

A RESEARCH ON ANALYSING THE IMPACT OF INCENTIVE MECHANISM AND TEACHER PROFESSIONAL DEVELOPMENT IN EDUCATIONAL MANAGEMENT

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Abstract

This study examined the effects of professional development assistance and reward systems on teacher motivation and the general efficacy of educational administration. The research investigated the extent to which organised training programs, collaborative learning, mentorship and chances for ongoing learning had served as an incentive structure that improved teachers' performance and engagement. A five-point Likert scale questionnaire was used to gather data from 649 respondents as part of a quantitative research strategy. SPSS 25 was used for the statistical analysis which included factor analysis, descriptive statistics as well as ANOVA testing. Teachers' propensity to engage in continuous professional development and enhance their teaching methods was shown to be substantially influenced by professional development support and incentive systems. Institutional support in the form of organised programs, easily available training materials and encouraging leadership had improved teachers' long-term dedication to development, while financial and non-financial incentives had a good effect on teachers' motivation. By confirming the alternative hypothesis, the data went on to show that there was a substantial association between educational management and professional development assistance. Organisational stability and teaching quality were both enhanced when incentives were tailored to teachers' professional requirements and included in plans for long-term professional development in schools. On the other hand, development projects have been hindered by insufficient funding or poor execution. In general, the research found that teachers were able to do a better job in their schools when they were given strong support for professional growth together with relevant incentives which led to better educational administration.

Keywords: Professional Development Support; Incentive Mechanism; Educational Management; Teacher Professional Development; Collaborative Learning.

1. Introduction

Teacher professional development is the cornerstone of every educational reform initiative. Both school development and educational management depend on it to be successful. Again, it serves as the epicentre for all initiatives aimed at enhancing educational institutions. Teacher professional development entails taking part in a variety of opportunities to expand one's knowledge and skillset as a teacher. It is important to keep teachers updated while simultaneously encouraging them to work together and develop a strong desire to help others. Qualifying education, professional skill training and education that takes place while working are the mainstays of teacher professional development. A sizable portion of the teaching population maintains the view that formal education is the only mechanism for achieving professional development (Yao, 2022). Teachers are an exceptional segment of the population. They are therefore described by several distinctive characteristics. Particularly noteworthy is the fact that the majority of young educators have a PhD or master's degree, indicating a very high level of education. The main body of a university and its principal source of human resources are the faculty members who work there. Everyone knows that a person's performance will never be more than 20 to 30% of their potential if they lack motivation. Under the right circumstances, people may prove that they have 80 to 90% of the required abilities. It is impossible to disentangle the creative contributions of professors from the pedagogical activities, research, staff development and campus culture building that

occur at educational institutions. Therefore, building a robust and scientific incentive mechanism for teacher management is crucial to the development of colleges and universities (Bellei & Muñoz, 2023).

2. Background Of the Study

In China, universities and other educational institutions are remarkable for the fact that they play a significant role in the development of the country's educational landscape and are an integral component of the system of educational administration that exists in China. As a consequence of the efforts that they have undertaken on a national level, they have seen rapid growth and development. Because of this, they have been met with widespread acclaim and support throughout China. Teachers are the lifeblood of many Chinese universities and colleges, and their future success depends upon them. They are the lifeblood of these institutions in a talent market that is marked by severe rivalry. Motivating the faculty and staff is an important goal of effective human resource management. For the advantage of academics and instructors, Chinese legislation has established a scientific incentive mechanism, a transparent competition agency, fair performance evaluations and a systematic salary plan. However, mainland China's in-service teacher education management has run into problems since it has not been able to improve both student performance and teachers' competence in the classroom (Yin & Huang, 2023). Data from 2016 indicates that there were around 12 million educators in China. Additionally, every Chinese teacher is required to complete 240 hours of professional development every five years. In addition, it was observed that educators are expected to participate in programs for the advancement of their teaching careers; nevertheless, they encounter obstacles such as a lack of funds, conflicts with their schedules, and insufficient organisation. According to the findings of the study, a shortage of financial resources may be the reason why there are not enough possibilities for teacher professional development in some schools in China. The techniques used by their instructors from China allow them to make progress at a rate that is in accordance with their innate abilities (Bakhmat et al., 2021).

3. Purpose Of the Research

The purpose of this research was to learn how professional development support functioned as a teacher incentive system within educational management. The study's objective was to explore how various schools employed various forms of professional development, such as mentoring, planned events and peer learning to encourage and assist teachers in their occupation. It also examined how different forms of mentoring motivated teachers to improve their teaching skills and actively participate in continuing professional development. The research examined the long-term impact of different types of development support on teachers' willingness to pursue professional growth. It examined how teachers maintained their interest after formal programs finished and how effective ongoing mentoring was in implementing new strategies into practice. The study also examined how professional development support affected teachers' pedagogy, self-esteem, and classroom performance. Another objective of the study was to examine how professional development support was incorporated into school management strategies. The research examined how senior management organised, provided the required resources, and promoted a learning atmosphere. It also examined the overall impact of these factors on the classroom.

4. Literature Review

In the context of modern educational management, professional development for teachers is considered an essential factor in the maintenance of excellent teaching and the improvement of student achievement. On the other hand, the combination of these programs with encouraging frameworks that are effective in promoting growth poses a problem for quite a few organisations. Empirical research that was undertaken at Chinese institutions has shown that there is a favourable correlation between a well-structured incentive mechanism and the professional competence of teachers. According to a survey that was conducted on 400 professors at universities, a larger incentive mechanism has been associated with higher

levels of both professional competence and professional satisfaction (Cavendish et al., 2021). Despite the importance of educational administration, imperfections might reduce its effectiveness. In underdeveloped nations or areas with little funding, many schools face financial challenges in the professional development of teachers. Without sufficient financing, education leaders may struggle to acquire resources, attract skilled employees and upgrade facilities and technology. These financial limitations may also affect teacher training and incentive programs. When there are too many students, old literature, and outdated technology in the classroom, students tend to learn less. Maintaining and motivating teachers is another problem confronting school management. Even though they are the foundation of every educational system, teachers face harassment, excessive workloads and low pay (Zheng, 2021). Moreover, when teachers see inequality in the classroom or an unfair distribution of responsibilities, they become demotivated and unhappy. In line with equity theory in education policy, principals and other school officials need to set up incentive structures that are open, equitable, and impartial. In educational research, participatory decision-making has lately gained prominence. This method promotes equity and trust by motivating educators to collaborate in developing reward schemes (Christodoulidis et al., 2022). A prior research conducted recent systematic analysis that looked at 23 peer-reviewed studies (2020–2024) that evaluated how professional development programs affected teachers' use of digital instructional components. Sustained guidance, digital instruction, collaborative learning, institutional backing, and context-specific adaptation were some of the major success elements they discovered. Most importantly, they point out that compared to brief workshops, more comprehensive and long-lasting improvements in teachers' mindset and real digital practices are achieved. From a managerial standpoint, this indicates that policymakers and school administrators should create professional development as an ongoing process and provide the materials and frameworks needed to facilitate lifelong learning (Amemasor et al., 2025).

5. Research Question

- What role does Professional Development Support have in Educational Management?

6. Research Methodology

6.1 Research Design

The study's method of analysis was a quantitative research method. In order to examine the numerical data, the researcher used SPSS 25. The odds ratio and 95% confidence interval were used to ascertain the validity and scope of the statistical correlation. When the p-value is less than 0.05, it can be said that the findings are significant. A better understanding of the fundamentals of the data was gained as a result of descriptive analysis.

6.2 Sampling

For this study, the researcher used a random sampling method. The researcher determined the total sample size of the study using the Raosoft tool. Thus, 720 questionnaires were provided to gather study sample data. Henceforth, 682 individuals filled out the surveys and returned them to the researcher. Nevertheless, 33 sets of questions that were not entirely answered were removed from the sets that were gathered. Hence, the ultimate sample size was 649.

6.3 Data and Measurement

Using quantitative analysis, the researcher collected data for the study. Respondents were requested to use a five-point Likert scale to quantify their responses in the survey. Secondary data was obtained via the sources of the internet.

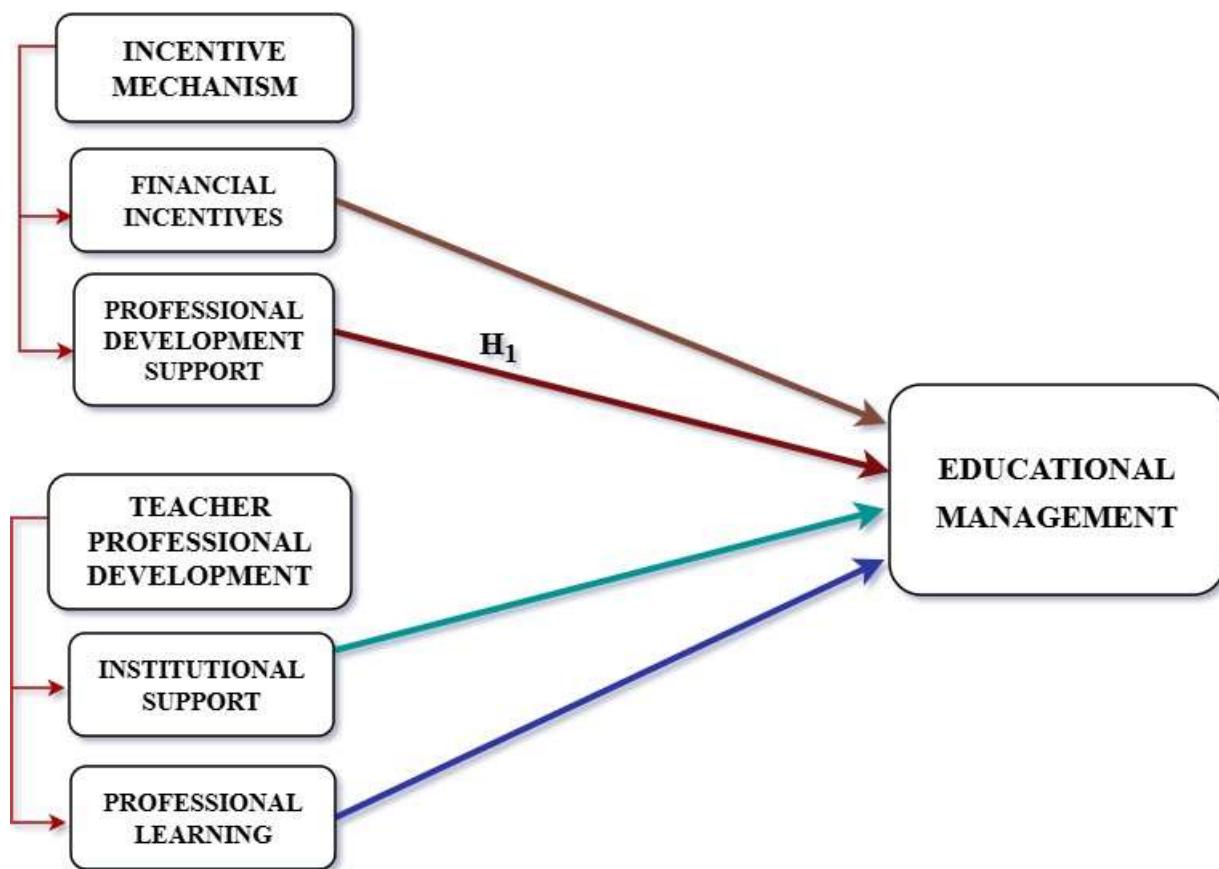
6.4 Statistical Software

The researcher used SPSS 25 and Microsoft Excel for the statistical analysis.

6.5 Statistical Tools

Several demographic and specific to the level program features were discovered via a study of descriptive data. To find out if theoretical frameworks are reliable and valid, to calculate odds ratios with 95% confidence intervals, and to apply other statistical tools, inductive statistical investigations use a variety of methods.

7. Conceptual Framework



8. Result

- **Factor Analysis**

Factor analysis (FA) may be used to identify hidden components using publically accessible data. Regression findings may be used in examinations when no clear psychological or physical symptoms are present. The use of simulations allows for the discovery of gaps, apparent connections, and potential weak points. Some regression analyses utilise Kaiser-Meyer-Olkin (KMO) tests to examine the results. The statistical model and its dependent variables provide an accurate approximation of the dependent variable. There may be many occurrences of duplicating data. Easier to comprehend data with less inequality. For academics, KMO provides a trustworthy source for integers ranging from 0 to 1. When the KMO score falls anywhere between 0.8 and 1, it is considered that the sample is big enough. It falls far short of the typical range of 0.050 to 0.059, or 0.60 to 0.69, as stated by Kaiser, one of the criteria for certification. A score between 0.70 and 0.79 would be considered normal for middle school. Between 0.90 and 1.00, it displays an impressive range.

Table1: 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		

It is appropriate to sample comments considering this. To determine whether the correlation matrices were statistically significant, the researcher used Bartlett's Test of Sphericity. The sample size was determined to be 0.988 in the Kaiser-Meyer-Olkin statistic, ranking it within the tolerable range. There was a p-value of 0.00 when Bartlett's Sphericity test was performed. If Bartlett's Sphericity test produces a positive result, then the correlation matrix is not an identity matrix.

❖ **Independent Variable**
 • **Incentive Mechanism**

An incentive mechanism is any system or method that employs incentives or penalties to promote or prevent a certain activity. Teachers are often offered money or other awards as part of education incentive mechanisms, with the idea that this would help them advance professionally and benefit both the school and their pupils. These advantages may include monetary incentives like bonuses or awards or intangible ones like professional growth, public recognition, or access to possibilities for learning. Management may establish a system that rewards effort and motivates teachers to remain dedicated to their profession and the teaching of their students over time by using incentive mechanisms (Xiang, 2021). Incentive mechanisms may enhance education in general by promoting a culture of ongoing learning and professional development. Motivated teachers are inclined to look for opportunities to develop their skills, connect with other educators, and try out innovative teaching strategies in the classroom. As a result, when teachers improve their abilities to meet the needs of a variety of learners and make the most of the technology at their disposal, students do better academically. Well-designed incentive schemes may support teachers' personal goals as well as the institution's overarching aim (Chen & Astillero, 2023).

❖ **Factor**
 • **Professional Development Support**

The term "Professional Development Support" refers to services and activities meant to help teachers develop their own competencies, knowledge, attitudes, and classroom behaviour. This concept makes it possible for schools to provide an enabling environment for the growth of teacher skills through activities such as mentorship and coaching, recognition, and career growth prospects. It is, therefore, very crucial in educational management because it is considered integral in long-term teacher effectiveness and effective teaching. Modern classrooms require educators to support students with diverse needs, ever-evolving curricula, new technologies, and increased accountability expectations (Akcaoglu et al., 2023). Teachers frequently struggle to meet these evolving expectations without regular guidance and feedback. Ensuring that teachers have sustained, comprehensive professional

development support is critical to teachers' individual and professional growth and to the health of the overall education system. Most importantly, it motivates teachers to learn continuously, which is one of the best ways to ensure they always bring their own learning and strategies into the classroom room. More than ever, education comprises much more than just teaching facts and figures to the learners. It also needs to offer substantial thinking, creativity, critical thinking, and familiarity with employing digital technology, according to the demands of every type of learner (Jing & Ali, 2024).

❖ **Dependent Variable**

• **Educational Management**

Managing schools and other learning settings effectively is part of the art and science of educational management. It is the process of organising, arranging, and overseeing instructional materials in order to achieve present objectives, according to many authors. The educational process must be followed and resources must be taken care of. Motivating a group of children and teachers to do well in class is another aspect of it. In contrast, it might be argued that school administrators play a pivotal role in establishing the strategic orientation of the institution (Ehrenfeld, 2022). Since schools are a part of a larger societal structure, effective school administrators need to have a thorough understanding of the political and social climate in which they operate. Data-driven techniques and technical breakthroughs have been blended into this strategy for enhanced school administration in recent years. Educational management is particularly important when schools are dealing with problems like increased enrolment, limited resources, and shifting social expectations. Effective educational management is necessary for the school to achieve its goal of teaching students. For this to be achieved, close oversight of the curriculum development, teaching strategies, and general learning environment is required. Teachers may progress in their careers as a result of efficient educational management. The foundation of each school is its teachers. Support in the classroom has a direct impact on students' personal development (Chen & Pan, 2022).

• **Relationship between Professional Development Support and Educational Management**

For modern educational management, professional development support is essential as a key strategic instrument for enhancing institutional quality, innovation, engagement, and sustainability. It goes beyond just assisting teachers in becoming better people. Support for educational management and professional development go hand in hand; they address concerns of school governance, future capacity planning, and teacher development in line with institutional goals. First, a key component of teacher fulfilment and engagement is professional development support. Principals and other school officials are aware that teachers who engage in meaningful and continuous professional development opportunities are more likely to remain in their current positions. Support for professional development improves teachers' efficacy as well as the quality of their teaching (Stevens et al., 2023). According to Stevens' mixed-methods research, professional development activities such as coaching, collaborative learning communities, and workshops are essential for teachers' learning and creativity in contexts where educational practices are changing. School administrators who engage in professional development see improved student learning because highly trained teachers are more adept at implementing new pedagogical techniques using evidence-based practices more often, and adapting more easily to curricular changes (Lin et al., 2022).

After examining the above discussion, the researcher arrived at the following hypothesis to examine the influence of Professional Development Support and Educational Management:

- ***"H₀₁: There is no significant relationship between Professional Development Support and Educational Management."***
- ***"H₁: There is a significant relationship between Professional Development Support and Educational Management."***

Table 2: H₁ ANOVA Test

ANOVA					
Sum	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	70248.681	219	320.770	140.874	.000
Within Groups	976.694	429	2.277		
Total	71225.375	648			

The study provided significant findings. Given a p-value below 0.05, an F-value of 140.874 would be considered statistically significant. This determined that the "**H₁: There is a significant relationship between Professional Development Support and Educational Management**" is accepted, and the null hypothesis is rejected.

9. Discussion

The study's findings demonstrated that incentive schemes had a major influence on teachers' motivation, commitment and participation in professional development activities. It was shown that both monetary and non-material incentives may have an impact on teachers' willingness to engage in ongoing learning and enhance their teaching methods. Furthermore, the results demonstrated that systematic support for professional growth enhanced both the efficacy of educational management and the calibre of instruction. The degree of institutional assistance one got was one of the most crucial elements in reaching one's professional objectives. Schools that provided organised training programmes, mentoring programmes and opportunities for collaborative learning were more likely to cultivate a positive professional culture. Teachers at these schools reportedly showed more participation, which would suggest that development initiatives were sustained because of helpful leadership and enough funding. Additionally, the study discovered that when teachers felt appreciated and included, their dedication to school development grew. This feeling was reinforced by possibilities for career advancement, fair evaluation procedures and acknowledgement. The results also showed that reward systems worked best when they were in line with the professional needs of teachers and the overall educational goals. When institutions added benefits to long-term professional development plans, teachers' work was more consistent and the group was more stable. On the other hand, growth programmes had less of an effect when they did not have enough backing or were carried out inconsistently. All things considered, the research demonstrated that a well-balanced mix of rewards and strong professional development assistance had resulted in notable advancements in educational administration and empowered the teaching staff.

10. Conclusion

The study discovered that professional development support and incentive systems had an impact on the effectiveness of educational management. Well-designed and consistently applied rewards had a favourable effect on teachers' motivation, engagement and professional growth. Again, the research discovered that educational institutions that offered structured assistance for career advancement, such as mentoring, opportunities for group projects and convenient access to training resources, created an environment that promoted ongoing development. Furthermore, it was shown that there were benefits in the long run to be gained by combining incentives with efforts for development which resulted in an improvement in both the coherence of the organisation and the quality of instruction. The endeavours to strengthen professional development had a very little effect on the individuals involved whenever there was an absence of institutional support or when the incentives did not align. The findings demonstrated that when the system was well-balanced and helpful, with solid mechanisms for professional growth and meaningful incentives, educational management was much improved and teachers were given considerably greater authority.

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