Transformational Leadership and Incentive Strategies for Retaining Young Rural Teachers

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Rural schools worldwide are facing persistent challenges in retaining teachers, especially younger ones—an issue that threatens educational equity. This study aims to explore how transformational leadership can enhance motivation and reduce attrition among early-career teachers in under-resourced rural schools. Methodologically, the study is distinctive in focusing on the age-specific needs of young teachers and in combining Three-Factor Theory (Qu & Chen, 2016) with Transformational Leadership to design a rigorously validated survey instrument. Drawing on data from a rural secondary school in China, findings show that while financial rewards remain relevant, age-specific intrinsic motivators play a more crucial role in sustaining young teachers' commitment. The results highlight that beyond material incentives, leadership practices fostering trust, growth, and purpose are crucial. These insights provide timely guidance for school leaders and policymakers seeking to improve young teacher retention and advance educational equity in rural communities worldwide.

Keywords: transformational leadership, incentive strategies, rural teachers, leadership, rural schools

INTRODUCTION

Education is undergoing a digital transformation driven by rapid advances in science and technology. While this shift introduces new teaching and learning modalities, it also poses serious challenges to educational equity. Evidence from China and elsewhere indicates that disparities in internet infrastructure and teacher preparedness exacerbate the "digital divide" in rural areas (Guo et al., 2022; Li & Ranieri, 2013). In many rural communities, teachers often resort to trial-and-error learning when navigating new technologies due to inadequate professional development support(Kormos & Wisdom, 2021).A large-scale study of over 11,000 K–12 teachers in China found that rural teachers scored significantly lower than urban counterparts in ICT skills, and overall digital teaching competence, underscoring structural barriers to effective online learning (Li&Ranieri, 2013;).Especially during the COVID-19 pandemic, many rural schools struggled not merely due to lack of devices, but because of unreliable internet, scarce professional development, and low digital capacity among teachers (Guo & Wan, 2022).

There is also a persistent shortage of qualified teachers in rural schools, which hurts the quality of education in those areas (Liu et al., 2022). Governments have tried to fix this by launching programs like a national Rural Teacher Support Plan to encourage teachers to work in the countryside. These initiatives provide benefits such as salary allowances or housing support to make rural teaching more attractive. However, these efforts have only led to modest improvements on the ground. Research increasingly suggests that the key problem is not merely recruiting new teachers but retaining them. A critical international review concluded that while financial incentives may help attract teachers, they seldom ensure long-term retention; instead, professional development and early-career support emerged as more promising strategies (See et al., 2020). Similarly, a comprehensive review of the empirical literature found that although salary plays a role, working conditions, professional support, and school leadership are more decisive for teacher retention (Guarino, Santibañez, & Daley, 2006). A qualitative study also found that teacher retention in rural Zimbabwe depended more on job security, collegial and administrative support, and leadership behaviour than on salary (Gomba, 2015). Many young teachers in rural areas feel they lack professional growth, recognition, and job fulfillment (Liu et al., 2022). Even financial incentives like rural living subsidies have had limited success in keeping teachers from leaving for better opportunities (Jiang & Yip, 2024).

Many new teachers begin their careers in rural schools but soon move to urban schools for better career opportunities, higher pay, and stronger support. As found by Ingersoll & Tran (2023), teacher turnover—not teacher supply—is the main driver of staffing challenges in U.S. rural schools, especially in high-poverty areas. Rural postings often involve professional isolation, limited advancement, and insufficient support, leading to chronic turnover. This trend widens the education gap between urban and rural areas and undermines socio-economic development.

Because of these challenges, researchers and policymakers are paying more attention to what motivates teachers to stay. Some efforts focus on improving external incentives like pay bonuses, housing, or faster promotions, hoping these will increase teachers' job satisfaction (Liu et al., 2022). Comprehensive reviews (e.g. Carver-Thomas & Darling-Hammond, 2017) emphasize that administrative support, working conditions, and professional support structures play a larger role. Studies also show that many teachers leave due to lack of recognition, poor workplace culture, or insufficient non-financial support—even when pay is adequate (Scull et al., 2020). In rural settings, some findings reveal that only about one third of teachers cite salary or benefits as the main reason to leave, implying deeper motivational drivers are at play. In fact, teachers in rural schools stay longer when supported by school leadership and a positive school climate" (Frahm & Cianca, 2021; Evidence2Impact, 2023).

In light of these insights, there is a growing call for school leaders to change how they manage and support teachers. In educational settings, transformational leadership has been empirically linked to improved teacher satisfaction, organizational loyalty, and retention (White, 2022). In rural contexts, research in Ghana found that practices such as fostering collaboration, promoting a shared vision, and offering individualized support significantly contribute to a positive school climate and higher teacher retention

rates (Abdulai, 2025). Moreover, during disruptive episodes like the COVID-19 pandemic, digital transformational leadership emerged as a crucial factor. Berkovich and Hassan (2023) showed that principals who employed digital leadership—leveraging remote communication technologies while maintaining transformational behaviours—successfully enhanced teachers' commitment and school effectiveness during crisis-induced online instruction. At the same time, younger or early-career teachers often emphasize growth opportunities, belonging, and purposeful work as core motivations (Dumas, 2024).

This study therefore addresses a clear gap: while the principles of transformational leadership hold promise and have been validated in broader and sometimes urban settings, few empirical investigations have examined how these leadership practices can specifically enhance motivation and retention among young teachers in under-resourced rural schools. Accordingly, this study explores the following research questions:

RQ1: What are the current levels and patterns of job satisfaction among young teachers in under-resourced rural schools?

RQ2: What are the main factors that influence the overall job satisfaction of these young rural teachers?

RQ3: What kinds of incentives do young rural teachers prefer, and how can these preferences guide more effective leadership strategies?

By investigating these questions, this study aims to provide evidence-based and practical recommendations. Ultimately, the goal is to help schools navigate the challenges of the digital era while also motivating young rural teachers and upholding the core principle of educational equity.

THEORETICAL FOUNDATION

Over the past century, researchers have developed many theories to explain human motivation in the workplace. These theories are often grouped into the following three broad categories (Kanfer, 1990; Steers et al., 2004), each offering a different perspective on what drives people — in our case, what drives young rural teachers.

Needs-based theories focus on fulfilling basic human needs to spark motivation. They propose that people are motivated when their fundamental needs are met, progressing from lower-level needs to higher-level goals. Examples include Maslow's hierarchy of needs (1943), Herzberg's two-factor theory (1959), McClelland's achievement motivation theory (1961), and Alderfer's ERG theory (1969). These theories highlight factors like financial security, social belonging, and personal growth as essential needs that influence work motivation.

Process-based theories focus on the cognitive processes behind motivation, such as expectations, goals, and perceptions of fairness. They look at how people make decisions about effort and persistence. Vroom's expectancy theory (1964), Adams's equity theory (1965), and Locke's goal-setting theory (1968) are key examples. These theories examine how teachers weigh their expected outcomes (e.g. rewards or

recognition), compare their situation to others (fairness), and set goals, which in turn affect their motivation and job satisfaction.

Outcome-based theories focus on how rewards, feedback, and consequences shape motivation after a task is done. They emphasize reinforcement and learning from results. Examples include Skinner's reinforcement theory (1953), which looks at how positive or negative reinforcement affects behaviour; Weiner's attribution theory (1985), which explores how people explain their successes or failures; and Kluger and DeNisi's feedback intervention theory (1996), which examines how receiving feedback can improve performance and motivation. These theories suggest that recognizing and rewarding desired behaviour (and providing constructive feedback) will encourage teachers to continue those behaviours.

In the Chinese educational context, Qu's Three-Factor Theory of teacher motivation (Qu, 2016) extends Herzberg's two-factor model by adding a middle layer of "disincentive factors." The framework identifies three types of influences: basic needs, contextual pressures, and deeper psychological drivers. Foundational conditions such as adequate pay, job security, and reasonable working hours help prevent dissatisfaction, but they are not enough on their own. Contextual barriers like heavy administrative tasks, rigid structures, and social expectations can still reduce motivation. Beyond avoiding dissatisfaction, teachers also need recognition, professional growth, and a sense of purpose to feel truly engaged. Qu argues that motivation requires both the removal of disincentives and the promotion of positive motivators. This three-factor approach offers a more nuanced view of teacher motivation in China, showing that even when basic needs are met, cultural and institutional challenges may continue to undermine young teachers' enthusiasm in demanding or under-resourced schools.

Each of the motivation theories above sheds light on one part of the motivation puzzle. Needs-based and process-based theories help us understand what teachers want and how they think, while outcome-based theories emphasize the importance of feedback and reinforcement. However, keeping young rural teachers motivated and satisfied likely requires a holistic approach that combines these elements. In other words, improving motivation in this context means addressing basic needs (so teachers are not dissatisfied), providing fair processes and clear goals, and offering positive feedback and growth opportunities. This is a complex task that goes beyond any single theory.

Transformational leadership theory offers an integrative framework that can tie these pieces together. Transformational leadership is a leadership style grounded in four core behaviours—idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration—that inspire followers toward a shared vision and elevate their commitment beyond routine expectations (Bass & Avolio, 1994; White, 2022; Abdulai, 2025). It is a leadership style where leaders inspire and empower their staff to achieve more than what is expected by appealing to higher values and providing strong support (Bass & Avolio, 1994).

In a school setting, a transformational principal tries to bring out the best in teachers through several key behaviours. First, they articulate an inspiring vision for the school that gives teachers a sense of purpose. Second, they encourage innovation and

intellectual stimulation by allowing teachers to try new teaching methods and think creatively. Third, they offer individualized consideration, meaning they mentor teachers, listen to their needs, and support their professional development. Fourth, they lead by example (sometimes called idealized influence), showing commitment, integrity, and enthusiasm in their role (Bass & Riggio, 2006). This leadership approach speaks to both extrinsic and intrinsic motivators: it can provide teachers with recognition and resources (extrinsic needs) while also fulfilling their desires for personal growth, meaningful work, and belonging (intrinsic needs). Studies in various educational contexts have shown that when principals use a transformational style, teachers tend to feel more motivated and are more committed to their school's mission (Nguni, Sleegers, & Denessen, 2006; Leithwood & Jantzi, 2006). By creating a supportive and mission-driven school culture, transformational leaders help teachers feel valued and part of a collective effort, which can reduce feelings of isolation or stagnation.

In rural schools, transformational leadership can play a key role in addressing challenges such as isolation, scarce resources, and limited career opportunities. By recognizing teachers' achievements, encouraging collaboration, and offering mentoring and skill-building opportunities, leaders can reduce professional isolation and support growth. In this way, even small under-resourced schools can foster a sense of purpose and empowerment, helping teachers stay committed rather than leaving for urban schools.

In this study, transformational leadership is adopted as a core framework. By combining insights from classical motivation theories with transformational leadership, the analysis aims to identify strategies that both meet teachers' needs and strengthen retention in rural contexts.

METHOD

To address the research questions outlined above, this section presents a case study investigating the incentive expectations and satisfaction levels of young rural teachers. The focal site for this research is a secondary school located in Tai'an, a representative rural area in eastern China. This school has long struggled with limited educational resources, geographic constraints, and the continuous turnover of qualified staff. Despite earnest efforts by the administration to improve instructional quality and teacher satisfaction, longstanding structural and contextual challenges persist— especially in the face of emerging digital technologies and evolving pedagogical demands.

Data Collection

The primary research instrument was a structured questionnaire, which was developed based on Qu's (2016) Three-Factor Theory to reflect social pressures, institutional rigidity, and context-specific constraints commonly observed in the Chinese educational system. This theoretical framework distinguishes among motivators, hygiene factors, and disincentives, providing a more comprehensive and context-sensitive model of teacher motivation. In parallel, components of Transformational Leadership Theory (Bass & Avolio, 1994) were integrated into the instrument to assess the influence of

leadership practices such as individualized support, vision-driven guidance, and professional empowerment on teacher engagement.

The final questionnaire consisted of 21 items, of which the first 20 were designed to measure teachers' satisfaction levels across key dimensions.For instance: *"I feel that my current compensation shows a stable upward trajectory,"* and *"The school provides sufficient space for my professional development."* The last item captured incentive preference, asking teachers to indicate which form of incentive (e.g., financial, professional, or recognition-based) they considered most important. All items were rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). For visualization purposes, the raw 5-point scores were linearly rescaled to a 0–10 range to enhance interpretability, whereas all statistical analyses (including reliability testing and PCA) were conducted using the original 5-point data to ensure analytical precision. Items were reviewed by educational researchers and frontline administrators to ensure content validity and contextual appropriateness for use in rural school settings.

The survey was administered at a representative rural secondary school in Tai'an, China. Among the school's 121 teachers, over half were under the age of 35 or had fewer than 15 years of teaching experience. To target the population most relevant to this study, the questionnaire was distributed to 62 selected early-career teachers, and 60 valid responses were collected, achieving a high response rate.

To assess the reliability of the instrument, internal consistency was calculated using Cronbach's alpha, which yielded a result of 0.971, indicating excellent reliability. For construct validity, a Principal Component Analysis (PCA) was conducted on the 20 items. The analysis showed that the first component accounted for 68.6% of the total variance, while the first three components cumulatively explained 79.9%, suggesting a clear and interpretable factor structure (see Figure 1). These results confirm that the instrument is both psychometrically sound and theoretically grounded, and it is therefore suitable for investigating motivational dynamics among young teachers in under-resourced school environments.
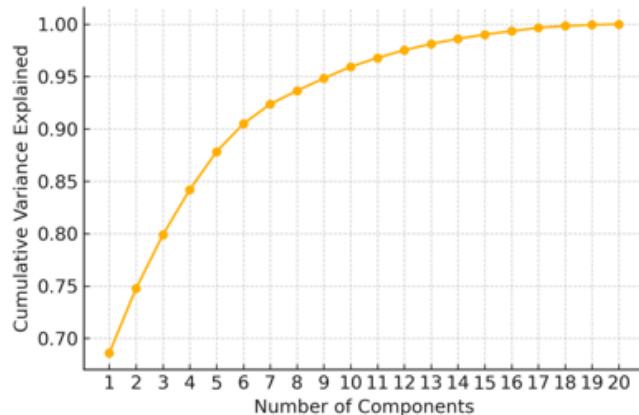

Figure 1
Cumulative Variance Explained by Principal Components

Data Analysis

A descriptive statistical review was conducted to provide a general overview of how young teachers felt about their work environment. Most items had an average score above 4, suggesting that many teachers were fairly satisfied overall. Still, some areas stood out with lower scores. In particular, the school's welfare system and teacher incentives were rated less positively (Figure 2). This indicates that while general satisfaction was high, important support systems may not fully meet teachers' needs, which could affect motivation in the long run.
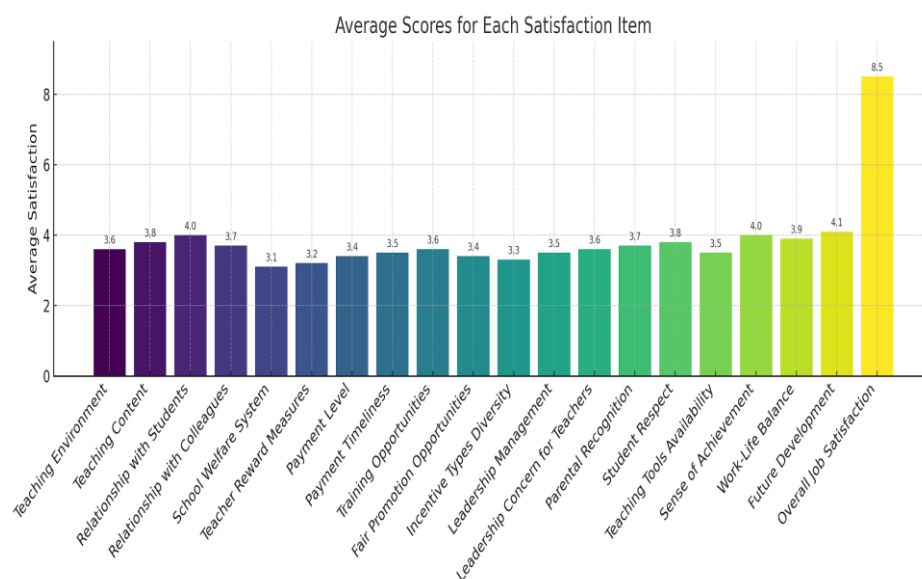

Figure 2
Average Scores for Each Satisfaction Item

To pinpoint which aspects show the most significant gaps, Figure 3 presents the scores for each item. Areas such as welfare, incentives, and training opportunities not only had lower averages but also showed more variation in responses. Figure 4 further highlights these patterns by comparing both the mean and the standard deviation. Together, these results suggest that while most teachers are satisfied with their general work environment, they are less positive about the welfare system, the way incentives are managed, and the availability of training. The greater variation in these items also indicates that teachers' experiences are uneven—some feel well supported, while others do not. This points to the need for school leaders to improve welfare policies, design clearer and fairer incentive systems, and ensure training opportunities are both adequate and relevant.

This analysis went beyond the general descriptive results by examining Overall Job Satisfaction with correlation analysis and linear regression. These methods helped identify both the associations between factors and their independent effects.

The correlation analysis (Figure 5) revealed several strong links. Teaching Environment and Relationship with Students showed a coefficient of 0.68, indicating that supportive environments foster positive teacher–student interactions. School Welfare System and Teacher Reward Measures (0.75), as well as Leadership Concern for Teachers and Collegial Support (0.72), highlighted the importance of welfare, incentives, and leadership in shaping satisfaction. Training and promotion opportunities were also closely related (0.71), underlining teachers' desire for career development.
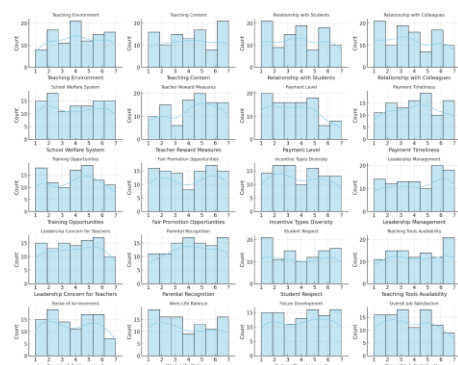

Figure 3
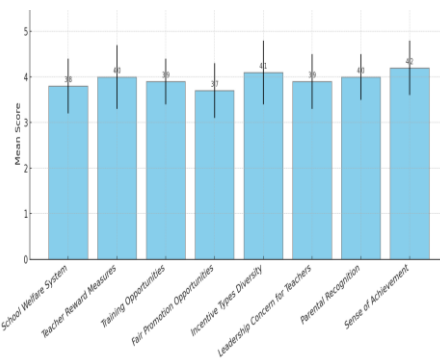
Distribution of Satisfaction Scores for Each Item

Figure 4

Mean and Standard Deviation of Divergent Items

The regression analysis (Figure 6) showed that School Development Prospects had the strongest effect: a one-point increase in this factor led to a 1.0367-point rise in overall satisfaction. Leadership guidance and a sense of achievement were also significant positive predictors. By contrast, School Work Environment and Facilities had a negative coefficient, suggesting that physical conditions alone may not guarantee satisfaction and could be outweighed by broader institutional or cultural factors. Together, these results indicate that vision, leadership, and professional growth opportunities matter more than surface-level conditions. For school leaders, this means that fostering trust, supporting career development, and aligning institutional goals with teachers' aspirations are more effective strategies for retaining young teachers than focusing only on material improvements.

Measuring satisfaction shows how teachers feel, but understanding their underlying motivations explains why they feel that way and how schools can design more effective support systems. A focused analysis titled "Incentive Preferences among Young Teachers" was carried out to uncover these preferences.The data came from a questionnaire that allowed respondents to select multiple incentive types. To make sense of the results, each combined response was broken down and the frequency of each individual incentive was counted.

The findings (Figure 7) revealed several key insights. "Promotion Opportunities" was selected 46 times, making it the most valued incentive among young teachers. This shows that many are thinking about their long-term career growth. Close behind,

"Honor Incentives" received 45 selections, highlighting the strong role of recognition and praise in shaping motivation. "Material Incentives" followed with 40 responses, suggesting that financial rewards remain important, though not necessarily the top priority. Other options like "Leadership Recognition," "Emotional Incentives," and "Communication Incentives" were also chosen, but at noticeably lower frequencies.
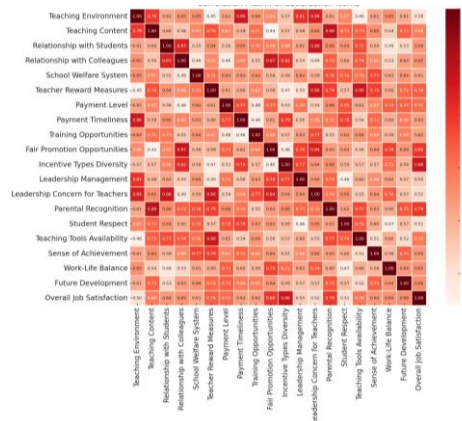

Figure 5
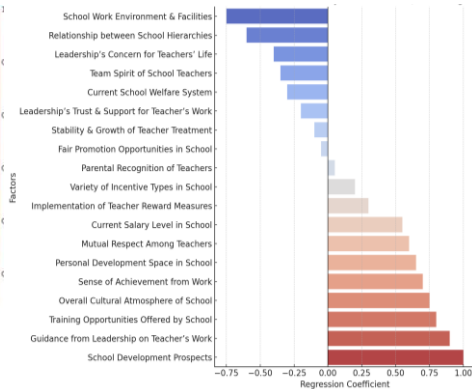Correlation Matrix of Satisfaction Items

Figure 6
Influence of Factors on Overall Job Satisfaction

These results suggest that young teachers are driven not just by pay or praise, but by a mix of career development, professional respect, and emotional support. For school leaders aiming to build stronger incentive systems, this data offers clear direction: support growth, celebrate contributions, and stay attuned to teachers' evolving needs.
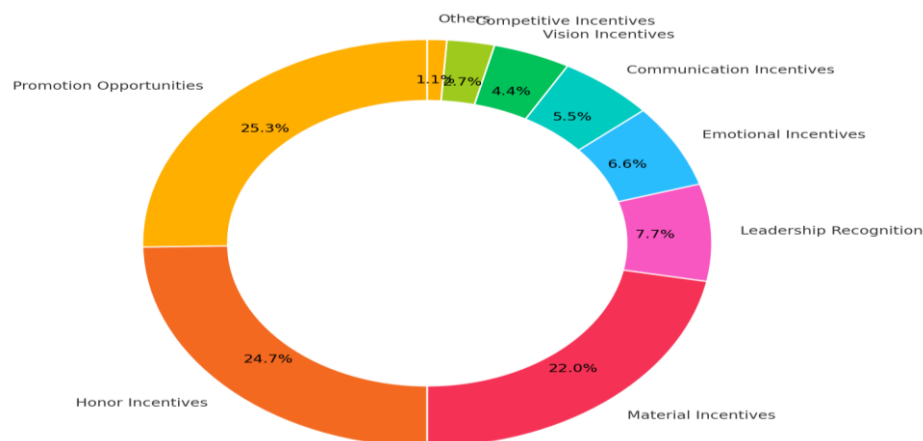

Figure 7
Incentive Preferences of Young Teachers

Key Findings and Implications

This case study highlights several factors that influence young teachers' job satisfaction and incentive preferences in rural schools. Survey results show that most participants reported generally positive attitudes toward their work. However, areas such as welfare systems, teacher incentives, and professional development opportunities stood out as points of concern, especially when lower average scores were paired with greater variation in responses.

Further statistical analysis revealed that the school's future development prospects had the strongest positive impact on overall job satisfaction. At the same time, factors such as work environment and facilities showed more complex relationships. When it came to incentive preferences, young teachers expressed the greatest interest in career advancement, followed closely by recognition and material rewards. These findings suggest that while financial support remains relevant, long-term engagement depends more on meaningful growth opportunities and a supportive culture.

Taken together, the findings underscore the need for leadership strategies that reflect young teachers' evolving priorities. Fostering trust, creating room for growth, and aligning institutional goals with personal values can help strengthen satisfaction and reduce turnover. These lessons are especially important for rural schools seeking to build committed and motivated teaching teams in challenging environments.

RECOMMENDATIONS

The previous analysis highlights important trends in how young teachers view motivation and satisfaction. These findings provide not only theoretical insight but also practical guidance for leadership and policy. As Gariddesler and Zeng Xiangquan (2007) emphasize, incentive design must consider the diversity of personality traits, abilities, values, and needs among individuals. This is especially true for young educators, whose generational traits and career stages demand more flexible and personalized approaches.

The following section draws on both the empirical results of this study and key theories. It outlines guiding principles and actionable strategies for creating fair, meaningful, and context-sensitive incentive systems that align with the values and aspirations of young rural teachers. These recommendations are especially relevant for schools aiming to improve retention and build stronger, more motivated teaching teams.

Foundational Principles for Incentive Design: Fairness and Need-Based Motivation

Wang (2025) found that teachers' intrinsic motivation for professional development is significantly influenced by their perceptions of organizational fairness, with trust and organizational identification serving as key mediators. This highlights that it is not only the absolute amount of remuneration that matters, but also whether the distribution of rewards and the processes behind them are seen as fair and transparent. In many Chinese middle schools, compensation remains closely tied to professional titles rather than actual workload or contributions, creating a mismatch between effort and reward.

For younger teachers who have not yet advanced in the promotion hierarchy, this often leads to frustration and diminished job satisfaction. To address these challenges, incentive systems should introduce transparent and differentiated reward mechanisms, establish clear evaluation criteria, and ensure respectful communication. By reinforcing both distributive and procedural justice, schools can build greater trust and sustain long-term engagement among young educators.

Maslow's (1943) hierarchy of needs posits that motivation arises from a range of needs—from basic (physiological and safety) to higher-level (esteem and self-actualization). Recent findings also support this hierarchy in contemporary educational settings: a 2025 study in China shows that when teachers feel autonomy, competence, and support, their motivation increases significantly (Su & Wang, 2025). Young teachers—especially those born in the 1980s, 1990s, and 2000s—are more inclined toward personal growth, autonomy, and recognition rather than just financial rewards. Our survey results reinforce this trend: incentives like career advancement and public recognition were preferred more strongly than material benefits. This suggests that traditional incentive models focused solely on monetary compensation may not meet the needs of younger cohorts. Therefore, effective incentive systems should align with evolving psychological needs and value orientations by supporting autonomy, professional development, and meaningful recognition.

Strategic Measures

Transformational leadership provides a comprehensive framework for meeting the complex motivational needs of young teachers. According to Bass and Avolio (1994), transformational leaders inspire and empower followers by leveraging four core dimensions: idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation. In the following subsections, we translate these dimensions into actionable strategies tailored to rural educational contexts.

One key strategy is to cultivate an inclusive school culture while enhancing leadership charisma. Teacher commitment often depends on the extent to which they identify with the school's values and environment. In many rural schools, existing narratives focus heavily on student outcomes, which may overlook the identity and contributions of teachers. Even in teacher-centered cultures, traditional or hierarchical values may clash with the expectations of younger educators. School leaders should therefore build inclusive, open, and diverse environments that validate young teachers' presence and promote a sense of belonging and intrinsic motivation.

Another important approach is to expand professional development pathways and foster intellectual stimulation. Young teachers typically seek continuous growth and adaptability. To meet these needs, schools should offer varied and high-quality learning opportunities, such as in-service workshops, peer mentoring, and exposure to innovative teaching practices. Where possible, policies like teacher rotation can allow educators to experience different teaching environments, encouraging new ideas, collaboration, and long-term professional renewal.

Equally important is the advancement of human-centered management practices. Supporting young teachers requires an understanding of both their professional goals and personal challenges. Transformational leaders can act as mentors by maintaining open, empathetic communication, responding to staff needs, and co-developing solutions. Allowing for flexible scheduling and more balanced workloads—where feasible—can support teacher autonomy, reduce stress, and strengthen commitment to the school.

Providing non-material recognition and psychological support is also essential. While financial rewards matter, symbolic appreciation carries significant motivational value. Drawing on the "Rosenthal effect," leaders who express confidence in teachers' abilities can enhance their motivation and performance. Simple but formal recognition methods—such as public praise, certificates, or thank-you notes—can help build a culture of affirmation. These gestures support a sense of professional dignity and remind teachers of the meaning behind their work.

CONCLUSION

This study explored how transformational leadership can enhance the motivation and retention of young rural teachers in under-resourced schools. Focusing on a rural school in China, it examined teachers' satisfaction, key motivational factors, and preferred incentives, all within the context of educational equity and rural talent retention. Findings showed that while financial incentives matter, recognition, career growth, and a sense of belonging are more influential. Job satisfaction was strongly linked to school development prospects, collegial support, and leadership care. These results highlight transformational leadership—through individualized support, inspiration, and intellectual growth—as a promising approach to meeting teachers' diverse needs and fostering long-term commitment.

This contributes to the growing body of literature at the intersection of teacher motivation, leadership theory, and rural education reform. Theoretically, it affirms the applicability of transformational leadership beyond corporate or urban contexts, highlighting its relevance in rural schools where intrinsic motivation plays a critical role. Recent findings also support that transformational leadership enhances collective teacher self-efficacy by improving satisfaction with job resources (Sánchez-Rosas et al., 2023), reinforcing its role as a motivational lever in resource-constrained school environments.

However, as a single-site case study, the generalizability of the findings remains constrained. While the use of structured questionnaires provided valuable quantitative insights into the motivational profiles of young rural teachers, the absence of qualitative data limits a deeper exploration of their lived experiences, personal interpretations, and contextual nuances.

Future research would benefit from a mixed-methods approach that combines surveys with semi-structured interviews or focus groups, allowing for richer triangulation and a more holistic understanding. Additionally, expanding the sample to include multiple

rural schools across different provinces or even countries and adopting longitudinal designs could further enhance the robustness and transferability of the findings.

ETHICAL CONSIDERATION

This study was conducted in accordance with ethical research guidelines. All participants were informed about the nature and purpose of the research prior to data collection. Participation was voluntary, and informed consent was obtained from all respondents. Anonymity and confidentiality of all participants were strictly maintained. Data was stored securely and used solely for academic research purposes. No identifying information was included in the published results, and the study posed no foreseeable risk to participants. This research was reviewed and approved by the relevant academic ethics committee.

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