Teacher-Driven Improvement

“Changing teaching means changing the understanding that underlies the teaching” (Katz & Dack, 2013, p. 5).

Collaborative inquiry holds the potential to transform learning, leading, and teaching. This is confirmed in research and our work with teams, schools, and districts. Powerful professional learning designs are grounded in educator’s practice, inquiry oriented, and collaborative and reflective in
nature. Collaborative inquiry provides a structure for educators to lead and learn together productively. It is an instrumental approach to developing teacher leadership and professional capital, increasing efficacy, and shifting attributions regarding causes for students’ success or failure. In moving the “learning of teaching closer to practice” (Gallimore, Ermeling, Saunders, & Goldenberg, 2009, p. 538), conversations change from what has been taught to what has been learned.

We have witnessed a growing and deep appreciation for the transformative changes that collaborative inquiry can deliver. Many teachers have reported that engaging in collaborative inquiry has not only impacted their teaching practices but also how they understand and value ongoing, relevant, and collaborative professional learning. School administrators echo these sentiments when they share how teachers engaged in collaborative inquiry speak with excitement about their learning in a way that is infectious and felt throughout the school. All agree that when teachers are learning, students’ learning experiences are enhanced.

The transformative potential of collaborative inquiry is also reflected in the relationship between collaboration, inquiry, and efficacy. Efficacy matters. Eells (2011) examined the relationship between collective teacher efficacy and student achievement. Results from this meta-analysis demonstrated that when educators believe that together they can make a difference, the impact on student gains can almost quadruple. Hattie (2009) synthesized over 800 meta-analyses that examined various factors impacting student achievement. Hattie continues to update this synthesis and recently ranked collective teacher efficacy as the number one factor influencing student achievement (personal communication, November 19, 2015). Studies show that teacher’s self-efficacy and collective efficacy increase when teachers collaborate (Beauchamp, Klassen, Parsons, Durksen, & Taylor, 2014; Horton & Martin, 2013; Johnson, 2012; Little, 1990; Moolenaar, Sleegers, & Daly, 2012). Studies also show that when collaborative teams engage in inquiry self-efficacy increases (Bruce & Flynn, 2013; Cooper-Twamley, 2009; Galligan, 2011; Henson, 2001). In addition,
Voelkel Jr. (2011) demonstrated a positive relationship between collective efficacy and professional learning communities characterized by collaboration and inquiry.

Gallimore et al. (2009) provided evidence that the inquiry process also helps to bring about changes in attributions. This research demonstrated a shift in attributions of improved student performance to teaching rather than external causes. Instead of attributing student success and/or failure to factors outside of their control, teachers came to better understand their ability to impact student outcomes. The authors noted that teachers shifted from assumptions that included “I planned and taught the lesson, but they didn’t get it” to “you haven’t taught it until they’ve learned” as a result of engaging in a collaborative inquiry process.

While the transformation of learning, leading, and teaching rests with all educators, the role and position of teachers in school improvement cannot be overlooked or understated. Hargreaves and Fullan (2012) made this sobering observation:

When the classroom door is closed, the teacher will always remain in charge. Where students are concerned, the teacher will always be more powerful than the principal, the president, or the prime minister. Successful and sustainable improvement can therefore never be done to or even for teachers. It can only ever be achieved by and with them. (p. 45)

Collaborative inquiry is a process that recognizes and values teachers as drivers for school improvement, as opposed to being the targets of improvement. It provides a systematic approach for teachers to explore issues and determine resolutions through shared inquiry, reflection, and dialogue. Rather than being merely consumers of research and the professional knowledge that accompanies it, teachers engaged in collaborative inquiry become producers and disseminators of knowledge.

Through the collaborative inquiry process, teachers develop professional capital as described by Hargreaves and Fullan (2012). In recasting the teacher’s role in improvement efforts, the authors advocate for the development of professional capital that includes human capital (the talent of individuals), social capital (the collaborative power of the group), and decisional capital (the wisdom and expertise to make sound judgments about learners that are cultivated over many years) (p. 5). Professional capital is not something that is bestowed upon educators but rather unleashed within and through them when they engage in a cycle of inquiry. The understanding and definition of teacher leadership expands, and teachers become leaders of their learning.
ADDRESSING ADAPTIVE CHALLENGES

Collaborative inquiry marries professional learning and leadership to simultaneously surface and transform the way student learning is understood and planned for. Since these transformations are manifested in teaching behaviors and beliefs, the challenges accompanying the changes can be described as adaptive in nature. Adaptive challenges are difficult to resolve, as solutions require new learning and upset past ways of doing things. Heifetz, Grashow, and Linsky (2009) pointed out that there is no clear path to solving an adaptive challenge. Solutions are iterative and appear more elusive as they challenge the status quo and existing cultures that may foster resistance. Collaborative inquiry can be understood as a promising way to address adaptive challenges in education. It is powerful because it transforms the learning of teachers by letting them lead their professional learning in ways that address the adaptive challenges of the classroom.

Technical problems are typically easy to identify and require quick solutions. They are usually solved by an authority or expert, and people are generally receptive, as the solution only requires changes in one or two areas. When technical problems are solved, compliance tends to be the outcome. The intended outcome of collaborative inquiry, however, is not compliance but rather teacher commitment to being innovative in the improvement of their practices. Approaches in addressing adaptive challenges are needed to reach this very different outcome.

The single biggest failure of leadership is applying a technical fix to an adaptive challenge (Heifetz & Laurie, 1997).

<table>
<thead>
<tr>
<th>Technical Fixes</th>
<th>Adaptive Challenges</th>
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<tbody>
<tr>
<td>Administering a practice test to prepare students for annual standardized literacy tests</td>
<td>Helping content-area teachers integrate literacy instruction into their everyday practice</td>
</tr>
<tr>
<td>Increasing the penalty for late or missing work</td>
<td>Raising awareness of ineffective grading practice</td>
</tr>
<tr>
<td>Sending students for resource support</td>
<td>Differentiating instruction to meet students’ readiness levels</td>
</tr>
<tr>
<td>Substituting technology for tasks that could be done with or without it</td>
<td>Integrating technology in support of student-centered, problem-based learning</td>
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A COLLABORATIVE INQUIRY FRAMEWORK

There are numerous collaborative inquiry frameworks, and the one proposed in this book does not differ significantly from others. In fact, it is a slight modification to Timperley, Wilson, Barrar, and Fung’s (2007) teacher inquiry cycle. Ideas that draw upon Timperley, Kaser, and Halbert’s (2014) revised spiral of inquiry are also reflected in this book. In addition, as we continue to learn and refine our practice as we support collaborative inquiry in school districts, the ideas suggested in one of the author’s earlier works entitled Collaborative Inquiry for Educators: A Facilitator’s Guide to School Improvement are expanded upon.

The collaborative inquiry cycle is situated within the work of a professional learning community. The process begins with teams identifying a needs-based focus. Once a learning need is identified, the team develops an inquiry question that they are genuinely curious about. Teams begin to map out a theory of action in order to identify assumptions and strengthen and share their theorizing. During this process, the team identifies educators’ learning needs. A driving question the team asks is, “What classroom and/or leadership practices (that are different from what we are currently doing) could we learn more about to address the gaps in student learning that we have identified?” Once participants identify and articulate their own learning needs, they engage in professional learning in order to deepen professional knowledge and refine skills.

Figure 1.2 illustrates different ways in which educators might engage in learning throughout the cycle. While not every avenue that leads to new understandings is depicted in the illustration, the point is that participants are provided the autonomy to pursue a model of learning that best fits the needs they have identified. If a participant needs to understand how to support inquiry-based learning in their classroom, peer observation might be an appropriate starting point. If a participant needs to understand how to utilize instructional time in order to maximize consolidation of learning, he or she might engage in lesson study. If a team member determines he needs to improve questioning skills, he might invite a coach into his classroom. If participants need to better understand strategies for increasing metacognition, they might access research or reach out to an expert in the field. Alternatively, participants might seek opportunities for direct instruction, depending on the learning need identified. These methods of learning are not in competition with the inquiry but are in aid of finding a solution to the inquiry posed.

New practices are tested and, collectively, teams examine artifacts representative of students’ learning. The team considers the impact of the changes on student outcomes before determining next steps. Notice the arrow circles back from “Determine next best move” to “Deepen
professional knowledge and refine skills.” It is likely that teams will cycle back a number of times, as they test and learn more about new and different approaches. The number of iterations usually depends on the...
willingness and timeliness in which teams examine evidence. If teams adopt a *wait and see* outlook, then it is less likely inquiries will be sustained. In order to make responsive changes and adjust instruction accordingly, teams need to examine student evidence frequently. This is discussed at greater length in Chapter 4. The cycle moves to a new iteration when team members feel they are able to answer the question posed at the beginning of the cycle. The process of documenting the team’s learning (including recommendations for others) encourages further reflection and helps to consolidate understanding. Recognition and celebration are integral to a team’s engagement in subsequent cycles.

### A Flexible and Applicable Approach to Learning

Hopkins Public Schools was seeking a process to better guide educators in seeking answers to student learning challenges. Despite teachers routinely using information from formative assessments to respond to student learning needs and implementing many interventions in classrooms, including school-wide programs, educators were frustrated with the minimal gains in assessment scores. Teachers recognized that students needed more than just content to be successful. Additionally, educators in nontraditional classrooms were looking for a process that would better fit the needs of their work.

In response, Becky Allen, staff development coordinator, and Sandy Homb, Q-Comp manager, offered collaborative inquiry as an option to the existing Professional Learning Community (PLC) process. Teacher leaders provided training and support as nearly 40 percent of PLCs opted to use collaborative inquiry the first year it was offered. Through a series of five face-to-face sessions, teams were guided in developing their inquiry question, theory of action, evidence collection plan, and the use of tools for examining evidence.

Based on this process, PLCs pursued a wide array of questions in an effort to determine how to increase engagement and build student skills, such as independence, literacy skills, technology integration, and problem-solving skills. This process was also a welcomed opportunity for staff working directly with adults and those working with students outside of a traditional classroom. A pretest/posttest model did not fit well with measuring the impact of their practices, and this process allowed for a variety of tools to answer questions about providing support to staff, families, or individual students.

Teachers who engaged in this process have found collaborative inquiry to be applicable and flexible for their needs. A critical part of the evidence collection process centered around gathering data pertaining to their own practice. This created a reflective environment and purposeful dialogue...
WHAT IT IS AND WHAT IT IS NOT

Collaborative inquiry is first and foremost a design for high quality professional learning that recognizes and celebrates the critical role of educators in improving student outcomes. While stages of the process share similarities to research designs, the intent is not for collaborative inquiry teams to undertake rigorous experimental research. Hattie (cited in Stewart, 2015) cautioned that teachers should not be expected to conduct research in schools or classrooms, noting that teachers are busy enough and that research skills are acquired through specialized graduate courses. Hattie prefers teachers not be researchers, but they be evaluators. Hattie (2012) also noted that “we need to collaborate to build a team working together to solve the dilemmas in learning, to collectively share and critique the nature and quality of evidence that shows our impact on student learning” (p. 151). Hattie’s latter statement is reflective of the activities of a collaborative inquiry team.

Rather than trying to randomly assign students to a control group and/or an experimental group while trying to control for variables and put interventions in place, collaborative inquiry teams engage in the following activities: identifying the knowledge and skills students need in order to succeed; investigating and selecting promising practices to address students’ needs; learning more about these practices by testing them in their classrooms; and assessing the impact of their actions in order to determine next steps. The cycle is repeated as educators reflect on and adapt their instruction based on a collective and careful examination of evidence.

This approach to professional learning is notably different from traditional models that were often based on isolated topics, determined and prioritized by others, and thus lacking connections with real problems experienced by classroom educators. Collaborative inquiry is driven by a central question composed by team members and based on perplexing issues related to learning and teaching. Solutions are determined by team members and, while the process honors the professionalism of the participants, their decisions should be informed by evidence, research on promising practices, and/or knowledgeable others. Decisions are not based on hunches; there is too much at stake.
People learn new ways of working together as they provide support to one another during each stage of the process. They bring unique experiences and share their expertise for the benefit of the team as they co-construct understanding and create new knowledge. Together, they problem solve and develop solutions to address adaptive challenges in order to ensure that students’ needs are met. Learning is solidified as team members identify, articulate, and reflect on the incongruence between espoused theories of action and theories-in-use. Teachers lead and learn with and from each other. Shared ownership for school improvement and a sense of collective efficacy often results.

Collaborative inquiry is a powerful strategy for building teachers’ capacity to lead, because it provides a structure for teachers to become authentic leaders and decision makers. Leadership opportunities extend beyond merely serving on a committee or acting as a department or grade level chair. Through their collaborative work and learning by doing, teachers have the potential to become more meaningfully involved in school improvement and catalysts for change.

Katz, Earl, and Ben Jaafar (2009) noted that “for inquiry to be truly effective, it needs to become a way of doing business, a way of thinking, a habit of mind, rather than a discrete event” (p. 43). Dweck’s (2006) work helped to uncover the power of people’s habits of mind and how they impact our actions—even if we are unaware of them. The beliefs we hold are very powerful and our actions are guided by these beliefs. Hattie (2012) presented a set of mindframes that “underpin our every action and decision in a school” (p. 159). Mindframes relate to how we think, and the specific mindframes that teachers have about their role is critical. Hattie (2012) suggested that “the most powerful way of thinking about a teacher’s role is for teachers to see themselves as evaluators of their effects on students” (p. 14). During a collaborative inquiry cycle, team members examine the link between the actions of educators and student results. Teams gather evidence that helps to inform, modify, or maintain evaluation beliefs about their effects.

Espoused theories of action refer to the values and beliefs that people believe guide their behavior. Theories-in-use are the values and beliefs that are actually reflected in people’s behaviors. Argyris and Schön (1978) noted that few people are aware of their theories-in-use or that theories-in-use are not always the same as the theories they espouse.

“...
Engaging in collaborative inquiry is often described by participants as both risky and rewarding. It is risky because educators are hesitant to admit they do not have all the answers. Katz et al. (2009) call this psychological condition the “imposter syndrome” (p. 91). They refer to it as “an inner voice” that whispers “I have no idea how it is that I came to be doing what I’m doing but hopefully nobody will find me out!” (p. 91). Opening up our practices to scrutiny is very risky for some, but it is also very rewarding. Csikszentmihalyi (1990) noted that “periods of struggling to overcome challenges are what people find to be the most enjoyable times of their lives” (p. 6). It is rewarding, because once new insight is gained, participants realize the effort was worthwhile. Educators are empowered as they work together to solve the challenges they face in their day-to-day practice. They recognize the power of the team and increased efficacy results.

Finally, the process is often referred to as “muddy,” as participants experience a certain amount of ambiguity. Educators are not used to being provided the freedom to direct their own professional learning, and they are often unclear as to where their inquiries will lead them. As noted earlier, there is no clear path when solving an adaptive challenge. People will experience disequilibrium, but as Katz and Dack (2013) noted, “the experience of cognitive discomfort is not an unfortunate consequence of new learning; it is an essential prerequisite of new learning” (p. 20). As teams work their way through the adaptive challenge, the path becomes less ambiguous.

Table 1.2 Collaborative Inquiry: What It Is and What It Is Not

<table>
<thead>
<tr>
<th>What It Is</th>
<th>What It Is Not</th>
</tr>
</thead>
<tbody>
<tr>
<td>A high quality professional learning design</td>
<td>Experimental research design</td>
</tr>
<tr>
<td>A cyclical and iterative process for improving student learning and teaching practices</td>
<td>Linear or lock step, a checklist of actions</td>
</tr>
<tr>
<td>Based on issues related to the learning needs of the students of the participating educators</td>
<td>Based on topics that determined/prioritized by someone other than the classroom educator</td>
</tr>
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(Continued)
1. **Collaborative Inquiry**

- **What It Is**
  - Driven by a central question—in which the answer is unknown to participants
  - Adaptive in nature as new knowledge is generated amongst team members
  - Steered in a direction determined by participants
  - Facilitated from within—by members of the team
  - Decisions informed by evidence, research on promising practices, and/or the advice of experts
  - The deep implementation of new and different approaches to classroom instruction
  - Gathering a variety of evidence—collectively examined at multiple points (not excluding pretest and posttest data)
  - A mindset, a way of thinking, a belief that what we do matters and that we need to evaluate the effects of our actions on student learning and achievement
  - Risky, rewarding, empowering
  - Sometimes a "muddy" process

- **What It Is Not**
  - Based on a topic mandated by administrators or central office staff
  - The transmission of knowledge from central office personnel or outside experts
  - Directed by outside experts
  - Facilitated by outside experts
  - "Cherry picking" teaching approaches
  - More of the same while expecting different results
  - Pretest, posttest data—examined at the beginning and end of the semester or at the beginning and end of the school year
  - A mindset, a way of thinking, a belief that no matter what we do, we cannot reach all students, having no appreciation for self-assessment
  - Risk-free nor unhelpful
  - A clearly laid out path

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**Developing New Understandings and Overcoming Challenges**

Julie Balen, teacher at Wikwemikong High School in Ontario, is working to help students overcome many challenges. Julie and her colleagues in the English department utilize collaborative inquiry as an approach to professional learning, so that they can identify what it is they need to know and be able to do in order to better serve their students. Julie noted that the collaborative inquiry process...
What do the experts say about professional learning?

When reviewing numerous books, articles, and reports written over the past few decades by leading education experts about systemic change and the transformative potential of professional development, three themes permeate: teacher leadership, collaboration, and inquiry.

Little (1982) concluded that staff development appeared to have greatest influence where there was a “prevailing norm of analysis, evaluation, and experimentation” (p. 339). Based on research surrounding workplace conditions of school success, Little (1982) suggested that the focus on professional improvement be at an organizational level rather than “an individual enterprise,” (p. 338) noting that continuous improvement was a shared undertaking in schools that were the most adaptable and successful amongst those studied. Little (1990) also pointed out that collaboration was a powerful way to change teaching practice when it involved joint work, including critical inquiry, sustained scrutiny of practice, analysis, and debate in search of improvement.

Darling-Hammond (1998) pointed out that an optimum setting for teacher learning would provide opportunities for inquiry; where teachers try, test, talk about, and evaluate the results of learning and teaching. Darling-Hammond (1998) concluded that professional development strategies that succeeded in improving teaching were “grounded in participants’ questions, inquiry, and experimentation” (p. 11) and “collaborative, involving a sharing of knowledge amongst educators” (p. 11). Also in the 1990’s, Ball and Cohen (1999) made a case for collaborative inquiry as they proposed new ways to “understand and use practice as a site for professional learning, as well as ways to cultivate the sorts of inquiry into practice from which many teachers could learn” (p. 6). The authors suggested that if teaching and learning how to teach became the object of continuing and thoughtful inquiry, then “much of teachers’ everyday work could become a source for constructive professional development”
Like the model suggested in this book, Ball and Cohen (1999) were not arguing that teachers should become researchers. Rather, they argued that “a stance of inquiry should be central to the role of teacher” (p. 11). The authors also noted that professional learning should be a collective endeavour, recognizing that creating and sustaining an inquiry-oriented stance is a “social enterprise” (p. 17).

In 2004, Lieberman and Miller promoted the role of teacher leadership in reshaping school culture and outlined a set of perspectives and practices that had the potential to transform teaching and schools. The transformative shifts included moving from “individualism to professional community” (p. 11) and from “technical and managed work to inquiry and leadership” (p. 11). Lieberman and Miller (2004) advocated for opportunities for teachers to “learn in practice” (p. 21) and “create knowledge rather than merely apply it” (p. 14). Reeves (2008) made similar arguments for reframing teacher leadership and offered a framework in which teachers “ask important questions, conduct investigations, discern inferences, and share their wisdom with colleagues” (p. 9). In 2010, Reeves studied school improvement plans and found nine characteristics that had measurable and significant effects on gains in student achievement. The inquiry process, where causal relationships between teaching and leadership practices and student results were identified as part of the school improvement plan, was one of the nine characteristics in successful schools.

Hargreaves and Fullan (2012) and Hattie (2012) also promoted inquiry as a valuable model for teacher learning. Hargreaves and Fullan (2012) suggested that “constant inquiry and continuous individual and collective development are essential to success” (p. 22) and noted that “teams, and communities are far more powerful than individuals when it comes to developing human capital” (p. 3). In addition, Hattie (2012) noted that a community of teachers who “work together to ask the questions, evaluate their impact, and decide on optimal next steps” (p. vii) is what is needed in order to advance education.

The Best Evidence Synthesis Iteration: Teacher Professional Learning and Development (Timperley et al., 2007) called for an “ongoing commitment to collaborative inquiry into the links between learning and teaching” (p. xxi). Building on this report, Timperley et al. (2014) proposed that “through a disciplined approach to collaborative inquiry, resulting in new learning and new action, that educators, learners, their families and involved community members will gain the confidence, the insights, and the mindsets required to design new and powerful learning systems” (p. 4). Katz et al. (2009) also specifically named collaborative inquiry as a way to “challenge the status quo” and an enabler of the “kind of professional learning that contributes to changed practice” (p. 46). Katz and
Dack (2013) suggested that “collaborative inquiry that challenges thinking and practice is the how of professional learning. It’s the methodology for moving a learning focus forward” (p. 39).

There is a wealth of documentation, written over the past few decades, demonstrating that the most respected thought-leaders in education believe in the power of collaborative inquiry. There is also documented evidence to show its impact on transforming learning, leading, and teaching. Our concern is that collaborative inquiry will be abandoned, like many other impactful reform approaches that were poorly understood and inadequately supported. This book shares lessons learned from the field so that school leaders can learn from other’s experiences. Too often change initiatives are abandoned during the early implementation phase. This book will help leaders stay the course, so collaborative inquiry can live up to what it promises—transformations in learning, leading, and teaching.

**MOVING COLLABORATIVE INQUIRY FROM THEORY TO PRACTICE**

Collaborative inquiry remains largely theoretical in many districts; a promise to transform leadership structures and the learning of educators and students. The ongoing challenge, however, has been bringing collaborative inquiry out of the realm of theory into the professional learning practices of educators. While collaborative inquiry has the potential to transform school improvement, simply putting structures in place for teams to come together and inquire about their practice is not enough to realize the transformation. Giving teachers time and resources to collaborate does not mean that they have the knowledge and desire to meaningfully do so. Yet, if this assumption is naively made, collaborative inquiry, as a result, will not be consistently adopted with fidelity.

If adopted as envisioned in this book, by engaging in the process, the quality of leadership will be cultivated in each and every individual. The term adopted was purposefully selected in favor of the overused and under established term implemented. The implementation of initiatives has been proven to be problematic in education. In addition, the term implementation implies the “deployment of a plan,” and that plan usually belongs to someone else. The term adopted implies that something has been “embraced, taken on, or that an attitude or position has been assumed,” and that is our hope for educators in regard to collaboratively inquiring into their practice. Every educator deserves access to high quality professional learning. Collaborative inquiry is a high quality design that is based on the premise that teachers are essential leaders in school improvement efforts. We hope
that participants experience the richness in learning and leading that is afforded by the process.

In addressing this adaptive challenge, successful adoption must be measured in terms of whether teachers comfortably contest the status quo of their teaching practices, in addition to the assumptions and beliefs that frame and perpetuate those practices. This book was written for district and school leaders (administrators and teachers), as they support teams engaged in the adopting, refining, and sustaining collaborative inquiry. It is about moving beyond a focus of how to do inquiry. The purpose of this book is twofold:

1. To strengthen understanding of the conditions and qualities within the collaborative inquiry cycle that support ongoing educator learning and development.

2. To provide insight into the key considerations for a systemic approach that results in a full and vigorous adoption of collaborative inquiry.

The following themes will be explored in this book underscoring its twofold purpose:

- Bringing collaborative inquiry to scale
- Establishing and maintaining a needs-based focus
- Provoking thinking to assess impact
- Shaping the development of a professional learning culture

Ultimately, we envision collaborative inquiry as an alternative to short-term, top-down, formulaic approaches to professional learning that do not hold enough rigor to realize self-sustaining cycles of improvement in schools. In order for education to remain relevant and responsive to the current and future learning needs of students, teachers and other educational leaders must have mechanisms and processes in place to collaboratively identify how schools should improve and how to meaningfully refine and sustain those changes. Collaborative inquiry holds the potential to do that by calling each individual in education to raise within themselves a truer sense of leader and learner.