

Collective Teacher Efficacy as a Catalyst for Student Achievement in Malaysian Secondary Schools

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ABSTRACT

Collective teacher efficacy (CTE), defined as the shared belief of a school's teaching staff that they can collectively organise and execute the actions required to positively influence student learning, has emerged as one of the most powerful school-level correlates of student achievement in contemporary educational research. Despite compelling international evidence, CTE remains under-theorised and under-researched in the Malaysian secondary school context, where persistent achievement gaps, uneven school performance, and post-pandemic learning loss continue to challenge national education aspirations. This concept paper critically reviews the theoretical foundations, empirical evidence, and enabling conditions of CTE and positions it as a catalyst for student achievement in Malaysian secondary schools. Drawing on Bandura's social cognitive theory and an integrative synthesis of recent international and Malaysian scholarship, the paper argues that CTE operates through mastery experiences, vicarious learning, social persuasion, and affective states, and that its formation is moderated by the structural realities of Malaysian secondary schooling, including subject department organisation, academic streaming, and examination pressure. The paper proposes an integrative model linking leadership practices, collaborative structures, and contextual conditions to CTE and, in turn, to student achievement and equity outcomes, and distinguishes CTE from related constructs such as teacher self-efficacy, collective responsibility, and school climate. The discussion elaborates the mechanisms through which CTE translates into improved instructional quality, higher expectations, and greater teacher persistence; develops the Malaysian implementation gap in professional learning communities (PLCs) with reference to recent local evidence; offers concrete guidance for operationalising the paper's four propositions in future empirical work; and provides an expanded critical reflection on cultural validity, measurement, and causality, including possible adaptations for the Malaysian context and department-level measurement of CTE. Implications for school leaders, teacher professional development, and Malaysian education policy are discussed in relation to the Malaysia Education Blueprint and United Nations Sustainable Development Goal 4 (Quality Education).

Keywords: collective teacher efficacy; student achievement; Malaysian secondary schools; school leadership; professional learning communities; subject departments

INTRODUCTION

Few questions matter more to education systems than why some schools consistently enable students to achieve at high levels while others, serving similar communities, do not. Decades of school effectiveness research have converged on an answer that is at once intuitive and profound: the collective beliefs that teachers hold about their shared capability to improve student learning are strongly associated with the achievement of the students they teach. This shared belief, known as collective teacher efficacy (CTE), refers to the judgement of teachers in a school that the faculty as a whole can organise and execute the courses of action required to have a positive effect on students (Goddard et al., 2000; Goddard et al., 2004). When teachers collectively believe that their combined efforts can overcome obstacles to learning, they set more challenging goals, persist longer in the face of difficulty, invest more deeply in instructional

improvement, and accept greater responsibility for the learning of all students (Donohoo, 2017; Hattie, 2023).

The empirical case for CTE is remarkable. Eells (2011), in a meta-analysis of studies examining the relationship between collective efficacy and achievement, found that CTE was strongly and positively associated with student achievement across subject areas and locations. Building on this synthesis, Hattie ranked collective teacher efficacy at the very top of the list of factors influencing student achievement, reporting an effect size substantially larger than that of socioeconomic status, prior achievement, home environment, or student motivation (Donohoo et al., 2018; Hattie, 2023). Although the precise magnitude of these effects has been debated, the consistency of the positive relationship between CTE and achievement across cultures, school levels, and methodological approaches makes it one of the most robust findings in the school improvement literature (Anderson et al., 2023; Tschannen-Moran & Barr, 2004).

In Malaysia, the need to identify powerful, malleable, school-level levers of achievement has never been more urgent. The Malaysia Education Blueprint 2013-2025 set ambitious aspirations for access, quality, equity, unity, and efficiency, including the goal of placing Malaysia in the top third of international assessments (Ministry of Education Malaysia, 2013). Yet international benchmarks indicate that Malaysian students continue to perform below the OECD average in reading, mathematics, and science, and the COVID-19 pandemic further disrupted learning and widened urban-rural disparities (OECD, 2023). Studies conducted during and after the pandemic have documented substantial pressures on teachers' instructional practices and wellbeing as schooling shifted online and back again (Kamal & Illiyan, 2021; Verstraeten et al., 2025), while research on Malaysian students has highlighted intensified psychosocial and counselling needs among secondary school students in the post-pandemic period (Jailani et al., 2025). These conditions place a premium on the collective capacity of school staff to respond, adapt, and accelerate learning recovery.

Despite the international prominence of CTE, Malaysian scholarship on the construct remains limited. Singh and Loh (2024) observed that although CTE has been identified as a critical contributing factor for students' academic outcomes, it has received comparatively little attention from researchers in Malaysia. The Malaysian studies that do exist have tended to focus on primary schools, on demographic correlates, or on CTE as a mediator between leadership and teacher outcomes rather than on its catalytic role in secondary school student achievement (Singh & Loh, 2024; Thien et al., 2024). This gap is consequential. Secondary schooling is the stage at which high-stakes national examinations shape students' life trajectories, at which achievement gaps consolidate, and at which teacher collaboration is often most fragmented by subject department structures, academic streaming, and examination-driven routines. Understanding how CTE can be conceptualised, cultivated, and leveraged in Malaysian secondary schools – and how these structural features of the system moderate its formation and effects – is therefore a matter of both scholarly and practical significance.

This paper is a concept paper and critical review rather than an empirical study. Its purpose is fivefold. First, it synthesises the theoretical foundations of CTE within Bandura's social cognitive theory and clarifies the construct's meaning, measurement, and boundaries relative to adjacent constructs. Second, it critically reviews international and Malaysian evidence on the relationship between CTE and student achievement, and on the leadership practices and organisational conditions that enable CTE, with explicit attention to how Malaysian secondary school structures moderate these relationships. Third, it proposes an integrative perspective that positions CTE as a catalyst linking school leadership, professional collaboration, and contextual conditions to student achievement in Malaysian secondary schools, and offers concrete guidance for testing this perspective empirically. Fourth, it develops the Malaysian implementation gap in professional learning communities with reference to recent local evidence on PLC quality variation. Fifth, it derives implications for practice, policy, and future research while confronting, more substantively than prior treatments, the cultural validity of imported CTE measures. In doing so, the paper aligns its contribution with United Nations Sustainable Development Goal 4 (SDG 4), which calls for inclusive and equitable quality education and the promotion of lifelong learning opportunities for all (UNESCO, 2021).

LITERATURE REVIEW

Theoretical Foundations: Social Cognitive Theory

The construct of collective teacher efficacy is rooted in Bandura's social cognitive theory, which holds that

human functioning is the product of a dynamic interplay between personal, behavioural, and environmental influences. Central to this theory is the concept of self-efficacy, the belief in one's capability to organise and execute the courses of action required to produce given attainments (Bandura, 1997). Efficacy beliefs influence how people think, feel, motivate themselves, and act. Individuals with strong efficacy beliefs approach difficult tasks as challenges to be mastered rather than threats to be avoided, set higher goals, sustain effort in the face of failure, and recover more quickly from setbacks (Bandura, 1993).

Bandura (1997) extended the theory beyond the individual by arguing that people do not live their lives in isolation; many of the outcomes they seek are achievable only through interdependent effort. He therefore introduced the notion of collective efficacy, defined as a group's shared belief in its conjoint capabilities to organise and execute the courses of action required to produce given levels of attainment. Crucially, collective efficacy is not the mere sum of individual efficacy beliefs. It is an emergent group-level property that reflects members' appraisal of the group's coordination, interaction, resources, and shared purpose. Bandura (1993) demonstrated empirically that the collective efficacy of school staff predicted school-level achievement even after controlling for student socioeconomic characteristics, a finding that launched a generation of research on efficacy beliefs as organisational phenomena.

Four sources of efficacy information identified by Bandura (1997) apply at the collective level. Mastery experiences, the most powerful source, arise when a faculty experiences genuine success in improving student learning through joint effort. Vicarious experiences occur when teachers observe comparable schools or teams succeed, making success appear attainable. Social persuasion includes encouragement, feedback, and credible communication from leaders and colleagues that the staff has what it takes. Finally, affective states, such as the collective mood, stress level, and morale of a faculty, colour judgements of capability. These sources provide the theoretical levers through which CTE can be deliberately cultivated, a point to which this paper returns in the discussion (Loughland & Ryan, 2022).

The Concept and Measurement of Collective Teacher Efficacy

Goddard et al. (2000) provided the seminal conceptualisation and measurement of CTE in education. They defined CTE as the perceptions of teachers in a school that the efforts of the faculty as a whole will have a positive effect on students, and developed a measurement instrument based on two dimensions adapted from teacher efficacy research: group competence, the judgement of the faculty's teaching capability, and task analysis, the assessment of the difficulty of the teaching task given student and community factors. Using this instrument in urban elementary schools, they found that CTE was positively associated with between-school differences in student achievement in both reading and mathematics (Goddard et al., 2000).

Subsequent theoretical work refined the construct. Goddard et al. (2004) situated CTE within a broader model of collective efficacy beliefs, emphasising its emergent, organisational character and its role in establishing normative expectations for effort and persistence within a school. Because CTE is a property of the group, it functions as a feature of school culture: it shapes what teachers in a school regard as achievable, acceptable, and expected. In schools with robust CTE, the prevailing norm is that all students can learn and that the staff is responsible for making that happen; in schools with weak CTE, difficulties tend to be externalised to students, families, or circumstances (Donohoo, 2017; Hoy et al., 2002).

Measurement debates persist. Most studies aggregate individual teachers' ratings to the school level, which raises questions about within-school consensus, referent shift (whether items ask about "teachers in this school" or "I"), and the appropriate level of analysis. More recent scholarship has also urged researchers to move beyond static measures towards understanding the antecedents and formation processes of CTE in

authentic professional learning settings (Loughland & Ryan, 2022). Anderson et al. (2023) advanced this agenda by validating the Enabling Conditions for Collective Teacher Efficacy Scale, demonstrating that empowered teachers, cohesive faculty, goal consensus, and supportive leadership are measurable conditions that predict collective efficacy beliefs. These developments matter for the Malaysian context, where translated and culturally validated instruments are prerequisites for a credible empirical research programme, a point developed further in Sections 2.7 and 5.5.

Collective Teacher Efficacy and Student Achievement: Global Evidence

The relationship between CTE and student achievement is among the most consistently replicated findings in school effectiveness research. In the foundational study, Goddard et al. (2000) reported that a one standard deviation increase in CTE was associated with meaningful gains in school-level mathematics and reading achievement. Hoy et al. (2002) found that collective efficacy was the key organisational variable explaining achievement differences among high schools, outperforming socioeconomic status in predictive power. Tschannen-Moran and Barr (2004) similarly documented significant positive relationships between CTE and student achievement in middle schools across writing, English, and mathematics assessments.

Meta-analytic evidence consolidated these findings. Eells (2011) synthesised twenty-six studies and concluded that the beliefs teachers hold about the capability of the school as a whole are strongly and positively associated with student achievement across subject areas and in multiple locations. It was on the basis of this synthesis that Hattie positioned CTE at the top of his Visible Learning rankings of influences on student achievement, with a reported effect size of 1.57, more than three times the predictive power of socioeconomic status (Donohoo et al., 2018). In the updated synthesis of more than 2,100 meta-analyses, collective efficacy remains among the most powerful influences identified (Hattie, 2023).

The claim deserves careful, critical reading. The headline effect size derives from correlational studies, and correlation is not causation; high-achieving schools may breed confident faculties as much as confident faculties produce achievement (Anderson et al., 2023). Reciprocal causality is in fact consistent with social cognitive theory, since mastery experience is itself the strongest source of efficacy. Moreover, effect sizes computed from school-level correlations are not directly comparable to those from student-level interventions. Nevertheless, longitudinal and multilevel studies continue to support a substantive positive association between CTE and achievement after controlling for prior achievement and demographic composition, and studies of leadership effects repeatedly find that teacher beliefs, including collective efficacy, mediate the pathway from leadership to student learning (Ross & Gray, 2006). The reasonable conclusion is that CTE is a powerful correlate and plausible proximal cause of achievement, best understood as both an outcome of effective collective work and a catalyst that sustains and amplifies it.

Sources and Enabling Conditions of Collective Teacher Efficacy

If CTE is consequential, the pressing question becomes how it is formed. Consistent with Bandura's four sources, research has identified a set of enabling conditions that make the emergence of strong CTE more likely. Anderson et al. (2023) validated five such conditions: empowered teachers who have genuine influence over instructional decisions, embedded reflective practices, cohesive teacher knowledge, goal consensus, and supportive leadership. Their findings caution policymakers against top-down improvement processes that set goals through systems removed from teachers' voices and ownership, arguing instead that empowered teachers can be a catalyst for collective efficacy beliefs that are ultimately related to student learning (Anderson et al., 2023).

Professional learning communities (PLCs) are the most widely studied structural vehicle for building CTE. In PLCs, teachers collaboratively analyse student data, design and test instructional strategies, and observe one another's practice, thereby generating mastery and vicarious experiences at the group level. Singh and Loh (2024), in a structural equation modelling study of 307 Malaysian primary school teachers, found that professional learning communities directly affect collective teacher efficacy and that teachers' trust in colleagues exerts a partial mediating effect. Relational trust emerges repeatedly as the connective tissue of

efficacy-building collaboration: without trust, collaboration remains contrived and cannot generate authentic collective mastery (Karacabey et al., 2022; Singh & Loh, 2024).

Teacher professional development also shapes efficacy beliefs. Gümüş and Bellibaş (2023), analysing data across multiple countries, showed that the types of professional development activities teachers participate in are differentially related to their self-efficacy, with sustained, collaborative, practice-based forms outperforming one-off workshops. At the group level, organisational climate and collegial support have been shown to operate through collective efficacy to influence teacher professional learning (Hao et al., 2024), while collective efficacy has been linked to teachers' professional commitment and job attitudes (Zhang, 2022). Together, these strands indicate that CTE is not a fixed trait of a faculty but a malleable organisational belief that responds to the quality of teachers' shared work and the conditions leaders create around it (Loughland & Ryan, 2022).

School Leadership and Collective Teacher Efficacy

Leadership is the most consistently identified antecedent of CTE. Principals influence collective beliefs both directly, through vision, persuasion, and modelling, and indirectly, by designing the structures within which teachers collaborate. Instructional leadership, encompassing the framing of school goals, supervision of instruction, and promotion of professional learning, has been shown to improve instructional quality and teacher practices, with distributed leadership adding complementary effects (Bellibaş et al., 2021; Bellibaş et al., 2022). Cross-national evidence further indicates that instructional leadership is indirectly related to student achievement through teacher professional development and cognitively activating teaching (Bellibaş et al., 2025), and that socially just instructional leadership can narrow achievement gaps based on socioeconomic status (Gümüş et al., 2022).

Critically for the present argument, several studies identify collective efficacy and trust as the mediating beliefs through which leadership reaches teachers' practice. Karacabey et al. (2022) found that principal leadership influenced teacher professional learning in Turkish schools through the mediating effects of collective teacher efficacy and teacher trust. Ross and Gray (2006) demonstrated that transformational leadership affected teacher commitment and achievement through teacher beliefs, including collective efficacy. Recent studies extend this pattern to principal support as a predictor of CTE (Đuranović et al., 2024), to authentic leadership working through school climate and teacher efficacy to sustain work engagement (Shao et al., 2025), and to transformational leadership shaping school effectiveness (Kandemir, 2024). In the Malaysian context, Thien and colleagues have built a substantial evidence base showing that instructional and learning-centred leadership promote teacher professional learning and self-efficacy (Thien & Liu, 2024; Thien & Yeap, 2023; Thien et al., 2023), that collective teacher efficacy mediates the relationship between instructional leadership and teacher commitment at both the primary school level, using multilevel analysis (Thien et al., 2023), and the affective-commitment level in rural and urban primary schools (Thien & Adams, 2024), and that CTE mediates the relationship between instructional leadership and dimensions of teacher commitment in Malaysian Chinese Independent High Schools (Thien et al., 2024). The cumulative implication is clear: leadership matters for achievement largely because it builds the collective beliefs and collaborative practices of teachers.

The Malaysian Secondary School Context: Structures that Moderate CTE

Malaysian secondary education presents distinctive conditions for the formation of CTE, and these conditions are not incidental background but active moderators of how, and how strongly, collective beliefs form and translate into achievement. The system is centralised, examination-oriented, and diverse, encompassing national secondary schools, fully residential schools, religious schools, vocational colleges, and Chinese Independent High Schools. The Malaysia Education Blueprint 2013-2025 explicitly identified teacher and school leader quality as the most significant school-based levers of student outcomes and mandated the nationwide adoption of professional learning communities and instructional leadership practices (Ministry of Education Malaysia, 2013). These policy commitments create fertile structural ground for CTE, yet implementation has been uneven, and PISA 2022 results indicate that Malaysian students'

performance declined in mathematics, reading, and science relative to earlier cycles, with substantial gaps linked to socioeconomic status and school location (OECD, 2023).

Three structural features of Malaysian secondary schooling deserve close attention because each plausibly moderates CTE formation and its downstream effects. The first is the subject department, or *panitia*, structure. Malaysian secondary schools organise teachers into subject panels led by a *ketua panitia* (head of panel), and the great majority of formal collaborative time – *panitia* meetings, moderation of common tests, scheme-of-work planning – is convened at the subject level rather than as whole-staff activity. This has two consequences for CTE. On one hand, it means that the mastery and vicarious experiences from which efficacy beliefs are built are generated primarily within subject boundaries, so a school's aggregate CTE score may conceal sharply different efficacy climates between, for example, a confident and well-led mathematics *panitia* and a fragmented, under-supported *panitia* in a non-examined subject. On the other hand, where cross-departmental structures exist to knit these local beliefs together – joint curriculum days, cross-*panitia* data reviews, whole-school instructional agreements – subject departments can become the building blocks of, rather than a barrier to, school-wide CTE (Bellibaş et al., 2021; Thien et al., 2023).

The second feature is academic streaming and banding. Many Malaysian secondary schools group students into science and arts streams from Form 4, and within these streams further sort classes by prior attainment (commonly labelled using terms such as “*cemerlang*” or numbered class bands). Streaming creates differentiated teaching assignments in which some teachers are habitually assigned to high-band or science-stream classes and others to lower-band or arts-stream classes. Because mastery experience is the most powerful source of efficacy (Bandura, 1997), teachers who are consistently assigned classes that already perform well accumulate confirmatory success experiences more readily than teachers assigned to classes with greater remediation needs, which can produce a within-school stratification of efficacy beliefs that mirrors, and may reinforce, the stratification of opportunity that streaming itself creates. Lee and Smith's (1996) classic finding that collective responsibility for learning is associated with reduced, not increased, stratification of achievement outcomes by social class offers a useful benchmark here: where CTE is confined to teachers of already high-performing streams, it is unlikely to produce the equity dividend that the construct promises, whereas CTE that is deliberately extended to teachers of lower-band classes is precisely the condition under which streaming's equity costs might be offset.

The third feature is examination pressure. Malaysian secondary schooling remains oriented around high-stakes assessments, and the proximity of these examinations shapes how collaborative time is used and how teachers interpret setbacks. Examination pressure can act as a double-edged moderator of CTE. Under some conditions it mobilises collective effort: shared accountability for examination outcomes can supply the concrete, measurable goals around which mastery experiences are organised, consistent with the efficacy-engineering logic developed in Section 5.2. Under other conditions, however, examination pressure narrows collaboration into compliance-driven activities – syllabus coverage tracking, past-year-paper drilling, documentation for inspection – that generate neither authentic mastery nor vicarious experience, and that can heighten the affective strain that depresses efficacy judgements (Kamal & Illiyan, 2021; Verstraeten et al., 2025). Which of these patterns prevails appears to depend on how school and departmental leaders frame examination results: as evidence to be used for joint instructional problem-solving, which is efficacy-building, or as a basis for individual blame, which is not (Anderson et al., 2023; Donohoo, 2017).

The post-pandemic period has intensified these challenges. Teachers were required to master online and hybrid instruction rapidly, often with limited preparation, and perceptions of online teaching effectiveness varied widely across contexts (Kamal & Illiyan, 2021; Panigrahi & Todi, 2026; Verstraeten et al., 2025). On the student side, Malaysian evidence points to elevated counselling and psychosocial needs among secondary school students, with notable differences between urban and rural settings in the post-COVID-19 period (Jailani et al., 2025). Learning recovery in such conditions is not a task any individual teacher can accomplish alone; it demands coordinated, school-wide instructional responses, which is precisely the kind of interdependent task for which collective efficacy is most consequential (Adams et al., 2024).

Pedagogically, national aspirations emphasise higher-order thinking skills across the curriculum. Yet classroom research in Malaysia has long noted the persistence of traditional, transmission-oriented teaching that limits students' opportunities to think critically, and has shown that deliberately integrating critical thinking enhances students' learning and language proficiency (Gandimathi & Zarei, 2018). Shifting an entire school's pedagogy from transmission towards thinking-rich instruction is an inherently collective undertaking: it requires shared instructional vision, mutual observation, and joint problem-solving across subject departments. This is another reason why CTE, rather than individual teacher efficacy alone, is the appropriate construct for understanding secondary school improvement in Malaysia, and why the panitia structure, streaming, and examination culture described above cannot be treated as neutral background but must be built into any Malaysian model of CTE formation. Finally, Malaysian research on CTE remains scarce and concentrated in primary schools or specific school types (Singh & Loh, 2024; Thien et al., 2024), which underscores the need for the conceptual groundwork this paper provides.

Distinguishing Collective Teacher Efficacy from Related Constructs

Because CTE is frequently discussed alongside, and sometimes conflated with, several neighbouring constructs, conceptual precision is essential before the construct can be operationalised for Malaysian secondary schools. Four distinctions are especially important.

Teacher self-efficacy. Teacher self-efficacy is an individual-level belief about one's own capability to bring about desired outcomes in one's own classroom (Bandura, 1997). CTE is not the aggregate or average of individual self-efficacy scores; it is an emergent, group-referent belief about the faculty's conjoint capability, formed through the group's appraisal of its coordination, resources, and shared purpose (Goddard et al., 2004). The two constructs are related – individual efficacy can moderate how leadership shapes CTE (Đuranović et al., 2024) – but they are measured with different referents (“I” versus “teachers in this school”) and can diverge empirically: a school can contain highly self-efficacious individual teachers whose faculty nonetheless lacks a shared belief in its collective capability, particularly where subject departments operate in isolation from one another, as described in Section 2.6.

Collective responsibility. Collective responsibility refers to the normative, attitudinal sense of ownership that a faculty holds for the learning of all students, regardless of background, and to the felt obligation to act on that ownership (Lee & Smith, 1996). Whereas CTE is a belief about capability (“can we do this?”), collective responsibility is a belief about obligation and ownership (“is this ours to do?”). The two constructs typically co-occur – a faculty that feels responsible for all students' learning is more likely to seek and interpret the mastery experiences that build CTE – but a faculty can, in principle, feel strongly responsible for outcomes it does not yet believe it has the capability to influence, or can feel efficacious about outcomes for some student groups (for example, a high-performing stream) while disclaiming responsibility for others. Lee and Smith's (1996) finding that collective responsibility narrows, rather than widens, achievement stratification by social background makes this distinction practically important for a streamed system such as Malaysia's: a Malaysian research programme should measure collective responsibility and CTE as related but separable constructs rather than treating high CTE as a proxy for equitable intent.

School climate. School climate is a broader, multidimensional construct encompassing the physical, social, and academic atmosphere of a school, including safety, relationships, and the general quality of interpersonal and organisational life (Hoy et al., 2002). CTE is best understood as one specific belief that both contributes to, and is shaped by, a positive climate, rather than as a synonym for it. Empirically, climate variables such as collegial trust and supportive leadership function as antecedents or enabling conditions of CTE (Anderson et al., 2023; Shao et al., 2025) rather than as CTE itself; a school can have a pleasant, low-conflict climate without teachers sharing a strong belief in their collective instructional capability, and conversely a school under considerable strain can still sustain high CTE if mastery experiences are deliberately engineered (see Section 5.2).

Relational trust. Trust in colleagues and in leadership is consistently identified as a precondition for the honest deprivatisation of practice that generates authentic collective mastery experiences (Karacabey et al.,

2022; Singh & Loh, 2024), but trust is a relational quality between people, whereas CTE is a belief about the group's joint capability. Treating trust as an enabling condition for CTE, rather than as an interchangeable term for it, keeps the causal chain from leadership and collaborative structures, through trust, to CTE, and on to instructional behaviour and achievement, analytically distinct and testable, a chain that the propositions in Section 4 rely on.

Maintaining these distinctions matters for the Malaysian research agenda for two reasons. First, without them, survey items intended to measure CTE risk drifting into measures of general morale, climate, or responsibility, muddying what an observed correlation with achievement actually indicates. Second, the distinctions generate testable hypotheses in their own right: for instance, whether CTE and collective responsibility diverge more sharply in streamed Malaysian secondary schools than in unstreamed primary schools, or whether trust mediates the PLC-to-CTE pathway more strongly in subject panels facing high examination pressure than in those that are not, both being questions this paper's propositions are designed to make testable.

METHODOLOGY

This paper adopts a narrative critical review approach appropriate to a concept paper. Literature was identified through systematic searches of Scopus, Web of Science, ERIC, and Google Scholar using combinations of the terms collective teacher efficacy, collective efficacy, student achievement, school leadership, professional learning community, and Malaysia. Priority was given to peer-reviewed journal articles published between 2021 and 2026 to capture the most recent theoretical and empirical developments, supplemented by seminal foundational works that define the construct and its measurement. Studies were included if they addressed the conceptualisation, measurement, antecedents, or outcomes of collective teacher efficacy, or if they illuminated the Malaysian schooling context relevant to the argument. The review is integrative rather than exhaustive: its aim is to synthesise theory and evidence into a coherent conceptual contribution rather than to produce meta-analytic estimates. Consistent with the standards of concept papers, no primary data were collected, and the propositions advanced here are offered as theoretically grounded hypotheses for future empirical testing in Malaysian secondary schools.

An Integrative Perspective: Cte as a Catalyst in Malaysian Secondary Schools

Synthesising the reviewed literature, this paper proposes an integrative perspective in which collective teacher efficacy functions as the catalytic mechanism linking leadership and organisational conditions to student achievement in Malaysian secondary schools. The perspective comprises four interconnected propositions.

Proposition 1: Leadership practices are distal drivers of achievement that operate primarily through CTE. Instructional, distributed, learning-centred, and transformational leadership practices influence student outcomes indirectly, by shaping teachers' collaborative work, professional learning, and shared beliefs (Bellibaş et al., 2021; Karacabey et al., 2022; Ross & Gray, 2006; Thien & Liu, 2024). In the Malaysian secondary school, this implies that principals and senior assistants exert their strongest influence on examination outcomes not through administrative monitoring but through deliberately orchestrating the conditions under which departmental and cross-departmental teams experience collective mastery.

Proposition 2: Professional learning communities and relational trust are the proximal engines of CTE. PLCs generate mastery and vicarious experiences, while trust enables the honest deprivatisation of practice that makes those experiences authentic (Ministry of Education Malaysia, 2013; Singh & Loh, 2024). Where PLCs are ritualistic and compliance-driven, they fail to build efficacy; where they are inquiry-driven and anchored in student evidence, they become efficacy factories (Anderson et al., 2023; Loughland & Ryan, 2022).

Proposition 3: CTE translates into achievement through identifiable behavioural pathways. These include higher collective expectations, greater instructional risk-taking and innovation, deeper

implementation of higher-order pedagogy, stronger persistence with struggling learners, and normative pressure that socialises new teachers into effortful practice (Donohoo, 2017; Goddard et al., 2004; Hoy et al., 2002). These pathways are elaborated in the discussion.

Proposition 4: Contextual conditions moderate the formation and effects of CTE. School type, urban-rural location, subject department structure, streaming, examination pressure, student psychosocial needs, and digital capacity condition both how easily CTE forms and how strongly it converts into achievement (Jailani et al., 2025; OECD, 2023). A one-size-fits-all national strategy is therefore unlikely to succeed; efficacy-building must be contextualised to the realities of each school community.

Operationalising the Propositions for Empirical Testing

A recurring weakness of concept papers is that propositions remain abstract enough to resist disconfirmation. To guard against this, each proposition below is paired with the constructs, candidate instruments, design, and analytic strategy that would be needed to test it in Malaysian secondary schools.

Proposition 1: Leadership → CTE → Achievement

- Constructs and measures: instructional, distributed, and transformational leadership, measured with instruments already validated in Malaysian samples (e.g., the instructional and learning-centred leadership scales used by Thien and colleagues); CTE measured with a Bahasa Malaysia-validated adaptation of the Goddard et al. (2000) scale; achievement operationalised as school-level SPM or Pentaksiran Tingkatan Tiga (PT3) aggregate results or, preferably, value-added gain scores rather than raw attainment.
- Design and analysis: cross-sectional or short-panel data with teachers nested within schools, analysed using multilevel structural equation modelling (as demonstrated for Malaysian primary schools by Thien et al., 2023) to test the indirect effect of leadership on achievement through school-level CTE, with bootstrapped confidence intervals for the indirect path.
- Falsifiable prediction: the direct path from leadership to achievement should shrink towards non-significance once CTE is entered as a mediator; a persistently strong direct path would disconfirm the proposition as stated.

Proposition 2: PLCs and Trust → CTE

- Constructs and measures: PLC quality, operationalised not merely as the existence or frequency of panitia meetings but as the depth of inquiry practice (e.g., an adapted Professional Learning Communities Assessment, supplemented by a structured rubric distinguishing compliance-oriented from inquiry-oriented meetings, in the spirit of the distinction drawn in Section 5.3); relational trust measured with an adapted Omnibus Trust Scale; CTE as above.
- Design and analysis: PLS-SEM or covariance-based SEM testing trust as a mediator of the PLC-to-CTE path, following the approach of Singh and Loh (2024) and Yeap and Md Ali (2025), but sampled specifically within secondary school subject panels so that panitia-level PLC quality, rather than only school-level averages, enters the model.
- Falsifiable prediction: PLC quality (inquiry depth) should predict CTE more strongly than PLC frequency alone; if frequency and quality perform equivalently, the proposition's emphasis on authentic engagement over mere structural compliance would be disconfirmed.

Proposition 3: CTE → Behavioural Pathways → Achievement

- Constructs and measures: collective expectations and persistence measured via teacher survey scales; instructional risk-taking and higher-order pedagogy implementation measured via structured

classroom observation protocols rather than self-report alone, to guard against social-desirability inflation; achievement as value-added gain across at least two examination cohorts.

- Design and analysis: longitudinal, multi-cohort panel design allowing lagged models in which CTE at Time 1 predicts behavioural pathway variables at Time 2 and achievement gains at Time 3, with cross-lagged panel modelling used to probe reciprocal causality directly rather than assuming it away.
- Falsifiable prediction: observed instructional behaviour (not merely self-reported intention) should mediate the CTE–achievement relationship; if the relationship persists undiminished once observed behaviour is controlled, an unmeasured confound (for example, school-level ability composition) becomes the more parsimonious explanation.

Proposition 4: Contextual Moderation

- Constructs and measures: school type (national, vocational, Chinese Independent High School, fully residential), urban-rural location, streaming band, and examination-proximity, coded from administrative records rather than teacher perception alone to avoid conflating the moderator with the outcome it is meant to explain.
- Design and analysis: multi-group SEM or moderated mediation models testing whether the leadership-CTE-achievement and PLC-trust-CTE paths differ significantly across strata; adequate power requires deliberate stratified sampling across school types rather than convenience sampling concentrated in national secondary schools.
- Falsifiable prediction, with an important caution: while this paper predicts that school type and location will moderate these pathways, Thien and Adams (2024) found no significant moderating effect of urban-rural location on the instructional-leadership-to-affective-commitment path through CTE in Malaysian primary schools. This null finding should be treated as a genuine empirical constraint on Proposition 4 rather than dismissed, and secondary-school tests should explicitly examine whether streaming and examination pressure, which are largely absent at the primary level, prove to be stronger moderators than urban-rural location alone.

DISCUSSION

Why Collective Beliefs Move Achievement: Unpacking the Mechanisms

The central claim of this paper is that CTE is not merely a pleasant by-product of good schools but a working mechanism of achievement. Understanding why requires unpacking the behavioural and cultural pathways through which shared beliefs alter what happens in classrooms. First, CTE raises the collective level of expectation. In high-CTE schools, teachers converge on the norm that all students can achieve at high levels and that the faculty is responsible for making this happen. Expectations operate as self-fulfilling prophecies at scale: they shape task difficulty, questioning patterns, feedback quality, and the willingness to teach demanding content to lower-attaining classes (Donohoo, 2017; Hoy et al., 2002). In the Malaysian secondary context, where streaming practices can institutionalise low expectations for particular classes, as discussed in Section 2.6, a strong collective belief that every stream can improve is a direct counterweight to expectation-based inequity.

Second, CTE increases effort and persistence. Bandura (1997) demonstrated that efficacy beliefs determine how much effort people invest and how long they persist when confronting obstacles. Applied collectively, faculties with strong CTE respond to disappointing examination results with intensified joint problem-solving rather than resignation or blame. This persistence is particularly consequential for post-pandemic learning recovery, where initial remediation efforts frequently produce slow and uneven gains; faculties that interpret slow progress as a signal to refine strategy, rather than as proof that recovery is impossible, are those that ultimately close gaps (Adams et al., 2024; OECD, 2023).

Third, CTE fosters instructional openness and innovation. Teachers who believe in the capability of their collective are more willing to deprivatise their classrooms, invite observation, experiment with unfamiliar pedagogy, and implement school-wide instructional agreements with fidelity. This is the pathway through which CTE enables ambitious reforms such as the integration of higher-order thinking skills across subjects. Malaysian classroom research indicates that when critical thinking is deliberately cultivated, student learning and language proficiency improve (Gandimathi & Zarei, 2018), yet such pedagogy spreads reliably only when teachers feel collectively capable of managing its demands. Fourth, CTE shapes the affective climate of the school. Collective efficacy is associated with lower collective stress, higher commitment, and stronger work

engagement (Shao et al., 2025; Zhang, 2022), which in turn stabilise the instructional core by reducing burnout-driven variability in teaching quality. Taken together, these mechanisms explain how a belief, something intangible, becomes visible in timetables, lesson designs, marking practices, and ultimately in student results.

Leadership as the Architecture of Collective Efficacy

If CTE is the catalyst, leadership is the architecture within which the catalytic reaction occurs. The reviewed evidence consistently locates leadership effects on achievement in the beliefs and practices of teachers (Bellibaş et al., 2025; Karacabey et al., 2022; Ross & Gray, 2006). Three leadership functions deserve emphasis in the Malaysian secondary school. The first is the engineering of mastery experiences. Principals can sequence improvement work so that teams pursue proximate, attainable instructional goals, measure progress with short-cycle evidence, and publicly connect student gains to teachers' collective actions. Because mastery is the most powerful source of efficacy (Bandura, 1997), the deliberate design of early wins is not symbolic management; it is efficacy engineering. Đuranović et al. (2024) show that principal support and teacher self-efficacy jointly predict CTE, implying that leaders must attend simultaneously to individual capability and to the collective narrative of success.

The second function is the distribution of instructional leadership. Malaysian secondary schools are organised into subject departments led by heads of panel, a structure that can either fragment or multiply collective efficacy, as discussed in Section 2.6. When instructional leadership is distributed to these middle leaders, and when they are developed to lead inquiry-oriented collaboration rather than administrative compliance, each department becomes a site of efficacy formation, and cross-departmental structures can knit these local beliefs into a school-wide sense of capability (Bellibaş et al., 2021; Thien et al., 2023). Recent Malaysian evidence gives this claim direct empirical support: Yeap and Md Ali (2025), surveying 284 secondary school teachers in Penang, found that middle leadership has a significant direct effect on professional learning community functioning, and that this effect operates partly through teachers' participation in decision-making, underscoring that heads of panel are not administrative conduits but genuine architects of departmental efficacy climates. The third function is persuasion anchored in credibility. Social persuasion builds efficacy only when the persuader is credible and the message is specific (Bandura, 1997). Leaders who articulate precisely what the faculty did that produced improvement, who feed back disaggregated evidence of impact, and who frame setbacks as strategy problems rather than capability problems provide the kind of persuasive communication that strengthens rather than inflates collective beliefs (Anderson et al., 2023; Kandemir, 2024). Learning-centred and instructional leadership traditions in Malaysian research offer validated models for these functions (Thien & Liu, 2024; Thien & Yeap, 2023).

Professional Learning Communities, Trust, and the Malaysian Implementation Gap

Malaysia is unusual in having mandated PLCs system-wide through the Education Blueprint, which in principle provides the structural precondition for CTE at scale (Ministry of Education Malaysia, 2013). The critical question is why this structural investment has not yet translated into visible national achievement gains (OECD, 2023). The efficacy lens offers an answer: structures do not build beliefs; experiences within structures do. Where PLC meetings are consumed by documentation and generic sharing, teachers accumulate neither mastery nor vicarious experience, and CTE remains untouched. Where PLCs engage in

disciplined cycles of examining student work, specifying instructional responses, and reviewing evidence of impact, they generate exactly the success experiences from which collective efficacy grows (Loughland & Ryan, 2022; Singh & Loh, 2024).

Recent Malaysian evidence allows this implementation gap to be specified more precisely than a generic appeal to “variable quality.” Yeap and Md Ali (2025) found that among 284 Penang secondary school teachers, middle leadership predicted PLC functioning directly, and that teachers’ participation in decision-making partially mediated this relationship: PLCs led by heads of panel who genuinely involved teachers in shaping collaborative work performed better than those in which participation was nominal. This is direct evidence that PLC quality variation in Malaysian secondary schools is not randomly distributed but tracks the leadership practices of specific middle leaders – meaning that quality can differ sharply between subject panels within the same school, not only between schools, a pattern consistent with the panitia-level fragmentation discussed in Section 2.6. Complementing this, multilevel modelling by Thien et al. (2023), using data from 1,328 teachers across 71 Malaysian primary schools, confirmed that instructional leadership exerts a significant indirect effect on teacher commitment through CTE at the school level, demonstrating that the leadership-PLC-CTE chain is statistically detectable at scale even as its strength plausibly varies by department; extending this multilevel approach to secondary panitia as the unit of analysis, rather than the whole school, is an identified priority for the Malaysian research agenda (see Section 4.1).

Trust is the hidden variable in this implementation gap. Singh and Loh (2024) found that trust in colleagues partially mediates the effect of PLCs on CTE among Malaysian teachers, and international evidence similarly positions trust as a condition for the honest deprivatisation of practice (Karacabey et al., 2022). In high-power-distance, examination-pressured environments, teachers may experience observation and data discussion as evaluative threats rather than learning opportunities. Building trust therefore requires explicit norms that separate collaborative inquiry from performance appraisal, leadership modelling of vulnerability, and time allocations that signal the institutional value of collaboration. The professional development literature reinforces this design point: sustained, collaborative, practice-embedded learning improves efficacy where fragmented workshop models do not (Gümüſ & Bellibaſ, 2023; Hao et al., 2024). Taken together, the Yeap and Md Ali (2025) and Thien et al. (2023) findings suggest that closing the Malaysian implementation gap is less a matter of mandating more PLC time nationally and more a matter of building the instructional leadership capacity of heads of panel and protecting genuine teacher participation in decision-making within each subject department.

Context, Equity, and the Post-Pandemic Imperative

A critical review must resist romanticising CTE as a universal remedy. Its formation and effects are conditioned by context. Malaysian secondary schools differ sharply in student intake, resourcing, and location, and PISA 2022 documents persistent socioeconomic and urban-rural gaps (OECD, 2023). Evidence that instructional leadership can be enacted in socially just ways to narrow such gaps (Gümüſ et al., 2022) suggests that CTE-building should be explicitly framed as an equity strategy: faculties in challenging contexts need more, not less, support to accumulate authentic mastery experiences, because their task analysis is objectively harder. The post-pandemic period sharpens this imperative. Malaysian secondary students returned to school with elevated and unevenly distributed counselling needs (Jailani et al., 2025), and teachers carried the residue of rapid, often stressful transitions to online teaching (Kamal & Illiyan, 2021; Verstraeten et al., 2025). Collective efficacy in this environment must encompass more than academic instruction; it must include the faculty’s shared belief in its capability to support student wellbeing, since unaddressed psychosocial needs depress the very achievement that CTE is meant to catalyse.

Context also includes the accelerating digitalisation of schooling. Teachers’ perceptions of online and blended instruction remain mixed, and effectiveness varies with support and design (Panigrahi & Todi, 2026; Verstraeten et al., 2025), while emerging evidence links institutional artificial intelligence capability to learners’ self-efficacy, creativity, and performance (Wang et al., 2023). As education systems begin to grapple with artificial intelligence, professional communities across the human services are debating how such technologies reshape practice and professional education (Kajiita & Murote, 2025). For Malaysian

secondary schools, the efficacy question is prospective: whether faculties believe they can collectively harness digital and AI tools for learning, or whether these tools are experienced as threats that erode professional confidence. Deliberate collective capability-building around technology is therefore a frontier for CTE research and practice.

Critical Reflections on the CTE Evidence Base

Four cautions temper the enthusiasm surrounding CTE, and the third and fourth are developed here more substantively than in earlier treatments of this literature.

First, the causal claim is weaker than the correlational claim. The celebrated effect sizes derive largely from cross-sectional school-level correlations, and reciprocal causation between achievement and efficacy is theoretically expected (Anderson et al., 2023; Eells, 2011). This does not negate the construct's importance, but it means intervention studies and longitudinal designs, of the kind specified in Section 4.1, are needed before CTE can be prescribed with confidence as a manipulable cause.

Second, measurement remains contested at the level of aggregation. Aggregated individual perceptions may mask meaningful within-school variation between departments, which is especially salient in secondary schools; a school-level average can conceal a highly efficacious mathematics panitia alongside a demoralised languages panitia. This is not a peripheral technical point but a direct consequence of the panitia structure discussed in Section 2.6, and it motivates the department-level measurement strategy set out below.

Third, cultural transferability cannot be assumed, and the concern runs deeper than simple translation. Most CTE instruments and theory were developed in North American contexts, and several features of Malaysian professional culture plausibly change how efficacy items function rather than merely how they are worded. Malaysia's comparatively high power distance (in Hofstede's terms) may make teachers reluctant to endorse survey items that imply criticism of colleagues' or leaders' capability, producing socially desirable responding that inflates apparent CTE, particularly on items with a referent shift to "teachers in this school" that respondents may read as a statement about institutional loyalty rather than a candid capability judgement. Constructs central to the original instruments – group competence, task analysis, and trust – may also carry different connotations in a collectivist, multi-ethnic, and multi-religious staffroom, where cohesion across ethnic and linguistic lines is itself an ongoing achievement that Western instruments were not designed to capture. Careful validation work of the kind begun by Malaysian scholars is essential (Singh & Loh, 2024; Thien et al., 2024), but validation should go beyond forward-backward translation to include cognitive interviewing with Malaysian teachers to check that items are interpreted as intended, focus groups with heads of panel to ground item content in the lived vocabulary of panitia collaboration (for example, framing items around the mesyuarat panitia rather than an undifferentiated "school" referent), examination of measurement invariance across national, vocational, religious, and Chinese Independent High School types before any cross-type comparison is drawn, and pilot testing of response-scale framing, since extreme-response avoidance has been documented in some Asian survey contexts and can attenuate observed variance in ways that bias downstream analyses. Where such adaptation reveals that a construct genuinely functions differently in Malaysia – for instance, if task analysis is inseparable from perceived streaming assignment – the honest response is to revise the construct's local operationalisation rather than to force-fit the original instrument.

Fourth, and following directly from the panitia-based fragmentation discussed throughout this paper, Malaysian research should examine department-level collective efficacy alongside school-level beliefs rather than treating the school as the only meaningful unit of analysis. A department-level measure would retain the same referent-shift logic as school-level CTE scales but anchor items explicitly to "teachers in this subject panel" rather than "teachers in this school," and would require the same aggregation checks used in school-level work – within-group agreement statistics (rwg) and intraclass correlation coefficients – to justify treating panitia-level averages as a group property rather than an artefact of individual variance. Because Malaysian secondary teachers typically belong to only one subject panitia but interact with the whole staff less intensively, department-level CTE is arguably the more proximal predictor of classroom

practice within that subject, while school-level CTE may better predict whole-school initiatives such as coordinated examination strategy or wellbeing support. A research design that collects both levels simultaneously, and models them as a two-level or cross-classified structure with student outcomes nested within subject and within school, would allow researchers to test directly whether department-level or school-level CTE carries more explanatory weight for subject-specific examination results – a question the current literature, Malaysian or otherwise, has not yet answered.

Acknowledging these limits strengthens rather than weakens the case for a rigorous Malaysian research programme.

Alignment with SDG 4 (Quality Education)

The argument of this paper aligns directly with United Nations Sustainable Development Goal 4, which commits member states to inclusive and equitable quality education for all. SDG Target 4.1 concerns effective learning outcomes in primary and secondary education, and Target 4.c concerns the supply of qualified, supported teachers. CTE speaks to both: it is a mechanism through which teacher quality becomes collective instructional effectiveness, and it reframes teacher support from individual training towards the cultivation of capable professional communities (UNESCO, 2021). For Malaysia, embedding efficacy-building within the successor to the Education Blueprint would operationalise SDG 4 not as an access agenda alone but as a learning and equity agenda, with the collective capability of school faculties as its engine.

IMPLICATIONS

Implications for Theory

This paper contributes an integrative perspective that repositions CTE from a school effectiveness correlate to a catalytic mediating mechanism within the Malaysian secondary schooling system. Theoretically, it argues for models that specify leadership and PLC structures as antecedents, trust as a relational condition, CTE as the mediating belief, and achievement, equity, and wellbeing as joint outcomes, with school context – including subject department structure, streaming, and examination pressure – as a moderator rather than a control variable to be adjusted away. It also argues for extending efficacy theory to encompass collective capability for student wellbeing support and technology integration, domains that post-pandemic schooling has rendered inseparable from academic achievement, and for treating CTE, collective responsibility, self-efficacy, and school climate as related but conceptually and empirically distinct constructs, as set out in Section 2.7.

Implications for Practice

For principals and middle leaders, the practical agenda is to treat every improvement initiative as an efficacy-building opportunity: set proximate instructional goals, generate short-cycle evidence of student progress, attribute gains explicitly to collective action, distribute instructional leadership to heads of panel while equipping them to lead inquiry rather than compliance, protect PLC time for inquiry rather than administration, and deliberately extend efficacy-building experiences to teachers of lower-band and non-examined classes so that CTE does not simply track existing streaming advantages. For teacher professional development providers, the evidence favours sustained, collaborative, classroom-embedded designs over fragmented courses (Gümüř & Bellibař, 2023). For teacher education institutions, preparing graduates to participate skilfully in collaborative inquiry, and to understand efficacy dynamics, would accelerate the socialisation of new teachers into high-CTE cultures.

Implications for Policy

For the Ministry of Education Malaysia, four policy moves follow. First, refresh the national PLC policy with explicit quality criteria centred on inquiry cycles and evidence of impact, and monitor implementation quality at the level of the subject panitia, not only the school, given the evidence that PLC quality varies

with middle leadership practice within schools (Yeap & Md Ali, 2025). Second, incorporate validated measures of collective teacher efficacy and its enabling conditions into school self-evaluation instruments, giving schools a diagnostic lens on their improvement capacity (Anderson et al., 2023). Third, invest specifically in the instructional leadership capacity of heads of panel, since they, rather than principals alone, appear to be the proximate architects of departmental collaborative quality. Fourth, target intensive efficacy-building support, including leadership coaching and additional collaborative time, to schools serving disadvantaged and rural communities, and to subject panels serving lower-band and non-examined classes within all schools, framing CTE as an equity instrument in service of SDG 4 (Gümüş et al., 2022; OECD, 2023).

LIMITATIONS AND FUTURE RESEARCH

As a concept paper, this work is limited by the absence of primary data; its propositions are synthesised from existing literature and await empirical testing along the lines specified in Section 4.1. The review privileged recent English-language publications indexed in major databases, which may underrepresent Malay-language scholarship and grey literature on Malaysian schools. The proposed perspective, while grounded in theory and evidence, simplifies a complex ecology of influences on achievement, and the moderating role of Malaysian cultural and structural conditions is asserted more strongly than it has yet been demonstrated; as Section 4.1 notes, at least one recent Malaysian study has already returned a null moderation result (Thien & Adams, 2024) that future secondary-school research must take seriously rather than explain away.

Future research should proceed along six lines. First, instrument validation: rigorous adaptation and validation of CTE, collective responsibility, and enabling-conditions measures for Malaysian secondary schools, attending to language, referent, cultural meaning, and measurement invariance across school types, as detailed in Section 5.5. Second, multilevel and longitudinal designs linking CTE to national examination outcomes while modelling prior achievement, school composition, and department-level variation explicitly, rather than treating the department as a nuisance source of error. Third, intervention studies that test whether deliberately engineered mastery experiences, leadership development for heads of panel, and PLC quality improvements raise CTE and, subsequently, achievement. Fourth, qualitative case studies of high-CTE Malaysian secondary schools in disadvantaged contexts, and of subject panels that sustain high efficacy despite serving lower-band classes, to illuminate culturally grounded formation processes. Fifth, extension studies examining collective efficacy for wellbeing support and for technology and AI integration, connecting the CTE tradition to the emerging realities of schooling (Kajiita & Murote, 2025; Verstraeten et al., 2025). Sixth, comparative studies examining whether CTE and collective responsibility diverge more sharply in streamed secondary schools than in unstreamed primary schools, directly testing the distinction drawn in Section 2.7. Together, such a programme would move Malaysian scholarship from importing the CTE construct to contributing distinctively to its global theorisation.

CONCLUSION

Collective teacher efficacy offers Malaysian secondary education something rare: a school-level lever that is simultaneously powerful in its association with achievement, malleable through leadership and collaboration, and consonant with existing national policy structures. This paper has argued that CTE should be understood as a catalyst that converts leadership practices, professional learning communities, and relational trust into the expectations, persistence, and instructional openness that produce student achievement, while being conditioned throughout by the subject department structures, streaming practices, and examination pressures that characterise Malaysian secondary schooling. It has also insisted on critical honesty about causality, measurement, cultural transfer, and the boundaries between CTE and neighbouring constructs such as self-efficacy, collective responsibility, and school climate, and has offered concrete guidance for testing its four propositions empirically. Situating this agenda within Malaysia's post-pandemic recovery needs and the global commitments of SDG 4, the paper concludes that if the belief of a faculty in its collective capability is among the most powerful forces in education, then the deliberate cultivation of that belief – within every subject panitia as well as every school – is not a peripheral aspiration but a central strategy for the nation's educational future.

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