WHEN TEACHERS BELIEVE, STUDENTS ACHIEVE

COLLABORATIVE INQUIRY BUILDS TEACHER EFFICACY FOR BETTER STUDENT OUTCOMES

BY JENNI DONOHOO AND STEVEN KATZ

When teachers share the belief that, together, they can positively influence student learning over and above other factors and make an educational difference in the lives of students, they actually do.

Collective efficacy refers to the shared perceptions of educators that, through their combined efforts, they can "organize and execute the courses of action required to have a positive effect on students" (Goddard, Hoy, & Hoy, 2004, p. 4). Tschannen-Moran and Barr (2004) expand on this definition, describing collective efficacy as the "collective self-perception that teachers in a given school make an educational difference to their students over and above the educational impact of their homes and communities" (p. 190).

In fact, collective efficacy is what matters most in improving student learning, topping Hattie's (2016) list of factors that influence student achievement in schools.

Many school leaders are asking: How do we foster a sense of collective efficacy among teachers to realize better outcomes for students? To answer that question, let's look at why collective efficacy is important, how collaborative teacher inquiry can enhance collective efficacy, and how school leaders can support educators' engagement in the process.

WHY COLLECTIVE EFFICACY MATTERS

The notion of collective efficacy is not new. In fact, the research base can be traced back more than two decades. Bandura (1993) was the first to generate interest in this area by demonstrating that the effect of perceived collective efficacy on student achievement was stronger than the link between socioeconomic status and student achievement. Consistent findings have been reported in more recent studies (Eells, 2011; Goddard, Goddard, Kim, & Miller, 2015; Ramos, Silva, Pontes, Fernandez, & Nina, 2014; Sandoval, Challoo, & Kupczynski, 2011).

Collective efficacy works because it influences student achievement indirectly through a constellation of productive patterns of behavior on the part of the adults in the building. In schools where there is a shared sense of efficacy, teachers have more positive attitudes toward professional development (Rauf, Ali, Aluwi, & Noor, 2012); exhibit deeper implementation of evidence-based instructional strategies (Cantrell & Callaway, 2008; Parks, Solmon, & Lee, 2007); and have a stronger focus on academic pursuits (Hoy, Sweetland, & Smith, 2002). In addition, in schools where efficacy is present, students are less likely to be suspended or be removed from classrooms as a result of misbehavior (Gibbs & Powell, 2011).

Unfortunately, even though educators give their best every day, they don't always believe they have the collective capability to change life courses for their students. Efficacy beliefs are powerful because they "directly affect the diligence and resolve with which groups choose to pursue their goals" (Goddard et al., 2004, p. 8).

The theory of action is such that teachers' beliefs influence their actions toward students, which, in turn, influence students' beliefs about their own abilities. Low expectations for success become barriers for

both teachers and students because, regardless of their accuracy, they become self-fulfilling prophecies. Expectations influence efforts, and efforts influence achievement.

THE SHAPERS OF EFFICACY BELIEFS

It's encouraging to know that educators can adjust their beliefs about their ability to influence student outcomes. Four sources shape efficacy beliefs (Bandura, 1986; Goddard et al., 2004).

The most powerful of these is **mastery experiences**. When teams experience success (mastery), collective efficacy increases and teams come to expect that they can repeat effective performances.

The second most powerful source is **vicarious experiences**. When educators see others who are faced with similar opportunities and challenges perform well, they come to expect that they, too, can succeed under similar conditions.

The third source, **social persuasion**, involves individuals persuading one another that they constitute an effective team. And the fourth source of collective efficacy, **affective states**, includes feelings of excitement or anxiety associated with perceptions of capability or incompetence (Bandura, 1977).

Collective efficacy is also shaped by teachers' causal attributions of student outcomes to either external or internal factors. External attributions include influences from the home ("She would do much better if her parents were more involved in her education"); influences from the school ("The large class sizes prevent us from giving students the individual attention they need"); and influences from the student ("It doesn't appear that he studied for the test").

Internal attributions, from teachers' perspectives, include appraisals of their own ability and effort ("If we had provided additional time and

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support, those students might not have slipped through the cracks"). When teachers attribute students' successes and failures to internal factors that are controllable — such as to instructional strategies, effective feedback, or systems of intervention — they come to believe that their actions can influence student achievement.

Georgiou, Christou, Stavrinides, and Panaoura (2002) noted that "attributions make a major contribution to the forming of expectancies that teachers hold for students' future academic success" (p. 584). Goddard, Hoy, and Hoy (2000) pointed out that the major influences on collective efficacy are "attributional analysis and interpretation of the four sources of information" (p. 486) — that is, mastery, vicarious experiences, social persuasion, and affective states.

HOW TO ENHANCE COLLECTIVE EFFICACY

Professional learning is integral to school improvement because classroom practice, an important predictor of student learning and achievement, is influenced by teacher learning. Put simply, students get better when teachers get better — and teachers get better when they come to think, know, understand, and practice differently in a demonstrable area of student learning need (Katz, Dack, & Malloy, 2017).

Effective professional learning taps into the sources of collective efficacy (mastery experiences, vicarious experiences, social persuasion, and affective states) (Donohoo, 2017). And when professional learning creates the conditions for teachers to make links between their collective actions and student achievement, those efforts foster efficacy.

Collaborative teacher inquiry is a promising practice that can positively influence educators' interpretations of their effectiveness and thus enhance collective efficacy (Donohoo & Velasco, 2016; Katz & Dack, 2013). It includes two components: collaboration (working together) and inquiry (examining teacher and student learning in search of deep understanding and evidence of impact).

It involves teachers working together to tackle challenges of professional practice by questioning what they already know and do in an area of demonstrated student learning need. And, most important, it requires that teams consider whether or not the evidence shows that their actions have had an effect on student learning.

THE PROCESS

Collaborative teacher inquiry begins with practitioners collectively developing an inquiry question, which involves identifying an evidence-based student learning need that is framed as

a challenge of professional practice. For example, teachers might ask: How can we facilitate students' ability to make inferences?

From there, the team develops a working hypothesis. This often takes the form of a theory of action, which also articulates the team's plan for investigating the hypothesis. As they reflect on their inquiry question, teachers might conclude: If we draw on what we do as readers to make our instruction more explicit and if we listen to what students tell us about reading instruction, then students will understand how readers infer the significance of details and patterns in texts.

This process helps illustrate the causality between the teams' actions and expected student outcomes. Framing hypotheses as theories of action (if/then statements) compels educators to consider causes (instructional practices) that precede effects (student learning). They help to uncover relationships between teaching and learning as teams examine what they think will work against the realities of what is actually happening in their existing contexts.

As collaborative inquiry teams carry out their plans, they have opportunities to engage in vicarious experiences, such as classroom observations of effective teaching, as they work together to develop new knowledge and competencies and implement changes in practice.

They identify sources of student learning information that will help answer their inquiry question and collect evidence from the students about how their actions are affecting students' experiences at school. Concerning their inquiry question about inferences, teachers might look at records of students' drafts and their revisions of their initial understandings of texts or observe how students identify and hold on to details as they move from confusion to clarity.

Feelings of empowerment (positive affective states) often result when teams realize success. Teachers consider next steps by identifying what they learned about the changes made to their practice and the resulting progress made by the students in their classrooms.

KEY FACTORS

Real new practitioner learning — thinking, knowing, and understanding differently than before — as well as an increased sense of collective efficacy can result from engaging in cycles of collaborative teacher inquiry. One way to enhance collective efficacy through collaborative teacher inquiry is through the analysis of attributions.

In their study, Gallimore, Ermeling, Saunders, and Goldenberg (2009) showed that teacher attributions shifted from external causes toward specific, teacher-implemented instructional actions as explanations for achievement gains. Teachers moved from assumptions such as: "I planned and taught the lesson, but they didn't get it," to beliefs such as: "You haven't taught it until they've learned it."

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In another research study, Preus (2011) contrasted results from groups of new teachers who participated in two different induction programs: a conventional new teacher induction program and one that included collaborative teacher inquiry. Teachers in the latter group defined professional growth as relating to student achievement, as opposed to the wide variety of ways — for example, progress in time management, organization, and the pursuit of advanced degrees — outlined by participants in the conventional group.

One conclusion drawn from Preus's study is that "leadership boosts efficacy" (p. 83). The author noted: "Given a leadership opportunity, even as a new teacher, there is an immediate urgency to become proficient in the content" (p. 83). In other words, leadership opportunities enabled mastery experiences, and these mastery experiences contributed to a heightened sense of efficacy.

Collaborative teacher inquiry provides a structure for meaningful collaboration, increases teachers' knowledge about their collective work, and contributes to the cohesion of a team of educators, all of which enable collective teacher efficacy to flourish (Donohoo, 2017).

Cohesion is the degree to which educators agree with one another about fundamental priorities, which include identified student learning needs, goals, expectations about student performance, high-leverage instructional approaches, and evidence to measure the impact on student progress and achievement.

The more cohesive a team, the more likely team members are to buy in to social persuasion (Ross, Hogaboam-Gray, & Gray, 2004). In addition, when professional learning is designed to assist teachers in making the link between their collective actions and increases in student achievement, it helps foster collective efficacy.

WHAT LEADERS CAN DO

While collaborative teacher inquiry holds promise, that promise can only be realized through quality implementation. School leaders need to support teachers' engagement in the collaborative inquiry cycle for collective efficacy, as a valued outcome, to be realized. The degree to which teachers collaborate to improve instruction is strongly predicted by principals' leadership.

Goddard and colleagues (2015) demonstrated that a principal's instructional leadership significantly predicts collective efficacy by influencing teachers' collaborative work. Effective school leaders know how to create the conditions for teachers to learn what they need to learn so that teachers, in turn, can create the conditions for students to learn what they need to learn.

PUT THE TENSION TO GOOD USE

That said, in looking to add value by influencing professional learning efforts, school leaders often find themselves caught between a set of top-down district-level forces that seek to prescribe practice expectations and a set of bottom-up practitioner-driven forces that favor experience-centered professional judgment.

Although these dual forces seem to create an oppositional dynamic, Katz and colleagues (2017) argue that this tension can be creative, that it can provide an opportunity for effective professional learning. Collaborative inquiry enables teachers to consider prescribed expectations and experience-based professional judgments at the same time. They take what they have learned from research and best practice and apply it to their unique contexts.

TRUST THE PROCESS

School leaders often think that creating the conditions for meaningful collaborative teacher inquiry requires an established culture of trust. But if leaders spend too much time on building trust as a precondition, teachers may never get to the work of learning how to collectively improve instruction.

Leaders can help teachers build trust while engaging in the work — for example, by allowing teachers to lead and shape their professional learning. Only a minimal amount of relational trust is necessary to encourage teachers to "take a chance together" if the overarching environment is a supportive one.

An effective leader stands back and trusts the process of teachers innovating together. By doing so, leaders demonstrate "a belief in empowerment over efficiency, choice over decisiveness, and autonomy over control" (Donohoo, 2017, p. 40). Katz, Earl, and Ben Jaafar (2009) have shown that enhanced relational trust is more an outcome of an effective collaboration than an antecedent. Moreover, the collaborative mastery experiences and associated affective states integral to collective efficacy work to increase relational trust.

KEEP TEAMS FOCUSED ON THE WORK

Schools are busy places. Carving out time and space from the proverbial whirlwind to learn and improve in an intentional way is a challenge.

Collaborative inquiry is a progressive cycle, in which each successive cycle leads to better and deeper understanding, more refined practices, and greater impact on student learning and achievement.

School leaders play a pivotal role in helping teams stay focused on the urgent, needs-based inquiry question. They buffer teams from landing in what Katz and colleagues (2009) have called activity traps — those well-intentioned doings that keep people busy but are not needs-based and that divert time, energy, and resources away from the student learning focus that matters most.

School leaders also ensure that professional learning teams keep up the necessary rhythm and discipline of the collaborative inquiry cycle. This involves working in small but regular increments (Katz et al., 2017). As a result, teams come to experience "small wins," which, as Duhigg (2012) explains, "fuel transformative changes by leveraging tiny advantages into patterns that convince people that bigger achievements are within reach" (p. 112). The associated mastery experiences and affective states, coupled with the vicarious learning of collaborative success, in turn contribute to enhanced collective efficacy.

THE POWER OF PROFESSIONAL LEARNING

Professional learning is powerful when it's intentionally designed to influence educators' beliefs about their ability to affect student learning. If school teams share a sense of collective efficacy, they have a greater likelihood of positively influencing student learning, over and above any other factors. Fostering collective efficacy is important, and collaborative teacher inquiry, supported by strong leadership, is a promising practice that educators can harness to achieve this objective.

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