



FOR YOUR

INTEREST IN

CORWIN

Please enjoy this complimentary excerpt from Schools on the Move.

LEARN MORE about this title!



Developing Collective Expertise

Many extended conversations occurred around the topic of developing collective expertise as the writing of this book unfolded. During one conversation, Jay had brought up the perception from outsiders that there was a mystique about Long Beach Unified School District (LBUSD) in respect to the deep capacity for high-quality teaching and learning. This conversation had a significant impact on Chris as he reflected on the years of work within Long Beach. He was surprised by the comment and clearly had been considering why others had this sense of wonder as to how Long Beach had developed such deep and collective expertise. His statement was insightful, "There is no mystique in Long Beach. It's about having an intentional and consistent focus on student equity. Long Beach administrators and teachers are equity warriors."

This is the key ingredient for developing collective expertise: having a shared purpose that drives and sustains equitable growth in student learning. It is not expertise in effectively using specific instructional strategies, formatively assessing student learning, or engaging in collaborative inquiry. The mystique comes not from the practices but rather the purpose of the practices: student equity. How many times have we heard school sites or central offices give praise about the effective use of instructional practices or student engagement strategies and, similarly, celebrate gains in student achievement results? These recognitions tend to be a way of promoting better use of strategies and realizing more gains in student achievement. It's kind of a bumper sticker mantra; teach better and learn more. But this approach does not have the power of what Chris noted of intentionally and consistently being equity champions.

Simon Sinek (2011) may have expressed this best in his description of the golden circle, which illustrated how high-performing organizations start with the why (purpose), then reinforce the how (process), and finally mention the what (practices and outcomes). Chris and LBUSD attended to the work in a way that most others do not—focusing improvement efforts on a shared purpose, co-creating processes for attending to the work, and empowering schools to learn how to develop collective expertise for achieving agreed-upon outcomes—whereas others focus on the degree to which practices were implemented with

fidelity and similar results are attained by all. Chris and his team at Long Beach have played the long game of sustainability, whereas many other districts and school sites continue to play the short game of quick wins. Developing collective expertise takes the discipline of a marathon runner rather than the short-lived endurance of a sprinter.

So how can collective expertise be developed for the purpose of reducing equity gaps and accelerating the learning of all students? It begins with clearly and redundantly reinforcing a shared purpose of student equity then plays out as a robust collaborative inquiry process that by design and over time creates instructional coherence and precision of pedagogy. And when pulling back the layers, one will find four factors are at the core of developing collective expertise: student equity, instructional coherence, collaborative inquiry, and precision of pedagogy.

Problems of Practice and Promising Practices

Developing collective expertise to continuously improve teaching and student learning does not have to be a complex endeavor, but it does have to be the purpose of district and school improvement efforts. As noted, it's not about an initiative focused on a specific instructional model, implementing an improvement science framework, or raising test scores for certain student groups. These are certainly viable tools and worthy outcomes, but each creates complexity and can unintentionally result in superficiality. A famous phrase from Grady Booch captures the essence, "a fool with a tool is still a fool," which implies that one must directly address the issues that stand in the way of improving instructional capacity and realizing gains in student performance. Tools don't build capacity for achieving better results because

Four factors are at the core of developing collective expertise: student equity, instructional coherence, collaborative inquiry, and precision of pedagogy.

growth in student learning is predicated upon the improvement of practices. A better phrase for consideration is "improvement of practices precedes growth in student learning." And this cannot be a solitary affair but rather a collective effort if equitable growth in learning is the ultimate outcome. Developing collective expertise is simply an agreed-upon process that engages all staff within a school in the relentless pursuit of learning how best to meet the learning needs of all students in their care. The key question is, "What is your agreed-upon process for developing collective expertise?"

In comparing our experiences over the past 18 years in education, Chris as superintendent of LBUSD and Jay as a consultant supporting the improvement efforts of superintendents, there are many similarities in how we have attended to capacity building. In simplest terms, this could be framed as "trust the process," meaning there needs to be a structured process that guides teachers and principals with support from district leaders in the continuous improvement of

teaching and learning. And when district and school leaders serve as role models of these processes and behaviors, the improvement of practice is 5.3 times more likely to be successful

(Bachmann et al., 2021). In LBUSD this is known by all as The Long Beach Way. In the work of InnovateEd, this came to be known as a coherent system of continuous improvement. Both have the following key elements:

- 1. A strategic focus guides the collective efforts of school site staff.
- 2. Agreed-upon outcomes drive the equitable growth in student learning.
- 3. Clearly defined student learning priorities inform the design of rigorous and complex student learning tasks.
- 4. Multiple sources of evidence (data, student work, learning rounds, student interviews, and survey results) monitor the impact of teaching on student learning growth.
- 5. A robust collaborative inquiry process guides recurring 4- to 6-week cycles of teaching and learning (and at 9 to 12 weeks with school sites and the central office).

What is important to note is the absence of a predefined instructional approach. This is intentional in that the dialog among school staff in defining how best to engage students in the learning process, test this theory of action, and continue to seek better methods for accelerating student learning is the primary purpose of the process. However, the problem of practice often seen among schools and in districts is the prescription of an instructional approach or assessment method followed by an expectation for fidelity to realize gains in student achievement. This is not continuous improvement but rather Einstein's theory of insanity in action: doing the same thing over again and expecting better results.

The most important insight is that precision of pedagogy and instructional coherence cannot be realized through prescription. An agreed-upon process must, by design, engage teachers and leaders in the work of developing collective expertise by learning how to improve the impact of teaching on student learning, the outcome of which is sustaining equitable growth in student learning and, ultimately, having a common way that staff within a school and school sites within a district co-create a coherent system of continuous improvement.

District and School Story

Having had an opportunity to reflect on the last school site visits, Erin and Jacob both were struggling with how to better understand the promising practices and problems of practice among the four schools. Erin had been struck by how different school sites were in their approach to improving teaching and learning, whereas Jacob was more focused on comparing his school and the others to better understand differences in climate, culture, and capacity. At the end of a principal meeting, they had a few

(Continued)

minutes to catch up, and Jacob made a statement that greatly affected Erin's thinking. He rhetorically asked Erin if she believed there was a consistent way among any schools in the district for the improvement of teaching and learning. Her response was that the use of common tools, resources, and practices had been reinforced but was uncertain as to "the way" that schools attended to the work. That quick conversation laid the groundwork for the next site visits, during which they would ask schools to share how they engaged in the continuous improvement of teaching and learning—or more simply what was "their way."

Jacob was interested in learning how schools built capacity to improve teaching and learning, and Erin was focused on understanding the degree to which there was coherence within and among school sites. They agreed to focus on both building capacity and creating coherence and again created a set of questions so that there would be consistency in how each school was asked to share their promising practices and problems of practice.

- 1. Is there a common vision or purpose that guides the work of all staff in the school?
- 2. Are there agreed-upon processes at your school that have been effective with building capacity to continuously improve teaching and learning?
- 3. Is there instructional coherence in your school, and if so, what do you believe has been most critical for this to occur over time?

The principals of the four schools that agreed to be visited had asked to receive the questions in advance of this third visit. Clearly, school staff had come to understand that Erin and Jacob had a set of questions and now wanted to be better prepared for the visit. Erin was a little reluctant to share the questions in advance for fear that there would be too much preparation and less authenticity in the dialog. Jacob was less apprehensive because his staff wanted to know what he was looking for in classroom visits, and it was only fair to communicate in advance what information they were seeking for the school sites. First up again was the school that had been noted on the previous charts as "compliant" with district goals and expectations. Upon entering the room, the principal frontloaded the conversation in sharing that the questions received were general and not connected to any guidance provided by the district in the past. Erin, feeling compelled to respond, asked the principal and teachers to further share their thoughts and insights on the lack of district guidance. Before anyone spoke, Jacob noticed three phrases on the whiteboard: common purpose, capacity building process, and instructional

coherence. And so he subtly asked if these phrases had been discussed prior to the visit, assuming that this was the case. A teacher spoke and explained that these phrases had been written to simplify the questions that had been shared, and that their intention was to expand upon these, but they had not gotten too far. Erin then asked a great question, "Why do you think this was somewhat of a challenging task?" The senior-most teacher, who shared she was retiring at the end of the year, blatantly stated, "Because we don't have any of these in place at our school." Seeing such candor from a teacher, Erin felt some level of responsibility to engage and asked how the district could be more supportive and helpful in this regard, at which point most staff openly shared their thoughts and ideas, which all related to a common theme: stop telling schools what to do to improve, and start working with schools so they can understand how to improve. Toward the end of the meeting, Jacob brought the group back together with a final question, "If I'm understanding correctly, your staff values the three phrases on the board and wants to be supported in a way that helps you put these into action at your school?" The soon-to-retire teacher spoke for the group and stated that she wouldn't be so eager to retire if these were already in place at the school. In leaving the room, Erin shared a final thought with the group: "Where there's a will, there's a way. And I look forward to better supporting your improvement efforts." When they had left the room, Jacob commended Erin for her gracious words and noted that there was a desire but a lack of capacity at the school. And that what was thought of as compliance now seemed to point to the need for a better district model for building the capacity of schools. Erin left the school wondering if, in the absence of school capacity, the default would be a compliance orientation to the central office. Do some schools simply comply with district directives when they don't understand what to do and how to do it?

Upon entering the parking lot of the next school, which was considered to be "prescriptive" in approach to teaching and learning, there was a feeling of anxiety between Jacob and Erin as to how staff would react to the questions provided to them. Jacob shared with Erin that he thought the school could be confrontational because the questions may be perceived as evaluative and judgmental in nature. They both entered the room expecting to be faced with a tough crowd. But to their surprise, they were openly welcomed and handed a portfolio of documents that the staff had prepared for the visit. The principal started off the meeting with a sense of exuberance as the portfolio contents were unveiled. What was inside were the original documents created by the principal and staff that had guided them in opening the school many years ago. The school mission and vision, guiding principles, instructional framework, and agreed-upon school practices were all within the folder. Jacob was

(Continued)

impressed and asked the staff to share more of how these documents were helpful in moving the school forward. What was explained felt more like the story of the school from inception and a description of what the school was intended to be in the minds of those who opened it years ago. The principal chimed in that this packet was given to all new staff members and was shared with parents who wanted to know more about the school. There was definitely a sense of pride among school staff in how these documents described a high-performing school. Erin knew that the student demographics had been changing since the opening of the school and so asked whether staff had considered if these documents needed updating to reflect the current student population. The principal was quick to state, "No. This is who we are and what we do. These documents are the foundation of our success," after which, all teachers nodded their heads in agreement. Jacob then asked, "But how do you know what worked in the past will be equally as effective in the future?" This time Erin was the one to sense a feeling of judgment from Jacob's question and so reframed it by asking, "I think what we're asking is, how does your school continuously improve teaching and learning?" A teacher quite boldly stated that the documents that had been shared describe how the school supports student learning. Another teacher referenced the page that listed school-wide practices. Jacob then directly asked this teacher whether she felt there were any changes that might be needed to this page. The answer was a steadfast, "No, I don't." Erin and Jacob politely thanked the staff for sharing their documents and expressed appreciation for their time and learning more about their school. When debriefing in the car, the common perception was that the school was not prescriptive in nature but actually resistant to changing what was perceived to be the perfect school. The mission and vision of the school was more important than student learning needs. The school had a way not for continuously improving but rather maintaining a strong sense of school pride. Jacob made a side comment to Erin, "Good is the enemy of great."

Prior to visiting the next school that had been identified as "fragmented," Erin thought it best to call the principal in advance. She was elated to hear that the last visit had in fact initiated productive conversations among staff about shared leadership and that the principal did want to see how this next visit might also provide the same type of questioning coupled with support and guidance. Erin suggested that the meeting be led by the principal to engage the staff in sharing and that she and Jacob would shape ideas for consideration as the sharing progressed. Upon entering the room at the school site, it was clear that the principal had set the meeting up as Erin suggested. The questions were written on the board, teachers were seated in a half-circle all facing the board, and Jacob and Erin were positioned between the board and the staff. Jacob jokingly commented,

"This feels like we're being interviewed," as he took a seat in the half-circle facing the staff. The principal commented that this structure would allow staff to see the questions and at the same time engage in dialog with each other and with their visitors and then commenced to read each question and give time and opportunity for staff to share insights and listen to comments and questions from Erin and Jacob. But what transpired was individuals, and at times a few members, advocating for their own perspectives rather than listening to and building upon each other's thoughts. It felt disjointed and almost confrontational in how staff members were stating their positions and expecting conformity of others to their thinking. After about 15 minutes of this unproductive interaction among staff members, Jacob asked a question: "Why does it feel like you're advocating for others to agree with you rather than having a common way of describing your purpose, processes, and practices?" There was a long moment of silence, and then one of the newer teachers stated he had not heard the staff having conversations about these topics before and assumed that the group was going through what he was taught in his credentialing program as "storming and norming." A few of the teachers did not appreciate his comment, but others seemed to agree with him. So Erin asked another question, "How does the staff at your school engage in the continuous improvement of teaching and learning?" One of the teachers who seemed a little disgruntled commented that most of the school staff had been teaching for 20 or more years and that each had their own way of approaching teaching and learning. The principal, who was waiting for an opportunity to prompt productive dialog, asked whether the expertise among staff could be shared in a way that may result in a few commonly agreed-upon ways of supporting student learning. The staff seemed to be responsive, and so the principal moved to the whiteboard and began asking each teacher to share their ideas for charting. After a long list had been generated, the principal then wrote on the board three headers—common purpose, common processes, and common practices—and asked the staff to assist with grouping ideas under each heading. At this point, Erin and Jacob thanked the staff for the opportunity to visit and exited the room. Erin commented that like the compliant school, the fragmented school seemed willing to engage in the work and yet needed some type of structure and guidance for the conversations to unfold. Jacob agreed and wondered who was learning more from these visits: Erin and him or the schools themselves.

Erin and Jacob received an email from the principal of the last school to be visited. They were intrigued about meeting this staff, because the school had already shown to have coherence, but were dismayed when the email indicated that the meeting would be replaced by classroom visits. Upon meeting the principal at the school office, Erin asked why there was a change in plans. The principal shared that after reading the questions, the staff thought it best to see teaching and learning in action rather than

(Continued)

hearing it described in a meeting. And then the principal shared a document that was titled "Instructional Rounds," which had a brief description of teaching and learning practices at the school, and asked Jacob and Erin what they would like to focus on while visiting classrooms. Jacob asked whether this was created for the visit today, and in fact it had not, but was created by the school leadership team earlier in the year. The staff wanted to have a few priorities to focus their collaboration and instructional planning. Erin was intrigued and asked, "Why did the staff want to have this, and how did they come together to create it?" The principal explained that because she had been visiting classrooms regularly, the staff wanted to have input on what she could expect to see happening in classrooms, and so they created what might be called teaching and learning practices. The previous principal had the book Instructional Rounds on a shelf, and the staff had been given the book but had never read it. So there was a book study, and the staff liked the concept of the "instructional core": student tasks encircled by student engagement, content rigor, and teacher expertise. The document was intended to describe what would be seen as students engaged in rigorous learning tasks with instructional support from teachers. Jacob, in thinking about the last school visit asked, "So does this define the purpose, process, and practices of your school?" The principal had not considered this schema but implied that the document seemed to do just that. The trio spent an hour visiting classrooms and using the document to discuss what was seen and share insights about teaching and learning in each classroom. Before leaving the school, Erin asked Jacob and the school principal if they thought this would be a valuable process for all principals to experience. The response was a resounding affirmative. In fact, Jacob went a little further in stating that this would help develop capacity and create coherence among principals and school sites. Erin asked the principal if, when an opportunity arose, she would be willing to share this document and process with her peers. She agreed but clearly was a little anxious about this possibility.

The next afternoon Jacob met with Erin in her office to debrief the school visits. She had already laid out the charts from the previous two visits and had on the whiteboard a chart for capturing key ideas from their observations that focused on capacity building and creating coherence (Figure 4.1). She had changed the "prescriptive" school to be labeled "resistant," and Jacob inferred this meant resistant to change. Three big ideas were also listed on the whiteboard: common purpose, agreed-upon process for improving teaching and learning, and instructional coherence. Jacob inquired whether they would use the same process of using sticky notes to capture ideas and then combine into final comments to write in the chart. Erin agreed, and the two spent several hours writing comments and wordsmithing content to be charted. When finished, each took some time to read through their collective efforts.

Figure 4.1 **Key Indicators of School Capacity and Coherence** SCHOOL CAPACITY INSTRUCTIONAL IMPACT ON QUESTIONS **PROFILE** BUILDING COHERENCE SCHOOL TO BE **IMPROVEMENT** CONSIDERED Compliant Staff does Staff does not Staff has not How can the not have an engage in sharing vet developed school best be agreed-upon of best practices capacity to supported to co-lead the process that to develop a further develop common set of quides the ongoing capacity of improvement practices. improvement staff with of teaching of school creating and learning. coherence? practices. Resistant Staff is How can the Staff desires to Staff appreciates comfortable maintain autonomy school pride school come with the by connecting the more than to understand status quo work of individuals improving that continuous and resistant to a static school improvement practices to meet to the mission and vision. is critical for the learning needs of all changing achieving of current students. long-term school success? practices. Staff do not Fragmented Staff do Staff are willing to In what ways not have create a common can staff be vet value the common set of practices but concept of engaged in beliefs or lack clear norms working together structured agreements and a process to to get better processes to together. build capacity as to how do so. best to and create coherence? support student learning. Staff are open The school has What has Coherent Staff have had the most commonly to working a collaborative agreed-upon together and impact with inquiry process tools and co-learning new that is used by building the processes ways for improving all for continuous capacity that guide teaching and improvement. of staff to improvement create school learning. of school coherence? practices.

(Continued)

Jacob suggested that because their questions for consideration were focused on better understanding how to support schools, it was important to share their findings with school principals. He was becoming uncomfortable with what could become predefining school site supports without input or feedback from principals. Erin disagreed because she saw this as action research and not for the purpose of designing central office supports for school sites. Her suggestion was that student data sets created by her office would be provided at the next principal meeting and that a final school visit could serve as a way to learn how school sites utilize this evidence. Jacob was accustomed to receiving these quarterly data reports and was also interested in seeing how schools used this information. So both agreed that the last school visits would focus on how evidence of student learning was utilized by the staff of each school.

Creating Instructional Coherence

Creating instructional coherence is not realized by disseminating tools and resources that delineate learning priorities, instructional practices, and student outcomes. Rather, it is an ongoing process for improving the instructional core, that is, maintaining high levels of student engagement in the learning of rigorous and complex learning tasks supported by teachers with pedagogical expertise (City et al., 2009). Successfully engaging students in rigorous and complex tasks calls upon teachers to integrate curricular resources with instructional strategies and assessments for learning in a way that supports the learning

Creating instructional coherence does not have an end point but is an agile improvement process driven by the moral imperative of student equity.

needs of all students. This is realized when school sites, in collaboration with district staff, design and refine guiding principles for high-quality instruction that improves student learning at the classroom desk. This ongoing interaction and co-learning ensures that a coherent instructional framework will evolve in depth and specificity as precision of practices within and among schools strengthens the instructional core. Creating instructional coherence does not have an end point but is an agile improvement process driven by the moral imperative of student equity.

This can be a challenging endeavor because a common approach for schools and districts is to guide teaching and learning with commonly accessible standards-aligned resources. Some may think of this as a pacing guide, others may consider this as an assessment framework, and a few default to using adopted materials verbatim for

such guidance. Instructional coherence is not the same as alignment with or fidelity to predefined instructional resources. These mindsets are akin to the former era of standards-based materials that were designed to reduce variation in teaching and learning that exists within schools and, even more so, across school districts. If one were to consider the differences that exist among schools, such as teacher tenure, student demographics, and school climate and culture, then it becomes immediately clear that such top-down guidance will not result in equitable improvement of student learning. In reality, the determining factor is whether school staff have the collective capacity to maximize the impact of these instructional resources and strategies for achieving equitable growth in student learning. It is not what resources you have, rather it is how you use the resources that matters most.

An example of this work in action was noted in Districts on the Move through the story of Little Lake City School District. This school district had spent years aligning instructional resources and tools that guided teaching and learning. This centralized approach was appreciated by teachers and principals because it had created instructional coherence among school sites. The central office and principals had grown a little skeptical of this long-standing top-down approach and were interested in further developing the capacity of school sites to take the reins on improving teaching and learning. This shift in creating instructional coherence from that of district-focused to site-driven was precarious at first because schools began to question the impact and effectiveness of district-wide resources and strategies. The focus on student learning at the classroom desk with a sharp lens on the instructional core began to further flush out equity issues among students. The work occurring within schools and among teachers and principals began to have more influence on the improvement of district-wide instructional tools and resources. After a few years, schools had become even wiser consumers and more active curators of the resources used for engaging students in learning at the classroom desk. So it is not an either-or process for creating instructional coherence, rather it's the beauty of and, meaning that instructional coherence requires both instructional tools and resources and the capacity of school sites to engage in the ongoing process of developing specificity and precision in how these materials are used to meet the learning needs of all students. And because new students arrive every year, and each school experiences shifts in teachers and principals, instructional coherence has to continuously be revisited, adapted, and modified to accommodate these recurring changes.

Within a given school site, creating instructional coherence can take root from several starting points. There could be a pacing guide, adopted instructional materials, an assessment platform, or a predefined instructional model for at-risk students that has been given to or acquired by a school. These tools and resources may or may not be appreciated or used effectively by staff. Again, tools and resources in of themselves do not create instructional coherence. When school staff begin to focus on the impact of learning at the classroom desk, student equity issues will become clearer. And this will create a need or demand for inquiring how to maximize the impact of these tools and resources on student learning growth. At this point there will be either a sense of frustration or an opportunity to adapt and refine how teaching and learning are approached. Those schools that delve into fine-tuning the use of tools and resources to discern how to maximize the impact on student learning will inevitably

engage in the process of creating instructional coherence. Those who remain frustrated will ultimately seek out new and different tools and resources that will result in the vicious cycle of seeking a "silver bullet" for improving teaching and learning. The former will take the long road of creating instructional coherence, and the latter will succumb to a reliance on tools and materials to guide teaching and learning. The desired outcome is that school teachers, in collaboration with site principals with district support, engage in the ongoing processes of learning how to maximize the impact of teaching on student learning by developing precision of practices. And when this occurs among all staff in a school or preferably among all schools within a district, the result will be the creation of an agreed-upon instructional framework that guides teaching and learning.

Creating Instructional Coherence in LBUSD

To ensure instructional coherence and build the capacity of instructional teams, LBUSD adopted system-, school-, and classroom-level practices to bring about equitable outcomes for a diverse student population. The most robust processes are at the system level. Instructional experts from LBUSD and staff from California State University Long Beach meet on a regular basis to review preservice courses for incoming teachers to ensure that individuals receive research-based instructional practices that align to the equity-driven work of the school system. The LBUSD Office of Curriculum and Instruction and Professional Development and Research brings teachers together over the summer to refine and/or develop common assessments in all subject areas at all grade levels to be deployed the following school year. The LBUSD Research department provides numerous professional learning opportunities for teachers and site administrators on how to develop their own classroom assessments and evaluate data to enhance student learning.

In addition, the LBUSD Instructional Steering Committee meets monthly to collaborate and analyze findings from CIV/quarterly visits to refine support provided to schools from the central office. Those schools, identified as Focus Schools through this process, are supported by central office instructional support personnel to provide professional learning support to teachers and administrators based on the problem of practice identified by individual school sites. The executive cabinet meets weekly to discuss instructional needs of the schools and make modifications in central office support systems. This allows for real-time allocation of fiscal resources to support specific student interventions that need to be implemented based on data from the CIV/quarterly visits. To promote transparency of improvement efforts, the Board of Education is provided two opportunities each year to take field trips to schools and attend professional learning sessions to see firsthand how the school system is addressing equitable outcomes for students.

At the school level, all new administrators are provided a coach to build capacity with leading the LBUSD improvement process. All monthly administrator meetings have an instructional focus, which is to ensure that site administrators spend 50% of their time in

classrooms supporting the continuous improvement efforts of the school. Sites record how many visits each administrator makes to classrooms on a monthly basis and reports this data to their supervisor. In addition, instructional leadership teams from each site are brought together twice a year for a full day of learning and collaboration to address the instructional needs of all students. And at the classroom level, all new teachers receive 2 years of coaching from district personnel who are experts in a particular grade level and/or content area. All teachers are provided numerous paid professional development opportunities to enhance their skills as teachers. Some of these sessions are required by the system, whereas others are preselected by the teacher based on their own professional growth.

Fostering Robust Collaborative Inquiry Processes

Creating instructional coherence has been described as a collaborative inquiry process that over time develops the capacity and expertise of school staff to engage students in rigorous and complex tasks with high-impact instructional supports. A robust collaborative inquiry process is essential for creating instructional coherence. The best way to frame this process is through recurring 3- to 4-week instructional cycles guided by an instructional framework that informs how school staff attend to teaching and learning. Within such a cycle are the four phases of analyze, design, implement, and refine. Analyze student learning needs to define instructional priorities that focus efforts on overcoming the identified problems of practice for teaching and learning. Design instructional approaches and learning outcomes that will inform the student learning process. Implement these instructional practices and student supports while making adjustments based on evidence of impact on student learning. Refine the teaching and learning process informed by a common understanding of what works best and why that has been discerned through the analysis of student learning progress and growth. This is the collaborative inquiry process that creates instructional coherence and develops precision of pedagogy.

The challenge is that this collaborative inquiry approach in many cases has not been fully developed or effectively supported to guide the work of school staff or the efforts of schools within a district. To do so requires that district and school leaders foster a robust collaborative inquiry process. And when we say foster, this is not the same defining, prescribing, or expecting collaborative inquiry to occur within and among school sites. It cannot be assumed that inquiry will be the primary driver of teacher collaboration during Wednesday professional learning community (PLC) time. Providing school staff with dedicated time, instructional tools and resources, and access to student learning evidence will not result in the precision of practice that maximizes impact on student learning. There must be a structured process that guides the co-learning and co-leading of school improvement efforts. And fostering such a process requires that leaders have strategies for encouraging, promoting, and developing capacity of school staff. This is a high-level investment of time and energy among district and school leaders. And the old adage of "what is calendared gets

done" should be top of mind. So the question to consider is, how much time and energy do leaders expend on fostering collaborative inquiry?

Mary Jean Gallagher has described her experience with fostering collaborative inquiry when serving as superintendent of schools in Ontario, Canada. She understood the value of collaborative inquiry and wanted the district leaders to become more proactive in fostering this among school sites. And so she had asked her district staff to engage school sites through an inquiry stance to assist with guiding their improvement efforts. When asked to share the progress of such visits, most all administrators noted the lack of time to do so. In the end, Mary Jean required that no district leaders were to be in their offices on Wednesdays and instead needed to be at school sites engaged in collaborative inquiry with school leaders and staff. Only then did the modeling and nurturing of an inquiry process begin to take root at the district and school site levels. As noted, what gets calendared is what gets accomplished.

Chris Steinhauser has a similar story of how the work unfolded in LBUSD. District leaders and site principals had established a collaborative inquiry visitation process every 9 weeks at secondary schools and 12 weeks at elementary schools. This took shape as both an ending and a beginning of a collaborative inquiry cycle, sharing progress of improvement efforts to clarify promising practices and analyzing evidence of impact to focus direction on overcoming newly identified problems of practice. In the interim of visits, school sites engaged in the phases of designing improvement strategies and then implementing and adjusting based on the evidence of impact on student learning. Schools were paired or grouped based on similar problems of practice and were visited by a team of district leaders. And so this became a true district and school collaborative inquiry endeavor that occurred every 9 to 12 weeks among all school sites. That is a high level of commitment to the ongoing process of encouraging, promoting, and developing a robust collaborative inquiry process.

The InnovateEd team has witnessed school sites in the absence of a district-wide model engage in the development of a collaborative inquiry process for improving teaching and learning. Corona-Norco USD had an approach that was more of an opt-in opportunity for school sites. Support was provided to opt-in schools in the form of school leadership team development supported by InnovateEd. This was designed as four to six sessions per year over a 2-year period to assist school sites with engaging in collaborative inquiry cycles and, over time, developing internal capacity to sustain the improvement process. Many school sites connected three to five sequential PLC Wednesdays to construct a collaborative inquiry cycle and then engaged in recurring cycles of analyze, design, implement, and refine every 4 to 6 weeks to develop capacity of teacher teams to co-lead collaborative inquiry. These schools were effective in their ability to develop an internal process for continuous improvement and share their progress and impact with other sites for an organic approach to creating systemic collaborative inquiry within the district. This would be more akin to the theory of action for scaling high-impact practices through a diffusion of innovation model.

The catalyst of change can begin at the teacher level as often occurs within schools when one or more teacher teams work together in a way that develops a robust collaborative inquiry process. These teachers plan instruction, discuss instructional approaches, analyze evidence of student learning, and create common agreements for engaging students in the learning process. At some point, their efforts become noticed by the site principal, who begins to more actively support their improvement processes. And slowly over time, more teachers and teams begin to engage in similar processes until there becomes a commonly agreed-upon process for engaging in collaborative inquiry. Then through principal dialog, the work of the school becomes known to other sites and begins to shape and influence how other schools attend to the process of improving teaching and learning. Hopefully there is a district leader who seizes upon the opportunity to foster more robust collaborative inquiry processes among all school sites. Never dismiss the power of how a few teachers can influence the work in their own school and potentially affect how the district attends to the continuous improvement of teaching and learning.

Fostering robust collaborative inquiry processes can be initiated by the central office, co-constructed with district leaders and site principals, taken on by individual schools with a system of support, or even be driven by the collective commitment of a few individuals within a school site. Ultimately, the approach taken is dependent on the culture of the school district and the capacity of school sites to co-lead improvement efforts. What is most essential for consideration is how school and district leaders can best nurture, promote, and develop an agreed-upon collaborative inquiry cycle that improves teaching and learning. And this does require dedicated time, energy, and focus among school principals and staff and some form of ongoing support from district leaders to sustain these recurring instructional cycles and improvement processes.

Developing Precision of Pedagogy

Pedagogy is the study of how knowledge and skills are exchanged during the learning process through interactions that take place between the teacher and students and among students. This differs from instructional strategies that are methods for engaging students in the learning process. A way to better understand this difference is to consider the book *Classroom Instruction That Works* (Marzano, 2001), which references nine research-based instructional strategies. At a conference the audience was asked how many knew of this work, and almost all raised their hands. Those with hands raised were asked to keep them in the air if they were able to name the nine strategies, and many hands went down. Then those with hands still raised were asked if they remembered reading Chapter 12, which described how to effectively plan instruction and implement these strategies. At this point there were no longer any hands in the air. Most knew of the strategies, few could explicitly name them, and none could describe how to use them effectively. This is the difference between having knowledge of an instructional strategy versus the precision of pedagogy for

actively engaging students in the learning process. Some would go as far as to say that many schools are strategy rich and yet learning poor.

John Hattie has encountered similar circumstances when several years ago he was the keynote for a large conference of education leaders in California, at which time he commented to the audience that his visible learning research had been done to delineate the most effective instructional strategies and practices in education. And yet schools and districts had not put this research into practice to improve teaching and learning. This brings to light a

Developing precision of pedagogy is achieved through a robust collaborative inquiry process that engages teachers and administrators within a school to learn how to ensure all students demonstrate growth in learning.

common dilemma in education in that the research is accessible, but the research has not had the desired impact on how learning occurs within schools and classrooms. What if the solution was not for educators to be better consumers of research but for educators to become better action researchers? What if educational research was not the end goal but instead a starting point from which to engage in collaborative inquiry and seek out better methods of teaching and learning that resulted in precision of pedagogy? So maybe we're asking educators the wrong question. Rather than asking, "How are you using research-based practices?" we should be asking, "What action research have you done that has provided clarity for maximizing the impact of teaching on student learning?" When reframed in this manner, developing precision of pedagogy is achieved through a robust collaborative inquiry process that engages teachers and administrators within a school to learn how to ensure all students demonstrate growth in learning. It is student equity in action.

As has already been noted, collaborative inquiry is a four-phase process of analyzing evidence to prioritize the focus of teaching and learning, designing high-impact instructional approaches with evidence to inform the teaching and learning process, implementing

strategies and adjusting based on the impact on student learning, and analyzing evidence of the impact on student learning growth to refine teaching and learning practices by collectively understanding what works best and why. Evidence of student learning is a common denominator of all four phases and is in fact the key driver of action research and continuous improvement. There are five sources of evidence that should be considered in the process of developing precision of pedagogy: formative assessment data, student work, learning rounds (i.e., observing the learning process in classrooms), student interviews, and survey results. These sources of evidence are used to triangulate multiple sources of information for the purpose of clearly discerning the barriers of and solutions for improving the impact of teaching on student learning. The foundational sources of evidence are data, student work, and learning rounds because all are directly connected to student learning at the classroom

desk. The added value sources of evidence are survey results and student interviews because both are a powerful means from which to better understand the perspectives of students, staff, and parents.

This collaborative inquiry process for developing precision of pedagogy might play out as follows within a school. During the analyze phase, student data disaggregated by student groups, ethnicity, and gender are analyzed to develop a deeper understanding of the problems of practices that are barriers to student learning growth. Student work samples may also be analyzed to gain a deeper perspective of the strengths and constraints among students with use of specific skills. With this information in hand, a theory of action and clear strategies of how to approach teaching and learning is designed. And evidence of learning is agreed upon for monitoring student progress, which would consist of student work and learning rounds focused on specific student attributes and outcomes. Teaching and learning practices would then be implemented during which time the information gathered from student work and learning rounds would inform adjustments to teaching and learning practices. At the conclusion of the collaborative inquiry cycle, student interviews and survey results may, and formative assessment data certainly would, be analyzed to make informed decisions as to how best to refine teaching and learning moving forward. This process could be attended to by the school leadership team in addition to some or all teacher teams at the school. Optimally, site administrators would be engaged in the process as well as district staff in a supportive and co-learning role.

What has been described could be considered as the "gold standard" for engaging in a robust collaborative inquiry process that develops precision of pedagogy. The intention is not to advocate that schools rush into such a process but, rather, slowly embark on the journey of building capacity to continuously improve teaching and learning. Therefore it is essential to take into account school climate (beliefs), culture (behaviors), capacity (efficacy), and coherence (shared depth of understanding). Do school staff have an appreciation of or a common approach for co-leading a collaborative inquiry process? Do school staff have an affinity for analyzing multiple sources of student learning evidence, or is there a sense of trepidation or even resistance? Do school staff desire to refine teaching and learning and achieve more equitable growth in student learning, or is there comfortability with the status quo or fear of change? All these questions and more must be considered because the key to success is not the speed of execution but achieving small successes that create momentum for attending to more difficult challenges.

As can be imagined, developing precision of pedagogy is a never-ending process because there will always be year-to-year changes in the students within classrooms as well as the fact that increased staff expertise leads to deeper understanding of student learning needs. The aforementioned collaborative inquiry process should be thought of as recurring instructional cycles that align with periods of time (i.e., 4 to 6 weeks) or connect to units of study

with clear priorities and outcomes for student learning. The intent is not to be precise with pedagogy for a fixed time but rather to develop a common understanding of how to maximize the impact of instructional practices on student learning growth. This moves away from what some might consider as content-based expertise toward that of learning-centered expertise: how to ensure that all students demonstrate the ability to complete rigorous and complex tasks by applying key cognitive skills as part of the learning process. In *Districts on the Move* we had referred to these key cognitive skills as visible evidence of student learning (see Figure 4.2). And this framework of student learning evidence can serve as a guide for school sites that focuses efforts on ensuring all students demonstrate these critical skills.

Figure 4.2	Visible Evi	dence of	Student	Learning
I Iguic T.E	VISIDIC EVI	actice of	Judelle	Learning

Figure 4.2 Visible Evidence of Student I	-earning	
Higher-Order Thinking Skills	Close and Analytic Reading	
Students engage in rigorous and complex tasks requiring analysis, reasoning, evaluation, logic, problem-solving, justifying, and transferring learning to new contexts via planning and creativity.	Students access and interpret media types with a clear purpose requiring annotation, source-dependent questions, notetaking, and analysis of information to gain knowledge for engaging in evidence-based conversations, writing, and performance tasks.	
Precise Use of Rigorous Academic	Structured Student Collaboration	
Language Students speak and write with precise use of general academic and domain-specific vocabulary, grammar, syntax, and word meaning as part of productive discourse related to content-specific subject matter.	Students effectively work in pairs or groups on clearly defined tasks with specific roles and responsibilities for engaging in structured academic discourse to convey understanding, share ideas, and build upon the thoughts and reasoning of others.	
Evidence-Based Arguments	Evidence-Based Writing	
Students develop claims, conjectures, and hypotheses that require analysis of information and interpretation of evidence to construct meaning, apply reasoning, and justify the logic of models.	Students clearly communicate through short constructed responses and process writing across content areas for a variety of purposes and audiences to justify opinions and arguments with evidence, show understanding of concepts, and transfer learning to new contexts.	

© 2022 InnovateEd

To this end, an inquiry question that can sustain the continuous improvement of teaching and learning could be framed like this: "I wonder how we can further improve teaching and learning so that all students demonstrate equal levels of success in applying key cognitive

skills to complete rigorous and complex learning tasks?" In doing so, schools clearly define the purpose and focus of developing precision of pedagogy: equitable growth in student learning. For the purpose of teaching and learning is not to achieve an outcome but rather to ensure all students have the key cognitive skills to effectively engage in and have ownership of the learning process. Precision of pedagogy should be focused on deepening student learning.

The Path of Progress for Holmes Elementary School

Lori Grady is the principal of Holmes Elementary School in Long Beach. She has been at the site for 3 years after having served as principal at several other schools as well as an administrator at the central office. Upon arrival at the site, it was clear that school staff had a deeply held belief that all students can learn at high levels, and student achievement results demonstrated that teachers were positively affecting student learning growth. The keys to this success were seen as the relationships between staff and students and the willingness of staff to figure out how best to support the learning of all students. At the heart of this was a student learning profile that aligned instruction with student learning interests and needs. This could be framed as a personalized instructional approach for engaging students in meaningful learning opportunities. The school had a student-centered culture in which teachers served as facilitators of learning. An emphasis was placed on high levels of student engagement with personalized learning tasks supported by differentiated instruction. As principal, Lori's role would be to promote and nurture this culture of collaboration and equity-driven improvement.

This deep level of instructional capacity and coherence existed in spite of serving a diverse student population ranging from poverty to upper middle-class families. A culture of collaborative inquiry driven by continuous improvement ensured that barriers to student learning growth were overcome by school staff. Although the school staff developed theories of action through the analysis of data and planning of instructional units to meet student learning needs, this was seen as a normal expectation that staff surpassed by personalizing and differentiating instruction to actively engage students in their own learning. In this regard, the three priorities in the school became creating a positive learning environment, increasing student engagement, and differentiating instruction. As the pandemic unfolded, and the school shifted to remote learning, the staff worked tirelessly to ensure that students had access to the materials and resources needed for a high-quality learning environment. Maintaining a strong connection with students was a top priority for school staff, who were open to asking students how they wanted to engage in learning, which was not diminished even though teaching and learning had changed dramatically.

Because the staff had experienced the positive impact of their work on student learning growth, a culture of risk-taking was instilled that drove the continuous improvement of teaching and learning. In this regard, district resources were only a guide that informed teaching and learning in a nonprescriptive manner. The staff at Holmes Elementary School has taken

the helm with guiding teaching and learning in a way that increases student engagement and achieves growth in student learning. The loose-tight relationship between the central office and school sites has been critical for the development of the culture and practices within the school site. There is a true balance of structure and autonomy in relation to central office expectations and school site action steps. The outside-of-the-box thinking among staff to discover how to best engage students in learning based on their needs and interests is what makes Holmes Elementary School a school on the move. The challenge for Lori and the staff is maintaining and sustaining the positive impact of school improvement efforts.

The Path of Progress for Lakeside Middle School

Little Lake City School District, a K–8 school district in California, had been a case study for *Districts on the Move* to highlight how to create clarity of district goals and school priorities for student learning. Over a 3-year period of time, district leaders, site principals, and school teachers had shifted from a district improvement model to a site-driven improvement process. The use of school action plans and an agreed-upon collaborative inquiry process ensured that improvement efforts focused on ensuring all students successfully completed rigorous and complex learning tasks to achieve equitable growth in student learning. One of the school sites, Lakeside Middle School, continued down this path of progress to develop even more depth and precision of school-wide instructional practices.

These continued improvement efforts began when the school principal, Ana Gutierrez, wondered how collaboration among content and grade-level teams could be expanded upon to further accelerate student learning. The school already had an action plan that guided 9-week improvement cycles with clearly delineated strategies for teaching and learning. Staff analyzed data and collaboratively planned instruction as grade-level and content area teams. But the focus was not on identifying and overcoming the learning gaps that existed among individual students. The staff agreed to integrate school-wide collaboration time as part of the collaboration model wherein samples of student work would be dissected to identify trends and patterns among all grade levels and content areas. This allowed the staff to have a "balcony" view of student learning progress that provided many insights as to the learning gaps among students. The key question was: "What are successful students able to do and demonstrate that unsuccessful students have not yet developed the skills and abilities to do so also?"

Over time, the staff transitioned to creating index cards for each student in the school that described their academic performance and learning needs. This allowed the analysis of student work to go deeper with analyzing the specific learning needs of individual students and student groups. As staff worked together to define the problems of practice among students, the initial conversations were superficial (i.e., better readers or more involved parents) and then became more specific as to the actual learning challenges occurring among students. These efforts were led by the school leadership team with support from Ana in her lead

learner role as principal. A protocol for student work analysis was created to focus the dialog on identifying learning gaps and clarifying the instructional supports for overcoming learning barriers. Eventually student work was being analyzed across content area teams so that student learning challenges could be seen not as a content challenge but rather connected to the cognitive skills students applied during the learning process.

This led to the conversations among staff to shift from identifying successful and struggling students to clarifying successful instructional strategies and making agreements as to school-wide instructional practices. One example was the realization a root cause of student literacy gaps was the fragmented use of nonlinguistic representations between grade levels and content areas. Essentially students were learning and relearning how to utilize these academic language support systems within their classes and also between grade levels. The staff recognized a need to determine the best practices for using nonlinguistic representations and come to agreements as to how to do so consistently within content areas and grade levels. Student learning needs guided the refinement and improved precision of school-wide instructional practices. Staff collaboration now focus on the subtle nuances of instructional practices that make a difference in supporting student learning. In the past this would not have been the dialog among teachers, but it has now become the culture of the school.

Tips and Tools for Taking Action

Having supported the improvement efforts of school districts for almost 20 years, Jay has come to recognize a troubling pattern in this work. School districts and sites default to purchasing adopted instructional materials, ascribe to the use of specific research-based instructional strategies, define how students should be assessed, and then require the monitoring of student learning progress at predefined time periods. This would be defined by many school districts as creating instructional coherence to develop precision of pedagogy. Knowing that Long Beach is recognized for high-quality teaching and learning and equitable growth in student learning outcomes, Jay inquired how the approach taken by Long Beach may differ in practice. Chris's response was enlightening in that the curricular resources, instructional strategies, and assessment practices are available and yet optional for all school sites. The primary driver is not fidelity to district-wide tools and resources, rather it is the robust collaborative inquiry processes led by school site teachers and leaders that create instructional coherence and develop precision of pedagogy. If a school site is struggling with improving student learning, then most certainly there are district-level interventions and supports provided to the site. But for the majority of schools, there exists defined autonomy that empowers teachers and leaders to clarify how best to achieve equitable growth in student learning outcomes.

This approach to developing collective expertise is paradoxical. It implies that the school district may provide tools and resources that inform teaching and learning, but these are not mandated or prescribed for use by schools. Instead, sites have the discretion and

autonomy to create instructional coherence and develop precision of pedagogy through the process of learning together how best to improve student learning. Continuously improving teaching and learning is the primary driver for school sites to create collective expertise. What follows for those ready to embark on this journey of site-driven capacity building are tips and suggestions that will help accelerate school improvement efforts.

Creating Instructional Coherence

A typical scenario for schools is to participate in a 2-day training on newly adopted materials, acquire an updated standards-based pacing guide, attend a session on how to use the latest assessment platform, receive professional development and a companion book on an instructional approach, and then be left to discern how to effectively use these tools and resources to meet the learning needs of a diverse group of students. This is not a one-time experience; rather, for many teachers and site leaders, this occurs to some extent on an annual basis. And then there is the expectation for school sites to create instructional coherence even though the tools and resources at hand continually shift based on the ongoing changes occurring at the district and state levels. The only viable solution is to create a coherent instructional framework that is not dependent upon the tools and resources at disposal but instead comprises guiding principles that inform high-quality teaching and learning.

Such guiding principles always connect to what Richard Elmore has defined as the instructional core: maintaining high levels of student engagement in the learning of rigorous and complex learning tasks supported by teachers with pedagogical expertise. As we have noted, successfully engaging students in rigorous and complex tasks calls upon teachers to integrate curricular resources with instructional strategies and assessments for learning in a way that supports the learning needs of all students. The goal is to focus the collective efforts of school staff on improving student learning at the classroom desk. Creating instructional coherence is not an outcome but rather an ongoing process of seeking to understand how best to ensure all students successfully complete rigorous and complex learning tasks as part of daily classroom instruction. The first step for school sites to embark on creating collective expertise is establishing guiding principles that can be initially framed as the following essential questions.

- 1. How can we ensure that all students have equal access to high-quality teaching and learning?
- 2. How can we integrate curricular resources, instructional strategies, and assessment practices in a way that meets the learning needs of all students?
- 3. How can we ensure that all students are actively engaged in rigorous and complex learning tasks as part of daily classroom instruction?
- 4. How can we continuously improve teaching to maximize the impact on student learning?

Fostering Robust Collaborative Inquiry Processes

There is a clear distinction between collaboration that denotes a time, location, and structure for productive group work and that of collaborative inquiry, which is an agreed-upon process for co-learning and co-leading school improvement efforts. For the past 20 years, most school districts have set aside collaboration time for teachers and leaders to plan instruction, assess the impact on student learning, and provide targeted support to struggling students. And yet we do not see the development of collective expertise within most school sites for achieving equitable growth in student learning. The reason for this unfortunate circumstance is that even though school sites have collaboration time, most do not engage in robust collaborative inquiry processes such as lesson study. To shift from a time and structure for collaboration to a process of collaborative inquiry requires that school sites reframe this critical work as teaching and learning cycles. This cannot be a quick change in practice but rather a slow transition that is nurtured and continually reinforced.

At the initial stages, the transition to fostering collaborative inquiry begins as reframing the purpose of collaboration to that of a collaborative inquiry cycle. This usually begins with defining an agreed-upon period of time such as 4 to 6 weeks for which there is a common focus on a problem of practice considered to be a barrier to student learning growth. This could be close and analytical reading, communicating with precise academic language, collaborative student discourse, or using evidence to explain, justify, and defend arguments. Then a theory of action is designed with clearly delineated improvement strategies to be measured with agreed-upon evidence of student learning. Staff work collaboratively to implement the strategies and make adjustments to improve the impact on student learning. At the conclusion of the inquiry cycle, student learning progress and the impact of teaching on student learning is analyzed to discern what works best and why. With these new insights in hand, teachers and leaders refine teaching practices and student learning supports moving into the next cycle. The aforementioned process is attended to in a slow and gradual manner as staff become comfortable and confident with engaging in a robust collaborative inquiry cycle. These efforts must be guided, promoted, and nurtured by site administrators and teacher leaders so that staff have an opportunity to adjust to new ways of working together.

Developing Precision of Pedagogy

When Jay served as an administrator of a county office of education, there were opportunities to visit high-performing school sites that achieved consistent growth in student learning despite teaching underserved student populations. At one such school visit, Jay inquired with the principal as to the secret of the school's long-term success. The answer was that the school focused on only one instructional priority and two instructional strategies each school year. To paraphrase the principal, "We need to become exceptional with teaching and learning, and to do so requires that school staff have a laser-sharp focus." At first this seemed

to be too linear of an improvement strategy before it was clear that school staff deeply analyzed the problems of practice among students and uncovered the barriers to student learning growth. The school was in fact developing precision of pedagogy with high-yield instructional strategies to achieve equitable student growth based on a carefully selected learning priority. And so year after year new strategies were selected as different student learning priorities emerged so that over time the staff had developed collective expertise with a multitude of high-yield instructional practices.

This example resembles the adage of Steve Jobs in describing how he turned around the failing company called Apple to become one of the most successful companies in history: simplify and focus. Mary Jean Gallagher, when serving as a senior leader in the Ministry of Education in Ontario, Canada, used such an approach to move the 4,820 schools within 96 school districts in the province. At the center of the improvement strategy was a simple question that we have expanded upon in this chapter: "How we can further improve teaching and learning so that all students demonstrate equal levels of success in applying key cognitive skills to complete rigorous and complex learning tasks?" We can break down the key ingredients of exceptional teaching and learning into six parts so that all school sites can develop precision of pedagogy.

- 1. Clearly define the barriers to student learning that are preventing all students from successfully completing rigorous and complex learning tasks.
- 2. Identify the key cognitive skills that if students develop mastery will result in significant growth in student learning.
- 3. Clarify which high-yield instructional practices will have the greatest impact on improving student acquisition of these key cognitive skills.
- 4. Determine the evidence of learning that will best inform the impact of teaching on student learning.
- 5. Make common agreements as to how teaching and learning will be approached to test this theory of action and make adjustments based on the impact on student learning.
- 6. Collectively commit to learning together how best to maximize the impact of teaching on student learning.

Taking Action

John Hattie has become the primary source of research for maximizing the impact on student learning in his publication of *Visible Learning* and subsequently *Visible Learning* for *Teachers*, which ranked the effect sizes of instructional strategies. In 2016 the rankings were updated to include a new number-one influence on student learning: collective

teacher efficacy. The greatest impact on student learning occurs when school staff have a shared belief in their collective ability to positively influence student learning. Marzano (2007) has framed the challenge of developing the capacity and confidence of a school staff through his seminal research in *The Art and Science of Teaching*:

The best that research can do is tell us which strategies have a good chance (i.e., high probability) of working well with students. Classroom teachers must determine which strategies to employ with the right students at the right time. In effect, a good part of effective teaching is an art, hence the title, *The Art and Science of Teaching*.

Clearly there is an art and science to developing collective expertise among the staff of a school site. To see this in action we can look toward another performance-based learning activity that requires instructional coherence, collaborative inquiry, and precision of practice: gymnastics. If you have ever had the opportunity to observe a gymnastics practice in action, you would understand. In a large room would be about four groups of gymnasts ranging from beginners to those with exceptional abilities. But what would be seen are similar routines being practiced by each group with increasing difficulty and precision as gymnasts ascend to the next group. There is a progression for developing, acquiring, and perfecting each highly structured skill before moving into the next group, where more complexity is added and a precision of practice is expected. You can actually see all four groups practicing at the same time and make explicit connections to the routines being learned that lead to developing the technical skills and artistic ability of an exceptional gymnast. And the trainers of these gymnasts transition from leading beginners in highly structured activities to ultimately serving as coaches who pinpoint subtle nuances of extremely difficult performances that define who will win the national championship. This is the mindset and process that school leaders and teachers need to adopt to develop collective expertise among the school staff. Some teachers or teams are beginners that need more explicit and structured support, others need more coaching and feedback, and some want specific insights on subtle shifts in instruction that make the difference in learning for certain students.

An effective approach to the process of developing collective expertise that allows for this gradual release of deeper levels of ownership and ability to improve student learning is through the use of a series of protocols (Figure 4.3). The sequence of this series of protocols is similar to what was shared in the example of the gymnasts with a structure and process that is designed to create instructional coherence, foster collaborative inquiry, and develop precision of pedagogy. What follows (Figures 4.4–4.10) is the sequence of protocols that Jay and the team at InnovateEd have used with schools and districts. The protocols are a beginning point that provide structure and support, then transition to adaptations and improvements by school staff to make the work their own, and finally result in a staff having the collective efficacy to carry on the work with high levels of confidence without the need of protocols to guide the work at hand.

Figure 4.3 School Site Protocol Cycle

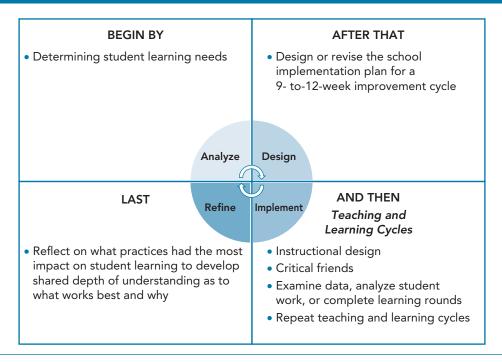


Figure 4.4 Determining Student Learning Needs

using data analysis. It is designed to be used after teams have determined what a years' worth of progress will look like for each student and before they engage in instructional design work. Review norms. Opening 5 minutes Facilitator explains or reviews the purpose and process of the protocol. Group reviews school implementation plan and makes connections to the cycle of inquiry. Calibrating Participants calibrate criteria for students' current level of Criteria for proficiency as it relates to multiple measures of student learning Student and performance, previously identified when the team determined **Baseline Status** what a year's worth of progress would look like and how they would measure a year's worth of progress. 30-45 minutes • What level of performance will we use to indicate that students are achieving above, at, near, or below the level of proficiency for our agreed-upon measures?

Purpose: A process protocol for teams to strategically design a tool for monitoring impact

Schools on the Move: Leading Coherence for Equitable Growth by Jay Westover and Christopher Steinhauser. Copyright © 2022 by Corwin Press, Inc. All rights reserved.

Record, Identify, Sort, and Post	Participants document each student's baseline data based on the criteria the team determined.
45–90 minutes (depending	 Document each student by name and/or grade level/class period and record their current level of performance.
on number of students)	Document each student's growth target based on team decision for measuring at least 1 year of growth.
	 Identify each student's current performance level based on calibrated criteria for current level of proficiency.
	 Sort all students by class period, then by proficiency level, then by performance level as needed based on criteria and team agreements.
	Create a visual representation for the team to examine simultaneously.
Determining Student Subgroups 30–45 minutes (depending on number of students)	Participants determine and list significant subgroups. Which subgroups do we need to be aware of when designing a response to this data (i.e., students with disabilities, English learners, etc.)?
Identify, Document, and Sort 30–45 minutes (depending on number of students)	Participants identify students by subgroup needs. Participants sort students within performance categories by subgroup needs. Create a visual representation for individuals and the team to examine.
Group Discussion and Next Step Commitments 45–60 minutes	Participants discuss implications of students' baseline data and growth targets. Ask questions. Reflect upon reality of students' current levels of performance Make connections to the school implementation plan Discuss implications for instructional design based on current reality and school implementation plan Team members make and commit to next steps.
Debrief 10 minutes	Team discusses what worked and didn't work with the process and the protocols. Group reflects on the norms.

Figure 4.5 Designing and Revising the School Implementation Plan	
Purpose: A process protocol for SLTs to determine the progress of implementation, lead indicators, and lead measures to refine the school implementation plan.	
Opening 5 minutes	Review norms, assign roles, and reinforce purpose and process of the protocol.
Dialogue Around Successes and Progress 30–60 minutes	Team members dialogue around individual and collective successes in implementing the plan and/or leading the work. What commitments did the team follow through on? What aspects of the plan was the team able to implement? What evidence has been collected to indicate success or progress made?
Dialogue Around Challenges and Obstacles 30–60 minutes	 Team members dialogue around individual and collective challenges with implementing the plan and/or leading the work. What if any commitments did the team not stick to? What got in the way? What aspects of the plan was the team not able to implement? Why? What evidence has been collected to indicate challenges or obstacles?
Refine the School Implementation Plan 150–180 minutes	 NOTE: Rather than deleting or replacing words, phrases, and so on, many teams prefer to keep a running log of their journey by color-coding revisions, dating revisions, or saving a new copy of their plan. Team members dialogue, discuss, and make decisions about the school implementation plan Considerations Focus and Outcome: Does your focus need narrowing or refining? Is this the right focus area given the needs of your students? Has evidence been collected that suggests a foundational or underlying issue? Is the outcome a clear, measurable target to aim toward? Student Success Indicators: What are your success indicators? Does your staff believe these student skills and behaviors will lead to achieving the focus and outcome? Are they lead indicators (predictive and influenceable)? Staff Practices: What staff practices do we need to implement or refine for students to gain the skills and demonstrate the behaviors outlined as student success indicators? Are these

	staff practices embraced? Will all or most of the staff commit to implementing them?
	 School Supports: Have you outlined the supports staff members need to implement staff practices outlined in your plan? Are there specific supports and/or resources that are needed from the district?
	 Evidence of Learning: Are these lead measures? Do they assess the students' abilities to demonstrate one or more success indicators? Does the staff believe these are valid and reliable measures? To what extent is the staff calibrated around these measures?
	Timeline: Is the timeline reasonable? Is it a specific date or window of time? Will your timeline increase or decrease commitment and internal accountability to the plan?
Clarify Next Steps and Solidify Commitments 20–30 minutes	Team members discuss next steps and make commitments to one another.
	 How will you re-engage staff with a refined school implementation plan?
	How will you restore or improve commitment?
	 What evidence of learning will you bring back to the next session?
Debrief 10 minutes	Group discusses what worked and didn't work with the process and the protocol.
	Facilitator asks the group to reflect on the norms.

Figure 4.6	Collaborative Instructional Design

Purpose: A process for strategically designing lessons and tasks related to the standards and based on the school-wide focus area.	
Opening	Review norms.
5 minutes	Participants review the focus, purpose, and process of the protocol.
Design the Learning Target 10 minutes	Design the learning target based on the following: Selection of state standards Determination of Depth of Knowledge (DOK, rigor and complexity) level

	What is the explicit expectation for mastery of standards-based skills and concepts?
	What is the explicit expectation for level of cognitive application (DOK level)?
Define the Performance Outcome 10 minutes	 Define student performance outcomes based on the following: Concepts and skills students must apply Level of cognitive application Student product or performance Feedback to the student How do your rubrics, exemplars, or models clarify expected student performance?
	Is there a clear connection between student performance and mastery of standards-based skills? Do the prompts and questions align with the expected level of cognitive application?
Develop a	Develop opportunities for student learning that provide the following:
Sequence of Learning Tasks	Connect to prior knowledge and build background knowledge
for Each Phase of the	Promote development of literacy and critical thinking skills
Instruction	Develop student metacognition
45 minutes	Support student collaboration and dialog
	Provide feedback to students as part of the learning process
	Student Task, Guiding Questions, and Formative Feedback
	How does the task guide student mastery of skills and concepts and cognitive application?
	What questions engage students in deliberate practice of skills and concepts with scaffolding to support cognitive application?
	How do the students actively engage in formative feedback to assess progress toward mastery of skills and concepts and expected level of cognitive application?
	Literacy Strategies and Engagement Strategies
	What are the student supports for close reading, evidence-based arguments, academic language, structured collaboration, and evidence-based writing?

	Targeted Student Support
	How are student group structures, questions, supports, and formative feedback differentiated based on levels of skill and concept mastery, cognitive application, active engagement, and social-emotional and behavioral needs? What specific support is provided to English learners, students with disabilities, and other targeted student groups?
We Agree	Identify and discuss one to three specific strategies each team member commits to implement.
5 minutes	commits to implement.
Debrief	What did you gain as a team from the process?
5 minutes	Discuss next steps and set date to discuss impact of instructional on student learning. Team reflects on norms
	ream renects on norms

Figure 4.7 Critical Friends Protocol

Purpose: A process protocol that allows individuals or groups to reflect upon inherent assumptions, clarity, and proposed outcomes with a professional peer group.	
Opening 5 minutes	Review norms. Facilitator explains or reviews the purpose and process of the protocol.
Presentation of Experience, Strategy, Student Work, Lesson, and so on. 5 minutes (one person at a time)	NOTE: During this stage of the protocol, one participant or team is sharing without interruption. The remaining members of the team or group should listen attentively and avoid interrupting the presenter. Participant describes the strategy, experience, student work samples, lesson, and so on. They should also share specific challenges or wonderings for the team to provide input on during the critical friends portion of the protocol. After the participant describes what they brought to the session, they should pass around evidence and artifacts for others to briefly preview.
Briefly Preview Work and/or Lesson and Ask Clarifying Questions 5 minutes	Allow participants a short time to preview the evidence, artifacts, and so on. Participants can ask clarifying questions about the information being shared.

(Continued)

Critical Friends 10 minutes	The presenter should be prepared to record thoughts while the group discusses the lesson and student work (they should avoid speaking during this portion of the protocol).
	NOTE: Facilitator reminds participants that all comments should be evidence-based and support the area(s) that the presenter asked for feedback around and/or areas that support the school focus.
	Plus Round: Participants should each take turns stating something positive about the presenter's material. Participants should use the phrase, "I saw, I observed, or I noticed because " citing specific evidence.
	Delta Round: Participants should each take turns stating something they wonder about. A wondering should address a question, concern, or possible extension or improvement of the work. Participants should use the phrase, "I wonder"
	Share Round: Participants share any additional ideas or resources to support the presenter. Participants should use the language, "Something to consider for next time might be"
Reflection 5–10 minutes	The presenter reflects on the insights provided during the critical friends' stage of the protocol and may respond to wonderings from the group or ask further questions for support.
	NOTE: Repeat rows two through five for each presenter.
Debrief	Participants discuss what worked and didn't work with the process and
5 minutes	the protocol.
	Facilitator asks the group to reflect on the norms.

© 2022 InnovateEd

Figure 4.8 Examining Data

Purpose: A deductive process to guide groups through analysis of quantitative data to identify strengths and problems of practice.	
Opening	Review norms.

and the same production of production of the same production of the		
Opening	Review norms.	
5 minutes	Assign roles (facilitator, recorder, and timekeeper). Explain and review the purpose and process of the protocol. Facilitator briefly describes the data to be discussed. Participants ask clarifying questions about the process, data, and so on.	
Gathering Facts 10 minutes	Individuals silently observe the data and list facts. What parts of this data catch your attention? Just the facts. Group discusses observations made.	

Schools on the Move: Leading Coherence for Equitable Growth by Jay Westover and Christopher Steinhauser. Copyright © 2022 by Corwin Press, Inc. All rights reserved.

Making Evidence- Based Inferences 10 minutes	Individuals silently make inferences about the data. Facilitator encourages participants to support statements with evidence from the data. • What does the data tell us? • What does the data not tell us? Group discusses inferences made and comes to consensus.
Identify Strengths 5 minutes Identify	Facilitator asks the group to look for indications of success in the data. • What good news is there to celebrate? Group discusses strengths. Individuals silently identify potential problems of practice.
Problems of Practice 10 minutes	What are the problems of practice suggested by the data? Facilitator helps group narrow problems of practice to one to two areas of priority.
Brainstorm Next Steps 5 minutes	 Facilitator reminds group to think outside of the box. What could we do differently to improve results? What ideas do you have for addressing the problem of practice? Individuals silently brainstorm ideas for acting on one or two problems of practice.
Determine Next Steps 10 minutes	Individuals share their ideas for addressing problems of practice. Facilitator helps group narrow ideas. Group determines how they will address problems of practice.
Design Next Steps 10 minutes	Group designs an action plan. What will you commit to doing differently? How will you do it? How will you gather evidence? What support do you need? When will you reconvene to examine the evidence? How and when will you share relevant findings with other stakeholders?
Debrief 5 minutes	All participants discuss what worked and didn't work with the protocol. Facilitator asks the group to reflect on the norms.

Figure 4.9 Analyzing Student Work

Purpose: A process to guide the analysis of student work, resulting in individual next steps and team commitments.		
Opening 5 minutes	Review norms. Review focus for the meeting. Reinforce purpose and process of the protocol.	
Calibration (as appropriate)	If the student work to be analyzed is rubric-based, then review of the rubric and calibration is done at this point.	
Presentation of Work and Clarifying Questions 15 minutes per participant	Teacher describes the student work and lesson that was conducted, including the learning target related to the area of focus. Place each set of student work samples in its own stack at the center of the table (should have multiple stacks depending on number of different work samples). Participants can take time to ask clarifying questions about the student work, lesson(s), or the protocol itself. Repeat calibration, presentation of work, and clarifying questions for each presenter.	
Review Student Work 30 minutes	Allow participants sufficient time to view student work samples from each stack. Participants should note how the student work demonstrates the area of focus. Record strengths and areas for growth. After reviewing student work, participants should record their reflections and recommendations related to the school focus area.	
Group Discussion and Group Commitments 5–10 minutes	Participants discuss their reflections and recommendations based on the student work and implications for next steps. Presenter documents individual commitments.	
Team Reflection and Commitments 10–15 minutes	 Group reflects on successes and challenges. Are there patterns or trends in the student work products across multiple classrooms, grade levels, and/or content areas? Discuss impact on school implementation plan and how to disseminate the analysis and next steps with the principal, school leadership team, and teacher teams. Team discusses and documents commitments. 	
Debrief 5 minutes	Team members discuss what worked and didn't work with the protocol. Participants reflect on norms.	

 $Schools \ on \ the \ Move: Leading \ Coherence \ for \ Equitable \ Growth \ by \ Jay \ Westover \ and \ Christopher \ Steinhauser.$ Copyright © 2022 by Corwin Press, Inc. All rights reserved.

Figure 4.10 Learning Rounds

Purpose: Provides an authentic experience for groups to gather information about students' skills, behaviors, and dispositions relevant to the site focus area while simultaneously calibrating understanding of student tasks. Participants have an opportunity to reflect on the experience and determine individual, team, and group next steps.

Opening and Pre-Brief: Clarify and Discuss Purpose, Focus Area(s), and Norms 30–45 minutes District and site administrators or teacher leader(s) facilitate conversation around purpose, focus area(s), and norms:

- Facilitator reviews district and site academic priorities through a brief, informative, interactive dialog.
- Facilitator explains or reminds the team of the purpose of learning rounds and previews the protocol, reflection tools, and notetaking templates.
- Team reviews focus for the meeting—connecting back to the school implementation plan.
- Facilitator explains importance of essential professional norms:
 - Focus on the students.
 - o Be engaged in the observation, reflection, and discussion.
 - o Be respectful of the students and the teachers in classrooms.
 - Hold strict confidentiality—only trends and patterns of student learning and next steps for student learning will be discussed outside of the learning rounds; specifics with regard to individual classrooms will not be discussed outside of learning rounds.
 - o Refrain from making evaluative comments.
- Team establishes procedural norms such as entering and exiting, taking notes, or talking to one another inside classrooms, talking to students in the classrooms, and so on.

Learning Rounds Approx. 10–20 minutes in each classroom with 5 minute debriefs between classrooms

Classroom Visits:

- Participants will observe students using the documents in the Learning Rounds Guide for reference while following agreed-upon norms.
- Team will gather in a standing circle away from the classroom to share evidence that was observed (i.e., student skills, behaviors, structures, etc. as outlined in the Learning Rounds Guide).
- Facilitator and team members will adhere to professional norms and agreed-upon procedural norms to ask probing questions and guide conversations.

(Continued)

	 Everyone in the team will be given the chance to share observations as they pertain to visible evidence of student learning, but participants may choose to pass. Team members will calibrate observations and agree upon the evidence observed.
Debrief	Final Debrief—Using Student-Centered Statements:
45–60 minutes	 Team members will calibrate and agree upon the evidence of student skills and behaviors observed.
	 Group members will discuss next steps for students. What opportunities, practices, and/or supports do your students need to go from x to x+1?
	 Facilitator will chart reflections to be shared later at staff, leadership, and/or team meetings.
	 Participants will discuss how the evidence gathered and next steps for student learning might inform school-wide efforts.
	 Team will decide how they can relay the information gathered to the principal, SLT, and/or other teams.
	 Team members discuss what worked and didn't work with the learning rounds protocol.

© 2022 InnovateEd