

A STUDY TO COMPREHEND THE ROLE OF INCENTIVE MECHANISM AND TEACHER PROFESSIONAL DEVELOPMENT IN EDUCATIONAL MANAGEMENT

¹Liu Taiyu, ²Archita Chakraborty, ³Srikrishna Banerjee

¹²³Lincoln University College, Petaling Jaya, Malaysia

Abstract

Looking at educational management in China through the lens of professional development and reward systems for teachers was the focus of this study. The purpose of the study was to get a better understanding of how financial incentives affect teacher motivation, organisational effectiveness, and student learning outcomes. The study focused on what extent to incentive schemes might help with school management and teachers' professional development. That was the main query the research set out to answer. A structured questionnaire was used in order to collect data for the quantitative investigation. The researcher received 682 out of 720 questionnaires, and after removing incomplete responses, they were able to pick 649 viable samples for the final analysis. The relationships between the variables were examined using analysis of variance (ANOVA), factor analysis, and descriptive statistics. Financial incentives had a positive effect on educational management because they increased teachers' commitment, job satisfaction, and engagement in professional development opportunities. The results also showed that well-designed incentive systems for instructors were more likely to participate in training programs to use innovative teaching strategies and actively support institutional goals. Financial incentives were shown to be essential for effective school administration with well-defined professional development pathways. In order to improve school quality and teacher performance over time, it emphasised the need for open, equal, and transparent performance-driven incentive systems. The results of the research might assist lawmakers to administrators, and educational leaders in developing incentive schemes that enhance teacher professional development and academic performance.

Keywords: Incentive Mechanism; Financial Incentives; Professional growth; Educational Management; China.

1. Introduction

Two key areas of focus in education policy are the planned implementation of incentive programs and the continuous professional development of educators. Modern educational systems mostly depend on teachers to not only impart information but also to influence change that affects student achievement to school efficacy and culture. Given the recent expansion of curricular aims to include competency-based teaching and digital literacy with holistic learning to improve teacher capacity. Educator's job motivation and to experience job satisfaction with commitment to professional development are significantly impacted by both monetary and non-monetary incentive schemes. When effectively implemented, these systems encourage positive behaviours such as peer collaboration, reflective teaching, and active engagement in professional development opportunities (Lin, 2023). To improve school effectiveness and student learning in the face of the ever-changing educational administration environment, professional development for teachers is crucial. One such approach that might be considered as a main mechanism for this is the implementation of incentive systems that are specifically designed to support teacher professional development. Financial incentives, such as bonuses and allowances, as well as non-monetary ones like autonomy, opportunities for professional growth, and acknowledgement teaching, may motivate students to continue learning and to be innovative in their group projects and pedagogy. Within the broader framework of instructional management, this study endeavours to understand the interconnected role of incentive systems and

instructional professional development. Teachers' work satisfaction at higher education institutions is influenced by Financial and Moral Incentives. Understanding the relationship between incentives and work satisfaction is crucial. Because they are happy in their positions, the majority of instructors at higher education institutions provide high-quality instruction (Lourmpas et al., 2024). The study's overarching goal was to facilitate the development of long-term, high-quality educational environments by shedding light on the interplay between these factors in the hopes of informing better practices in school leadership.

2. Background of the Study

Good educational administration is very important for student results and teacher effectiveness. Educational administration helps to improve the overall output of the school. Teacher professional growth and incentive programs are now equally important to enhancing teaching methods to motivating teachers and bringing about long-term changes in education in this huge area. Many educational institutions utilise well-planned monetary and non-monetary incentives to motivate teachers to perform a better job and be more innovative in their own professional development. Teachers may also improve their classroom management abilities, learn more about education, and keep up with the changing needs of technology and curriculum via ongoing professional development. Policymakers and scholars are increasingly paying more attention to incentives and how they affect career growth (Rostini et al., 2022). Modernisation and equity with quality enhancement have been the main focuses of educational reforms in recent decades. Due to differences in school administration practices and unequal opportunities for professional development with unequal levels of teacher motivation have remained elusive. There is significant regional diversity in incentive distribution to promotion paths and performance evaluations under the highly structured administrative frameworks that many Chinese schools operate under. More effective methods for training future teachers are desperately needed because of the transition in China from test-based to quality-based education. Incentive schemes are increasingly being used to acknowledge outstanding teaching to boost training program participation and improve professional growth (Hao, 2023). There is ongoing discussion on their actual impact, long-term effectiveness, and compatibility with teachers' fundamental motivations. Designing policies that promote teacher development and school improvement requires an understanding of how incentive structures affect Chinese education administration (Alnsour & Kanaan, 2021). The purpose of this research was to emphasise the influence of financial incentives on management and to investigate the interaction between incentive mechanisms within Chinese educational management.

3. Purpose Of the Research

This study aimed to analyse educational management in Chinese educational institutions through the lens of incentive mechanisms and especially highlighting the financial incentives. The researchers set out to find out if well-planned incentive schemes had a noticeable effect on educator engagement with career advancement as well as school output whole. It examined the effects of financial incentives to allowances alongside other financial benefits on teachers' commitment and engagement in learning activities. This study's secondary objective was to determine whether or not these incentives led to an improvement in organisational performance, in classroom practices, and in students' final grades. Another goal of the research was to look at how well financial incentive systems fit with the objectives of educational administration, including using resources well and evaluating teacher effectiveness. The educational management encourages lifelong learning. The study also sought to identify deficiencies in current incentive structures and assess their equitable distribution and successful implementation across various institutional contexts. The research aimed to provide empirical information about these correlations to assist policymakers, administrators, and school leaders in formulating more effective incentive-based ways to foster teacher growth and improve the overall quality of education. The results were anticipated to enhance decision-making and facilitate enduring educational improvements.

4. Literature Review

There are several literatures shed the light on education management and the role of incentive mechanism in academic administration. Financial incentives and recognition programs to evaluations based on achievement, and positive work environments are a few examples of incentive systems in the educational system. Raising student learning outcomes is their top priority and they want to do this by increasing teacher motivation. Both academics and practitioners agree that teachers are the single most significant factor influencing student achievement in the classroom, making it all the more vital to understand how incentives impact teachers' professionalism (Kooli & Abadli, 2022). A study explored the true effect of financial and moral incentives on higher education institutions' teachers' job satisfaction. Financial incentives in the form of money or tangible goods. The study primarily focused on two types of financial incentives: employee health plans and promotions. The two most prevalent types of moral incentives recognition, success, and personal development are also included in the study. The core concept of ethical imperatives is not financial or intangible. The study found that incentives had a positive and significant effect: monetary incentives, such as a promotion or group insurance, and one moral incentive that was achieving goals and getting praise for teachers' efforts (Kwan, 2020). Another study focused on the five elements that affect incentives. These elements were pay and benefits and experience a feeling of belonging. The incentive includes a system for training and promotions. They shed light on rewards like an assessment of one's performance as well as the workplace environment. They also mentioned the personal spiritual award. The study concluded that professors at H Private University are generally dissatisfied with the incentive system as well as the current system was unable to satisfy their demands. If the salary and promotion systems were getting better the job satisfaction level would be better (Booth et al., 2021). A previous study analysed that Workplace motivation was based on the desire to fulfil a given goal. and job motivation was a meaningful construct. They defined employee pleasure at work relies on effectively inspiring individuals. They also discussed about the human resource management and the approach to human resource management in educational institutions that made use of incentive systems to provide appropriate citations. Teachers to administrative personnel with other teachers might be able to summarise their work overtime and create a good work motivation effect if the appropriate reward schemes could also meet their psychological needs (Yan, 2024). These papers helped to get the information about the incentive mechanism and its impact on education management in China.

5. Research Question

- What is the influence of Financial Incentives on Educational Management?

6. Research Methodology

6.1 Research Design

The researchers quantitatively analysed the data they had gathered using SPSS version 25. The researchers used descriptive statistics to arrange the findings. The descriptive analysis used odds ratios and 95% confidence intervals to look for relationships. If the p-value was less than 0.05, the results were deemed statistically significant. To determine if there were any differences between the groups, analysis of variance (ANOVA) was used. They verified the validity of the notions using factor analysis. All statistical analyses were conducted using Microsoft Excel and SPSS.

6.2 Sampling

For this study, the researcher used a random sample technique. To calculate the overall sample size needed for the investigation, the researcher used the Rao-soft program. In order to collect sample data for the research, 720 questionnaires were sent out. A total of 682 people completed and submitted the questionnaires in order to take part in the research. 33 sets of incomplete questionnaires were eliminated from the collected sets. As a result, 649 was the final sample size.

6.3 Data and Measurement

This poll initially just requested the most basic demographic information. A 5-point Likert scale was used in Section B of the survey to allow respondents to rate on a number of relevant parameters. Quantitative secondary data points selected from reliable online and offline sources were used to supplement the core data collection.

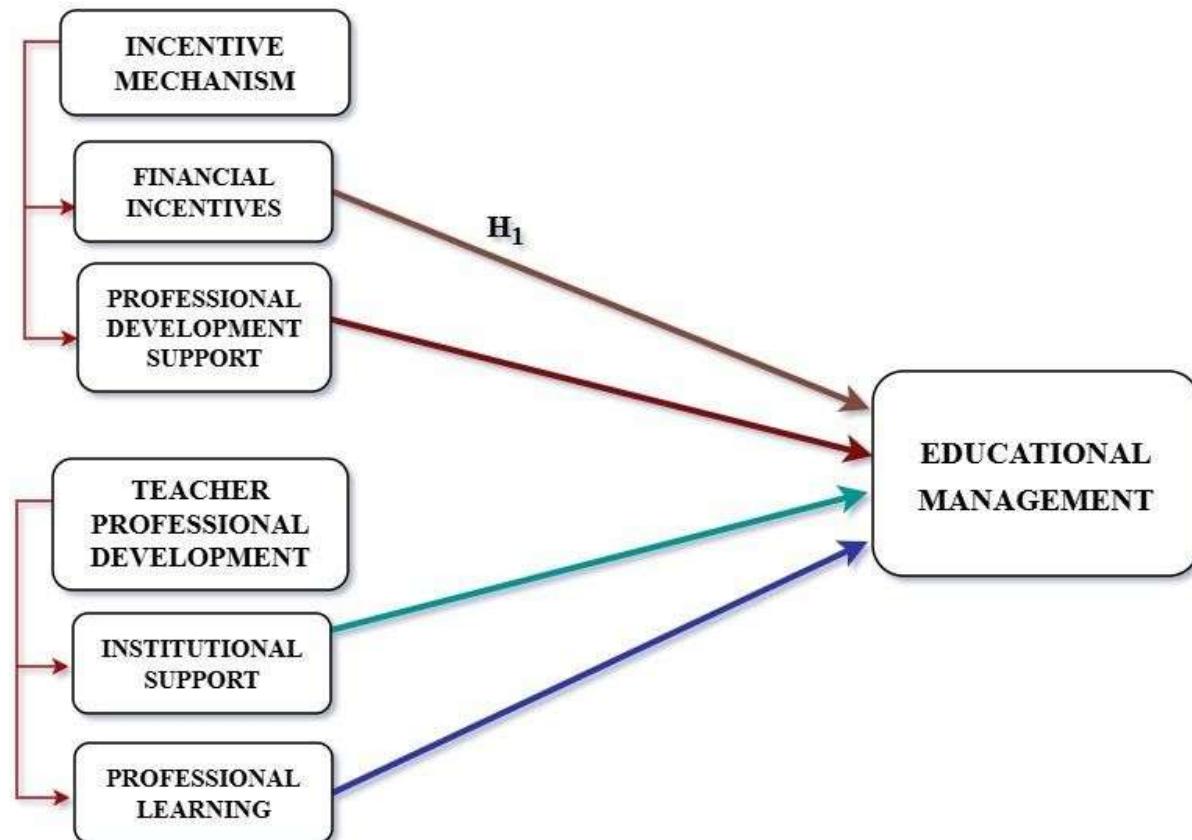
6.4 Statistical Software

SPSS version 25 and Microsoft Excel were used for all statistical analyses.

6.5 Statistical Tools

The researchers started with a descriptive statistics-based data analysis. Researchers used factor analysis to make sure the constructs were reliable and valid. Analysis of variance (ANOVA) was employed to assess each dataset. They used probability ratios and 95% confidence intervals to examine the relationships between the variables. The threshold for statistical significance was set at a p-value of less than 0.05.

7. Conceptual Framework



8. Result

- **Factor Analysis**

The objective of Factor Analysis (FA), which seemed to identify novel components, was to use open-source datasets. Regression coefficients were often used by doctors to focus on possible diagnoses when there were no symptoms. Finding discernible patterns, anomalies, and flaws was the primary goal of using mathematical models. The Kaiser-Meyer-Olkin (KMO) test was used by certain academics to assess the results of regression analysis. This study supported the model's dependent variables and inductive definition. There might have been some duplication, according to the data. Scientists might try to reduce the size of the image to make it easier to understand. If they utilised MO, they might have a number between 0 and 1. A KMO score of 0.8 to 1 suggested that there were enough samples. According to

Kaiser, in order to go forward, the following had to be completed: Kaiser confirmed that each of these conditions had been met: The mean falls between sixty-nine and sixty-nine within the limited range of 0.050 to 0.059. For intermediate purposes, ground grades typically ranged from 0.70 to 0.79. Has an HPS between 0.80 and 0.89.

They marvel at the range of 0.90 to 1.00.

Table 1: KMO and Bartlett's Test

Testing for KMO and Bartlett's

Sampling Adequacy Measured by Kaiser-Meyer-Olkin 0.988

The results of Bartlett's test of Sphericity are as follows:

approx. chi-square = 7315.249

df = 190; sig. = .000

Table 1: KMO and Bartlett's Test

KMO and Bartlett's Test ^a		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.988
Bartlett's Test of Sphericity	Approx. Chi-Square	7315.249
	df	190
	Sig.	.000
a. Based on Correlations		

This was how many people arrived at the claims in their samples. The researchers would verify the statistical significance of the correlation matrices using Bartlett's Test of Sphericity. The sample size's Kaiser-Meyer-Olkin score of 0.988 suggested that the study might proceed with confidence. The Bartlett sphericity test yielded no positive findings, as shown by a p-value of 0.00. Researchers might conclude that the correlation matrix was not an identity matrix if it passes Bartlett's Sphericity test.

- ❖ **Independent Variable**
- **Incentive Mechanism**

A well-thought-out incentive mechanism is a methodical way to encourage people or groups to do a desired activity. One popular strategy to encourage individuals or groups to act in a manner that supports set objectives to use rewards for good behaviour and penalties for poor behaviour. These approaches may be advantageous to sustainability initiatives due of their versatility in promoting eco-friendly habits. It is a way to depict the connection between the driving subject and the driving object via a succession of idealised systems (Xiang, 2021). It is a variety of tools used to motivate employees. Incentives help employees meet the organisation's goals by consistently rewarding and fostering behaviour that meets those standards. Consequently, the organisation continues to grow and change. An incentive system usually includes rewards that might be big or small in education. These awards may help instructors grow professionally. This can improve student results and the school as a whole. These benefits might be financial, like bonuses or prizes. It does not always have to be financial. It may be praise for doing well at work or a chance to learn more about their field. The major goal of incentive mechanisms is to create a system that encourages dynamic work and keeps teachers motivated to be dedicated to their jobs and their students for a long time. An effective incentive system promotes long-term involvement to boost productivity and helps the institution succeed in the long run (Liu, 2021).

❖ **Factor**
• **Financial Incentives**

Financial incentives refer to meet individual requirements and encourage professionals to do their jobs better including monetary rewards to allowances and it can be profit sharing and bonuses. Financial incentives are any kind of compensation intended to boost productivity. It can be defined as the more an individual does efficient work productivity then the more money they will get. The suggested objective of financial incentives in the workplace is to encourage instructors to behave in a certain way by offering a financial advantage (Alnsour & Kanaan, 2021). Financial incentives are economic rewards given to people in exchange for achieving certain objectives or engaging in certain behaviours. There are several financial incentives for teachers to progress in their professions, including salary increases to bonuses for outstanding performance, or more money for attending training sessions or putting in longer hours. It is believed by some that monetary incentives increase motivation to output and contentment in the workplace. Universities and institutions provide financial incentives to teachers so that they may continue to improve their teaching, advance their careers, and meet student learning goals (Huang & Zhang, 2023).

❖ **Dependent Variable**
• **Educational Management**

Educational management is a field of study and practice concerned with the operation of educational organisations. Educational institutions and their resources must be carefully planned and managed for better involvement. The resources should be directed and regulated to ensure effective teaching and student accomplishment. Researchers call this process education management. It includes the development of policies to the creation of curriculum. It also includes the supervision of staff and the distribution of resources. Education management is the creation of learning environments (Marbun et al., 2020). The main objectives of education management are to ensure effective and moral institution operation and to enhance educational quality to foster student development. Education management is crucial for fostering collaboration amongst all stakeholders, including educators, parents, students, and policymakers. It ensures accountability and maintains standards to promote continuous improvement via observation and evaluation. The management established a systematic approach by guiding institutions towards long-term sustainability of equity in academic accomplishment. Education administration lays the groundwork for effective educational systems (Wong, 2020). Educational leaders should place a high priority on teachers' professional development by offering opportunities for conferences, seminars and training programs that increase subject knowledge to enhance teaching skills and promote better classroom management. Reward schemes are often utilised to encourage this commitment to professional success. These strategies may be utilised to inspire instructors. Educational management involves not only helping people advance their professional skills but also making effective use of financial, human, and material resources (Ratten & Jones, 2021).

• **Relationship between Financial Incentives and Educational Management:**

Strategies that promote pupil achievement, boost teacher excellence, and guarantee resource efficiency are essential to effective educational administration. Financial incentives such as performance bonuses, pay raises, grants, and funds for professional development are instruments used to promote positive behaviours, such as better teaching methods, creativity, and dedication to school objectives (Sahibzada et al., 2022). These incentives may boost employee enthusiasm, lower absenteeism, and encourage ongoing professional development when properly planned and executed. They assist managers in coordinating individual performance with organisational goals. Poorly designed incentives might lead to unfairness to competitiveness or limited instructional methods. A balanced incentive structure that is transparent to equitable and linked to quantifiable results is necessary for good educational management and guaranteeing that monetary awards have a beneficial impact on teacher efficacy and overall school progress (Smith & Gillespie, 2023). Financial

incentives are a kind of direct compensation or an award given to personnel as a token of appreciation for going above and beyond the call of duty. Financial incentives are a part of performance-based compensation packages, which are distributed independently of seniority. Employees' expenditures might be covered by these financial incentives, which aim to increase productivity and motivate personnel to do a better job. Professionals are motivated to work harder in order to fulfil deadlines when they are offered incentives. Offering financial incentives might contribute to more equitable school management. Financial incentives may encourage teachers to work in underprivileged regions or with particular course needs. This helps to ensure that every kid has access to a high-quality education, irrespective of their family's financial circumstances (Liu et al., 2025). To promote professional growth, creative teaching methods, and involvement in school reform initiatives, administrators use incentive programs. Effective financial incentive programs ensure that resources are allocated to areas that advance educational quality by assisting in coordinating individual performance with institutional goals.

Researchers have constructed their whole comprehension of the correlation between Financial Incentives and Educational Management:

- ***H₀₁: There is no significant relationship between Financial Incentives and Educational Management."***
- ***"H₁: There is a significant relationship between Financial Incentives and Educational Management."***

Table 2: H₁ ANOVA Test

ANOVA					
Sum	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	79436.257	252	315.223	144.797	.000
Within Groups	862.148	396	2.177		
Total	80298.405	648			

Notable outcomes were produced by this inquiry. Researchers have achieved statistical significance when the p-value is less than .000 and the F-value is 144.797. Scientists reject the null hypothesis and accept "***H₁: There is a significant relationship between Financial Incentives and Educational Management***" considering these findings.

9. Discussion

The study's findings suggested that financial incentives significantly and positively impacted educational management. Teachers' motivation to work satisfaction and dedication towards professionalism were all shown to be greater when they were rewarded monetarily. This lent credence to the idea that institutions were able to raise the bar on both instructional quality and efficiency as a result of performance-based financial incentives. The research went on to show that monetary incentives improved school management practices by bringing teachers' efforts in line with organisational objectives. The strong link shown in the ANOVA findings also revealed that incentives were important in influencing teachers' perspectives on continuous professional development. But it was also noted that monetary incentives alone may not be enough to motivate employees and might lead to inequalities in pay if not applied equitably. The research found that well-structured incentive systems benefited educational management when implemented openly and in harmony with school development aims.

10. Conclusion

The study discovered that one of the main factors influencing the improvement of educational management in Chinese schools was financial incentives. The findings demonstrated that well-designed financial incentives had a positive impact on teachers' motivation for outcomes

and participation in professional development activities. Financial incentives also assisted school administrators in better coordinating instructors' work with the school's overarching objective, which increased overall efficiency. The statistical results demonstrated that financial incentives significantly influenced educational management, boosting teacher commitment and raising instructional quality. The study seemed to indicate that incentive systems were helpful in promoting professional development and improving learning environments over time.

References

1. Alnsour, S. A., & Kanaan, A. O. (2021). The effects of financial and non-financial incentives on job tenure. *Management Science Letters*, 729-736.
2. Booth, J., Coldwell, M., Müller, M. L., Perry, E., & Zuccollo, J. (2021). Mid-career teachers: A mixed methods scoping study of professional development, career progression and retention. . *Education Sciences*, 299.
3. Hao, D. (2023). Study on incentive factors and incentive effect differences of teachers in universities and colleges under the view of demographic variables. *BMC psychology*, 379.
4. Huang, J., & Zhang, X. (2023). Dynamic Allocation Method of Incentive Pool for Financial Management Teaching Innovation Team Based on Data Mining. *International Journal of Advanced Computer Science and Applications*.
5. Kooli, C., & Abadli, R. (2022). Could education quality audit enhance human resources management processes of the higher education institutions? *Vision*, 482-490.
6. Kwan, P. (2020). Is transformational leadership theory passé? Revisiting the integrative effect of instructional leadership and transformational leadership on student outcomes. *Educational administration quarterly*, 321-349.
7. Lin, S. (2023). Professional skills development, incentive programs, and employee collaborations: Basis for talent management framework. . *International Journal of Research*, 77-98.
8. Liu, C. W., Kong, C. L., Wang, J. C., Kee, H. Y., Ng, B., Lam, K., & Reeve, J. (2025). A qualitative examination into the school-related factors affecting teachers' motivating styles. *Asia Pacific Education Review*, 1-16.
9. Liu, Y. (2021). On the application of incentive principle in the management of college students. *International Journal of Social Sciences in Universities*, 253.
10. Lourmpas, S., Chalikias, M., & Sykianakis, N. (2024). Leadership in Education: School Leaders and Teachers' Professional Development. *The International Conference on Strategic Innovative Marketing and Tourism* (pp. 543-551). Cham: Springer Nature Switzerland.
11. Marbun, S. D., Effendi, S., Lubis, Z. H., & Pratama, I. (2020). Role of education management to expedite supply chain management: a case of Indonesian Higher Educational Institutions. *International Journal of Supply Chain Management (IJSCM)*, 89-96.
12. Ratten, V., & Jones, P. (2021). Entrepreneurship and management education: Exploring trends and gaps. *The International Journal of Management Education*, 100431.
13. Rostini, D., Syam, A. R., & Achmad, W. (2022). The significance of principal management on teacher performance and quality of learning. . *Al-Ishlah: Jurnal Pendidikan*, 2513-2520.
14. Sahibzada, F. U., Jianfeng, C., Latif, F. K., Shafait, Z., & Sahibzada, F. H. (2022). Interpreting the impact of knowledge management processes on organizational performance in Chinese higher education: mediating role of knowledge worker productivity. . *Studies in Higher Education*, 713-730.
15. Smith, C., & Gillespie, M. (2023). Research on professional development and teacher change: Implications for adult basic education. In *Review of Adult Learning and Literacy, Volume 7* (pp. 205-244). Routledge.

16. Wong, C. S. (2020). Competency definitions, development and assessment: A brief review. *International Journal of Academic Research in Progressive Education and Development*, 95-114.
17. Xiang, H. (2021). Design and function of teaching incentive mechanism of university teachers under the background of big data. *2021 International Conference on Internet, Education and Information Technology (IEIT)* (pp. 110-113). IEEE.
18. Yan, M. (2024). An Exploration of the Use of Incentive Mechanisms in Human Resource Management in Colleges and Universities. . *Journal of Humanities, Arts and Social Science*.