Advances in Social Sciences Research Journal – Vol. 8, No. 2
Publication Date: February 25, 2021
DOI:10.14738/assrj.82.9690.
Hoogsteen. T .J. (2021). Fostering Collective Efficacy: What School Leaders Should Know. Advances in Social Sciences Research Journal, 8(2) 78-84.

Fostering Collective Efficacy: What School Leaders Should Know?

T. J. Hoogsteen
Independent Scholar

ABSTRACT

Statements claiming that efforts of policy makers, system and school leaders, and staff developments toward education reforms might be better served by strategically and intentionally considering how to foster collective efficacy throughout the conceptualization, design, delivery, and assessment of change initiatives (Donohoo, 2018, p. 340) have led schools and districts to attempt to do just that. However, such conclusions may not be justified. The present review examines available research using a framework inspired by Willingham (2012) which is meant to guide leaders in evaluating the trustworthiness and value of research. Willingham (2012) notes that leaders should be able to recognize the change when it happens, know how large the change should be, and estimate the length of time the change will take. This framework is applied to CTE literature to gauge whether the research base surrounding collective teacher efficacy is useful to school and district leaders when making decisions regarding school improvement and organizational change initiatives. The article concludes with suggestions for future research.

Key Words: Collective Teacher Efficacy, Leadership, Organizational Change, School Improvement

INTRODUCTION

Collective teacher efficacy (CTE), the perception that teachers in a school can make an educational difference for their students over and above that of their homes and communities (Tschannen-Moran & Barr, 2004), has been linked to many positive outcomes in schools. First and foremost, collective efficacy has been associated with student achievement (Bandura, 1993; Goddard et al., 2000; Tschannen-Moran & Barr, 2004; Goddard et al., 2015). The group beliefs are also related to several positive teacher consequences such as persistence, job satisfaction and professional commitment, expectations for students, and implementation of change (Donohoo, 2018).

These positive correlations have led several researchers to conclude that it is in a school leader's best interest to find ways to foster collective efficacy beliefs. For example, Tschannen-Moran and Barr (2004) stated that the principal of the school has the responsibility to enhance the collective efficacy of the school to facilitate higher individual efficacy beliefs and, thus, student achievement (p. 195). To concur, DeWitt (2017) names collective teacher efficacy one of the six influences that matter most for leadership. Maybe the strongest related claim has been made by Donohoo (2018), where she suggests that policy makers, leaders, and staff developers devote attention to

strategically and intentionally considering how to foster CTE throughout the conceptualization, design, delivery, and assessment of change initiatives.

To accomplish this end and create and support change through fostering the development of collective efficacy, leaders can undertake several practices and actions. For instance, Ross et al. (2004) identified four factors related to school processes and leadership that contribute to collective teacher efficacy. The processes with the strongest effects were shared school goals, school-wide collaboration, fit of plans with school needs, and empowering school leadership. Donohoo (2017) further contributed to the list of ways leaders can support and foster CTE and compiled a list of six of enabling conditions. The enabling conditions are advanced teacher influence, goal consensus, teachers' knowledge about one another's work, cohesive staff, responsiveness of leadership, and effectiveness of intervention (p. 29).

Although recently the concept of fostering collective efficacy to induce change has gained momentum, Willingham (2012) identifies three criteria school leaders should look for when evaluating research to guide and implement change. First, leaders should be able to recognize the change when it happens. Second, school leaders should know how large the change is supposed to be. Finally, leaders need to know when the change can be expected or how long it will take for the desired change to occur.

This article draws inspiration from these ideas and will work from the stance that school leaders are/or are considering implementing the enabling conditions with the purpose of building collective efficacy. The purpose of the article is threefold. To begin, available research related to collective teacher efficacy and achievement will be reviewed to see if the criteria mentioned in Willingham (2012) can be satisfied, thus making the research valuable to school leaders and fostering collective efficacy a viable pursuit. The article will conclude with suggestions for school leaders in order to maximize potential effects of CTE and, at the same, provide ideas for future research.

RECOGNIZING CHANGE

Leaders enacting change through developing collective efficacy can look to the literature for how change may look. Two areas in which leaders can set their focus when looking for consequences or impact of change are patterns of behavior and improvement in student learning. This section will first address the former and then move on to the latter.

Patterns of Behaviour

As Donohoo (2018) notes, past research has demonstrated that teacher efficacy has an indirect influence on student achievement through productive patterns of behavior. In her review, Donohoo (2018) cited deeper implementation of school improvement strategies, the extent of teacher leadership in a school, goal setting and high expectations for students, commitment and job satisfaction, persistence in the face of challenges with students, dealing with difficult student behavior, and engagement with parents and community as the productive behaviours which have been found to be related to collective efficacy and have an influence on achievement.

However, Donohoo (2018), also cautions against concluding about causation as it relates to collective teacher efficacy and the noted teacher behaviours because in most of the studies the

causal directions of the variables were determined in advance. She then commented on the need for future reviews to examine more about what is known about the causal direction of the variables. Hoogsteen (2020) performed such a review of select outcomes, specifically attempting new teaching approaches (implementation) and decreasing disruptive behaviour. The review concluded that collective efficacy's role in causing these outcomes could not be determined. Reason being, is the timing of the surveys to measure CTE and the chosen teacher outcome. Surveys measuring CTE were often given after the fact, so any conclusion drawn that collective efficacy causes said teacher outcomes are incomplete and possibly misleading. The best conclusion that can be drawn is that collective efficacy and the chosen teacher behavior co-vary, meaning that when one is high (or low), so is the other, but not that collective causes either. In this case, available research cannot be relied upon to provide the answer.

Improvement in Student Learning

Ross and Gray (2006) explain that principals can expect that increasing teacher beliefs about their collective capacity will make a modest but significant contribution to enhanced student achievement. Such a statement is ambiguous, but additional research supports this claim. Several studies (Bandura, 1993; Goddard et al., 2000; Tschannen-Moran & Barr, 2004; Ross & Gray, 2006; Goddard et al., 2015; & Goddard et al., 2017) have demonstrated the relationship between collective efficacy beliefs and student achievement. Following their finding, Goddard et al. (2000) state that one way for school administrators to improve student achievement is by working to raise the collective efficacy beliefs of their faculties. While this may seem intuitive, the statement cannot be verified as being much more than conjecture because it is unclear if any of the sample schools from the cited studies employed an intentional process to build collective efficacy beliefs which resulted in improved achievement. Again, if school leaders are turning to the knowledge base of CTE to provide definitive answers regarding recognizing change, the solution is not to be found.

SIZE OF THE CHANGE

When it comes to the size of the change, a couple findings may be of interest and use to school leaders if they are attempting to leverage collective efficacy to build achievement. Goddard et al. (2000) found that a one unit increase in a school CTE scale score is associated with an 8.62 point average gain in mathematics achievement and an 8.49 point average difference in reading achievement. This difference in collective efficacy equates to an increase of more than 40% of a standard deviation in student achievement. A second study provides similar insight. Goddard et al., (2017) found that one standard deviation increase in collective efficacy was related with a 0.10 standard deviation increase in mathematics achievement. But possibly more interesting, especially for leaders in more diverse contexts, was the discovery that a one standard deviation increase in CTE was associated with a 50% reduction in the academic disadvantage experienced by Black students.

While these numbers sound promising, they are not likely useful to school leaders engaging in building collective efficacy to drive improvement. For example, the first study, Goddard et al. (2000) uses achievement data collected from the district and perceptions of CTE via researcher survey but does not specify when each was collected. The issue with the timing of the surveys is that is it cannot make clear if there is a causal relationship between collective efficacy and achievement, just that there is a relationship. The second study, Goddard et al. (2017), tracks

seven years' worth of achievement data, which is significant, however, the impact in terms of informing practice is diminished because it does not report on changes year over year in achievement and collective efficacy, thus making the data less useful for leaders when seeking how much improvement can be expected per year or for longer improvement projects. Again, while these studies can demonstrate the association between collective teacher efficacy and achievement, what they cannot do is show that collective efficacy is the *cause* of the differences in achievement. They also do not explain whether school leaders intentionally built collective efficacy and achievement was the result. A leader implementing enabling conditions to build CTE in order to improve their school needs to be aware that these studies are only demonstrating correlation and are not enough to prove causation.

This section, as compared to the last, has a glaring omission. Whereas, the previous section explored teacher outcomes, thus far, the current section has only discussed achievement. That is because when it comes to the size of a change in relationship to building collective efficacy, or how much of a change can be expected in teacher behaviours, no such quantifiable evidence exists, at least to the best of the author's knowledge. Oftentimes in the collective efficacy research base, researchers and writers take an appreciative stance, that is a focus on idealism rather than reality, toward teacher outcomes being associated with collective teacher efficacy.

For instance, based on self-efficacy theory Goddard et al. (2000) posit that when CTE is high, teachers will be more persistent, plan more, and accept responsibility for student achievement. Additionally, Tschannen-Moran and Barr (2004) tout many of the same outcomes, but much of the research they cite is related to self-efficacy, rather than collective efficacy. Donohoo and Katz (2020) admit this appreciative stance and also states that new classroom strategies and approaches or initiatives aimed at improving a schools are *unlikely* (italics added for emphasis) to be adopted by teachers or administrators unless they believe they are capable of putting them into practice (p. 12) but no supporting evidence is offered.

Another exclusion, that of meta-analysis may seem negligent, nevertheless, it is purposeful. A couple well-known meta-analysis related to collective teacher efficacy exist, Eells (2011) and John Hattie (Donohoo et al., 2018), however, for the purposes of this review, they are being omitted. Meta-analysis used to evaluate interventions in education are meant to measure expected impact, or effect sizes. These effect sizes are often framed to illustrate anticipated yearly growth , which may seem appropriate for this article. Not only are said meta-analyses subject to the same drawbacks as the others studies mentioned, mainly that they do not include studies where building collective efficacy is the primary objective, meta-analysis as it applies to education research is not without criticism, thus not appropriate for inclusion herein. Although it is beyond the scope of this review to delve into criticism of meta-analysis as it pertains to education research, these criticisms can be found in detail in other sources. In general, they can be found in Wiliam (2016) and Wrigley (2018), and more specific to CTE in Hoogsteen (2020).

EXPECTING THE CHANGE

When pondering change through implementing enabling conditions for collective teacher efficacy in order to build CTE, school leaders have one final, and important, question they need to consider, how long can or should it take for the expected change to occur? As with any change, having a reasonable estimation of the time it will take can assist leaders especially when trying to build momentum and commitment for change, and for long-term planning of school goals. Nonetheless, the collective efficacy research base has addressed this question in only imprecise terms.

For example, Tschannen-Moran and Barr (2004) note that once collective efficacy of a school is established, it becomes a stable component of the school's culture and requires significant effort to change (p. 191), but no timeline for such an effort is suggested. A study by Sørlie and Torsheim (2011) aligned with this expectation when they collected teacher efficacy data two times, with data collection taking place six months apart. At the same time, the authors acknowledged that due to lack of studies with a longitudinal design, little is known about the stability of collective efficacy (p. 186). This still leaves the question of how long changing a school staff's collective efficacy would take, not to mention whether it is even possible to manipulate collective efficacy through intervention.

Assuming that what has been said about CTE being a stable school factor is true, this may be troublesome for school leaders. This thought may be especially problematic to those applying the enabling conditions of advanced teacher influence, goal consensus, teachers' knowledge about one another's work, cohesive staff, responsiveness of leadership, and effectiveness of intervention as listed in Donohoo (2017). A leader could dedicate a great deal of time, for example, to strategies to promote teachers acquiring knowledge about each other's work and developing a cohesive staff. This becomes problematic when leaders are setting their focus on building beliefs but there are areas of the school organization that require concentration. If what Donohoo and Katz (2020) claim is true, that without beliefs, the "work" of implementation will not unfold (p. 12), without an idea of how long it might take, or if it is even possible, leaders could be stuck in a cycle of trying to build beliefs and never move forward with other goals.

SUGGESTIONS FOR SCHOOL LEADERS AND DIRECTION OF FUTURE RESEARCH

The preceding review has made clear that currently available research on collective efficacy is not of much use to school leaders when deciding if attempting to build collective efficacy in order stimulate school improvement is a worthwhile pursuit. Research cannot answer important questions such as how to recognize the change, how large the change should be, and how long the change might take. While this particular framework for evaluating the practical application of research may not be the quintessential way to do so, it does illuminate gaps in the existing literature and the flaws in claims that leaders should be focused upon building collective teacher efficacy in order to create change and improvement.

Donohoo et al. (2020) state that knowledge of levels of CTE do not support its development. Conversely, Bernhardt (2017) notes continuous improvement and evaluation assists in understanding the interrelationships and improvement of programs, processes, and products on an ongoing basis (p. 24). The position taken here aligns more with the latter and is that school leaders need information related to levels of CTE in order to make sound judgements about the effectiveness of the interventions, such as the enabling conditions of CTE, they have put in place.

With that said, if leaders are intent on building collective efficacy to drive school improvement, it may be useful to take the following suggestions into account.

As they begin, leaders should survey their staff to gauge initial collective efficacy beliefs. Using an instrument such as those found in Goddard et al. (2000) or Tschannen-Moran and Barr (2004) would be ideal. Measuring initial levels of enabling conditions being applied using the survey developed in Donohoo et al. (2020), known as the enabling conditions for collective efficacy scale, would also be useful. School leaders should also decide which outcome they want to focus on, teacher behavior outcomes or student achievement, or both. Achievement data is usually readily available so collection of such should be relatively easy. On the other hand, teacher behavior data would be considerably more difficult to gather. A self-report survey instrument could work, but also some sort of observational data would likely be needed. Even so, tracking changes over time in teacher behavior would be challenging. Collecting the same data again at pre-determined intervals over time would help determine if efforts to improve collective efficacy resulted in changes in CTE and if such changes influenced teacher outcomes and/or achievement.

Although action research of this nature would be time consuming and out of the area of expertise for many school leaders, it is probably the best way to know if collective efficacy can be manipulated, and if such manipulation results in significant changes. Studies of this nature are required to move the knowledge base related to collective efficacy forward, and if studies such as those suggested are conducted the results may then be useful and applicable to school leaders. If a case study or action research approach to answering the questions raised by this review turn out to be too difficult to conduct in practice, it may be time to cease viewing collective efficacy as a shaper of the normative environment of a school (Goddard et al., 2000) and a characteristic to build. Instead, school leaders and researchers may need to view CTE as an indicator of the health of the organization and result of having implemented and performed effective school practices.

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