabulary words in our conversations.”

Ruth Herrin, Assistant Secondary Principal in Guangzhou, notices greater buy-in from teachers who are new to data-informed instruction when they understand the purpose. “When we first present data, some teachers are nervous. They see a new graph and they don’t know what to do with it. Sitting and talking it through with teachers is helpful. Then they see, ‘Oh, this is going to be useful. I can make a better decision tomorrow based on what I’m seeing here.’ Then it’s not just an intellectual exercise—it can be used to improve teaching.”

At Vienna International School, building teachers' data literacy often requires changing attitudes. "Some teachers see this as an accountability stick and a reflection on their teaching rather than a reflection on the students' learning," explains Ben Hacking, Primary School Deputy Principal. "We're trying to work toward teachers seeing data as a tool for empowerment. It's about structuring the conversation to focus on, what's going well? How can we work together to port that over [to other teachers]?" At student support team meetings, for example, "data is really good to help us identify students with needs. We have meetings throughout the year with a structured protocol. It's within the context of that conversation where teachers see data as a helpful tool for gaining insights and measuring progress."

American International School Vietnam has hosted "data roadshows" to introduce teachers to LAC tools. The small-group setting and interactive format of these events give teachers time and space for hands-on learning. Emma Burns describes how she and two colleagues have facilitated the sessions: "We met with department teams [of about 10 teachers] rather than the whole faculty. We modeled using LAC to look at data snapshots with the see-think-wonder protocol. Then we had participants log in and pull up their own grade-level data. Working with a thinking partner, they looked for things they noticed. Finally, we came back together as a whole group to discuss next steps."

Starting small with teacher groups that can see the benefits of using data to improve student outcomes is a strategy at International School of Kuala Lumpur, according to Trina Cobbledick, Director of Student Services. "Starting with a teaching team or grade level group that is keen and having them share the successes they have found will build the momentum. It will be especially beneficial if teachers can see how using data will actually save them time in the end by making their planning more efficient and effective."



## Set Expectations

In schools across the Collaborative, expectations for teacher learning are typically aligned with broader strategic goals.

As part of its accreditation process, for example, American International School of Guangzhou has set six schoolwide goals, one of which is creating a data-informed teaching and learning culture. “The goal is that everyone is thinking and talking about this schoolwide,” explains Eric Crabtree. Schoolwide, teachers use the same guidelines, clarified in a document called [Formalizing External Assessment Data](#). At the elementary level, he observes, “it’s been really helpful for our teachers to carve out expectations to be using things like MAP scores throughout the school year. We’re not just looking at them for 30 minutes in the fall and in the spring, but really using them throughout the school year to create strategy groups or to inform lesson planning and calendars.”

Similarly, at Zurich International School, the professional development model balances teacher-directed goal setting with schoolwide initiatives. Will Kirkwood, Educational Data and Technology Coordinator, explains how the model has evolved in recent years to have leaders work in partnership with faculty around their growth:

“The model has been heavily influenced by executive coaching and also instructional coaching. Each teacher is assigned a professional growth leader [such as a senior administrator, principal, or assistant principal] who has oversight of the goals and process. But the teacher can choose their own pathway for how they can complete their goal.”

An individual pathway might include being part of a professional learning community, working with an instructional coach, pursuing graduate studies, or other options. “The

hope is that data will show up in teachers' professional goals," Kirkwood adds. Coaches can also use data to highlight and identify areas for growth. As the data culture deepens and teachers' data fluency increases, conversations between teachers and their professional growth leaders should increasingly include data analysis.

At NIST, professional learning happens on an individual level as well as through schoolwide professional development. The school provides a budget for individualized professional learning. Teachers' requests have to align with school goals and go through an approval process. Nancy Fairburn looks for trends in the goals that teachers are pursuing so that they can have reflective conversations with colleagues pursuing similar goals. At the same time, NIST plans for whole-school professional development that aligns with the strategic plan. "A goal in the strategic plan is to move from data to action, to be more data informed," Fairburn added. "That's a growth area for us."

## **Putting Learning into Action**

As teachers' data literacy increases, schools become better prepared to make data analysis a core component of teaching and learning. The following examples highlight strategies and structures that are enabling teachers to embed data in their regular practice.

**Collaborative planning at Vienna International School:** Several days throughout the school year are dedicated to staff development and collaborative planning. "During planning meetings, we try to build in data conversations. We also look for opportunities after doing external assessments and our own internal assessments, and before teachers meet with parents. It's about building the data right into the existing work," explains Ben Hacking. "It helps to have a director who is passionate and knowledgeable

about assessment. Our current director has experience leading and modeling data conversations—with senior leadership, with our academic council, and with middle level leadership. He’s bringing knowledge and also giving people room to grow.”

**Data window meetings at Zurich International School:** All faculty take part in data window meetings that are scheduled for three times per school year (an increase from twice yearly prior to 2023-24). Each division meets in teams and looks at data in a structured way. The following table provides an overview of the process:

|                           | Data Window 1 - Fall   |  |  | Data Window 2 - Winter  |   |   | Data Window 3 - Spring  |   |                                      |
|---------------------------|--|--|--|---|---|---|---|---|--------------------------------------|
| <b>Purpose</b>            | Get to know students as learners and ensure support structures are in place                            |  |  | Check progress and adjust support structures as needed  |   |   | Reflect on progress and growth over the year                                      |   |                                      |
| <b>Dates</b>              | Aug-Sep  |  |  | Dec-Jan   |   |   | May-June  |   |                                      |
| <b>Data Sets</b>          | LS   | G6-9   | G10-12   | LS  | G6-9  | G10-12  | LS  | G6-9  | G10-12                               |
|                           | EC-KG  | MAP Math<br>MAP Reading                              | Unit 1<br>Assessment<br>Data<br>Grade<br>Distributions<br>from Previous<br>Year<br>IB/AP Results | EC-KG   | Semester 1<br>Assessment<br>Results:<br>teacher<br>feedback,<br>student<br>reflection | Semester 1<br>Assessment<br>Results:<br>teacher<br>feedback,<br>student<br>reflection | EC-KG   | MAP Math<br>MAP Reading<br>End of Year<br>Assessment<br>Results | End of Year<br>Assessment<br>Results |
|                           | G1-2 - Unit 1<br>and/or 2 IM   |  |  | G1-5<br>Math Unit<br>Results<br>Individual<br>Student<br>Assessment<br>Folders                                  |   |   | G1-2 - Math<br>Unit Results<br>F&P<br>MAP Reading<br>Fluency                      |   |                                      |
|                           | G3-5<br>MAP Math<br>MAP Reading<br>Unit 1-2 IM<br>Math Fluency<br>F&P and/or<br>MAP Reading<br>Fluency |  |  | G3-5<br>MAP Math<br>MAP Reading<br>Math Unit<br>Results<br>Math Fluency<br>F&P and/or<br>MAP Reading<br>Fluency |   |   |   |   |                                      |
| <b>Lead/s</b>             | KD & WK  | WK, JK &<br>HODs                                     | WK, JK &<br>HODs   | KD & WK   | WK, JK &<br>HODs  | WK, JK &<br>HODs  | KD & WK   | WK, JK &<br>HODs  | WK, JK &<br>HODs                     |
| <b>Participants</b>       | All Campus Faculty   |  |  |   |   |   |   |   |                                      |
| <b>Specific Material</b>  | - MAP Class Profile<br>- MAP Class breakdown by instructional area                                     |  |  |   |   |   | - MAP Class Profile<br>- MAP Achievement Status and Growth Summary with Quadrants |   |                                      |
| <b>Action</b>             | <a href="#">Data Conversations Recording Template</a>  |  |  |   |   |   |   |   |                                      |
| <b>Follow Up Meetings</b> | Faculty meeting 90 mins to look in detail 1-2 weeks after completion                                   |  |  | Faculty meeting 90 mins   |   |   | Faculty meeting 60 mins to look in detail 1-2 weeks after completion              |   |                                      |
|                           | KD/WK with TL<br>- one on one<br>follow up<br>discussions  | JK/WK with HOD - one on one<br>follow up discussions |  | Team Leader/HOD overview meeting 60 mins  |   |   | Campus Leadership meeting 60 mins 2-3 weeks<br>after completion                   |   |                                      |
|                           | Campus Leadership meeting 60 mins 2-3 weeks<br>after completion  |  |  | KD/WK with TL<br>- one on one<br>follow up<br>discussions   | JK/WK with HOD - one on one<br>follow up discussions                                  |   | SLT meeting 60 mins 2-3 weeks after completion                                    |   |                                      |
|                           | SLT meeting 60 mins 2-3 weeks after completion   |  |  |   |   |   |   |   |                                      |

As Kirkwood explains: “Early in the school year, teams are trying to get to know their kids. They look at all the initial data they have collected (both internal and external data) and look to make sure structures are in place to support their group of learners. For example, they might bring in math assessment data from their first unit. Which kids are doing well? Which ones are doing poorly? Then they’ll look at fluency, using a timed assessment. Does this correlate with the unit data? Which trends do they notice? Then we layer MAP data, which is about the whole scope of mathematics understanding. Teachers take note of which students need support, which students need to extend. That becomes a reflection point throughout the year. At the winter data window, they’ll look specifically at the students they identified early in the year. Which interventions have worked well? In the spring, MAP data shows general trends about growth. But the team also looks at the kids they focused on in the beginning of the year. What do they notice?”

Data window reflections are captured using a recording template. Using the template below, for example, participants are prompted to consider questions and implications after the spring discussion.

### Data Window 3 Recording Template

**Purpose of Data Window 3:** Reflect on progress and growth over the year

|              |  |   |
|--------------|--|---|
| <b>Class</b> | <b>Looking at Data</b> <ul style="list-style-type: none"> <li>What is the general trend/growth pattern for your students over the year?</li> <li>How have the previously identified students (from Data Window 1 &amp; 2) progressed?</li> </ul> | <b>Implications</b> <ul style="list-style-type: none"> <li>Are there any specific students for whom further follow up is required? (e.g. discussions with families/students and/or informing the following year’s Head of Grade/Grade Level)</li> <li>What lessons can we take from this year’s data as we look at our program for the next school year?</li> </ul> |
|              |  |   |

|                             |  |  |
|-----------------------------|--|--|
| <b>Student Support Team</b> | <b>Looking at Data</b> <ul style="list-style-type: none"> <li>What does the data show about the progress made by students in the SST program?</li> </ul> | <b>Implications</b> <ul style="list-style-type: none"> <li>Looking at the data for students not in the SST program, are there students who should be on our radar moving forward?</li> </ul> |
|                             |  |  |

**Team/Grade Level Discussion (assign facilitator to take notes):**

General Summary (In a paragraph, describe what the data say about the growth of your students.)

What implications might this data have as we plan for the next school year?

“These can be powerful discussions,” Kirkwood says, and are scheduled to happen across the entire school, not just in pockets. It helps to have an alignment of data collection practices (what data is collected and when), and regular times when teacher teams can discuss how to support their current learners—not just looking at end-point data. “It provides an opportunity to learn about how to talk about and use data. These discussions often lead to further questions around, are we collecting the ‘right data’? Debriefing and reflecting conversations that are part of data window meetings help to surface teachers’ needs and interests regarding data literacy.”

**Instructional Coaching at the American International School Vietnam:** When teachers feel ready to work with an instructional coach on a specific professional learning goal, they reach out. Emma Burns explains the rationale: “We want our coaches to be really friendly and approachable, not someone who will judge you. And the first thing coaches tend to do is pull up your class data on LAC. They use the Data Wise process and language. That helps make teachers feel less defensive. The coach isn’t saying, ‘You’re doing it wrong.’ Instead, they have a conversation with you about problems of practice.”

**PLCs at Vienna International School:** A survey about teachers’ interests sets the stage for professional learning communities. “We encourage staff to choose not only high interest, but also areas where they want to grow professionally,” explains Ben Hacking. In formulating questions for PLCs, teachers often consider data. For example, student well-being surveys generate information that helps PLCs create questions for deeper inquiry.

Throughout the year, PLCs meet six or more times in small groups, using a set of slides that include reflective questions to guide conversations. “It’s informal, casual, but really

productive. They pick a very specific targeted area so they can try and put something into practice and then come back together and reflect on how that went. Instead of going after big, lofty goals, we want to keep it super focused, super practical, and fairly short—8-10 weeks. Otherwise, PLCs can lose momentum and wind up meeting just for the sake of meeting.”

A recent example involved looking at redirection in the primary years. Teachers focused on the question: *How do we speak to students and give feedback with redirecting language, reinforcing language?* “They got together, co-taught and tried a couple of lessons in a couple of different content areas. They were really intentional about the kinds of language that they were using, and they came back together and reflected,” Hacking said.

Another group, including teachers from across grade levels, looked at diversity, equity, inclusion, anti-racism, and unconscious bias in schools. Their inquiry: *How to make the curriculum more inclusive and reflective of the cultures and diversity of the classroom?* “It’s an area where we know that teachers want to know more, and we wanted it to be an authentic learning opportunity for them that was manageable and practical.”

So far, the data that has resulted from PLCs has been more qualitative than quantitative, Hacking noted, but clearly tied to teachers’ goals to improve teaching and learning.

### **Case study: Data to Action at the International School of Kuala Lumpur**

A thoughtful use of data analytics has helped teachers at International School of Kuala Lumpur take concrete action to make progress on schoolwide goals for diversity, equity, inclusion, and justice (DEIJ). Trina Cobbledick explains how the process unfolded:

This began with a street data approach. The DEIJ steering committee sent out a student questionnaire and identified certain demographics where there were areas of need. Even though our students overall report a very high sense of belonging, you have certain groups of students who are not doing as well. So teachers did focus groups with students, with counselors present, to find out more about their experiences. They asked students: What would you want your teachers to know [about DEIJ issues] that would help everyone? Why was there not the same sense of belonging in certain environments? Teachers wanted to learn from their stories, and then we can think about specific actions moving forward.

Every division did the focus groups differently. In elementary school, students shared through artwork and other forms of creative expression. In middle school, there were quotes [from students] and student writing. In high school, students participated in an interview panel and gave their perspective.

The process allowed teachers to see more of the *why* behind the work we are doing. These students are in their classrooms—teachers feel much more connected to the story behind the student rather than just a number. For some of the discussions, we used a protocol [what/so what/now what], but there was no interpretation presented. It was up to teachers to pull out their own observations in their conversations.

As a result of the focus groups, teaching teams have taken different actions. Some did an inventory on their lessons in their curriculum. Where could they put in opportunities for more diverse representation? We've had more people join the library committee and are making sure that we are getting more representation in

our library books. We have had more people interested in joining the DEIJ scope and sequence work from the different faculty groups. After hearing students' stories, it was pretty hard for any teacher to think that there wasn't a need for this work.

## Closing Thoughts

Across the Collaborative, schools recognize that teachers are critical partners in building data culture. Although strategies to increase teachers' data literacy vary from school to school, leaders emphasize that the goal is to embed data analytics into existing practice rather than to treat it as a separate topic for professional learning.

“What works best is integrating data into the structures you already have,” advises Trina Cobbledick at ISKL. “For instance, our teachers have regular collaborative planning times. A lot of the time we default to looking at *what* we're teaching next. What's the resource we're going to use? What's this lesson going to look like? What's the assessment we're going to do at the end of this unit? And those are all important parts of the conversation. In the learning team protocol [from Adaptive Schools], questions three and four are about what to do if my students aren't getting it. How will I extend them if the work is not challenging enough for them? So it encourages them to start thinking about the *how* of teaching. We've also been trying to embed professional development into their PLC time through meaningful data conversations and protocols. This is forward thinking for next year in order to get those meetings to focus less on the *what* of teaching and more on the *how*.”

What seems to help with professional development, Cobbledick adds, “is when teachers see that something's working well for them. So if we can generate more data-based



conversations where they're seeing the results of having that conversation and how it really has impacted a student, that's going to generate more buzz for wanting to look at data.”

Although external assessments generate important data, Vienna International School has intentionally focused on assessments that teachers create to build their buy-in for using data. “Let’s really value the internal diagnostic assessments that teachers are devising, that they're working with,” advises Ben Hacking. “What’s working well? Then we can look at how an assessment they didn’t design can complement or show a disparity with what they’re noticing. It’s about structuring the conversation to really value their work.”

Encouraging teachers to take ownership of data conversations is another key strategy to build the culture among faculty. “A professional development session run by me or an outsider is helpful only up to a certain degree,” says Ruth Herrin at American International School of Guangzhou. “It has to be done in a way that leverages teacher voice. Getting folks on the ground who can lead and do this professional learning is really powerful.”

Momentum for using data will increase, predicts Eric Crabtree at Guangzhou, “when teachers see this in action, when they’re using data on a day to day basis with their students. Seeing the success it brings [for student learning] will create more avid data users in our faculty.”

## **Key Takeaways**

- Pay attention to indicators of high-quality professional learning when designing experiences that build teachers’ data literacy.

- Align data literacy goals to strategic planning; dedicate sufficient time for professional learning.
- When introducing data analytics, ensure a shared sense of purpose; build common understanding of vocabulary and protocols to build data literacy.
- Document and reflect on growth of data literacy; celebrate evidence of improvements in student learning as a result of using data to inform instruction.



## Reflect

- Consider how learning about data can be integrated into existing professional development and structures (such as PLCs and grade-level or content planning teams) rather than treating it as a stand-alone topic.
- How might you help teachers recognize the benefits of using data to support student learning?
- How might you measure the growth of student learning that results from teachers' professional learning about using data to inform instruction?

## How does LAC support schools in this work?

The LAC Learning Space is a dedicated portal for all LAC Members. It is a collection of resources aimed at ensuring successful implementation and utilization of the LAC ecosystem as well as raising overall Data Literacy levels for all members of the LAC Schools community. It consist of three sections:

- **LAC Learning Center** - a vast collection of learning resources, video tutorials, and protocols for utilizing LAC Learning Analytics platform
- **LAC Webinars** - recording and resources from all LAC Webinars

- **LAC Data Literacy Workshops** - our LAC workshops aimed at raising the Data Literacy levels for teachers and other members of the school community.



#### Welcome to the LAC Learning Space!

The LAC Learning Space is a dedicated portal for all LAC Members. It is a collection of resources aimed at ensuring successful implementation and utilization of the LAC ecosystem as well as raising overall Data Literacy levels for all members of the LAC Schools community. It consists of four sections:

- **LAC Learning Center** - a vast collection of learning resources, video tutorials, and protocols for utilizing LAC Learning Analytics platform
- **LAC Webinars** - recording and resources from all LAC Webinars
- **LAC Data Literacy Workshops** - our LAC workshops aimed at raising the Data Literacy levels for teachers and other members of the school community.

# Chapter 9: Trends to Watch

## ***What's on the horizon for schools that are building a data culture?***

The LAC is a learning Collaborative, working with member schools to document best practices, identify challenges, and co-create products that will deepen data culture and support students. To stay responsive, it's important to keep an eye on the horizon to anticipate future challenges and opportunities.

Here are five trends to watch.

### **Building teacher capacity and data literacy**

As discussed in previous chapters, schools start their data journeys at different places. Within the same school, teachers, leaders, and learning specialists likely have varied understandings about data. Their previous experiences with data can also shape their attitudes about contributing to a data culture.

The LAC is seeing a shift in how and why teachers use data. In the past, learning data dashboards were primarily used by school leaders to track trends. Teachers were not considered important consumers of this information. That is changing, with teachers and learning specialists becoming more comfortable using data tools to inform their practice. Visualizations are helping them identify students in need of support, and then plan and evaluate interventions. In collaborative work, such as PLCs and action research teams, they increasingly use data tools and protocols to investigate questions of practice and have more productive conversations.

This trend toward increased participation underscores the need to support teachers and learning specialists in building their data literacy.

### **Engaging parents in data discussions**

Parent access to analyzed data is another trend that we expect to grow. In the past, schools typically limited parents to seeing only formative data in teachers' gradebooks and summative data in report cards. Parents have been asking for more frequent and regular information (not limited to twice-a-year during report card time) about their child's growth. The pandemic has highlighted the need for parents to have access to this information to support their child's learning at home.

Parent engagement with data is an area where LAC member schools can support each other by continuing to share best practices.

### **Increasing student voice in data discussions**

Engaging students in assessment is a growing trend, supported by research about high-performing schools. With the increased adoption of practices such as student-led conferences, portfolio defenses, and the Mastery Transcript, students are being asked to take more ownership of their learning. That means learning to set their own goals, recognize their strengths, and advocate for the support they need. Providing students with access to their own data and scaffolding data discussions with them are logical extensions of this trend.

### **Using data to support goals for equity, inclusion, and cultural responsiveness**

International schools are diverse communities by design. Beyond celebrating the diversity of their students and faculty, what more could schools do to reach goals related

to diversity, equity, and inclusion? Some LAC member schools are exploring how data could help address students' cultural and linguistic needs. The International School of Kuala Lumpur, for example, is collecting data about languages spoken within the student population and asking multilingual students about their own goals for future language development. "We want to foster their home language so they're not losing it, but see it as an asset," explains Trina Cobbledick, Director of Student Services. Developing tools to assess students' sense of belonging is also on the horizon. "Whether it's gender, race, religion – if somebody is feeling marginalized or isn't getting equitable access, we want to be able to identify that and address it," she adds.

### **Incorporating "street data" and learning stories**

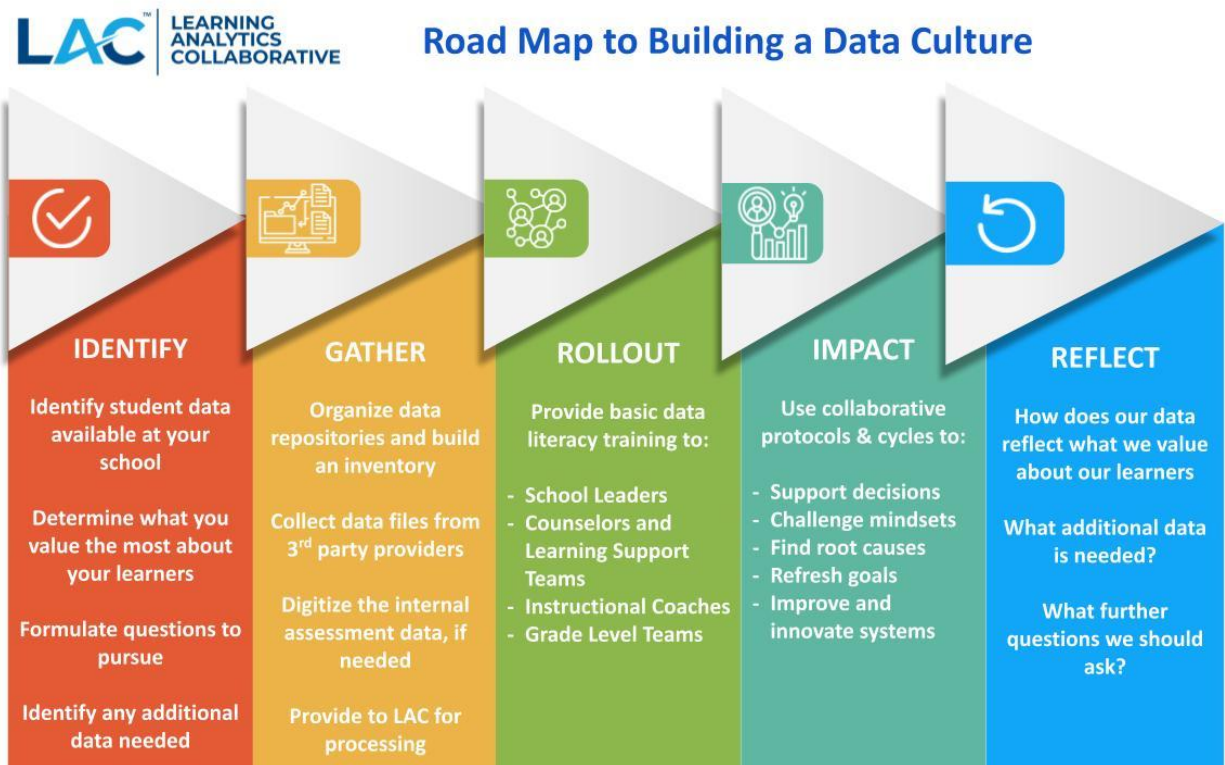
Throughout this *Playbook*, we have emphasized the importance of qualitative as well as quantitative data to gain a holistic view of students. An emerging focus on "street data" (Safir & Dugan, 2021) challenges educators to look beyond traditional assessments to investigate more fine-grained data that reveal students' assets, cultural wealth, and their feelings about learning. Grounded in culturally responsive practices, street data can uncover microaggressions or implicit biases that are impeding learning. Gathering this kind of feedback happens in real time through deliberate observation, listening, and collection of artifacts that tell a nuanced story of each student as a learner. Interest in street data in international schools could lead to demand for new tools and protocols to gather street data, make sense of these learning stories, and plan appropriate responses.

### **Which Trends are You Watching?**

The *LAC Playbook* will continue to grow as we hear from more schools in the Collaborative – and perhaps beyond. Please continue to share your best practices and keep us informed about the trends you are following when it comes to using data to support learning.

## Reflect

Take another look at the Road Map to Building a Data Culture. Have the strategies, examples, and resources in the *Playbook* helped you gain new insights into your own school’s progress and challenges when it comes to building a data culture? What are your next steps in the journey?



The roadmap offers a general overview of the stages a school is likely to move through while leveraging the LAC to build and grow a data culture.

# Suggested Resources

## Blog entries and Articles

- [How To Speak With Families and Communities About MTSS](#)
- [Social-Emotional Learning Is Important. But What Do All Those SEL Terms, Actually Mean for the Classroom?](#)
- [Wellbeing, Relationships and Teaching as a Caring Profession?](#)
- [Rethinking Data: How to Create a Holistic View of Students](#)
- [What Data Can't Do](#)
- [Demystifying Student Data for Parents](#)
- [Sharing Data to Create Stronger Parent Partnerships](#)
- [Using data to inform decision-making within the Student Support Team](#)
- [Using Student-Generated Questions to Promote Deeper Thinking](#)
- [Peer connections reimaged: Innovations nurturing student networks to unlock opportunity](#)
- [MTSS as Organizing Principle for Moving Beyond the 2020-2021 School Year](#)
- [The dormant potential of extracurriculars for remaking assessment](#)



# Appendix

## Survey Questions

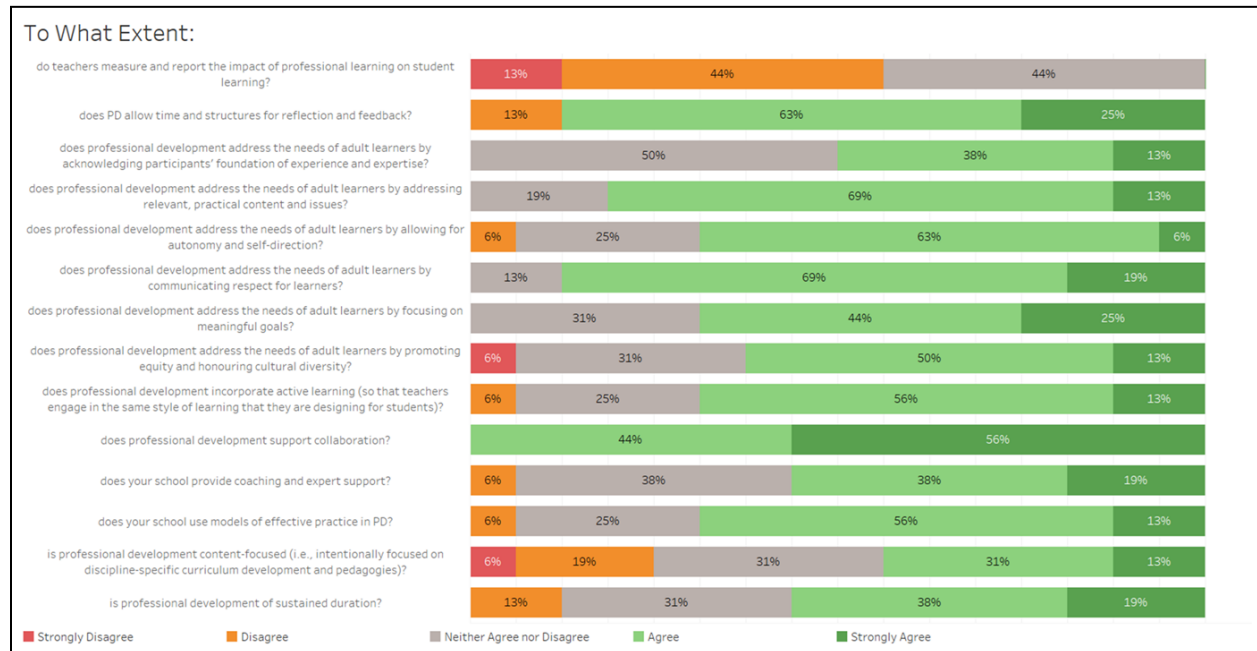
|  |
|--|
| Full Name  |
| Role/Position at the school  |
| Email ID   |
| School Name  |
| <a href="#">Our school has a data culture</a>  |
| <a href="#">Data culture and learning analytics are an integral part of our strategic plan</a>   |
| <a href="#">Expectations and goals around data culture are well-defined and understood across our school</a>   |
| <a href="#">Teachers and administrators review data on a regular basis</a>   |
| <a href="#">We regularly use data to inform instruction and assessment</a>   |
| <a href="#">We use data to identify areas of improvement and set goals</a>   |
| <a href="#">Learning analytics enables us to make data-informed decisions</a>  |
| How do you define “data culture”? Does your staff share this understanding and use common language to discuss data? Is data culture part of all divisions and programmes at your school? |
| How did you get started building your data culture? (What has helped accelerate culture building? What has hindered early adoption?)   |
| Why is your school committed to building a data culture?   |
| Who (what roles) is responsible at your school for implementation and maintenance of data culture?   |
| How do Teachers, Administrators, and Learning Support staff review data? How often? In what format (i.e., team meetings, collaborative documents, etc.)?                                 |
| What activities does your school plan (such as data retreats, learning walks, or action research) aimed at cultivating data culture?   |
| Do you use data protocols as part of these activities? How? Which ones are most useful?  |
| How else is data used to inform instruction and assessment?  |
| What main data assets are being used and maintained?   |
| Are learning analytics part of your PD structure? How?   |
| How do you handle staff transition in respect of the data culture, roles and responsibilities?   |
| How do data analytics make a difference for administrators, teachers, and students?  |

[\(5 point likert scale from Strongly Disagree to Strongly Agree\)](#)

School leaders that shared their information with us, either through the survey, or in both the survey and an interview:

| <b>Full Name</b>        | <b>Role/Position at the school</b>              | <b>School Name</b>                      |
|-------------------------|---|---|
| Maria Domingues         | Assessment Coordinator                          | Nansha College Preparatory Academy      |
| Amy Valerio             | VP-Upper School                                 | Shanghai Community International School |
| David Andrew Walker     | Deputy Lower School Principal                   | International School of Luxembourg      |
| Jay Priebe              | Director of IT                                  | NIST International School               |
| Brent McAvoy            | Vice-Principal - Academics                      | International School of Basel           |
| Aloha Lavina            | Director of Curriculum                          | International School of Myanmar         |
| Andy Pontius            | Secondary Leadership Team                       | American International School Bucharest |
| Laura Brown             | Director of Learning                            | International School of Beijing         |
| Jilene Murray           | Learning Data and Assessment Specialist         | American School In Japan                |
| Christopher John Garden | Deputy Academic Director, Teaching and Learning | ISS International School                |
| Ben Hacking             | Primary School Deputy Principal                 | Vienna International School             |
| Raedel Bagley           | Director of Teaching and Learning               | International School of Dongguan        |
| Amanda Sunderman        | Director of Teaching and Learning               | I-Shou International School             |
| Bryan Wiedeman          | Director of Technology                          | American International School Vienna    |
| Carlos Eduardo Pinho    | Director of EdTech                              | Escola Americana do Rio de Janeiro      |
| Melissa Schaub          | Deputy Superintendent of Learning               | American International School Lagos     |
| Carol Jordan            | Director of Teaching and Learning               | American School of Warsaw               |
| Trina Cobbledick        | Director of Student Services                    | International School of Kuala Lumpur    |
| Sandy Mikulik           | Data Specialist                                 | American International School Vietnam   |

# Summary of results from the LAC Playbook PD survey and Acknowledgments



We would like to acknowledge and thank all schools that have contributed to the survey findings:

- American International School of Lusaka
- American International School of Guangzhou
- American International School Vietnam
- American School of Doha
- International School of Kuala Lumpur
- International School of Luxembourg
- International School of Myanmar
- International School Nido de Aguilas
- NIST International School
- Oberoi International School
- Strathcona-Tweedsmuir School

- UWC Changshu
- Vienna International School
- Zurich International School

# References

Archibald, S., Coggshall, J. G., Croft, A., & Goe, L. (2011). *High-quality professional development for all teachers: Effectively allocating resources*. National Comprehensive Center for Teacher Quality.

[www.gtlcenter.org/sites/default/files/docs/HighQualityProfessionalDevelopment.pdf](http://www.gtlcenter.org/sites/default/files/docs/HighQualityProfessionalDevelopment.pdf)

Boudett, K., City, E., & Murnane, R. (2018). *Data wise: A step-by-step guide to using assessment results to improve teaching and learning*. Cambridge, MA: Harvard Education Press.

Darling-Hammond, L., Hyler, M. E., Gardner, M. (2017). *Effective teacher professional development*. Palo Alto, CA: Learning Policy Institute.

<https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report>

Guskey, T.R. (2003) What makes professional development effective? *Phi Delta Kappan*, 84(748-750). <http://dx.doi.org/10.1177/003172170308401007>

Knowles, M. S., Holton, E. F., & Swanson, R. A. (2011). *The adult learner: The definitive classic in adult education and human resource development* (7th ed.). New York: Elsevier Inc.

Marzano, R. J. (2007). *The art and science of teaching*. Alexandria, VA: ASCD.

Safir, S., & Dugan, J. (2021). *Street data: A next-generation model for equity, pedagogy, and school transformation*. Thousand Oaks, CA: Corwin.

Sherwood, E., Domingues, M., Elsen, G., Tagessen, J., Wang, H., Xie, W., Kane, P., Maldonado, A., & Cyrus, M. (2021). Collaboration for literacy improvement: The experiences of teacher-researchers in the first stages of an inquiry process. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 94:3, 128-136. Retrieved from <https://doi.org/10.1080/00098655.2021.1907147>