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Culture and Collective Teacher Efficacy: A Case Study Through a Social Cognitive Theory Lens

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ABSTRACT

The concept of collective teacher efficacy was first introduced by Bandura (1997) in the 1990s. Hattie's (2016) identification of collective teacher efficacy as the number one influence on student achievement has led to the idea that educators within a school can positively impact student achievement. In his research, Bandura identified four sources of both individual and collective teacher efficacy: mastery experience, vicarious experiences, social persuasion, and affective state. The purpose of this qualitative research study is to identify aspects of school culture that support collective teacher efficacy. This purpose was accomplished by interviewing 32 faculty and staff members at a K-8 school in New Zealand through a social cognitive theory lens. Data were analyzed using NVivo software and multiple coding cycles grounded in principles of grounded theory. Qualitative analysis of these interviews identified five core aspects of school culture that contribute to collective teacher efficacy: shared vision for learning, school systems, relationships, well-being, and collaboration. Based on the assumption that collective teacher efficacy can positively affect student achievement, we assert that understanding and applying these five aspects of school culture could have a significant, positive impact on student achievement.

***Keywords*:** collective teacher efficacy, school leadership, school culture, sources of efficacy, qualitative methods

Collective teacher efficacy (CTE) has recently emerged as a significant factor influencing student achievement, prompting school leaders to seek strategies to cultivate and strengthen CTE within their institutions. Research suggests that effective school leadership plays a crucial role in shaping collective efficacy by fostering instructional knowledge and skills, facilitating collaboration, providing meaningful feedback, and involving teachers in decision-making processes (Brinson & Steiner, 2007). Despite a growing familiarity with the concept of CTE and its connection to Bandura's four sources of efficacy—mastery experiences, vicarious experiences, verbal persuasion, and physiological states—many school leaders lack a clear understanding of how to apply these principles within their own schools. Without a structured approach to CTE, school leaders may struggle to fully leverage its benefits.

This study examines the role of school culture in supporting collective teacher efficacy. While previous research has explored potential antecedents of CTE (Loughland & Ryan, 2020; Ross, 1994; Tschannen-Moran & Woolfolk Hoy, 2007), a deeper understanding of the factors that influence CTE is necessary to sustain school improvement. Additionally, because most studies on CTE have been conducted in the United States (Minnet, 2016), expanding research to international contexts is crucial for identifying factors that contribute to CTE globally. Furthermore, much of the existing research relies on quantitative methodologies that do not provide a detailed, context-driven exploration of how CTE manifests in schools. A

qualitative approach is needed to capture educators' firsthand experiences and provide school leaders with practical insights into how school culture influences CTE.

This study focuses on School ABC (pseudonym), a renowned K-8 institution in Auckland, New Zealand, where previous research (Hallam et al., 2022) found that faculty and staff demonstrated significantly higher levels of CTE than other schools. Using Tschannen-Moran's Collective Teacher Efficacy Scale in faculty interviews, the 2018 study reported that School ABC had an average collective efficacy score of 7.47 [95% confidence interval: 7.14-7.80], making it slightly above average. A two-tailed *t*-test comparing the School ABC score to the mean and standard deviation of the 66 schools in the Tschannen-Moran and Barr (2004) study showed a significant difference. Building on these findings, this research applies social cognitive theory to conduct a qualitative case study, seeking to answer the central research question: *What aspects of culture support collective teacher efficacy?*

Again, given the growing focus on collective teacher efficacy as a driver of student success, this study offers valuable insights for school leaders seeking to enhance CTE in their schools. By identifying the cultural elements and collaborative structures that contribute to strong CTE, this study provides practical strategies for educational leaders to foster and sustain collective efficacy, ultimately improving teaching effectiveness and student outcomes. Further, this study contributes to the existing body of research by offering a qualitative perspective on how school leaders can establish and reinforce CTE through intentional school culture development and purposeful collaboration with all stakeholders. With a stronger understanding of the connection between school culture and collective teacher efficacy, educational leaders will be better equipped to implement strategies that maximize teacher effectiveness and drive meaningful improvements in student achievement.

REVIEW OF LITERATURE

Bandura defined self-efficacy as an individual's belief in their capacity to organize and execute the necessary actions to achieve specific goals. Bandura posited that "expectations of personal efficacy are derived from four principal sources of information: performance accomplishments, vicarious experiences, verbal persuasion, and physiological states" (Bandura, 1977, p. 195). The following paragraphs outline these four sources of Bandura's theory in greater detail.

Sources of Efficacy Information in Social Learning Theory

The first source of efficacy information is mastery experiences, in which people succeed or fail at a specific task. Bandura sees these as indicators of capability (1977, 1997). Goddard (1998) further states, "Of the four sources, enactive mastery experiences are the most powerful because they directly convey information about a person's ability to succeed under a given set of conditions" (p. 18). Thus, foundational researchers in this field view mastery experiences as among the most important sources of efficacy.

The second source of efficacy information, vicarious experiences, occurs when someone observes others performing a specific task. Such moments largely depend on the credibility and expertise of those seen as potential role models (Bandura, 1977, 1997). Eells explains, "Efficacy that is gained by observation is acquired vicariously." She adds, "Observing another person perform a task successfully can influence personal beliefs about their ability to do the same" (2011, p. 28). Goddard (1998) further stipulates that opportunities to observe others modeling best practice are crucial in developing efficacy.

The third source, verbal persuasion, focuses on a school's social influences and "is dependent on the beliefs that others have in our abilities" (Goddard, 1998, p. 20). "It is easier to sustain a sense of efficacy," said Bandura, "…if significant others express faith in one's capabilities" (1997, p. 101). Social persuasion's impact also depends on the credibility of the person providing it (Bandura, 1997; Goddard, 1998; Tschannen-Moran & Hoy, 2007).

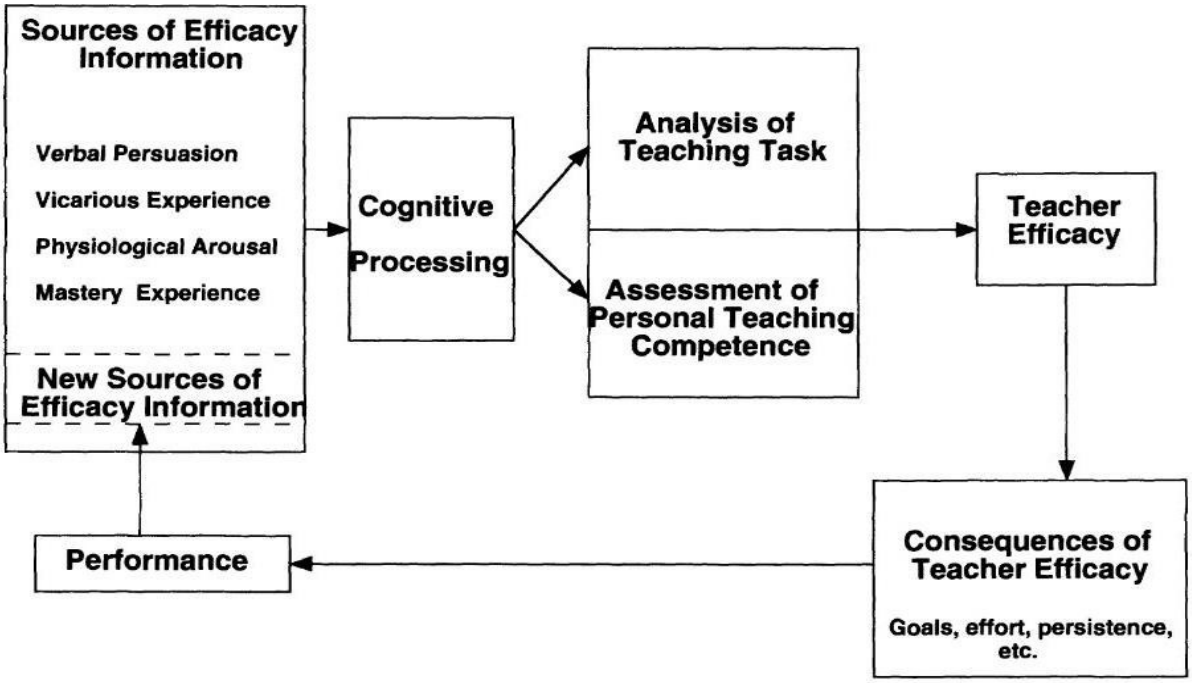
The fourth source outlines the affective and physiological states that impact the exercise of personal control (Bandura, 1977, 1997). Tschannen-Moran and Hoy (2007) stipulate that "the feelings of joy or pleasure a teacher experiences . . . may increase her sense of efficacy, yet high levels of stress or anxiety" may do the opposite (p. 945). These four sources play a critical role in developing an individual's belief in her ability to accomplish personal and professional goals.

While the RAND Corporation preceded Bandura in identifying teacher efficacy (Weber & Omotani, 1994), Bandura's concept of collective self-efficacy has been more influential for teachers generally. Importantly, Bandura noticed that "teachers operate collectively within an interactive social system rather than as isolates" (Bandura, 1993, p. 141). "Rooted deeply in . . . social cognitive theory and his concepts of self-efficacy" (Zhou, 2019, p. 71), collective teacher efficacy can impact student achievement when schools have "staffs who firmly believe that, by their determined efforts, students are motivatable and teachable whatever their backgrounds" (Bandura, 1993, p. 143).

Building on Bandura, Tschannen-Moran et al. (1998) presented a cyclical model of teacher efficacy, which is shown in Figure 1.

Figure 1

Model of Teacher Efficacy



Note. From "Teacher Efficacy: Its Meaning and Measure," by M. Tschannen-Moran et al., 1998, *Review of Educational Research, 68*(2), 202–248. Reprinted with permission.

Goddard (1998) then noted, "Collective teacher efficacy has received relatively little research attention" (p. 2). In answer, Goddard (1998) confirmed that collective teacher efficacy positively affects student achievement and presented one of education's first conceptual models of collective teacher efficacy, displayed in Figure 2. Importantly, Goddard et al. (2000) based their definition of collective teacher efficacy on "the self-efficacy formulation of Bandura (1997) and the model of teacher efficacy . . . developed by Tschannen-Moran et al. (1998)" (p. 482).

Understanding Efficacy

To improve student achievement, education researchers have used survey instruments such as the Gibson and Dembo's (1984) teacher efficacy scale, Tschannen-Moran and Hoy's (2001) teachers' sense of efficacy scale, and the Norwegian teacher self-efficacy scale (Skaalvik & Skaalvik, 2007). In addition, Goddard et al. (2000) created a collective teacher efficacy scale. To this, Tschannen-Moran and Barr (2004) added their collective teacher beliefs scale.

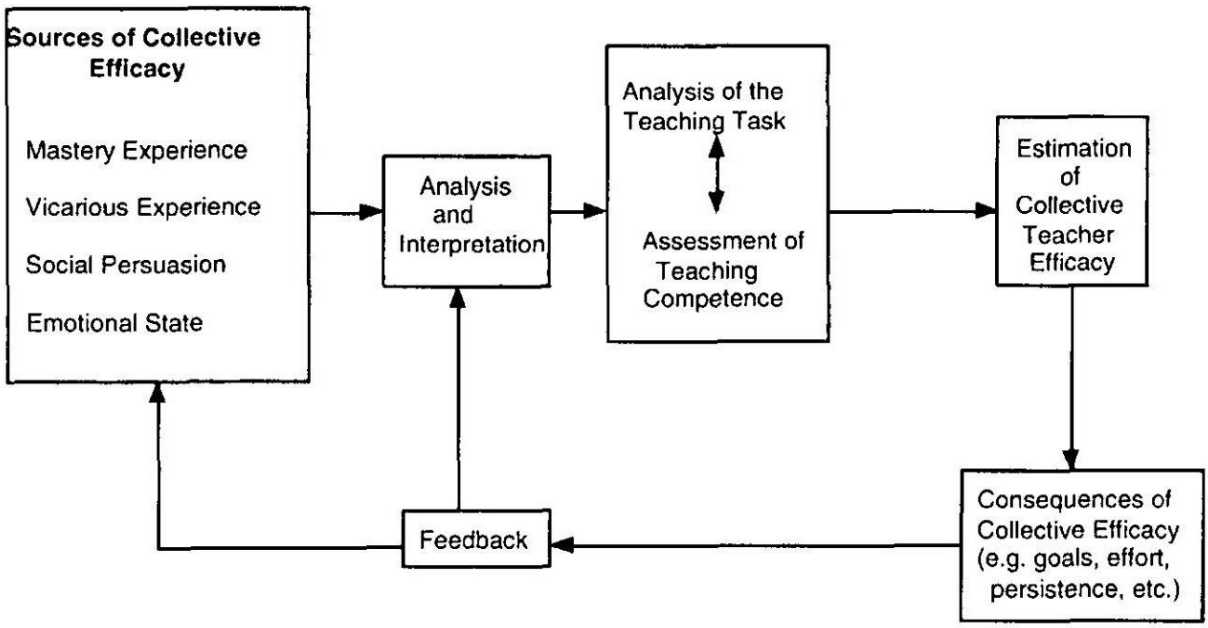
Importantly, Goddard et al. (2000) state that "teacher efficacy is context specific" because "teachers do not feel equally efficacious for all teaching situations" (p. 482). Linguistically, collective teacher efficacy can be measured either as the aggregate of teacher self-efficacy (I-referent statements) or as the aggregate measures of individual perceptions of group-referent capabilities (we-referent statements; Bandura, 1993; Goddard et al., 2004). Bandura (1993) and Goddard et al. (2004) both suggest to "conceive and assess perceived collective efficacy as the aggregate of individual perceptions of group capability" or as "we-referent statements" (Goddard et al., 2004, p. 7). Third, most research on collective teacher efficacy has utilized quantitative methods (Klassen et al., 2011; Salas-Rodriguez & Lara, 2023). Salloum (2022) reasoned that qualitative research might provide deeper insight into collective teacher efficacy.

Collective Teacher Efficacy

Hattie identified CTE as having the largest effect size on student learning (Visible Learning, n.d.). Hattie's meta-analyses found that collective teacher efficacy has an effect size $d = 1.57$,[1] almost twice that of feedback ($d = 0.72$) and nearly three times that of classroom management ($d = 0.52$). Eells' meta-analyses additionally found that "collective teacher efficacy is strongly related to achievement in schools" (2011, p. 129). Simply stated, CTE is directly related to student academic performance (Ramos et al., 2014; Bozkurt et al., 2021; Goddard et al., 2021; Salas-Rodriguez & Lara, 2023; Salloum, 2022). Education researchers have also established a positive relationship between school leadership and CTE (Brinson & Steiner, 2007; Cogaltay & Boz, 2022; Yada & Savlainen, 2023; Salloum, 2022).

Figure 2

Simplified Model of Collective Teacher Efficacy



Note. From "Collective Teacher Efficacy: Its Meaning, Measure, and Impact on Student Achievement," by R. D. Goddard et al., 2000, *American Educational Research Journal, 37*(2), 479–507. Reprinted with permission.

METHODS

The purpose of this study was to examine culture and collective teacher efficacy within School ABC, a K-8 grade school located in Auckland, New Zealand. We chose School ABC, founded in 2011, because of its influence on educational practices worldwide. The principal presents for influential education organizations and serves as the director of a powerful education organization and education trust.

Drawing on social cognitive theory as a foundation, our research team conducted a qualitative case study of collective teacher efficacy beliefs through interviews with educators at School ABC. A case study design was chosen because it provides deep, nuanced insights into a specific real-world subject by thoroughly examining it in its actual context. Specifically, we sought to answer the research question *What aspects of culture at School ABC support collective teacher efficacy?*

Given the attention collective teacher efficacy has received among educators, the findings from this study have implications for school leaders seeking to increase student achievement by building the collective efficacy of their faculty and staff. This study contributes to education research by outlining how school leaders can facilitate collective teacher efficacy beliefs by establishing key components of school culture.

Research Process

After receiving Institutional Review Board (IRB) approval, our research team conducted semi-structured interviews with faculty and staff at School ABC. We first contacted the principal to coordinate and receive permission for our study. We conducted interviews in an individual, open-ended question format with one member of our four-member research team. Using a series of questions from Tschannen-Moran and Hoy's (2001) and Goddard et al.'s (2000) teacher sense of efficacy scales as a guide, interviewers met with individual faculty and staff for 25-30 minutes.

Participants

We conducted these interviews with faculty and staff at School ABC whom the principal approached and invited to participate. In total, these interviews included 32 of 39 faculty and staff members, including administration, teachers, and some classified personnel. Among these were four men and 28 women. Table 1 summarizes the participants and the interviews conducted.

Table 1

Respondents by Type

Type	Interviews	Number of Respondents
Principal	In-depth (90 minutes)	1
School Administration	Intermediate (25-30 minutes)	3
Classified Personnel	Intermediate (25-30 minutes)	2
Teachers	Intermediate (25-30 minutes)	26

Procedure

While we attempted to conduct a census sample, due to the voluntary nature and timing of the interviews, we ended with a voluntary convenience sample of 82% of the faculty and staff. Our four-member research team conducted and later transcribed one-on-one interviews in the school. We established inter-rater reliability protocols to maintain consistency across interviews and among team members.

Interview Questions

We based interview questions on Tschannen-Moran and Hoy's (2001) teacher sense of efficacy scale and Goddard et al.'s (2000) collective teacher efficacy scale. Interviews consisted of eight questions about participants' experiences, work life at School ABC, and beliefs about their impact there.

Data Analysis

The research team recorded and transcribed each interview, during which we took notes to supplement interview data. After completing interviews, we discussed initial thoughts and identified potential themes. We used a transcription of this meeting to triangulate the axial coding phase of our data analysis.

We used a grounded theory approach, which focuses "on inductively generating novel theoretical ideas or hypotheses from the data as opposed to testing theories specified beforehand" (Gibbs, 2007, p. 49). As suggested by Corbin and Strauss (1990), data analysis included cycles of open coding, axial coding, and selective coding using NVivo. Due to the large number of categories generated during the coding process, we distinguished between significant themes ($\geq 60\%$) and notable themes (30% to 59%) (Greckhamer et al., 2018). We employed a systematic approach to qualitative data analysis, beginning with open coding of individual interviews to identify patterns and themes. Utilizing the constant comparison method (Corbin & Strauss, 1990; Gibbs, 2007), we further categorized and subcategorized similar themes.

We conducted a subsequent round of coding, adhering to the same categorization and constant comparison principles, this time framed by the research questions. Axial coding followed, examining relationships and patterns between categorized themes and potential connections to sources of efficacy and focusing on discovering connections through Corbin and

Strauss's (1990) lens of "conditions, context, strategies (action/interaction), and consequences" (p. 423). The selective coding cycle involved creating memos for each theme to develop concise definitions and deepen understanding of the categories (Corbin & Strauss, 1990). These memos facilitated the consolidation and prioritization of categories into central themes. The analysis concluded with the implementation of Lincoln and Guba's (1985) four-dimensional criteria (credibility, dependability, confirmability, and transferability) to assess the study's robustness. Through this rigorous process, we synthesized findings by contextualizing each core category within relevant theory, research, and literature.

RESULTS

Educators at School ABC reported that intentional cultural practices supported a belief in their ability to meet student needs. This section presents themes from interviews with the school's faculty and staff. First, we will provide a brief definition of culture and discuss its role at School ABC. We will then describe five critical themes regarding School ABC's culture: shared vision for learning, school systems and structures, relationships, collaboration, and well-being. Since we used the cultural context of School ABC as the basis for our findings, the specific placement of themes and sub-themes is grounded in the actual interview texts. For example, while the theme of trust could also have been categorized under relationships, educators at School ABC felt that the school's systems and structures fostered trust through grade-level hubs, peer modeling, and feedback. When considering the findings from Hallam et al. (2022) and our research on collective teacher efficacy at School ABC, we propose that their strong culture, characterized by a shared vision for learning, combined with school systems and structures, relationships, collaboration, and their focus on the well-being of their faculty and staff, fostered a more profound sense of collective teacher efficacy within their school.

Culture

We defined culture here as the values, beliefs, and attitudes that guide how a school functions and are evident in its expected behaviors and everyday operations. As we interviewed the faculty and staff, it became apparent that the nurturing, connected culture of School ABC was an important part of how they saw themselves as educators and "learners." For educators at School ABC, the vision for learning was a crucial aspect of their school culture and established expectations for both educators and students. School ABC's culture also served as the foundation for how educators interacted with and treated one another. This fostered positive relationships and well-being and provided opportunities for effective collaboration.

Shared Vision for Learning

A vision for learning provides stakeholders with a clear understanding of what learning will look like within a school. It includes school-wide beliefs and values, then connects them to expected student and educator behaviors. At School ABC, their purpose is to cause learning, serve each learner, and create curious individuals who think and relate well to others. In interviews with faculty and staff, 75% (n = 24) said that School ABC's shared vision for learning was their driving force and gave them a common identity. One teacher said that their strong shared vision for learning was promoted through their language of learning and that this vision gave them strength as practitioners. She explained, "It gives us a strong framework in terms of supporting learners and learning how to learn."

One teacher noted that she participated firsthand in the development of this shared vision of learning. Instead of just handing the faculty and staff an already-created vision for learning, the school administration team pulled everyone together before the school even opened and worked collaboratively to create a vision they were all invested in. She stated, "When the vision came out, I was more invested because we had been a part of it . . . It is not happening to us. We are part of it."

When asked about how they maintained such a strong, shared vision for learning with their faculty and staff, the principal said, "Leadership works being guardian to that vision, and living and role modeling the values and the way we do things around here." To guard and promote their shared vision, School ABC's administration created a VIBES (Vision Instigators, Belief Enablers) team. The VIBES team worked closely with grade-level hubs and individual teachers, and as one teacher said, "They are always providing support and solutions." In describing the impact of the VIBES team, one first-year teacher said, "You can't even put a price on that." Another educator stated that the VIBES team spreads their vision, "Because it is momentum, positivity, go get 'em. It comes from the top down."

An assistant principal explained that they have developed a vision presentation and a learning journey that helps potential faculty members experience firsthand "what we value." She stated, "We are very transparent in who we are . . . We share our learning journey. We share this is what we do here, and this is what we value." This transparency helped

establish clear expectations for working at School ABC. This same assistant principal explained that having conversations with each potential teacher allowed them to stress, "This is what we believe and if doesn't align with you, we may not be the right school for you." She emphasized, "This is part of how we grow our culture here."

Our study found that School ABC deliberately placed faculty and staff in positions and provided experiences that allowed them to learn and grow as educators. At School ABC, educators are viewed, and view themselves, as "learners and not knowers" (n = 26). They are encouraged to speak up, take risks, try new things, and to "leave their ego at the door." Throughout our interviews, it was common to hear educators make comments such as "I am a teacher, but I am also a learner still," or "There's always something to learn." As one teacher said, "If you fail, you are going to learn from it. If you don't try and you always do the same, then it is not having a good impact on your learners." In discussing this mentality with the school principal, she asked us, "So how do we make the teachers' jobs joyful, doable, and reasonable while serving our young people for their future?" She answered that you "provide the conditions, the capabilities, the tools that enable us to travel the undulating bumpy unknown pathway."

Systems and Structures

In considering the culture at School ABC, our data identified important systems and structures that helped them achieve their common purpose and vision. 97% of the faculty and staff (n = 31) reported that a variety of systems and structures had a significant impact on their teaching capacity. They discussed how grade-level hubs (n = 25) and a collaborative system that promoted student academic progress (n = 23) allowed them to grow as educators through intentional school design.

Unlike traditional elementary schools, where students are assigned to a single grade-level teacher, School ABC's students were placed in grade-level learning hubs. Each hub consisted of two to four teachers who collaboratively taught grade-level students. Depending on experience and expertise, teachers divide teaching responsibilities that would typically fall to one teacher in a "singleton" classroom. For example, math was generally taught to all the students in the hub by one teacher, while students learned about language arts from another. This allowed teachers to take responsibility for the entire hub and cultivate a sense of ownership within the team. 78% of teachers (n = 25) mentioned that this grade-level structure was one of the most important factors in building collective teacher efficacy at School ABC. By removing the barriers that often accompanied "single cell" teachers, educators at School ABC were constantly surrounded by opportunities to learn.

Further, educators at School ABC explained that peer modeling (n = 12) increased their ability to meet the needs of all students within the school. A new teacher described the impact that this has had on her during her first year at School ABC. She said, "You've always got a role model there to show you what's going on, and if things turn to custard, then someone's there." A veteran teacher new to School ABC discussed the differences between her previous experience at a traditional school and her time at School ABC. She explained that, even though she had only been at School ABC for a short time, this type of environment had fostered vicarious learning. She said, "You might see something else in action and you might see the results that that teacher has gotten and say, 'I am going to change my practice to that.'" Due to the systems and structures in place, educators reported being able to build trust within their teams (n = 14) more authentically. This allowed them to learn from each other in an environment designed to build teacher capacity. A veteran teacher said, "You're not alone and you're not expected to be the expert in everything." Another more novice teacher explained, "You have that opportunity to observe more and you have somebody slowly scaffolding you into taking the reins."

The culture at School ABC played an important role in increasing teacher capacity, as administrators intentionally created grade-level hubs and teams. An assistant principal described that the administrative team focused on understanding each teacher's strengths and struggles. They always ask, "Who can we place around this person's being so [John] can be the best [John] can be?" These grade-level hubs are cultural centers that prioritize vision for learning and actualize efficacy. For example, mentors are placed in the same hub as newer teachers. One newer teacher explained, "Because I was seeing it modeled every day, and we had shared expectations, it really brought my confidence up." Another mentored teacher said, "Sometimes you do need someone to say, hey, this is how you do it. You don't learn everything on your own."

Additionally, 11 out of 32 faculty and staff reported that "feedback from leadership, feedback from the students, feedback from teachers" not only helps them improve their own teaching but also helps them be more effective team members. One educator explained that the best feedback for her came not from pointing out what she was doing but from asking questions, such as, "Why do you want it that way?" or "Why do you need it that way?" In her opinion, "It is the best way to get yourself to metacognitively think about what you are doing yourself." Another teacher, referring to the entire school, said, "We are all really good at giving feedback about what is working and what is not working. It's about the culture and how happy we are."

Often called a "sense-making" conversation, this feedback, one of the school assistant principals said, begins with seeking to understand the situation and asking good questions. Feedback, she explained, is meant to make teachers feel empowered and valued, not just telling someone what they need to improve on. One teacher confirmed this philosophy when she said, "It is all about growing your awareness, I think. Helping you notice rather than telling you what you have to do. It is quite powerful actually when you notice it for yourself." In describing the role that trust and respect play in receiving feedback from her team, one teacher stated, "With the feedback they put in, because I respect them, I can take it onboard and then put it into practice."

Relationships

Thirty-one (97%) faculty and staff discussed the important role that personal connections played at School ABC. Interviewees mentioned such connections with students, colleagues, and administration. For many at School ABC, relationships with students were a top priority that led students to learn more effectively. One educator said, "If you can show the children that you believe in them, then they will want to do the work." Another explained, "I think that if I make the time to continually build the relationships, then the learning piece is going to be able to take off." To build such a relationship, a veteran teacher said you need to show that "you actually like the kids, and you appreciate them, and you respect them." As the relationships between students and educators at School ABC grew, educators felt that they could begin to meet their individual needs. As one educator said, "If you know them well, then you can design learning that you know is going to engage them."

Faculty and staff at School ABC identified relationships between teachers, teams, and grade-level hubs as key to their success. Educators mentioned, "Parents can walk in and they can see that positive attitude that we have towards each other," and that "you are not going to get anywhere with anyone if you don't build [relationships] first." A newer teacher mentioned how relationships with the adults in the building helped her through a challenging experience: "As soon as one adult gave me just a little bit of love and extra care at school," and she added, "I felt like I was successful, even if I wasn't." Faculty and staff also mentioned that the important relationships they had with school administration began when the administrative team demonstrated their belief that the educators and teams were "on the right track and doing the right thing." This led to more positive relationships as faculty and staff viewed themselves as valued members of the school.

Significantly, more than 57% of interviewees (n = 18) indicated that they were more invested and dedicated to the school's culture because they knew their voices, opinions, and thoughts mattered to the school administration. For many (n = 15), knowing that their voice mattered led them to take ownership of both their grade-level hubs and the entire school. One educator explained that School ABC doesn't have an unwritten "hierarchical system" which allows them to "see the value of everyone owning what we do." An assistant principal explained that she felt that the school administration genuinely wanted to know teachers' opinions. Whether it was in formal meetings or morning tea, she said, "We have a variety of leaders across the school that, I think, were very much in gathering voice from all teachers."

One educator described having time to dialogue directly with the principal as "invaluable," as she had "never had a principal like [this one] before." "If you go to her with a problem," she continued, "she will sit down with you and make time with you." This accessibility to the principal and other administrators has fostered trusting relationships among School ABC's educators, such that one teacher remarked, "We are all in this together."

Collaboration

75% of respondents (n = 24) mentioned collaboration as among the strongest components of their school culture. Collaboration, the principal said, "Boils down to communication, commitment, and availability to meet together." Teachers collaborate in grade-level hubs and committees. One teacher described feeling "massively supported" at School ABC, saying that it is an "organization where you are heard and helped" because "someone is always working with you to do something." Another educator described School ABC as a place where they "truly collaborate in a sincere way."

Student learning is at the heart of such collaboration. A veteran teacher explained that if anyone has a struggling student, "We try and see what can do to help the learner." If the student isn't learning, she continued, "We need to change our ways to help them." One teacher explained that it "is better for students" because, through collaboration, "you yourself will be introduced to ideas you would have never thought about," which will help educators better meet student needs.

To support teacher learning, School ABC has also built collaborative coaching (n=15) into its daily and weekly schedules. Collaborative coaching focuses on coaching the entire grade-level hub on a common need, such as collaborating more effectively, looking at the hub's learning design, or using data and evidence. These coaching sessions consisted of

structured, semi-structured, and even informal conversations conducted by the school leadership team, mentor teachers, evidence assurance coaches, or other teachers.

Well-Being

When considering the impact of stress on individual and collective teacher efficacy, School ABC was intentional about addressing what it called faculty and staff well-being. Overall, 81% of participants (n = 26) mentioned intentional practices and resources at School ABC that promoted higher levels of a person's health, happiness, and well-being. This focus aligns with School ABC's culture. For example, their wellness committee regularly hosts outside experts to provide professional development around well-being. One teacher commented, "They really deeply care about us as teachers and us as the educators, and they really want to work in partnership with us, which is really nice." Importantly, the effectiveness of collaboration within a grade-level team is often interrelated to the personal connections that team members have with each other. Knowing this, ABC administrators offer opportunities for teams to build relationships outside of school, which, in turn, enrich school culture.

DISCUSSION

This research study investigated a school known for its innovative practices and collaborative culture. By interviewing educators at School ABC, our goal was to identify links between their culture and the school's collective teacher efficacy by exploring the question, "What aspects of culture support collective teacher efficacy?" Our hope was to provide school leaders with specific cultural practices to support collective teacher efficacy in their schools. In this section, we will discuss how our findings connect to educational best practices, especially Bandura's efficacy frameworks.

According to the Association for Supervision and Curriculum Development (ASCD), school culture is defined as "the way teachers and other staff members work together and the set of beliefs, values, and assumptions they share" (n.d., para. 2). School ABC developed a shared vision for learning that leveraged its systems, structures, relationships, well-being, and collaboration to build self-efficacy beliefs.

Goddard et al. (2000) stated, "Because collective teacher efficacy beliefs shape the normative environment of a school, they have a strong influence over teacher behavior, and consequently, student achievement" (p. 497). School ABC's environment provides experiences that contribute to a shared vision for learning. DuFour and Eaker (1998) state that a vision "instills an organization with a sense of direction" (p. 62), and Roberts and Pruitt (2008) explain that a collaborative vision is a "shared image of what you desire your school to look like in the future" (p. 30). Said differently, the shared vision connects beliefs, values, and expectations to desired behaviors, which in turn influence the effectiveness and efficiency of school-wide experiences. Fullan and Quinn (2015) state, "What we need is consistency of purpose, policy and practice" and that "the solution requires individual and collective ability to build shared meaning, capacity, and commitment to action" (p. 1).

Such experiences are made possible through school systems and structures such as grade-level hubs. Within School ABC's grade-level hubs, educators must rely on each other. One teacher described how this structure enabled them to create their own "little systems" that provided them with "extra teachable moments" for their students. She said that one teacher might be reading a book to the entire hub and that it "leaves two of us free then to pull two students aside and do extra dose in density work to get them up to speed." Bandura called these mastery and vicarious experiences. Mastery experiences, which stem from one's own performance accomplishments, build confidence. In contrast, vicarious experiences involve observing others achieve success, which helps one believe she can do the same (Bandura, 1977, 1997).

Bolstering individual teacher efficacy through established systems and relationships is more natural and can have a more immediate impact on collective teacher efficacy. Goddard et al. (2000) describe feedback as a key component of their collective efficacy model (see figure 2). We found that at School ABC, feedback can influence social persuasion directly. A veteran teacher new to the school described this process as intimidating at first because school culture promotes an "open door policy" within each hub. Once she realized that the purpose was to make her a better teacher, she said, "It is always continually happening . . . so you can get feedback that way." Educators at School ABC were also actively involved in the feedback process. Whether in working with their evidence assurance coach or their mentor teacher, educators viewed feedback as a way to move forward. Teachers mentioned that they often invite others into their hubs as they progress along their "inquiry journey." When trusted and credible individuals make compelling arguments, they can boost a group's belief in its collective ability to succeed and innovate. Groups that have strong internal connections are particularly receptive to persuasive reasoning that encourages them to tackle complex problems and develop new solutions (Donohoo, 2016).

By promoting work-life balance, encouraging regular exercise, and creating a wellness committee, School ABC encouraged its educators to take control of their affective state. This supports Bandura's (1977, 1997) findings that affective state impacts one's sense of self-efficacy. One educator mentioned that his team helped him realize the importance of his well-being. He said, "I couldn't see it. Because I'm like, 'I can work, I can work, I can do it.' They said, 'No you can't. You need a break.' They have taught me those things. It's really important." Another teacher said, "You are not good to anyone" when you are overly stressed. Emotional experiences include how individuals perceive and make sense of their feelings. People with strong self-efficacy tend to interpret their emotional states as motivating and empowering. In contrast, those with lower self-efficacy often allow their emotional responses to undermine their determination and create barriers to continued effort (Goddard et al., 2004).

As school leaders seek to build collective teacher efficacy, they must understand that not all sources of efficacy information have the same influence on it (Bandura, 1997). Data from our research supported Bandura's proposed differentiated influence for mastery experiences, vicarious experiences, and social persuasion, but we found that the focus on well-being at School ABC significantly affected the affective states of faculty and staff. Bandura posited that mastery and vicarious experiences have greater influence on efficacy, while social persuasion and affective state have less significant and lasting impacts (Bandura, 1997).

Three out of the five significant cultural themes (vision for learning, collaboration, and relationships) from our research have strong connections to the firsthand experiences educators had at School ABC. Educators can also have more efficacious mastery experiences when they view themselves as learners who feel that they have administrative support to try new things, as the educators at School ABC do. Vicarious experiences at the school, on the other hand, were almost exclusively related to the systems and structures in place there. Grade-level hubs and purposeful teams fostered a greater sense of trust and learning through peer modeling and opportunities for teacher observations.

Bandura (1997) explains that social persuasion is encouraged by the faith others have in our abilities, and that the reception of feedback depends on the credibility, trustworthiness, and expertise of those providing it. The systems and structures at School ABC promoted more authentic feedback, or social persuasion, through an organized, timely, and schoolwide feedback system. School ABC's educators, however, did not recognize social persuasion as having as strong an impact on their capacity as other sources of efficacy. Our research further revealed that, while Bandura suggested that affective state has a weaker effect on efficacy, the focus on well-being at School ABC had a significant impact on teachers and their ability to teach. However, Bandura (1977) did affirm that an individual's emotional and physiological state significantly impacts their perception of self-efficacy. When teachers experience emotional challenges or health issues, their professional performance can be compromised, potentially affecting the quality of their instruction. We assert that by prioritizing teachers' well-being and providing supportive environments that foster a sense of safety and care, educational institutions can help educators recover from stress, manage anxiety, and maintain professional effectiveness. Such supportive approaches are fundamental to building trust and strengthening collective efficacy and a sense of professional capability.

It appears that nearly every facet of School ABC's structure has been intentionally designed to foster a more effective and lifelong learning experience, thereby promoting collective teacher efficacy. School ABC focused on the firsthand "experience" of learning. Educators learned through ongoing vicarious experiences, observing peers and colleagues model best practices and proper curriculum implementation. This increased educator capacity to meet the needs of every student through a school model that embraced collaboration and well-being. Further research into intentional, focused well-being strategies in schools would help determine whether educators' affective states can consistently and positively impact teacher efficacy when such methods are used. We recommend longitudinal studies that track how collective efficacy develops and changes over time, along with the long-term impact of collective efficacy on student outcomes across different school contexts.

IMPLICATIONS

School leaders face diverse challenges within their institutions; however, they should foster collective teacher efficacy. The core of collective teacher efficacy lies in educators' belief in their capacity to impact students' lives. Research has consistently demonstrated that collective teacher efficacy substantially influences student achievement and is directly correlated with educators' beliefs (Bandura, 1993, 1997; Goddard & Goddard, 2001; Tschannen-Moran et al., 1998). Donohoo (2016) emphasized that "fostering collective teacher efficacy should be at the forefront of a planned strategic effort in all schools" (p. 1). She further asserted, "Given its effect on student achievement, strengthening collective teacher efficacy should be a top priority relevant to everyone in the field of education" (p. 1). While principals do not directly

determine student academic success, their leadership plays a crucial role in shaping school outcomes. School leaders must strategically work to cultivate a positive institutional culture and articulate a collective vision that prioritizes student achievement. Based on the premise that collective teacher efficacy can positively influence student achievement, we posit that understanding and implementing the five aspects of school culture could yield significant improvements in student performance.

CONCLUSION

Collective teacher efficacy flourishes when educational institutions have a strong and purposeful culture guided by a clear and collaborative vision for learning that all stakeholders can trust. Goddard et al. (2015) stated, "Teacher collaboration is a key to the pathway from leadership to collective efficacy beliefs because it is the shared interactions among group members that serve as the building blocks of collective efficacy" (p. 504). Through deliberate cultural design, school leaders can leverage their shared vision for learning, relationships, well-being, collaboration, and school systems and structures to increase collective teacher efficacy, thereby enabling all faculty and staff to meet the needs of every student. The principal at School ABC offered this encouragement: "I do believe through really good leadership and the right culture, it can be the best job to come to every single day." This sentiment encapsulates the transformative potential of collective teacher efficacy when nurtured in a supportive, visionary educational environment.

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