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The Impact of a Professional Development **Program on College Teacher Effectiveness**

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ABSTRACT: In today's rapidly evolving educational landscape, institutions are increasingly investing in faculty development programs to enhance teaching quality and student learning experiences. This study examines the effectiveness of faculty development programs in improving teaching skills, student learning outcomes, and preparing educators for future challenges in technology and pedagogy. Through a mixed-methods approach, combining secondary data from published literature with primary data from a structured questionnaire, this research aims to provide insights into the impact of faculty development programs on teaching effectiveness and student learning. Specifically, this study investigates whether such programs enable faculty members to adopt innovative teaching methodologies, integrate technology into their teaching practices, and foster a more engaging and inclusive learning environment. The findings of this study will contribute to the existing body of knowledge on faculty development, informing institutional policies and practices aimed at promoting teaching excellence and student success. Ultimately, this research seeks to shed light on the critical role of faculty development programs in empowering educators to navigate the complexities of 21stcentury education and to equip students with the skills and knowledge necessary to thrive in an increasingly complex and interconnected world.

KEYWORDS: faculty development program, teaching effectiveness, student learning outcomes, etc.

I. INTRODUCTION

Youth are the cornerstone of a nation's future, and teachers play a pivotal role in shaping their minds. To empower the next generation, it is imperative for countries to prioritize enhancing teachers' skills, knowledge, and teaching effectiveness. Achieving this goal requires investing in professional development programs that equip educators with the tools to adapt to evolving educational landscapes. However, the effectiveness of such programs in transforming teaching skills remains a critical question. To address this, our research employs a mixed-methods approach, combining a structured questionnaire with secondary data from published literature and research papers. The questionnaire delves into aspects of professional development, self-efficacy, and open-ended questions to gather nuanced insights. Notably, India's allocation of 4% of its GDP to education falls short of global benchmarks. To bridge this gap, increasing the allocation to 6% would significantly enhance teacher efficiency and educational outcomes. Our study aims to provide actionable recommendations for policymakers, educators, and stakeholders to elevate the teaching profession and foster a brighter future for the nation's youth. This research paper aims to provide the recommendation on professional development program as well as finding out the outcome of such program.

II. LITERATURE REVIEW

In the report "EFFECT OF PROFESSIONAL DEVLOPMENT PROGRAM ON TEACHER CLASSROOM PRACTICES IN COLUMBIA", Andres Pinzon, Pedro Gomez and Maria Jose Gonzalez examined the impact of a teacher professional development program on secondary math teachers' classroom practices. The program, part of the "Teaching Excellence" initiative, improved teachers' planning, implementation, and assessment skills, resulting in significant enhancements in curriculum use, anticipation of student errors, task selection and sequencing, error feedback, learner-centred interactions, and assessment practices among 43 participating teachers. The program's emphasis on teacher autonomy, collaborative learning, and practical strategies contributed to its success, offering a valuable model for future initiatives.

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In the report "THE EFFECT OF PROFESSIONAL DEVLOPMENT, INITIATIVE WORK AND WORK COMMITMENT ON QUALITY OF TEACHER LEARNING IN ELEMENTARY SCHOOL OG INDONESIA", Siti Asiyah, Bambang Budi Wiyono, Nur Hidayah and Achmad Supriyanto explored the interplay between professional development, innovative work, and work commitment on teacher learning quality. Analyzing data from 100 Indonesian elementary school teachers using structural equation modeling (SEM), the researchers discovered that professional development had a profound impact on teachers' work commitment, which in turn, positively influenced the quality of their learning. Additionally, innovative work was found to have an indirect positive effect on learning quality, mediated by work commitment. The study's findings underscore the importance of investing in professional development and fostering a culture of innovation to enhance teacher commitment, ultimately leading to improved teacher learning and higher quality education.

A literature review titled "EXPLORING THE IMPACT OF TEACHER PROFESSIONAL DEVELOPMENT ON TEACHER'S PERFORMANCE" by Chen Yueqin and Lubna Ali underscores the vital role of teacher professional development (PD) in elevating teaching quality and student achievement. The review reveals that effective PD programs significantly enhance instructional practices, pedagogical knowledge, and student outcomes. However, it also emphasizes the need for a holistic approach, recognizing that teacher talent, experience, and a student-centered focus are equally essential for optimal performance. Ultimately, the primary objective of PD should be to improve student learning, rather than solely focusing on monetary incentives or teacher evaluation.

The Ministry of Education's National Education Policy (NEP) 2020 aims to transform India's education system by emphasizing governance, capacity building, and teacher quality. The policy seeks to achieve quality education through systemic reforms, improving teacher training, professional development, and overall teacher well-being. To achieve this, the policy advocates for a holistic approach to teacher education, encompassing continuous professional development, mentorship programs, and leadership development opportunities. Additionally, it stresses the importance of integrating technology and innovative teaching methodologies into teacher training programs, and establishing strong governance structures and effective monitoring mechanisms to ensure successful implementation. Ultimately, the policy envisions creating a highly skilled and motivated teaching force capable of delivering high-quality education to all students, regardless of background or location.

The National Portal of India throw light on India's educational landscape is undergoing significant transformations thanks to various initiatives aimed at improving quality, accessibility, and infrastructure. The government has launched several programs, including the Professional Development Scheme, which supports faculty members in attending international conferences to enhance their teaching skills. Additionally, the National Literacy Mission Authority oversees adult education planning, management, and funding, while the Quality Education in Madrasas scheme integrates essential subjects into madrasa curricula to improve educational standards among minority communities. Other initiatives, such as Infrastructure Development for Minority Institutions and Direct Admission of Students Abroad, focus on enhancing school facilities and streamlining access to higher education. The University Grants Commission now oversees distance education, consolidating governance and ensuring quality education. These initiatives demonstrate India's commitment to providing quality education and opportunities to diverse demographics, shaping a brighter future for the country.

RESEARCH GAP:

The main objective behind this research paper is to understand the importance of professional development program for teacher. The factor which can make impact on their teaching. Is really the faculty development program helpful for teachers to improve and make changes in their teaching according to the current trends? The previous researcher had already made a research on this topic but on an international level, my research focuses on the colleges in my city. To understand the real problem or the benefits which teachers gets through this development's program I have prepared a structured questionnaire in which I have asked variety of question to get in depth understanding about the fact.

OBJECTIVE:

- To study how well professional development program work in improving college's teachers skills and
- To see how professional development program affect college teacher confidence in their abilities.
- To find out what makes professional development programs work best for college teacher.

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To study how professional development programs affect's student learning.

III. METHADOLOGY

This research paper is based on primary as well as secondary database to get comprehensive understanding of the topic. The primary data collected from 80 individual of different age group through a structured questionnaire and secondary data have been collected from various published research paper, article, government website, etc.

DATA ANALYSIS AND INTERPRETATION:

Table 1: Age wise distribution

| Age group | No. of respondent | Percentage |
|------------|-------------------|------------|
| 21-30 | 15 | 18.8% |
| 31-40 | 25 | 31.2% |
| 40 or more | 40 | 50% |

The data collection process yielded a diverse respondent pool, spanning various age groups from 21 years to over 40 years. Notably, the age group of 40 years and above was disproportionately represented, accounting for a significant majority of the respondents. Conversely, the age group of 21-30 years had the lowest representation. This diverse age distribution provides a unique opportunity for a comprehensive understanding of the impact of professional development programs on teachers' effectiveness. It allows for inter-generational comparisons and insights, identification of age-specific needs and challenges, and development of targeted strategies for professional growth and development. Ultimately, this age diversity enriches the study's findings, offering a nuanced and multifaceted understanding of the relationship between professional development and teacher effectiveness.

Table 2: Gender wise distribution

| Gender | No. of respondent | Percentage |
|--------|-------------------|------------|
| Male | 55 | 68.8% |
| Female | 25 | 31.2% |

From the above table we can analyse that data collected from both the male and female. There are 68.8% male and 31.3% female have responded. The percentage of male responded is quite higher than the female respondent.

Table 3: Highest educational qualification

| Particular | No. of respondent | Percentage |
|-----------------|-------------------|------------|
| Graduation | 20 | 25% |
| Post-graduation | 35 | 43.75% |
| PhDs | 25 | 31.25% |

The table illustrates the educational qualifications of the respondents, revealing a varied landscape. The majority of respondents hold post-graduate degrees, while 25% possess graduate degrees. Notably, 31.25% of respondents have

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attained PhDs, demonstrating their advanced expertise in their fields. This diverse range of educational backgrounds provides a valuable foundation for understanding the impact of professional development programs on teachers with varying levels of qualifications and experience.

Table 4: Teaching experience

| Particular | No. of respondent | Percentage |
|------------------|-------------------|------------|
| 5 years | 27 | 33.75% |
| 10 years or more | 53 | 66.25% |

The tables illustrate the teaching experience of the respondents, showcasing a wealth of expertise. A significant majority of respondents boast over 10 years of teaching experience, while a smaller proportion, 33.75%, have 5 years of experience, highlighting the respondents' extensive background in education.

Table 5: Have you participated in Professional Development Program

| Particular | No. of respondent | Percentage |
|------------|-------------------|------------|
| Yes | 80 | 100% |
| No | 0 | 0% |

The above table represent the data of the participant who have participated in the professional development program. There were 80 respondent means the total number of respondent have participated in professional development program and there is no such respondent who have not participated in such deployment program.

Table 6: Kinds of Program (Means)

| Particular | No. of respondent | Percentage |
|---------------|-------------------|------------|
| WhatsApp | 30 | 31.25% |
| Conference | 25 | 31.25% |
| Online course | 15 | 18.75% |
| other | 10 | 12.50% |

The data reveals that the majority of respondents participated in professional development programs through WhatsApp, accounting for 58.33%, followed by conferences at 25%. In contrast, online courses and other sources garnered relatively lower participation rates, at 18.75% and 12.50%, respectively. This suggests that respondents prefer informal, accessible, and interactive learning experiences, such as those offered through WhatsApp and conferences. The popularity of these channels implies that professional development programs can benefit from incorporating similar formats, such as leveraging social media platforms, workshops, and group discussions, to increase engagement and participation.

Table 7: Methods covers in the program

| Particular | No. of respondent | Percentage |
|------------------------|-------------------|------------|
| Teaching method | 12 | 15% |
| Curriculum design | 27 | 33.75% |
| Technology integration | 41 | 51.25% |

The table reveals that professional development programs primarily focus on technology integration, with a majority of 50% of respondents opting for this topic. This suggests that educators are eager to incorporate new technologies into their teaching methodologies to enhance student learning outcomes. Additionally, curriculum design was a significant area of focus, with 33.75% of respondents selecting this option, while 15% chose teaching methods. These findings imply that professional development programs should prioritize technology integration, curriculum design, and teaching methodologies to support educators in staying updated with emerging trends and best practices in education.

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Table 8: Quality of professional development program

| Particular | No. of respondent | Percentage |
|------------|-------------------|------------|
| Excellent | 75 | 93.75% |
| Fair | 5 | 6.25% |

The table reveals an overwhelmingly positive assessment of the professional development program's quality, with a remarkable 93.75% of respondents rating it as "excellent". This enthusiastic endorsement suggests that the program has been highly effective in helping educators stay current with the latest trends and teaching methodologies. In stark contrast, only 6.25% of respondents considered the program merely "fair" in quality, underscoring the program's overall success in meeting the needs of its participants.

Open ended question:

- What do you think the most important factor that contributes to the effectiveness of PDP's for college teacher? There were various important factor what respondent give, here are some of the factor:
 - Idea generation platform
 - Teaching methodology
 - Interactive session will be useful 0
 - Relevance of topic and hands on experience
- How do you think PDP's can be improved to better support the needs of the college teacher?

There were various response given by the respondent, here are some of the collective response:

- Be updating with recent trend
- It is important and useful if it's design on current topic
- Including practical aspects in the PDP

Findings and Recommendation:

Through my in-depth research on "Impact of Professional Development Program on College Teacher Effectiveness", I gained valuable insights into the crucial role of professional development programs in enhancing teacher effectiveness. These programs empower teachers to stay updated with current trends and adapt to changing educational landscapes. Notably, my research revealed that professional development programs enable teachers to acquire new skills, refine their teaching methodologies, and become more productive. Interestingly, the majority of teachers preferred attending conferences as their primary means of participating in such programs, highlighting the value of interactive and collaborative learning experiences. This study underscores the significance of investing in professional development initiatives to foster teacher growth, ultimately leading to improved educational outcomes.

Recommendation:

- Need based training.
- Evaluation and feedback mechanism.
- Collaborative learning opportunities.
- Technology integrated training.

IV. CONCLUSION

The development of a nation's youth is a collective responsibility, and investing in their knowledge, skills, and practical thinking is crucial for their growth and success. Teachers play a pivotal role in shaping young minds, and their own professional development is essential to equip them with the latest pedagogies, technologies, and subject expertise. Professional development programs are instrumental in enabling teachers to stay updated with current trends, best practices, and research-based methodologies, ultimately enhancing teacher effectiveness and positively impacting student outcomes. Governments worldwide recognize the importance of teacher development and actively promote professional growth opportunities, underscoring the need for sustained investment in teacher growth and development to drive economic growth, national development, and improve student learning outcomes.

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