

# Leadership Training for Teachers and Students' Classroom Performance in China

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**Abstract:** This study investigates the impact of leadership training on teachers' classroom performance and student achievement in the context of Chinese schools. The research aims to address the gap in understanding the specific effects of leadership training on teaching practices and classroom dynamics in China. Drawing upon Transformational Leadership Theory and Social Cognitive Theory, the study explores how leadership training can inspire and motivate teachers, enhance instructional quality, and foster student success. The research indicates that while educational reforms in China have emphasized the professional development of teachers, including leadership training, there is limited empirical evidence on the effectiveness of such programs. The study finds that transformational leadership practices are increasingly prevalent, with positive effects on school culture and teacher motivation. However, challenges persist, such as the gap between theoretical training and practical application, which can hinder the effective implementation of leadership training programs. The study highlights the importance of comprehensive professional development programs that align with teachers' experiences and involve active learning. It also underscores the need for targeted and practical leadership training that directly addresses classroom challenges and enhances teachers' self-efficacy. By examining the impact of leadership training on teaching practices and student performance in Shaanxi province, China, the research provides valuable insights for educators and policymakers. The findings suggest that effective leadership training can significantly contribute to the enhancement of educational quality and student achievement in China.

**Keywords:** Leadership Training; Instructional Quality; Teachers' Self-efficacy.

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## 1. Introduction

Leadership training for teachers has emerged as a critical component in the pursuit of educational excellence. In contemporary educational systems, effective leadership is essential not only for administrative purposes but also for enhancing the instructional capabilities of teachers and improving student outcomes. Leadership training programs are designed to equip teachers with the skills necessary to inspire, guide, and support their students, thereby fostering a more conducive learning environment. Despite the recognized importance of leadership training, its impact on teachers' classroom performance and student achievement in China remains underexplored.

In recent years, there has been a growing emphasis on improving the quality of education in China, with significant investments in professional development for teachers. However, the specific effects of leadership training on teaching practices and classroom dynamics are not well-documented. This study aims to fill this research gap by investigating the extent and impact of leadership training on teachers' performance and student outcomes in Chinese schools.

The importance of this study lies in its potential to inform educational policy and practice. By understanding how leadership training influences teachers' effectiveness and students' academic achievement, educational leaders and policymakers can make more informed decisions about the design and implementation of professional development programs. This research can provide valuable insights into the best practices for leadership training and highlight areas that require improvement, ultimately contributing to the enhancement of educational quality in China.

In the context of a typical Chinese school, the researcher

observed that despite various professional development programs, there was a noticeable inconsistency in the application of leadership principles in the classroom. The researcher noticed that while some teachers thrived and significantly improved their classroom environments and student outcomes, others seemed to struggle with integrating leadership skills into their teaching practices. This inconsistency raised questions about the effectiveness and accessibility of the current leadership training programs.

Moreover, during informal discussions with colleagues from other schools, the researcher found that these observations were not isolated. Many teachers expressed a need for more targeted and practical leadership training that directly addresses classroom challenges. They reported that existing programs often lacked a focus on practical application, leaving them ill-equipped to handle real-world classroom situations effectively.

Additionally, a review of the existing literature revealed a paucity of studies specifically examining the impact of leadership training on teachers' classroom performance and student achievement in China. Most research in this area tends to focus on broader aspects of professional development without delving into the specific effects of leadership training. This lack of targeted research highlights a significant gap that this study aims to address.

By conducting this research, the researcher seeks to provide empirical evidence on the impact of leadership training on educational outcomes. The goal is to identify effective practices and potential barriers, thereby contributing to the development of more effective leadership training programs that can enhance teachers' performance and improve student achievement in China. This study not only aims to bridge the existing research gap but also aspires to offer practical recommendations for educators and

policymakers striving to elevate the quality of education across the nation.

Leadership training for teachers is increasingly recognized as a crucial element in enhancing educational quality and student outcomes in China. Recent educational reforms emphasize the need for effective leadership to foster innovative teaching practices and create a supportive learning environment. Despite significant efforts, there is still a substantial gap in understanding the specific impact of leadership training on classroom performance and student achievement in the Chinese context.

In China, educational reforms have prioritized the professional development of teachers, including leadership training. The Ministry of Education has implemented various programs aimed at enhancing teachers' skills and leadership capabilities. According to recent studies, transformational leadership is becoming more prevalent in Chinese schools, with principals and school leaders increasingly adopting practices that inspire and motivate teachers. For instance, a study by Heenan et al. (2023) highlighted the positive effects of transformational leadership on school culture and teacher motivation in primary schools.

Effective professional development is essential for improving teacher effectiveness in China. Comprehensive programs that align with teachers' experiences and involve active learning have been shown to be most effective. Cheng et al. (2024) emphasized that such programs help teachers adopt innovative teaching strategies and improve their instructional practices. However, there is still a need for more practical, hands-on training components to bridge the gap between theory and practice.

Despite the benefits of leadership training, several challenges hinder its effective implementation in China. Wu (2021) noted that many training programs lack practical application and focus excessively on theoretical aspects. This disconnect makes it difficult for teachers to implement new pedagogical approaches effectively.

Szeto and Cheng (2018) highlight that beginning teachers can assume leadership roles through principal-teacher interactions, which inspire, empower, and allow for leadership development. This finding sets the stage for understanding the fundamental dynamics of leadership growth within educational settings.

Expanding on this, Ingersoll et al. (2018) summarize research on instructional and teacher leadership, identifying gaps particularly regarding the elements most beneficial for instructional leadership and the overall impact of teacher leadership on student growth. This underscores the need for targeted research to refine leadership practices that directly enhance student learning.

In Greece, Kouni et al. (2018) investigate teachers' perceptions of transformational leadership by principals and find significant job satisfaction among teachers, independent of demographic factors. This study highlights the universal benefits of transformational leadership in fostering a positive work environment for teachers.

Amels et al. (2021) contribute to this discussion by demonstrating that the distribution of leadership roles by school leaders significantly impacts teachers' capacity to effect change. Schools with well-distributed leadership roles show higher levels of collegial support, knowledge sharing, and alignment with school goals, which are crucial for sustained educational improvement.

Further, Koeslag-Kreunen et al. (2018) explore university

teacher teams' learning behaviors and the role of leadership in fostering innovation. Effective teams engage in not only sharing ideas but also constructive conflict and co-construction, facilitated by both transformational and transactional leadership, which promotes a comprehensive approach to team-based learning and innovation.

In a related study, Amels et al. (2020) find that distributive leadership in primary schools positively influences teachers' collaboration and motivation, suggesting that leadership roles combined with inquiry-based practices significantly enhance teachers' capacity for change and professional development.

Shen et al. (2020) provide a meta-analysis revealing a positive correlation between teacher leadership and student achievement, particularly in curriculum, instruction, and assessment improvements. This emphasizes the critical role of teacher leadership in driving educational success.

Bellibaş et al. (2020) examine principal leadership and its impact on teaching practices, focusing on instructional and distributed leadership models. Their results indicate that while instructional leadership directly improves instructional quality, distributed leadership's effects are mediated by teacher collaboration and job satisfaction, highlighting the multifaceted nature of leadership impacts.

Mngo and Mngo (2018) report that teachers in Cameroon prefer separate special education schools over inclusive ones, despite recognizing some benefits. This resistance is linked to a lack of preparedness, indicating a need for more comprehensive special education training.

Vermeulen et al. (2022) utilize longitudinal data to show that transformational leadership, school learning climate, and leader-member exchange significantly influence teachers' inquiry habits and innovative behavior. These findings underscore the importance of a supportive learning climate and strong leader-member relationships in fostering innovation among teachers.

Malik and Rizvi (2018) demonstrate that students' perceptions of the classroom learning environment significantly impact their academic achievement in Mathematics. Factors such as involvement and personal relevance are major positive predictors, whereas autonomy and investigation have a negative effect, suggesting tailored strategies for improving low achievers' outcomes.

Zysberg and Schwabsky (2020) find that academic self-efficacy mediates the relationship between school climate and academic achievement, with positive school climate enhancing self-efficacy and academic performance. This highlights the crucial role of a supportive school climate in student success.

In Nigeria, Ndidi and Effiong (2020) show that class size and the availability of instructional materials significantly affect students' mathematics achievement. They recommend increased government funding to improve classroom environments and provide necessary instructional materials.

Lavrijsen (2022) finds that Flemish students in high-achieving classes perform better academically, while class heterogeneity has little impact. Teachers' use of differentiated instruction in heterogeneous classes is associated with higher student achievement, emphasizing the importance of responsive teaching practices.

Mantooth et al. (2021) report that students' self-efficacy for self-regulation decreases over the semester in both technology-enhanced and traditional classrooms. However, statistics self-efficacy increases in traditional classrooms, with self-efficacy being a significant predictor of course

grades, underscoring the need for supportive learning environments in technology-enhanced settings.

Alamri (2019) reveals that students in flipped classrooms perform better academically and are more satisfied compared to those in traditional settings. Key success factors include online materials, peer discussions, and the instructor's role, though challenges with computer skills and time management persist.

Ramli et al. (2018) emphasize that facilities such as e-learning, libraries, and sports significantly impact students' academic achievement. Adequate resources in temporary campuses can lead to good academic outcomes, highlighting the importance of providing necessary resources for student success.

Yin et al. (2020) find that a positive mathematics classroom environment is associated with higher self-efficacy and achievement among university students in China, while a difficult learning environment correlates with lower achievement. This study confirms the mediating role of mathematics beliefs in these relationships.

Finally, Brink et al. (2020) conduct a systematic literature review showing that indoor environmental quality (IEQ) positively impacts the quality of learning and students' short-term academic performance in higher education. However, the influence of IEQ on long-term performance remains unclear due to limited evidence.

In summary, these studies collectively underscore the importance of supportive leadership, effective teaching strategies, and conducive learning environments in achieving educational success. The findings highlight the multifaceted nature of educational improvement and the critical role of leadership in fostering positive outcomes for both teachers and students.

The existing literature underscores the importance of leadership training in enhancing educational outcomes in China. However, there remains a notable research gap specifically examining the impact of leadership training on teachers' classroom performance and student achievement in the Chinese context. This study aims to fill this gap by providing empirical evidence on the effects of leadership training on teachers and students in China, offering valuable insights for educators and policymakers.

In exploring the impact of leadership training and educational outcomes, various studies provide a comprehensive understanding of the role of effective leadership in educational settings, particularly in China.

In China, educational reforms have emphasized the professional development of teachers, including leadership training, with transformational leadership becoming increasingly prevalent. Heenan et al. (2023) highlight the positive effects of transformational leadership on school culture and teacher motivation in primary schools, underscoring the importance of leadership in enhancing educational environments.

Cheng et al. (2024) emphasize the need for comprehensive professional development programs that align with teachers' experiences and involve active learning. However, Wu (2021) points out the challenges in implementing such programs, noting the gap between theoretical training and practical application. This gap aligns with findings by Ingersoll et al. (2018), who identify the need for targeted research to refine leadership practices that directly enhance student learning.

Comparatively, studies outside China also highlight similar themes. Szeto and Cheng (2018) demonstrate that principal-

teacher interactions can inspire and empower teachers to take on leadership roles. This finding is echoed by Kouni et al. (2018) in Greece, where transformational leadership by principals leads to significant job satisfaction among teachers.

In the context of distributed leadership, Amels et al. (2021) and Amels et al. (2020) show that well-distributed leadership roles significantly enhance teachers' collaboration, knowledge sharing, and motivation, which are crucial for educational improvement. Similarly, Koeslag-Kreunen et al. (2018) explore the role of leadership in fostering innovation within university teacher teams, indicating that effective leadership promotes a comprehensive approach to team-based learning and innovation.

Shen et al. (2020) provide a meta-analysis revealing a positive correlation between teacher leadership and student achievement, emphasizing the critical role of leadership in driving educational success. Bellibaş et al. (2020) further examine the impact of principal leadership on teaching practices, highlighting the multifaceted nature of leadership impacts.

Additional studies, such as those by Mngo and Mngo (2018) and Vermeulen et al. (2022), underscore the importance of supportive leadership and a conducive learning climate in fostering teacher innovation and effective educational practices. These findings are complemented by research on the classroom environment and its impact on student achievement. Malik and Rizvi (2018) and Zysberg and Schwabsky (2020) emphasize the role of a supportive school climate in enhancing student self-efficacy and academic performance.

In Nigeria, Ndidi and Effiong (2020) highlight the significant impact of class size and instructional materials on students' mathematics achievement, advocating for increased government funding to improve educational resources. Lavrijsen (2022) and Mantooth et al. (2021) also explore factors influencing student achievement, such as differentiated instruction and self-efficacy.

Studies on innovative teaching methods, such as Alamri (2019) on flipped classrooms and Ramli et al. (2018) on e-learning facilities, further underscore the importance of adequate resources and supportive environments in achieving good academic outcomes. Yin et al. (2020) and Brink et al. (2020) similarly emphasize the positive impact of conducive classroom environments and indoor environmental quality on student performance.

In summary, the literature collectively underscores the importance of supportive leadership, effective teaching strategies, and conducive learning environments in achieving educational success. These findings highlight the multifaceted nature of educational improvement and the critical role of leadership in fostering positive outcomes for both teachers and students. The current study aims to build on these insights by examining the specific impacts of leadership training on teaching practices and student performance in Shaanxi province, China.

## 2. Statement of the Problem

This study will seek to answer the following questions.

(1) What is the profile of the respondents in terms of:

1) Teachers

① Sex

② Years of teaching experience

③ Highest Educational Attainment

2) Students

① Age

② Sex

③ Academic Performance

(2) What is the assessment of teacher respondents on their leadership training in terms:

1) Consistency of Leadership Training

2) Content of Leadership Training

3) Quality of Training

4) Impact on Teaching Practices

5) Support and Resources

(3) Is there a significant difference on the assessment of teacher respondents on their leadership training when their profile is taken as a test factor?

(4) What is the assessment of teacher and student respondents on their classroom performance in terms of:

1) Engagement and Participation

2) Classroom Environment

3) Behavior and Discipline

4) Learning and Development

(5) Is there a significant difference on the assessment of student respondents on their classroom performance when their profile is taken as a test factor?

(6) Is there significant relationship between teachers' leadership training and students' classroom performance?

(7) What enhanced leadership training program can be proposed based on the findings of the study?

### 3. Research Design

The research design of this study employs a quantitative descriptive comparative correlational approach, selected to systematically investigate and quantify the relationships between teachers' leadership training and students' classroom performance. The descriptive component provides a comprehensive overview of the current state of leadership training and its various elements. The comparative aspect allows for the examination of differences in outcomes based on varying levels of training received by teachers. Meanwhile, the correlational analysis aims to determine the strength and direction of relationships between leadership training variables and student performance metrics. This design is justified as it offers a robust framework for understanding the multi-dimensional impacts of leadership training on educational outcomes, thereby enabling data-driven conclusions and practical recommendations for enhancing teaching practices and student achievement (Creswell & Creswell, 2018).

### 4. Results and Discussion

Research Question 1: What is the profile of the respondents in terms of:

(1) Teachers

Table 1 displays the frequency and percentages of demographic data for a cohort of educators, encompassing their gender, years of teaching experience, and highest level of educational attainment. The data reveals that 44% of the individuals were female and 56% were male, indicating that male students comprise the majority of the cohort.

In terms of their years of teaching experience, 25% had 1 to 5 years, 13% had 11 to 15 years and more than 20 years, 15% had 16 to 20 years, and 35% had 6 to 10 years. This indicates that the majority of teachers have between 6 and 10 years of teaching experience.

**Table 1.** Frequencies and Percentage of Demographic Factors

Sex		Counts		% of Total	
Female		154		44 %	
Male		197		56 %	
Years of Teaching Experience					
1-5 years		88		25 %	
11-15 years		44		13 %	
16-20 years		53		15 %	
6-10 years		122		35 %	
more than 20 years		44		13 %	
Highest Educational Attainment					
Bachelor's Degree		22		6 %	
Doctorate		91		26 %	
Master's Degree		238		68 %	

Lastly, according to their greatest educational qualifications, 6% possess a bachelor's degree, 26% hold a doctoral degree, and 68% have attained a master's degree, indicating that the predominant majority of the educators are master's degree holders.

The data highlights a predominantly male teaching workforce with a significant number of mid-career educators and a strong emphasis on advanced education qualifications. These demographic factors may play a crucial role in shaping the impact of leadership training, as well-educated, mid-career teachers may be particularly receptive to strategies that enhance their teaching and leadership capabilities.

(2) Students

**Table 2.** Frequencies and Percentage of Demographic Factors

Sex		Counts		% of Total	
Female		191		50 %	
Male		190		50 %	
Age					
18-19		152		40 %	
20-21		155		41 %	
22 and above		74		19 %	
Academic Performance (Average Grade)					
60-69%		62		16 %	
70-79%		88		23 %	
80-89%		82		22 %	
90-100%		53		14 %	
below 60%		96		25 %	

Table 2 delineates the demographic attributes of a student sample, including sex, age, and academic program. The tabulated data shows that 50% of the students were male and 50% were female, suggesting that the distribution of assigned sex was evenly distributed.

Regarding age distribution, 40% were aged 18 to 19, 41% were aged 20 to 21, and 19% were 22 years or older. The data reveal that a considerable proportion of the students are aged 20 to 21 years.

Finally, according to their academic performance, 16% of pupils achieved an average grade between 60-69%, 23% between 70-79%, 22% between 80-89%, 14% between 90-100%, and 25% below 60%. This indicates that the majority of pupils possess an average grade below 60%.

The student demographic is evenly balanced by gender, concentrated within the 18–21 age range, and shows a wide distribution in academic performance, with a considerable proportion of students in the lower performance brackets. This information could be crucial for tailoring interventions aimed at enhancing academic outcomes, especially for students with lower average grades.

## 5. Conclusion

(1) Profile of Respondents: The teacher respondents are predominantly male, with the majority having 6-10 years of teaching experience and holding a master's degree. In terms of the students, the group has an even distribution by sex, with most students falling within the 20-21 age range. Academic performance varies, with some students achieving below 60% and others reaching 90-100%, indicating a broad range of academic success among the participants.

(2) Assessment of Teachers on Leadership Training: Teachers provided an overall "average" assessment of their leadership training across all measured dimensions. They rated the Consistency of Leadership Training slightly higher, indicating a moderate perception of regularity in training sessions. The Content of Leadership Training was also rated as average, reflecting that the training material met general expectations but did not exceed them. Quality of Training and Impact on Teaching Practices were similarly rated as average, suggesting teachers saw only a moderate effect of the training on their instructional methods. Support and Resources received average ratings as well, with teachers indicating a moderate level of available resources but also highlighting a need for better support mechanisms.

(3) Differences in Teacher Assessments Based on Profile: When analyzed according to their profiles, significant differences emerged in teacher assessments of their leadership training based on sex and highest educational attainment. Female teachers rated the consistency, quality, and support in their leadership training higher than male teachers. Additionally, teachers with a doctorate viewed the training more favorably across various dimensions compared to those with only a bachelor's or master's degree, suggesting that educational background may influence perceptions of training effectiveness.

(4) Assessment of Classroom Performance by Teachers and Students: Both teachers and students provided an overall average assessment of classroom performance across the domains of Engagement and Participation, Classroom Environment, Behavior and Discipline, and Learning and Development. Classroom Environment received the highest ratings from both groups, indicating a moderately positive perception of safety, inclusivity, and support within the

classroom. Engagement and Participation received the lowest scores, suggesting a need for strategies to increase student involvement and motivation. Behavior and Discipline and Learning and Development were similarly rated as average, with slight differences between teachers and students indicating aligned perceptions with minor variances.

(5) Differences in Student Assessments Based on Profile: Significant differences in students' assessments of classroom performance were observed based on age, sex, and academic performance. Male students rated Learning and Development and overall classroom experience slightly higher than female students. Age also showed an impact, with younger students (18-19) generally reporting more favorable perceptions than older students (22 and above) in Classroom Environment, Behavior, and Overall Performance. Students with higher academic performance (90-100%) tended to view their classroom experiences more positively, especially in Learning and Development, compared to students with lower academic performance, who rated these areas lower, suggesting a relationship between academic success and classroom satisfaction.

(6) Relationship between Teachers' Leadership Training and Students' Classroom Performance: The correlation analysis revealed very weak and mostly negative relationships between teachers' leadership training and students' classroom performance. Perceived Quality of Training and Support and Resources were negatively correlated with students' assessments in Behavior, Discipline, Learning, and Development, suggesting that an increase in perceived quality or support in leadership training did not translate into improved student performance. This outcome indicates that while leadership training may benefit teachers in other areas, its direct impact on student outcomes in the classroom appears limited, highlighting a need for more integrated approaches that link teacher development directly to classroom effectiveness and student outcomes.

(7) Overall, this study highlights the necessity of a more integrated approach in enhancing both teacher leadership training and student classroom outcomes. While current leadership training equips teachers with essential skills, its limited direct impact on student performance indicates a gap between professional development and classroom application. Closing this gap will require training that more effectively connects leadership skills to practical, student-focused teaching strategies. Furthermore, the influence of demographic factors such as age, academic performance, and educational attainment on perceptions suggests that training and classroom approaches should be tailored to diverse needs. These findings affirm the importance of developing adaptable, targeted training programs that not only support teachers' leadership growth but also foster a more engaging and impactful learning environment for students.

## 6. Recommendations

(1) Enhancing Teacher Leadership Training with Student-Centered Applications: Given the weak correlation between teacher leadership training and student classroom performance, it is recommended that training programs place greater emphasis on student-centered strategies. Integrating practical techniques, such as fostering student engagement, effective classroom management, and instructional adaptability, can help bridge the gap between leadership skills and classroom outcomes.

(2) Tailoring Training Content to Teachers' Educational

Backgrounds and Experiences: Since teachers' perceptions of leadership training vary by educational attainment, training programs should be customized to better address the diverse needs of teachers with different educational backgrounds. For instance, more advanced workshops or modules could be offered for those with higher degrees, while foundational skills could be emphasized for those with less formal training.

(3) Addressing Student Engagement and Participation: With engagement and participation rated the lowest among classroom performance factors, it is recommended to implement more active learning techniques, such as collaborative projects, interactive discussions, and hands-on activities, that can help students become more involved. Teachers could also receive targeted training in strategies to motivate and engage students, particularly those who may require additional encouragement to participate actively.

(4) Improving Classroom Environment for Older and Lower-Performing Students: As older and lower-performing students rated the classroom environment less favorably, tailored support is recommended to create a more inclusive and positive learning atmosphere for these groups. Schools may consider implementing peer support systems, providing additional resources, and fostering an environment that emphasizes respect and inclusivity to enhance the experience for all students.

(5) Offering Additional Learning and Development Support for Lower-Performing Students: With lower-performing students expressing less satisfaction in learning and development opportunities, it is recommended that schools provide additional academic support, such as tutoring, study groups, and one-on-one mentoring. Teachers could also benefit from training focused on differentiating instruction to meet the needs of students across a range of academic abilities, thereby ensuring that every student receives the guidance necessary to succeed.

(6) Regular Evaluation and Feedback Mechanisms for Training Programs: To continually improve the quality and relevance of leadership training, implementing a system for regular feedback from teachers regarding the effectiveness of the training is essential. Feedback can inform program adjustments, making the training more responsive to teachers' evolving needs and aligning more closely with the goal of improving student outcomes.

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