

## THE INFLUENCE OF TEACHER'S LEADERSHIP ON ACADEMIC ACHIEVEMENT AMONG COLLEGE STUDENTS IN GANZHOU, CHINA

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### Abstract

Through this abstract, the discussion is captured on teacher leadership as a multisided phenomenon, its influence on academic achievement at a time of education sector transformations, and the troubles teachers face in the process of adapting to the modern education systems. The primary finding of the thematic analysis was that the context sensitivity of leadership development is very important, the teacher leadership programs can transform a leader and the call for innovative approaches to address the leadership challenges cannot be overemphasized. These insights showed the specific features of teacher leadership, its impacts on academic achievements, and the problematic issues of following system transformations. Input highlighted contextualized attributes, transformative leadership practices and adaptive mechanisms to promulgate teacher leadership adjustment. In general, the talk reflects the leading role of teachers in determining educational achievements and makers of policy enactment and educational leadership development.

**Keywords:** *Teacher leadership, Academic Achievement, Educational sector changes, Adaptation, Challenges*

### Introduction

In this study, the concept of teacher leadership will be unfolded and analyzed in cases of academic performance of college students in Ganzhou, China. Teacher leadership means forming new practices, socializing with peers, and demonstrating successful lessons designed for specific groups of learners within the educational community. The existing research points out teacher empowerment, collaboration between teachers, and flexible organisation in crafting teacher leadership (Tadese, Yeshanah & Mulu, 2022). These factors such as COVID-19 and shifting learning patterns necessitate that teachers be dynamic and capable of addressing learners' new needs that arise effectively. Despite the voluminous body of theory on teacher leadership, the existing empirical evidence on the relationships between teacher leadership and students' academic performance remains few and far between (Ye & Zhao, 2019). A research objective was defined which supposes an empirical study that teacher leadership has a measurable relationship with students' academic success. This research attempts to understand the effect that teacher leadership practices have on educational outcomes with a focus on what practical lessons can be learnt to improve teaching methods and, hence, facilitate the learner's success at the college level in China (Zhu & Caliskan, 2021).

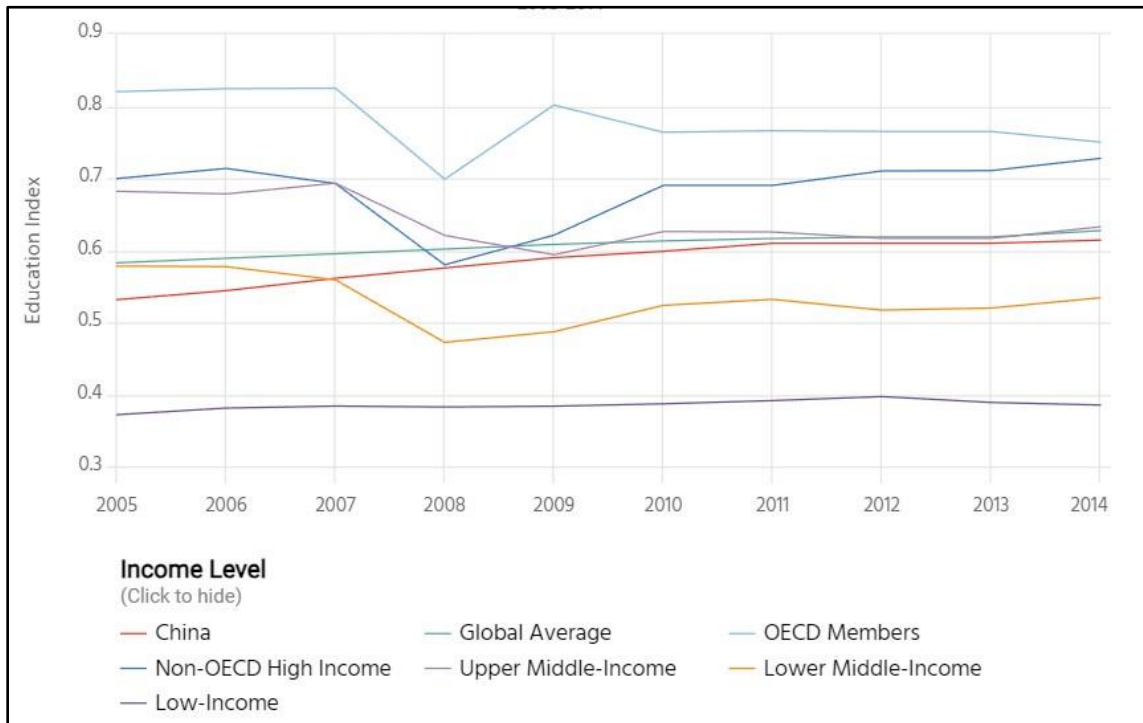


Figure 2.9: Education index by index level in China in 2014  
(Source: Zhu & Caliskan, 2021)

The emphasis of the research work is to find out the scarcity of empirical studies confirming the influence of teacher leadership on academic achievement among college students in Ganzhou China (Granić, 2022). Notwithstanding several studies affirming the impact of effective teacher leadership on student achievement, there is less empirical evidence of the exact dynamics explaining the link between teachers' behaviours and students' outstanding performance in a uniquely situated Ganzhou educational context. Thus, the study incrementally establishes to which extent teacher leadership skills affect college students' achievement levels in Ganzhou with visibility of the dimensions of teacher leadership perceived by the students. This research endeavour attempts to present a complete picture of the field concerned and allow for better policy and practice designs for higher education in this region (Turnbull et al., 2021). Therefore, researchers hope that the study outcomes can increase the quality of higher education and improve the student's experiences in the region.

It is the study's single limitation that it examines solely the Ganzhou province of China because it may lead to location bias when conclusions are drawn for this specific region instead of a larger one rather (Zhang, 2022). Besides the structured schedule which is going to be further broken down into the periods for statement distribution and interview data collection the methods approach requires enough time for both survey administration and the interview. This limitation may limit the depth and width of the information gathering and analysis process (Haan&Wang, 2021). In the same way, it offers a too-narrow view of the role that teacher leaders play in coming up with academic success among college students in Ganzhou. It is an attempt to give information on the dynamics of leadership by teachers, managerial support, and peer collaboration difficulties in changing the education system and this research contributes empirical evidence to uncover the previously undiscovered territory (Han & Wang, 2021).

This research is important because it leans on the importance of multiple roles played by leaders in the Grade tertiary sector, mostly during times of change in online education in China (Liu et al., 2020). Through a survey on the influence that education leadership has on performance, the researchers intend to stress the participation of teachers in the promotion of a conducive learning climate; This becomes even more important in the online learning environment. Moreover, the study discusses the issues currently faced by teachers in online education with a highlight of their leadership role towards facilitating the achievement of successful outcomes (Liu et al., 2020). (Exploring through a review of teacher leadership domains, the paper provides some valuable hints on how teacher leadership styles can lead to student's sense of commitment, boost their engagement and eventually, boost their academic performance). Consequently, this would contribute to the improvement of teacher training programs and educational policies.

Ethical considerations related to research involving human participants are key among others and they include guaranteeing voluntary participation, free and well-informed consent, and confidentiality (Nayak and Narayan, 2019). The researchers should certainly give place to the participation autonomy as well as provide details concerning the purpose of the study, probable risks, and benefits, making the process of informed consent complete. In addition, security measures such as data anonymization are a necessity as they protect the privacy of participants who are at risk in online surveys. More importantly, ensuring ethical standards guarantees that participants' rights are not infringed upon while at the same time strengthening the worth of the research data obtained. Teacher leadership means that teachers can lead the way and make changes in schools for the students to the advantage of all, displaying characteristics described as agents of change, and excellent communicators (Harris & Jones, 2019). Within the context of academic settings, academic success involves performing well and reaching academic standards. Shared leadership involves an arrangement where power and authority are shared among group members and thereby it ensures cooperation and mutual decisionmaking. The professional development covers all the knowledge areas aimed to improve competency and lead to career promotion (The Economic Times, 2022). Educational technology allows them to study through such devices as computers and the internet, enabling flexibility and independent learning. Digital communication can be defined as the transmission of information through computer networks that encourage e-learning and personal communication (Martyushev et al., 2021).

#### Objectives

1. To descriptively identify factors fostering teacher leadership and its characterization.
2. To examine teacher leadership's impact on academic achievement post-educational sector changes.
3. To evaluate challenges teachers encounter in modern education system's teacher leadership adaptation.
4. To propose strategies addressing challenges for effective teacher leadership adaptation.

#### Method

Interpretivism research philosophy has been used in this study for the sake of investigating subjective experiences and perspectives of the teachers and students that deal with the cases of teacher leadership and its impact on academic success in China - Ganzhou. Through interpretivism, this study aims to acknowledge social and cultural dimensions of Ganzhou's educational context and thus have room for perceptive investigation of the leadership behaviours of teachers representing them. The society's perspective is the understanding that reality is a social construction and that individuals can interpret and give meaning to their experiences (Liu-Farrer et al., 2021). Hence, interpretivism equips researchers to unveil the latent influences, assumptions, and

values that guide leader behaviours and impact the learning outcomes of students. Qualitative methods like interviews and observation will help in understanding the multi-diverse perceptions and experiences of the teachers and students (Alvarado-Caushi et al., 2022). Such deep analysis will give wonderful insides into the complexity of teacher leadership and its impact on academic performance.

Accordingly, the investigation will be conducted in an inductive manner that seeks to discover the impact of teacher leadership on students' academic performance in Ganzhou, China. Inductive study starts from particular observations and the collection of data. That way, researchers can form theories based on the data available which they have earlier gathered empirically. This research starts by analyzing data on aspects of enhancing teacher leadership, evaluating the implications on academic excellence and determining obstacles teachers encounter in embracing modern education systems. This is a top-down approach and the main connotation of this method is to obtain deep concepts from the data itself, which will help in a complete understanding of the complex interactions between the teacher leadership and academic achievements in the local environment of Ganzhou. Explaining it all inductively reproduces the design of locally tailored approaches to deal with constraints and leads the way for teachers to rise in their effectiveness in improving student achievements.

Using the explanatory research design, the study will examine how teacher leadership affects student success among college students in Ganzhou, China. This layout enables people to get a firm perspective on how the different factors that contribute to the observed result. The purpose of such an explanatory research design that sets the contingent factors of teacher leadership and portrays how they work is to depict how teacher leadership influences academic success (Saleem et al., 2021). The other component of research is the education sector changes' aftermath considering the effect faced by teacher leadership on academic achievement. This component will reveal how the shifts in educational settings have transformed the relationship between teacher leadership and academic achievement. The study attempts to elicit challenges teachers grapple with and adapt to modern education systems and related factors that influence the implementation of teacher leadership in modern school systems. Finally, to come up with some tactics for tackling these challenges, the research aims to provide practical advice that could help to boost the positive impact of teacher leadership on student achievement in the particular case of Ganzhou, China.

The research utilizes a qualitative approach to researching the relationship between Teacher leadership and academic achievement among college students in Ganzhou, China. Qualitative methods enable uncovered and in-depth analysis of complex situations, like the roles of teacher leadership and its behaviour, the influence of teacher leadership on academic success in response to educational system changes, and challenges that are faced by teachers in adapting to modern educational systems (Kilag, 2024). Mediated by vehicular tools such as interviews and thematic analysis, qualitative research opens up the complex facets of teacher leadership and its influence on academic achievements entrapping Ganzhou, China. The study uses a secondary data collection approach, namely, researchers will draw information from already available sources such as academic journals, reports, and official documents, to examine the extent to which college students' academic performance is influenced by teacher leadership in Ganzhou, China. Secondary data is an umbrella for understanding multiple aspects of teacher leadership. Examples of those are the reasons or endeavours that are coming up, the effect on academic performance, and the teaching ability to cope with changes in education systems. Through the combination and analysis of the existing data, this approach provides insights related to the complicated connection between teacher leadership and student out-take without primary data gathering (Ho, 2022). Also, the different types of secondary data sources can give a wide range of perspectives and contexts, making the research more comprehensive and stronger in the location of Ganzhou, China.

This study has adopted thematic data analysis to broadly demonstrate the relationship between school teachers' leadership and academic success rate among the students of Ganzhou, China. Through this method of data analysis, a regularity in the themes that repeat themselves in qualitative data as a whole in connection to the objectives of the research can be identified and interpreted (May et al., 2022). Through thematic analysis of data, researchers may get glimpses into those elements that support teacher leadership, assess its impact on student performance in the face of education sector reforms, and judge the complexities teachers go through while adapting their leadership roles to the current education scenes. Thematic analysis will help in the study of intricate areas of teacher leadership and how it affects students' performance to the extent of developing strategies to cope with the challenges and improving the practices of leaders in universities in Ganzhou, China (Sarfraz et al., 2022). The study methodology is valid and reliable as it employs strict adherence to the interpretivism, inductive approach, explanatory research design, qualitative research strategy, secondary data collection, and thematic data analysis to ensure that the study exhibits the complex dynamics of teacher leadership and its impact on academic achievement in Ganzhou, China. Ethical issues such as ensuring the privacy and anonymity of participants' data, seeking proper consent, and using already available secondary data resources in a good way should be paid attention to. Researchers are not exempt from adopting an ethical code of practice, even when conducting thematic data analysis, to guarantee the findings' credibility and authenticity.

## Findings

### *Theme 1: Identification of factors fostering teacher leadership and its characterization*

The theme analysis of the factors that help to promote teacher leadership, define its characteristics, given articles, discloses some significant things. First of all, there are more and more people who believe that context is a predominant factor in transforming leadership in the educational environment into successful practices. Brauckmann et al., (2023) argue that such programs should take cognizance of the ecosystem and setting of the schools as they are essential for effective leadership. They assert the fact that surfacing the society-level facilitators and barriers is the key to delivering specific and valid leadership phenomena to individual schools. The outcome of this is that the training of teachers in developing context awareness is a prerequisite for the development of teacher leadership.

For the second point, Nguyen, Harris & Ng (2020) stated that teacher leadership research is changing, as the definitions and acts observed in different contexts have been diverse. They bring forth various contextual and methodological patterns on display in the field such that one learns the value of the contextual nuances that make or break teacher leadership enactment. This leads to the conclusion that the ability to grasp the context correctly should be deemed as the most important factor while categorizing a teacher's leadership.

Also, Li & Liu (2022) contribute to the construction of the thematic analysis by researching dyadic leadership and teacher leadership. Their research evidenced strong correlations between principal's transformational leadership and teacher leadership implying that principal's involvement in transformational leadership practices could result in teacher leadership activities. Further, they concluded that both principal transformational leadership and teacher leadership positively affect teacher self-efficacy and student achievement, with teacher leadership being also important for the latter. Such a scenario indicates that school

principalship and teachers' leadership practices are aligned in creating highly effective teachers and bettering student outcomes.

Overall, a theoretical framework is thus developed that illuminates the divergent extent of factors that encourage teacher leadership and its traits. It primarily underscores the function of cultural sensitivity, and dynamism inherent in the field of teacher leadership research, and the role played by principal and teacher leadership in determining the quality of education provision. Such revelations reveal the intricate mechanisms behind teacher leadership and this also makes paramount recommendations for both leadership development and educational policy. Therefore, these aspects become central pillars of the Ganzhou educational system.

**Theme 2: Teacher leadership's impact on academic achievement post-educational sector changes** The thematic analysis of the effect of the teacher leadership and the educational system achievement after the change, which is based on the research provided, discloses some crucial points. Among them, Edrees et al. (2021) have stressed the significance of leadership commitment to be transformative as it deals with the issues emanating from technological changes in nursing clinical education. The nature of their research reveals the fact that the training of transformational leadership has a positive effect on the pattern of the personal responsibility of clinical nursing educators. The personal knowledge and the self-evaluation of the leadership and the responsibility accordingly improve. This, however, implies that the primary purpose of transformational leadership programs is to help educators develop the flexibility needed for the development of education system reforms as a way of enhancing academic performance.

As the second, Szczepankiewicz et al., (2021) suggest a holistic style for climate literacy by promoting coordinated efforts across all levels of education. Climate-educational model is developed to take over the system of sustainability management education revealing the vital core of systemic change application. This implies that including climate education in educational systems is to empower students "for now and future" circumstances. Therefore, learners have an appropriate set of skills to succeed in these conditions with better academic outcomes in the environment. Thirdly, Hill IV (2020) brings up the issue of educational equity and what it means for academic success for kids. He notes that the existence of educational inequality worsens mediocrity and low levels of performance of certain student groups, showing that solving structural blockages of equity in education should be of the highest priority. It is thus clear that educational institutions that try to make education more accessible can overcome the drawbacks of the job market and educational sector changes on academic achievement, and give all students equal opportunities to succeed.

Across all, the thematic interpretation of leadership, structural changes, and equality is a factor that mainly shapes the academic attainment of schools in the era of educational sector reform. Inference made from the findings helps to highlight the relevance of the transformative leadership approach, holistic learning strategy and equity principles as important success factors in education in a time of rapid technological advancements.

**Theme 3: Challenges teachers encounter in the modern education system's teacher leadership adaptation** It identifies the major pedagogical issues teachers face during the integration of the teacher leadership concept in contemporary education, under the influence of the assigned readings. In addition, Pak, et al., (2020) claim that the teachers' practices should be in line with standards-based reforms which can only be achieved by identifying and addressing adaptive challenges during curriculum. Their research illuminates the extent to which the non-technical strategies, namely the dynamic capability, are adversarial to the adaptive factors that block the

teachers from changing their practice fundamentally. This recommendation implies that educational administrators ought to use both technical and transformational skills to help teachers adopt more appropriate leadership roles in the face of the radical developments expected in the education system.

Furthermore, Mirata et al., (2020), find that higher education institutions experience many challenges in the implementation of adaptive learning. Their study pinpoints three areas in which technology, teaching and learning, and organizational changes collide and affect people's daily routines. The results indicate a complex structure of adaptive learning implementation which further regards the attention of institutional leaders who are not only willing to embark into this digital realm but also offer trusted support. This therefore reveals the complexity of problems tackled in the framework of adaptive learning in the sense that a holistic approach that considers multifaceted individual and higher educational institution perspectives should be used.

This third study by Van Nuland et al., (2020) concentrates on the difficulties that emerged amid the COVID19 crisis among teacher educators in Ontario, Canada. The evaluation reveals the gaps in several areas, such as available online capabilities and helpful services, as well as teaching staff proficiency and deployment in online courses. This study brings these challenges into evolving complex adaptive systems, which highlight the intractable and diversified nature of the educational landscape this calls for innovative approaches for continual improvement in teacher training. This signifies that thinking in terms of complex adaptive systems might give one an understanding of how well the uncertainties and complexities that precipitate the change of external crises and disruptions in educational leadership.

Thus, the themes unearthed by thematic analysis emphasize the multi-tiered nature of challenges teachers face while reinventing their leadership roles in the current education system. These insights emphasize the fact that educational administrators need to be leaders who are ready to be flexible, and innovative and to deal with both technical and adaptive challenges. They have to support effective teacher leadership adaptation which thrives on a constantly changing educational environment.

## **Discussion**

The study that was conducted through the thematic analysis gives significant information on the factors that lead teachers to leadership, the effect of leadership on educational achievement after the change in the educational system, and the challenges that teachers encounter as they try to adjust to the current teacher leadership in the modern education system. Correspondingly, the inquiry examines the fundamental nature of teacher leadership and its associated effects on student achievement in the local setting of Ganzhou, China.

Initially, the topic of leadership characteristics and their source can be identified via thematic analysis and the concept of context sensitivity is highlighted as a factor in leadership development. Brauckmann et al. (2023) stress teacher leader programs' demand to account for contextual influencers and educational practices, which emphasizes that contextual consciousness should be included the leadership training. Displaying attention to the descriptive indication of the situation aiding teacher leadership indicates that context is one of the determining factors in cultivating leadership. Furthermore, this may suggest that the call for a nuanced exploration of teacher leadership characteristics and their implications, as per Nguyen, Harris, and Ng (2020), leads to the development of a sophisticated understanding of the multi-faceted issue. This exposes the goal of the study on teacher leadership and its effect on academic achievement in post-educational sector change by

emphasizing the evolving nature of leadership practices faced by education leaders in the context of the changing education landscape.

Secondly, the thematic analysis emphasizes how transformational leadership and teachers' professionalism may be leveraged to improve academic results under the backdrop of the educational sector overhaul. Edrees et al. (2021) proved the application of a transformational leadership program that plants the seeds of responsibility in educators, that futuristic harvests would be a possibility in the academic context. What is more, it enables people to assess the influence of teacher leadership on academic performance after educational sector reforms are in place, emphasizing the Potence of education improvement through leadership changes. Also, Szczepankiewicz et al., (2021) also recommend on the system level when environmental problems should be addressed and to include climate education in the curriculums. The identification of that contributes to the purpose of the study as it zooms in on the importance that leadership practices play in the betterment of the student's attainment as induced by environmental changes.

Additionally, this thematic analysis colourizes the multifaced challenges in adapting to these modern systems and the need for innovation as the means for effectiveness. Pak et al. (2020) further point out the significance of encountering adaptive challenges in developing a curriculum that aligns classroom practices with standardsbased enhancement. This concept applies to the challenges that teachers encounter in transitioning education systems to modern and educational reforms become complex and leadership tactics need to be adjustable. As well as that, Mirata et al. (2020) recognized three major challenges in the implementation of adaptive learning concepts which are technological, training, and organizational, stressing the necessity of integrated solutions to reduce these challenges. The success of the aim is brought out by the case of introducing strategies that effectively deal with teacher leadership challenges by considering various factors such as contexts from the complex world.

Thus, the thematic analysis reveals crucial issues such as how teacher leadership is expanding, the influence of a disrupted educational system on students' success, and the struggles teachers encounter in the transformation of the education system. These knowledges integrate into an expanded definition of teacher leadership laying down the basis for teacher leadership development as well as for educational policy development in the city of Ganzhou, China. Providing the support of contextual factors, facilitating the change of transformative leadership practices and adopting adaptive methods to cope with challenges, school principals may adequately help their teachers to adapt and thus bring about improved school performance in the world of new education.

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