

# Teacher leadership structure, self-efficacy, and effectiveness in Chinese universities

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## Abstract

The study on Chinese college teachers examines the interplay between teacher leadership, self-efficacy, and perceived effectiveness, aiming to propose a faculty development program. Using an online survey from 400 participants across five universities, the research found that most respondents were female with 6-10 years of experience. It highlighted that male teachers, particularly early in their careers, reported higher self-efficacy levels. The study also noted that while school leaders were seen as balanced in their leadership approach, there was a need for increased teacher autonomy in decision-making. Teachers expressed satisfaction with their traditional teaching roles but faced challenges in uncertain situations, where confidence dipped. The research emphasized the interconnectedness of leadership structure, self-efficacy, and effectiveness, advocating for a comprehensive development policy. The proposed program includes creating a transparent governance participation mechanism for teachers and fostering practice communities that focus on student engagement, innovative teaching, and interdisciplinary collaboration. This approach aims to enhance teaching efficiency, boost teacher self-efficacy, and develop leadership skills, moving beyond fragmented interventions to a more integrated strategy for faculty development.

**Keywords:** teacher leadership structure, teacher self-efficacy, teacher effectiveness, Chinese universities, teacher professional development

## Teacher leadership structure, self-efficacy, and effectiveness in Chinese universities

### 1. Introduction

Amidst rising strategic complexity from globalization and digitization megatrends, cultivating teacher excellence has become imperative for education systems to maintain outcomes, inclusion, and advancement (Dong & Qin, 2023). However, prevailing development pathways concentrate largely on domain knowledge fortification rather than leadership expansion, motivational resilience, or contextual dexterity crucial for student-centered education. Hence, this study investigated teacher perceptions of leadership support patterns, motivational outlooks, and self-evaluated proficiencies to reveal areas needing cultural and policy re-calibration to retain peak performance continuity.

Recent discourse in China emphasizes holistic student competencies beyond test-centric metrics. Hence examining the interconnectedness of leadership structures, efficacy beliefs, and perceived effectiveness offers pathways synchronizing top-down policies with ground capacities preventing attrition. It compels exploring participatory decision channels, resilience-building mechanisms, and horizontal innovation networks supplementing centralized approaches (Srinivas et al., 2014). Thereby, system stability and advancement are sustained despite exponentially transforming external landscapes. However, top-down decision paradigms still dominate without reciprocal input channels for teacher participation in policy formulation aligned with ground realities. Thereby reforms risk resistance lacking ownership. Concurrently, rapidly evolving technologies, tools, and best practice innovations overwhelm educators lacking motivational persistence for self-driven recurrent competence refreshers. Current faculty development remains concentrated in static domains without expanding resilience for uncertainty or celebrative cultures inspiring exploratory risk appetite. Meanwhile, dated coaching modes constrain pioneering pedagogical initiatives addressing 21st-century student needs (Whittaker & Montgomery, 2022). Thereby desire for personalization advancement shifts towards disengagement risks over time.

Teacher leadership structure includes patterns of administrative support and peer empowerment mechanisms to guide institutional progress spanning centralized hierarchy to decentralized participation (Bishop et al., 2020). Teacher self-efficacy pertains to faculty beliefs in their abilities to accomplish instructional activities and achieve student outcomes (Meulen et al., 2021). Teacher effectiveness covers multi-parameter self-assessment on excelling across pivotal classroom delivery facets like knowledge transfer, holistic engagement, and optimized time utilization (Asare & Amo, 2023). Holistic empirical diagnosis concurrently investigating leadership support patterns, motivational mindsets and capability self-views remains sparse. This risks fragmentation and disconnects developmental initiatives from faculty's lived experience. Hence, the study bridged this gap by concurrently assessing teacher perceptions of the organizational leadership climate alongside motivational outlooks and effectiveness beliefs using self-reported data. The triangulated insights guide cultural and competency elevation re-calibrating managerial support, peer empowerment and advancement structures promoting teacher resonance with strategic objectives. Specifically, the study examined if decentralizing leadership to nurture autonomy, constructing motivational scaffolds, and expanding competencies holistically can sustain peak performance continuity navigating exponential education transformations.

Pragmatically, the triangulated insights construct developmental priorities nurturing competencies, participative empowerment and motivational persistence retaining and advancing talent. Specifically, the empirical perspective guides cultural and policy re-calibration injecting targeted interventions addressing inclusion barriers or senior faculty needs through flexible decentralization accommodating complex situations. Theoretically, the study expanded limited holistic examinations of interlinked leadership, motivational and competency outlooks shaping teacher effectiveness. It revealed multilateral cultural relationships whereby decentralized participation, resilience scaffolding, and skills advancement must progress in tandem for

sustainable transformations(Wan et al., 2017). Thereby the analytical outcomes and subsequent recommendations aimed to uphold stakeholder harmony for students and teachers progressing together rather than apart as collaborative partners.

This integrated investigation examined teacher leadership, motivation and competency perceptions, which carried tangible impact potential steering policies upholding peak performance continuity amidst exponential strategic turbulence. This study was poised to make significant contributions to the field of educational leadership and teacher development in Chinese universities, with the potential to enhance teaching practices, improve student outcomes, and inform policy and practice for years to come.

**Objectives of the study** - The study aimed to assess teacher leadership structure, self-efficacy, and effectiveness of Chinese college teachers to propose a faculty development program for enhancement of their leadership, self-efficacy and effectiveness. More specifically, it identified teacher leadership structure in terms of empowering, task, transformational and interpersonal leadership; determined teacher self-efficacy in terms of self-efficacy level, strength and breadth; assessed the teacher effectiveness in terms of teaching achievement, teaching quality and time management; variables; established the relationships between teacher effectiveness with leadership structure and self-efficacy; and proposed a faculty development program for enhancement of leadership, self-efficacy and effectiveness of Chinese college teachers.

## 2. Methods

**Research Design** - This study employed a descriptive quantitative-correlational design to explore the relationships among teacher leadership structure, self-efficacy, and effectiveness in Chinese universities. This design was chosen for its ability to analyze numerical data and establish connections between variables, which is essential for understanding how these elements interrelate in an educational context. The quantitative aspect of the design allowed for the use of statistical tests to identify patterns and correlations, providing a clear and objective analysis of the data collected from 400 teachers across various prestigious Chinese universities. The correlational element is crucial as it enables the examination of whether changes in one variable are associated with changes in another, without assuming causality. This is particularly relevant for this study's objectives, which aim to understand the interplay between leadership, self-efficacy, and teaching effectiveness rather than to test a direct cause-and-effect relationship. Overall, the quantitative-correlational design is the most suitable for this research as it aligns with the study's goals of measuring and understanding the relationships between key variables that influence educational outcomes.

**Participants** - The study involved 400 teachers from several prestigious universities in China. These universities are known for their high academic standards and attract experienced educators. Selecting teachers from such institutions ensured insights into leadership structures, self-efficacy, and effectiveness within a highly qualified group. This approach provided a strong foundation for analyzing the research variables. They were chosen as the respondents because they were the ones who would best represent the structure, self-efficacy, and effectiveness of the teachers in the same universities, They would know what the structural differences in the universities are, This entails that they would understand the occurrences of leadership structure. More so, the teachers would have a knowledge of the self-efficacy and effectiveness of other teachers using themselves as the representation of the population. They would ensure that the information being given is the most accurate data that could be shared in terms of teacher leadership structure, self-efficacy, and effectiveness. Teachers are the best fit for this study because the topic circled the idea of their involvement in Chinese universities. This would enable the study to be led in the direction of in-depth analysis of the variables presented. It would be elaborated with accuracy since the topic being discussed is related to teachers. They would be able to comprehend the severity of their involvement. Thus, presenting new findings that would help future readers and the researcher herself in accumulating enough information about the topic. Raosoft sample size calculator was used as a tool for calculating the number of participants. By setting “the error margin at 5 % and the level of confidence at 95% of the error range”, 400 respondents were selected having different sexes, majors, educational backgrounds, and

years of work experience.

**Data Gathering Instrument** - The data collection instrument was a self-administered structured questionnaire distributed to respondents online via Google Forms, which were adapted from different research studies. The questionnaire was divided into four sections. Part I solicited the demographic profile of the respondents. This section used multiple choice questions to gather information on respondents' sex, age, highest educational qualification, subject specialization, and years of teaching experience. Part II focused on teacher leadership structure, adapted from the Multifactor Leadership Questionnaire of Bass and Avolio (1995) and the Differentiated Transformational Leadership Inventory of Callow et al. (2009). This section included 20 Likert-scale questions across four dimensions: empowering leadership, task leadership, transformational leadership, and interpersonal leadership. Part III addressed teacher self-efficacy. Adapted from the Ohio State Teacher Efficacy Scale (Tschannen-Moran & Woolfolk Hoy, 2001), this section contained 21 Likert-scale questions capturing three self-efficacy parameters: level, strength, and breadth. Part IV evaluated teacher effectiveness. To assess effectiveness across teaching quality, achievement, and time management, 20 Likert-scale questions were adapted from the Teaching Analysis by Students questionnaire (Centra, 1993). A total of 81 items were measured on a four-point Likert scale, encompassing all study variables. The reliability of the questionnaire was found to be very high; the Alpha value is 0.943 or above, and the excellent verbal interpretation in all indicators were registered.

**Data Gathering Procedures** - The data collection process for this study was meticulously structured to ensure the acquisition of accurate and reliable information. Initially, the research questionnaire was developed after an extensive review of relevant literature and consultations with academic professors and advisors. The questionnaire underwent several revisions before finalizing its three main sections, each designed to assess different aspects of the study's focus. Once the questionnaire was refined through this iterative process, it was uploaded onto Wenjuanxing (Questionnaire Star), a widely utilized online platform for distributing and collecting surveys among Chinese researchers. This platform facilitated the distribution of the questionnaire through WeChat, a popular communication app, by sharing a link with the targeted respondents. To maintain the integrity of the data, a pilot test was conducted with a small group of participants who were not part of the main study sample. This preliminary round of data collection allowed for the assessment of the questionnaire's validity and the identification of any ambiguous items. Following the pilot test, the finalized questionnaire was distributed to a larger sample of 400 teachers from top universities in China via WeChat. The participants were selected to represent a diverse range of experiences and backgrounds, ensuring a comprehensive understanding of the research variables. The survey was conducted anonymously, with participants assured that their responses would be used solely for academic research and not for any commercial purposes. They were given a specific time frame to complete the questionnaire and were encouraged to respond thoughtfully and honestly. After the data collection phase, the responses were carefully compiled and cleaned to prepare for analysis. The data were then coded and organized, with the help of professional statistical software, to establish the basic variable model.

**Data Analysis** - Data analysis involves the use of several statistical tools. Using weighted averages and rankings to evaluate teacher leadership structure, teacher self-efficacy, and work efficiency. The Pearson Product-Moment Correlation coefficient was applied to evaluate the correlations between the variables under study. To complement the analysis, a post hoc examination was also undertaken to elaborate on the initial findings. All data processing and statistical computations were facilitated by the SPSS software, specifically version 26, which was instrumental in interpreting the study's outcomes with a focus on the alpha levels of 0.05 and 0.01.

**Ethical Considerations** - In conducting this study, utmost consideration was given to observing ethical standards of research. To begin with, the researcher sought approval from the LPU Ethics Review Committee before proceeding with the research. This ensured that the study adhered to established ethical guidelines and protocols. Furthermore, prior to data collection, the researcher requested permission from the universities involved to involve their teachers as respondents. This step demonstrated respect for the institutions and

individuals participating in the study. Moreover, the researcher ensured that the privacy and confidentiality of the respondents were maintained throughout the process. All data gathered were promptly deleted after use, and only the researcher had access to the information. This safeguarded the respondents' personal information and prevented potential misuse or unauthorized access. The researcher also took measures to ensure academic integrity and avoid plagiarism. All citations were properly included, and content from other authors was carefully paraphrased without copying their exact wording. Moreover, the researcher utilized a plagiarism tool to verify the originality of the work. Notably, the researcher did not employ any AI tools in the creation of the study, ensuring that it was an original and unique work produced solely by the researcher.

### 3. Results and discussion

**Table 1**

*Summary Table on Teacher Leadership Structure*

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Empowering Leadership.	2.95	Agree	2
2. Task leadership	2.98	Agree	1
3. Transformational Leadership	2.94	Agree	3.5
4. Interpersonal Leadership.	2.94	Agree	3.5
Composite Mean	2.99	Agree	

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree*

Table 1 presents data on teachers' perceptions of their supervisors' interpersonal leadership qualities. The highest ranked item, with a mean of 3.00 (Agree), is "My supervisors often remain impartial and have no preference for how colleagues are treated." This suggests that teachers perceive their supervisors as being reasonably fair and just in their treatment of colleagues, which is an important aspect of fostering a positive and cohesive work environment. On the other hand, the lowest ranked item, with a mean of 2.81 (Agree), is "My supervisors often concern with and understand my personal needs." While still in the "Agree" range, this lower ranking indicates that teachers feel their supervisors could be more attuned to their individual needs and provide more personalized support and guidance.

The remaining items fall in the middle range, with moderate ratings for "My supervisors often provide help for my troubles in relationships" (mean = 2.99), "My supervisors value and try to strengthen the cohesiveness of the team" (mean = 2.99), and "My supervisors often try to avoid conflict within the team" (mean = 2.93). These ratings suggest that while teachers perceive their supervisors as making efforts to maintain positive relationships, provide support, and promote team cohesion, there is room for improvement in terms of actively addressing and resolving conflicts, as well as fostering a deeper sense of community and belonging. The data reveal a positive perception of interpersonal leadership qualities among supervisors, with strengths in maintaining impartiality and fairness, as well as moderately addressing relationship concerns and team cohesion. However, there are areas where teachers feel their supervisors could be more proactive in understanding and addressing individual needs, as well as fostering a stronger sense of community and belonging. Effective interpersonal leadership practices, such as providing individualized support, fostering open communication, and promoting a sense of community, can contribute to a more committed workforce.

In the context of China, where this study was conducted, the findings may reflect the ongoing efforts to modernize and decentralize leadership practices in education (Li, 2020).. However, the pace and extent of this transformation may vary across regions and institutions, potentially contributing to the mixed perceptions observed in the data. To further enhance interpersonal leadership in education, it may be beneficial for school leaders to prioritize professional development opportunities that focus on developing emotional intelligence, active listening skills, and conflict resolution strategies. Additionally, establishing open communication channels and fostering a culture of trust and collaboration can help create a more inclusive and supportive environment for all members of the school community.

**Table 2***Summary Table on Teacher Self-efficacy*

	Weighted Mean	Verbal Interpretation	Rank
1. Self-efficacy level	3.01	Agree	1
2. Self-efficacy strength	2.95	Agree	3
3. Self-efficacy breadth	2.98	Agree	2
Composite Mean	2.98	Agree	

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree*

Table 2 aggregates teacher self-appraisals across three pivotal facets - perceived competency managing expectations (level), resilience amidst unfamiliarity (strength) and transitional dexterity applying skills across contexts (breadth). The agreeing range (2.95-3.01) signals reasonably high current self-assurance upholding status quo teaching activities. Specifically, confidence sustaining existing achievement targets ranks highest (level=3.01). However, fluidity cultivating personalized learning pursuits trails as complexity escalates, with the lowest score for navigating role ambiguity (strength=2.95). This performance-potential gap risks disengagement as policy increases holistic benchmarks beyond content mastery towards life wide competency, creativity and purpose actualization. Thereby development warrants balancing domain expertise depth with interdisciplinary agility breadth. Patterns reveal teacher training currently concentrates capability consolidation in specialized spheres like STEM and social sciences, enabling reliable outcomes through precedented activities (Dan & Wong, 2018). Addressing this requires interventions expressly uplifting exploratory mindsets, global peer exchanges and pilot experimentation opportunities that stretch faculties beyond overspecialized niches towards transfer-oriented competencies portable across unfamiliar environments. Ultimately change resilience and contextual fluidity dynamically cultivated sustains education through unprecedented transformations.

**Table 3***Summary Table on Teacher Effectiveness*

*Legend: 3.50 – 4.00 = Strongly Agree; 2.50 – 3.49 = Agree; 1.50 – 2.49 = Disagree; 1.00 - 1.49 = Strongly Disagree*

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. Teaching achievement	3.01	Agree	2
2. Teaching quality	2.98	Agree	3
3. Time management	3.06	Agree	1
Composite Mean	3.02	Agree	

Table 3 compiles the assessment of teacher effectiveness across the three fundamental facets of teaching achievement, quality and time management. The composite means range from 2.98 to 3.06, indicating that overall, respondents have reasonably high to high perceptions of their own instructional effectiveness across the parameters tied to positive engagement and learning excellence. Among the dimensions, time management is rated highest (mean=3.06) followed by teaching achievement (mean=3.01). This reveals that teachers view themselves as most effective when it comes to productively organizing class time and producing learning outcomes. However, capabilities upholding well-rounded quality allows room for improvement. This pattern resonates with practitioner models moving across competency stages from focusing on content coverage to learner-centered advancement. It takes considerable skill consolidating outcomes alongside facilitating personalized meaning-making. This suggests that while existing systems prepare teachers well for achievement and efficiency metrics, there is space to further enrich human-centric mindsets that evaluate successes through multidimensional development yardsticks centered on agency and purpose actualization. Continued progress requires balancing education quality across essential measurable parametric and deeper philosophical ideals. Teacher development plays a key role in gently catalyzing this evolution. Table 3 provides an overarching snapshot of how teachers view their effectiveness on critical facets energizing high-performing classrooms. The insights can help shape policies sculpting enrichment across technical, cultural, and philosophical fronts.

The data on teacher effectiveness reveals that faculty largely perceive their instructional practices as successful across pivotal metrics tied to learning outcomes, quality engagement and optimized time management. The general efficacy ratings verify that existing policies afford robust pedagogical proficiency consolidation

spanning achievement facilitation, activity customization and scheduling prioritization competencies. Teachers feel empowered to deliver on mandated syllabi and required competency build up efficaciously despite contextual constraints. However, the comparative variability in ratings on facets concerning student-centered advancement, lifelong learning values integration and collaborative time optimization highlights considerable scope to aspire towards elevated benchmarks per evolving global excellence paradigms.

While accomplishing prescribed content obligations and numeric targets remains imperative, transcendental education philosophies complement this with holistic realization across intellectual, emotional, social, aesthetic and spiritual dimensions. The journey also entails shifting mindsets from purely individual delivery bandwidth to collective knowledge leverage. Bridging this paradoxical divide between production logistics and transformational service warrants bridging current competencies with expansive mindsets that recalibrate teaching as a flowing, reflective, and collaborative craft constantly co-creating optimal lifelong learning systems tailored to unique socio-emotional needs. Teacher effectiveness evaluation and development must align policies and programs nurturing this blended balance across all K12 stages. Assessment metrics shaping evolutions require similar integration of tactical parametric and cultural philosophy advancements. No binary choices exist - the art and science must nourish each other (Willis, et al. 2022)..

Recommendations include establishing specialty councils updating policies aligning strategic demands and philosophical ideals; formalizing communities of practice around focus areas like SEL excellence, global citizenship values, teacher-family partnerships, indigenous pedagogies and nature-based learning models; accrediting participation avenues like festivals, micro-credentials and youth development projects enabling teachers to immerse as learners themselves; celebrating teaching artisans within formal systems; and cultivating listen-first leadership mentalities across administration cascades shaping cultural advancement. In essence, actualizing the seeds of greatness within each teacher through sustained immersion in the transformational change they wish to see, supported through legitimization of risk-taking, idea flows and team coaching. By touching the human soul, policies, metrics, and behaviors organically bend towards harmonic balance. Our core shared purpose demands and deserves nothing less.

**Table 4**

*Relationship between Teacher Leadership Structure and Teacher Self- efficacy*

Empowering Leadership	rho-value	p-value	Interpretation
Self-efficacy level	.583**	0.000	Highly Significant
Self-efficacy strength	.545**	0.000	Highly Significant
Self-efficacy breadth	.490**	0.000	Highly Significant
<b>Task leadership</b>			
Self-efficacy level	.564**	0.000	Highly Significant
Self-efficacy strength	.568**	0.000	Highly Significant
Self-efficacy breadth	.508**	0.000	Highly Significant
<b>Transformational Leadership</b>			
Self-efficacy level	.591**	0.000	Highly Significant
Self-efficacy strength	.618**	0.000	Highly Significant
Self-efficacy breadth	.501**	0.000	Highly Significant
<b>Interpersonal Leadership</b>			
Self-efficacy level	.623**	0.000	Highly Significant
Self-efficacy strength	.610**	0.000	Highly Significant
Self-efficacy breadth	.533**	0.000	Highly Significant

*Legend: Significant at p-value < 0.01*

Table 4 explores the relationship between teacher leadership structure and self-efficacy. It presents a correlation analysis between the four fundamental teacher leadership styles – empowering, task, transformational, and interpersonal – with three key dimensions of teacher self-efficacy comprising level, strength, and breadth. The results reveal strong positive correlations across all leadership aspects with self-efficacy components, indicating a significant linkage between perceived leadership effectiveness and personal competence beliefs. This finding proves that enhancements in domain mastery, resilience, and adaptability owned by teachers run parallel to their convictions in the support provisions from formal and informal leaders directing organizational

advancement. In other words, as teachers perceive their leaders to be more effective in various leadership styles, their self-efficacy beliefs across multiple dimensions tend to be stronger.

Examining the specific variables, the consistently high correlations reveal the pivotal role played by senior administrators, principals, and teacher-leaders themselves in shaping motivational outlooks tied to instructional duties. Leadership focused on empowering autonomy, aligning expectations, advocating for change, and demonstrating compassionate communication allows faculty to internalize self-assuredness in meeting emerging challenges. This interdependent mechanism has profound cultural implications, stressing that teacher motivation, commitment, and retention are profoundly tied to how leaders cultivate and enliven institutional environments. Top-down policy formulations require equal attention to bottom-up advancements, fostering leadership capabilities at all levels to sustain positive bi-directional dynamics that convert grand visions into ground realities. By creating supportive environments, providing autonomy, and fostering a shared vision, effective leaders can positively influence teachers' perceptions of their own abilities and resilience. In the context of educational reform and innovation, these findings have important implications for leadership development and teacher support systems. By prioritizing the cultivation of effective leadership at all levels, educational institutions can create an environment that empowers teachers, fosters collaboration, and supports their continuous growth and development, ultimately contributing to improved student outcomes and overall organizational success (Tang & Kong, 2021).

**Table 5**

*Relationship between Teacher Leadership Structure and Teacher Effectiveness*

Empowering Leadership	rho-value	p-value	Interpretation
Teaching achievement	.497**	0.000	Highly Significant
Teaching quality	.542**	0.000	Highly Significant
Time management	.498*	0.000	Highly Significant
<b>Task leadership</b>			
Teaching achievement	.495**	0.000	Highly Significant
Teaching quality	.566**	0.000	Highly Significant
Time management	.453**	0.000	Highly Significant
<b>Transformational Leadership</b>			
Teaching achievement	.481**	0.000	Highly Significant
Teaching quality	.530**	0.000	Highly Significant
Time management	.467**	0.000	Highly Significant
<b>Interpersonal Leadership</b>			
Teaching achievement	.506**	0.000	Highly Significant
Teaching quality	.550**	0.000	Highly Significant
Time management	.525**	0.000	Highly Significant

*Legend: Significant at p-value < 0.01*

Table 5 presents a correlation analysis between the four fundamental teacher leadership styles – empowering, task, transformational, and interpersonal – with three key dimensions of teacher effectiveness tied to achievement facilitation, instructional quality, and time optimization. The strong positive correlations across all leadership aspects with effectiveness components indicate a significant linkage between perceived leadership competence and self-reported teaching capacities across outcome delivery, engagement enrichment, and efficiency parameters. Essentially, enhancements in competencies like progress monitoring, assessment innovations, and syllabus integrity owned by teachers run parallel to their convictions in the support provisions from administrators and peer leaders directing school improvement initiatives. The high interdependent correlations affirm the influential role of those in formal or informal positions of authority in shaping motivational outlooks driving teaching excellence. By establishing clear expectations and autonomy, leading change mindsets, and providing compassionate communication channels, leaders ignite institutional cultures where teachers feel supported in translating their core competencies into impact.

This finding reveals how leadership calibration uplifts faculty effectiveness beliefs across layers in the system, underscoring why scattered leadership models built on delegation, trust, and decentralized decision



channels are gaining prominence for managing complex educational transformations. This empirically validates that opportunities for leadership expansion significantly influence teacher effectiveness, which is essential for managing rising demands. It compels investing equally in vertical excellence and horizontal networks to steer holistic growth. By creating supportive environments, providing autonomy, and fostering a shared vision for growth and improvement, effective leaders can positively influence teachers' perceptions of their own abilities and their motivation to deliver high-quality instruction. In the context of educational reform and innovation, these findings have important implications for leadership development and teacher support systems. By prioritizing the cultivation of effective leadership at all levels, educational institutions can create an environment that empowers teachers, fosters collaboration, and supports their continuous growth and development, ultimately contributing to improved student outcomes and overall organizational success (Daniëls et al., 2019).

**Table 6**

*Relationship between Teacher Self - Efficacy and Teacher Effectiveness*

Self-efficacy level	rho-value	p-value	Interpretation
Teaching achievement	.446**	0.000	Highly Significant
Teaching quality	.514**	0.000	Highly Significant
Time management	.488*	0.000	Highly Significant
<b>Self-efficacy strength</b>			
Teaching achievement	.491**	0.000	Highly Significant
Teaching quality	.558**	0.000	Highly Significant
Time management	.509*	0.000	Highly Significant
<b>Self-efficacy breadth</b>			
Teaching achievement	.450**	0.000	Highly Significant
Teaching quality	.547**	0.000	Highly Significant
Time management	.456*	0.000	Highly Significant

*Legend: Significant at p-value < 0.01*

Table 6 reveals strong positive correlations between all dimensions of teacher self-efficacy (level, strength, and breadth) and facets of perceived effectiveness (achievement, quality, and time optimization), with  $p < 0.01$  indicating high statistical significance. This finding suggests that teachers' confidence in their own competencies and capacities to handle classroom challenges exhibits a strongly symbiotic connection with their conviction in their abilities to deliver quality learning outcomes. Specifically, the data show that teachers' self-assuredness in domain mastery, resilience, and contextual application directly links with their perceived capacities to facilitate academic progress, enrich participative engagement, and optimize in-class time utilization. The tight interdependent relationship empirically verifies that teachers driven by robust, versatile efficacy beliefs consistently evaluate themselves as more effective instructors. Conversely, feelings of instructional accomplishment reinforce their inner motivational outlooks, creating a self-reinforcing cycle.

This quantitative evidence validates the notion that deliberately cultivating teacher self-efficacy across their careers, punctuated by stage-appropriate support structures that counter predictable motivation dips arising from growing complexity, profoundly shapes the ability to sustain peak performance excellence amidst exponential educational transformations. Teachers with higher levels of self-efficacy tend to exhibit greater instructional quality, better classroom management, and increased student achievement. In the context of China, where this study was conducted, the findings may have implications for teacher professional development and support systems. By providing targeted interventions, ongoing professional learning opportunities, and supportive environments that bolster self-efficacy, educational institutions in China may be better equipped to nurture and retain effective and resilient teachers (Tang & Kong, 2021).

To further strengthen the connection between teacher self-efficacy and effectiveness, it may be beneficial for educational institutions in China to prioritize initiatives that provide opportunities for mastery experiences, vicarious learning, social persuasion, and strategies to manage emotional states (Bandura, 1997). Additionally, fostering a growth mindset and a culture of continuous learning can help teachers navigate the complexities of the profession and maintain their motivation and belief in their abilities.

### Proposed Program

Based on dimensions with lowest score under each Variable, a program was proposed as below targeting to overall improving the teachers' leadership structure.

**Table 7**

*Proposed Faculty Development Program to Enhance Teacher Leadership Structure, Efficacy and Effectiveness*

Key Result Areas	Program Objectives	Enhancement Activities	Success indicators	Person involved
Empowering Leadership: "Often encourage me to think and make decisions independently"	To increase teacher participation in decision-making processes	Grant authority for teachers to spearhead 3-5 working groups annually addressing high-priority educational issues Committee scope spans areas like hybrid learning upgrades, student psychology supports, parental engagement channels etc. Provide adequate budget, facilities and administrative support.	- 90% of key decisions with teacher committee input - Over 90% of teachers report high satisfaction on influence and voice	principal  Committee members
	To provide adequate funding mechanisms for teacher-initiated ideas	Institute recurring townhalls and feedback channels  Monthly two-way open forums for discussing policy changes and ground sentiments  Anonymous suggestion/input boxes across the physical and digital campus Designated personnel formally integrating bottom-up perspectives into strategy planning actions	-Approximately 75% of the funds are allocated towards implementing innovative teacher ideas -Around 70% of the initial ideas conceived by teachers are successfully translated from the conceptual stage to actual implementation.	principal  Teachers
	To familiarize teachers with effective strategies for complex situations	Spot awards for demonstrated empowerment in action. Monthly peer nominations for teachers visibly enabling others and leading by inspiration	More than 75% of the ideas generated by teachers are successfully translated from conception to implementation stages	Teachers Programme team
Teacher Self-Efficacy: Self-efficacy Level: Cope with a variety of teaching tasks of varying difficulty and complexity	To improve capability handling multifaceted assignments To cultivate comfort with unfamiliar complex teaching activities	Immersive online simulation training modules Attachment stints with experienced mentors Structured troubleshooting lesson plan circles International best practice exchanges Sample real-time classroom scenario videos	-Over 90% of teachers effectively experience an increase in self-efficacy after training, and their perceived competence in managing unfamiliar activities is significantly enhanced. -More than 95% of teachers continue to serve within the school system two years later.	Teachers, Veteran mentors
Self-efficacy Strength: Complete the suspected teaching tasks even when I encounter difficulties	To develop resilience in handling challenging teaching scenarios To enhance problem-solving skills under pressure	Workshop on resilience and problem solving in teaching Role-play scenarios to simulate challenging classroom situations	-90% of teachers have improved their resilience assessment scores -Positive feedback on problem-solving skills reached 90%	principal Veteranmentors  Teacher Represt.
Self-efficacy Breadth: Apply successful experience to other similar teaching tasks	To encourage adaptability and transfer of skills across different teaching contexts To foster an understanding of diverse teaching methodologies	Cross-disciplinary teaching workshops Peer exchange sessions to share successful experiences	-90% of educators report that their teaching methods have become more adaptable. -90% of teachers use different strategies in the classroom environment	Teachers

Teaching Achievement: Help students to achieve good academic performance	To enhance teachers' ability to identify and address individual student needs To focus on outcome-based teaching strategies	Training in student-centered teaching methods Workshops on designing effective assessments and feedback mechanisms	-More than 90% of teachers have significantly improved their student performance indicators after implementing new teaching strategies. -More than 90% of students gave positive feedback	Teachers Students
Teaching Quality: Make the teaching goals I set meet the needs of students and help them with their all-round development	To align teaching goals with holistic student development To implement inclusive and diverse teaching practices	Professional development in inclusive education Seminars on holistic educational approaches	More than 95% of students provide feedback that the set teaching objectives meet their needs.	Teachers Students

#### 4. Conclusions and recommendation

Teachers agreed that school leaders demonstrate reasonably balanced leadership across empowering, task, transformational and interpersonal dimensions. However, further enhancing participative empowerment can enrich capabilities responding to complexity. While teachers expressed confidence in core competencies, gaps existed in managing unfamiliar complex situations. Targeted resilience building can address this. Teachers viewed themselves as effective across achievement delivery, engagement, and time optimization. However, fluidity cultivation potential assists multifaceted personalized education. Establish relationships between variables Significant positive correlations affirmed interlinkages between leadership climates, motivational outlooks and competency beliefs, requiring integrated development. The faculty development program was designed and proposed to enhance the leadership, self-efficacy, and teaching effectiveness of Chinese university teachers.

School administrators may establish transparent governance mechanisms for teachers, implement recognition and rewards systems for leadership roles, and introduce participatory budgeting initiatives to foster project ownership and innovation. Teacher organizations may facilitate communities of practice for sharing best practices and promote global knowledge ecosystems to encourage cross-cultural educational connections and idea exchange among teachers. Department heads and supervisors may implement targeted mentorship programs for skill development and resilience, and may cultivate decentralized support communities with leader-coaches to provide personalized guidance for teachers. University teachers may engage in self-directed learning and professional development opportunities to enhance their teaching and leadership capabilities and may participate in multimedia celebrations of teaching excellence for inspiration and peer learning. Future researchers may conduct longitudinal studies to assess the long-term impacts of faculty development on teacher leadership and effectiveness, exploring the role of demographic and contextual factors in shaping program outcomes.

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