

MEDIATING ROLE OF DEVELOPMENT PROGRAMS ON TEACHERS' WORK ETHICS AND PRODUCTIVITY: A CONCURRENT TRIANGULATION

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ABSTRACT

This study investigated the influence of teachers' work ethics and development programs on their productivity using a convergent mixed-method design that combined quantitative surveys and qualitative interviews to provide a comprehensive understanding of the subject. Conducted in schools under the Municipality of Arakan, the study involved 200 teachers for the survey component, with 10 teachers participating in in-depth interviews and 7 in focus group discussions for qualitative insights. Results revealed that teachers exhibited high levels of work ethics, development program engagement, and productivity, with significant positive relationships between work ethics, development programs, and productivity. Regression analysis indicated that development programs significantly predicted teachers' productivity, while work ethics alone did not, and mediation analysis showed that development programs did not significantly mediate the relationship between work ethics and productivity. The qualitative findings highlighted students' perceptions of teachers' empowerment through professional growth, reflective teaching, pedagogical transformation, ongoing professionalism, efficiency and innovation, structured professionalism, collaborative growth, and professional confidence, which corroborated the quantitative results. These findings imply that fostering professional development and ethical teaching practices can enhance teachers' productivity and positively impact student learning outcomes.

Keywords: *Work Ethics, Development Programs, Teachers' Productivity, Mixed-Methods, Professional Growth, Student Outcomes*

INTRODUCTION

Data revealed that 40% of teachers report feeling overburdened by administrative tasks, which detracts from their teaching time and negatively impacts productivity (OECD, 2019). Also, teachers' productivity worldwide has been a significant concern, especially as educational systems strive to meet ever-increasing demands for student performance. The report further reveals that only 60% of teachers spend most of their time on direct

instruction, with a considerable percentage of their workday dedicated to non-teaching duties. These findings underscore the need for better support and resources to improve teachers' productivity, ensuring they can focus on what matters most: effective teaching and student outcomes. The lack of effective management of teachers' workload has been found to directly correlate with burnout and decreased overall productivity in educational settings (OECD, 2019).

In the Philippines, the issue of teacher productivity is similarly pressing, as teachers are often overburdened by the dual responsibilities of teaching and administrative tasks. The Department of Education's (2023) report shows that only 55% of teachers in the country feel they can effectively meet their instructional goals due to various factors such as insufficient resources, large class sizes, and inadequate professional development opportunities. Moreover, around 45% of teachers reported spending excessive time on non-teaching activities, which significantly affects their ability to focus on instructional quality. These challenges result in lower levels of productivity, affecting the overall effectiveness of the Philippine education system. Enhancing teacher productivity is thus critical in improving educational outcomes and achieving national goals for quality education (DepEd, 2023).

Development programs play a significant role in enhancing teachers' work ethics and productivity by equipping them with skills and knowledge necessary to improve teaching effectiveness. According to Kyndt et al. (2020), professional development programs have been found to improve teachers' job satisfaction, work ethics, and productivity by increasing their motivation to implement innovative teaching methods. Teachers involved in well-structured development programs report a stronger sense of responsibility and commitment, which positively influences their punctuality and accountability (Darling-Hammond et al., 2021). This is reinforced by Hagger et al. (2018), who emphasized that development programs not only enhance instructional quality but also help teachers develop a work ethic aligned with current educational demands, thereby boosting overall productivity.

While numerous studies have examined the direct impact of development programs on teacher productivity, there is limited research on how these programs mediate the relationship between work ethics and productivity. Research by Naylor and Mielke (2022) suggests that the connection between teacher professionalism and their productivity is underexplored, especially in terms of how development programs can foster accountability and motivation. Additionally, there is a gap in understanding how different types of professional development programs, such as mentoring or collaborative workshops, influence teacher work ethics across various educational systems (Cheng et al., 2019). More studies are needed to explore how development programs specifically mediate work ethics as a factor in teacher productivity, particularly in diverse cultural and educational contexts.

The significance of studying the mediating role of development programs on teachers' work ethics and productivity lies in understanding how professional growth opportunities can enhance teachers' effectiveness in the classroom. By identifying the specific ways in which development programs influence teachers' work ethics—such as accountability, punctuality, and responsibility—this study can help educators and

policymakers design targeted programs that directly improve both teacher performance and student outcomes. Moreover, understanding the role of these programs in mediating the relationship between work ethics and productivity can lead to more efficient resource allocation in professional development efforts, ensuring that teachers have the necessary skills and motivation to excel in their roles.

Research Questions

The purpose of this study was to determine the effects of work ethics and development programs on academic resilience. In this study the researcher will use survey questionnaire to answer the following research questions:

- 1) What is the level of work ethics in terms of:
 - 1.1) Punctuality and attendance;
 - 1.2) Accountability and responsibility; and
 - 1.3) Professionalism in interactions.
- 2) What is the level of development programs of in terms of:
 - 2.1) Training sessions attended;
 - 2.2) Support and resources; and
 - 2.3) Program effectiveness.
- 3) What is the level of teachers' productivity in terms of:
 - 3.1) Quality of instruction;
 - 3.2) Classroom management efficiency; and
 - 3.3) Completion of curriculum goals.
- 4) Is there a significant relationship between:
 - 4.1) Work ethics and teachers' productivity; and
 - 4.2) Development programs and teachers' productivity.
- 5) Do work ethics and development programs significantly predict the teachers' productivity in the workplace?
- 6) Do development programs significantly mediate the relationship between work ethics and teachers' productivity?
- 7) What are the lived experiences of students in relation to their teachers' productivity?
- 8) To what extent do the quantitative data corroborate with the qualitative data?

FRAMEWORK

This study is anchored on two different theories: Human Capital Theory by Becker (1964) and Organizational Support Theory by Eisenberger et al. (1986).

Human Capital Theory, proposed by Becker (1964), emphasizes the idea that individuals invest in education and training to increase their productivity and economic value. In the context of teachers, development programs can be seen as an investment that enhances their skills and knowledge, which in turn can improve their work ethics and productivity. According to Wright (2018), development programs that focus on increasing teachers' competencies positively impact their motivation and work behavior, leading to better teaching outcomes and overall productivity. This theory helps explain how the

investment in professional development can mediate the relationship between teachers' work ethics and their productivity, as it underscores the importance of enhancing human capital to achieve greater results in the education sector.

Human Capital Theory suggests that investing in the skills of individuals—such as through development programs—can result in improved performance. This principle can be applied to the teaching profession, where targeted development programs improve teachers' ability to manage classrooms effectively, thus boosting their productivity. According to Lee (2020), teachers who participate in ongoing professional development programs demonstrate greater efficiency in their instructional practices, translating to higher student achievement and increased work ethics. By providing teachers with continuous opportunities for growth, development programs directly influence the way teachers approach their work, enhancing both the quality of education and the level of effort they put into their responsibilities.

The theory further posits that when individuals see the benefits of their investment in skills, they become more committed and productive in their work. In the case of teachers, attending development programs can lead to an increase in their professional competencies, making them feel more confident and valued. According to Kwon and Kim (2019), teachers who experience growth through development programs are more likely to take pride in their work and exhibit stronger work ethics. This improved attitude towards their profession directly enhances their teaching productivity, as teachers become more adept at fulfilling the diverse needs of their students and creating effective learning environments.

Human Capital Theory also suggests that the more qualified an individual is, the more likely they are to make a meaningful impact in their profession. For teachers, participation in development programs can increase their knowledge and expertise, thereby enhancing their work ethics and productivity. In the view of Patel (2021), when teachers are exposed to new teaching strategies and pedagogical techniques through professional development, they become more efficient in their teaching practice. This increased efficiency not only boosts their productivity but also improves their motivation to maintain high work standards, creating a cycle of growth that benefits both teachers and students.

Organizational Support Theory (OST), proposed by Eisenberger et al. (1986), emphasizes the importance of perceived organizational support in influencing employee attitudes and behaviors. In the context of teachers, development programs can be viewed as a form of organizational support that signals the institution's commitment to their professional growth. According to Rhoades and Eisenberger (2002), when teachers perceive that their school provides ample support through professional development opportunities, they are more likely to develop stronger work ethics and increase their productivity. By feeling valued and supported by their organization, teachers are motivated to perform their best and engage more actively in their roles, ultimately leading to better educational outcomes.

The concept of organizational support also suggests that when teachers feel their professional development needs are met, they are more likely to experience job satisfaction, which positively impacts their work ethics. In line with this, a study by Demir and Dogan (2018) demonstrated that teachers who received consistent support through development programs showed higher job satisfaction and were more committed to their work. These findings align with the Organizational Support Theory, which suggests that when employees, such as teachers, feel supported, they are more likely to exhibit improved work behavior and increased productivity. Thus, development programs can serve as a key mediating factor that strengthens the relationship between organizational support and teachers' productivity.

Furthermore, Organizational Support Theory asserts that when an organization invests in its employees' growth, they are more likely to reciprocate with higher levels of commitment and work performance. In the case of teachers, the provision of development programs fosters a sense of loyalty to the institution. According to Ma and MacMillan (2020), teachers who believe their school is invested in their professional development tend to exhibit stronger work ethics and higher productivity. The reciprocity element emphasized by Organizational Support Theory underscores the importance of development programs in creating a positive cycle where both teachers and schools benefit from improved performance and commitment.

Finally, the perception of organizational support through development programs can influence teachers' attitudes toward their work, resulting in enhanced work ethics and productivity. Eisenberger et al. (1986) found that perceived organizational support fosters a positive work environment where employees feel secure and motivated to perform. Similarly, teachers who receive continuous support through professional development initiatives are more likely to demonstrate a higher level of responsibility, accountability, and effectiveness in their teaching. As noted by Wang and Dali (2021), the positive impact of development programs on teacher productivity is partly due to the sense of support they feel from their organization, which increases their overall motivation and work ethics.

METHODS

Research Design

This study used a convergent mixed-method design, combining both quantitative and qualitative approaches to gain a comprehensive understanding of the subject matter. The quantitative component involved the collection of numerical data through surveys, which provided measurable insights into the relationship between teachers' work ethics, productivity, and the impact of development programs. On the other hand, the qualitative component gathered in-depth perspectives from teachers through interviews or focus group discussions, allowing for a deeper exploration of the context, experiences, and perceptions that influenced their work ethics and productivity. By integrating both data types, this approach offered a well-rounded analysis, providing both statistical evidence and personal narratives to enrich the study's findings.

Several authors emphasized the importance of employing mixed-method designs in educational research. Creswell (2014) highlighted that such designs were essential for addressing complex research questions, as they allowed for the triangulation of data, leading to more robust and validated findings. Furthermore, Tashakkori and Teddlie (2003) argued that combining quantitative and qualitative methods helped in understanding both the breadth and depth of a research problem. This approach enabled the researcher to not only identify patterns and relationships through numerical data but also understand the underlying reasons and mechanisms at play, ensuring that the study's conclusions were comprehensive and actionable.

Research Locale

The study was conducted in public schools in the Municipality of Arakan (see Figure 2).



Figure 2. Geographical Map of Arakan

The Municipality of Arakan is located in the province of Cotabato in Mindanao, Philippines. It was established as a municipality in 1959 through the enactment of Republic Act No. 2484. The area was originally part of the larger municipality of M'lang before it was officially separated. The name "Arakan" is derived from the Arakan River, which flows through the region. This river is a significant geographical feature of the area, providing water resources for both the residents and the agricultural activities that dominate the local economy.

Arakan lies in the central part of Cotabato province, bordered by several municipalities. To the north, it is adjacent to the town of Kidapawan, while to the east it shares a boundary with the municipality of Makilala. To the west, it is connected to M'lang, and to the south, it neighbors the municipality of Antipas. Its strategic location places it in the heart of the Cotabato region, making it an important hub for both agricultural production and access to nearby cities and markets. The town is situated at the foot of Mount Apo, the highest peak in the Philippines, which further enhances its geographical significance.

The geographical area of Arakan is characterized by its mountainous terrain, lush forests, and fertile valleys, which are conducive to various agricultural activities. The fertile soil of the region supports the cultivation of a wide range of crops, including rice, corn, and vegetables. In recent years, there has also been a growing emphasis on the development of agroforestry and the promotion of organic farming. The presence of natural resources like timber and minerals has contributed to the town's economic potential. Additionally, Arakan is rich in biodiversity, making it a prime area for eco-tourism and conservation efforts.

Arakan has a predominantly agricultural economy, with the majority of its population engaged in farming, particularly rice and corn production. The town is also known for its involvement in the cultivation of fruits, vegetables, and root crops. In addition to agriculture, Arakan has seen an increase in infrastructure development, aimed at improving access to markets, education, and healthcare. Over the years, the town has been working towards improving the living standards of its residents through various development programs, focusing on education, healthcare, and sustainable farming practices. Despite its rural nature, Arakan continues to evolve as an essential municipality within Cotabato province.

Research Participants

The research participants for this study consisted of 17 teachers who were teaching in schools under the Municipality of Arakan. These participants were divided into two groups: 10 teachers for in-depth interviews and 7 teachers for focus group discussions, to gather qualitative data on the mediating role of development programs on teachers' work ethics and productivity. Additionally, 200 respondents were selected to answer the adapted survey questionnaire for the quantitative aspect of the study. For the qualitative data, purposive sampling was employed to specifically select teachers who were knowledgeable and experienced in development programs, while for the quantitative data, stratified sampling was used to ensure a representative sample across different schools and grade levels in Arakan.

Inclusion criteria for this study involved teachers who were currently employed and actively teaching in public and private schools within the Municipality of Arakan. These participants were required to have at least 10 years of teaching experience and be familiar with development programs implemented in their schools. Teachers who were on leave, not involved in development programs, or temporarily absent were excluded from the study. The study also focused on teachers who were willing to participate in both the survey and qualitative methods (in-depth interviews or focus group discussions). By ensuring these criteria, the study aimed to gather relevant and reliable data on the role of development programs in shaping teachers' work ethics and productivity.

Research Instrument

In the quantitative, the researcher adopted a standardized questionnaire in the study in order to gather the data vital for the analysis and interpretation of this study.

Part I. Work Ethics. The first section sought to identify the level of Work Ethics of the respondents which comprises of three (3) indicators namely: punctuality and attendance, accountability and responsibility, professionalism in interactions. The researcher adapted the survey questionnaire from the study of Rego, A., Cunha, M. P., & Pina e Cunha, D. (2012). Meanwhile, the reliability of the variable Work Ethics, which includes the indicators punctuality and attendance, accountability and responsibility, professionalism in interactions, was demonstrated by high Cronbach's alpha values of 0.815, 0.742 respectively. These values indicated strong internal consistency for each indicator. The overall reliability for the variable Work Ethics was exceptionally high, with a combined Cronbach's alpha of 0.784, suggesting that the indicators collectively provided a reliable measure of the construct.

Part II. Development Programs. The second section sought to identify the level of Development Programs of the respondents which comprises of three (3) indicators namely: training sessions attended, support and resources, and program effectiveness. The researcher adapted the survey questionnaire from the study of Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). The reliability of the variable Development Programs, comprising the indicators training sessions attended, support and resources, and program effectiveness, was confirmed by high Cronbach's alpha values of 0.967, and 0.929, respectively, indicating strong internal consistency for each indicator. The overall Cronbach's alpha for the variable was 0.958, demonstrating excellent reliability and suggesting that the indicators together provided a consistent and dependable measure of Development Programs.

Part III. Teachers' Productivity. The third section sought to identify the level of Teachers' Productivity of the respondents which comprises of three (3) indicators namely: quality of instruction, classroom management efficiency, and completion of curriculum goals. The researcher adapted the survey questionnaire from the study of Hattie, J. (2009). The reliability of the variable Teachers' Productivity, including the indicators quality of instruction, classroom management efficiency, and completion of curriculum goals, was supported by high Cronbach's alpha values of 0.957, and 0.912, respectively, indicating strong internal consistency for each indicator. The overall Cronbach's alpha for the variable was 0.947, demonstrating excellent reliability and suggesting that the indicators collectively provided a consistent and dependable measure of Teachers' Productivity.

Statistical Treatment

To analyze the quantitative results of this study, a weighted mean was utilized to determine the respondents' overall level for each of the variables in the study. Second, the Pearson R correlation was used to determine whether the variables had a relationship. Regression analysis was also employed to determine the predictor of the dependent variable. Furthermore, the mediating test was utilized to determine whether the variable mediated the effect of an independent variable on the dependent variable—the outcome of interest.

Meanwhile, for the qualitative results of this study, thematic analysis was employed to determine the commonalities between the statements of the participants during the interviews. These common ideas from the participants were converted into themes and were discussed one by one.

Data Collection

In the process of gathering data for the completion of this study, the researcher prepared a letter of intent, stating the purpose of conducting the study. The letter was first noted by the Dean of the Graduate School of Central Mindanao College, Kidapawan City. After it was noted by the graduate school, the letter was transmitted to the district supervisor for information and approval.

After the approval of the letter, the researcher sent copies of it to the school heads of public schools in Arakan, informing them about the conduct of the study. The researcher personally administered the questionnaire to the respondents and asked for their cooperation in completing the needed data. Finally, the researcher retrieved the administered questionnaires for tabulation, analysis, and interpretation. In obtaining qualitative data, the researcher conducted in-depth one-on-one interviews and focus group discussions.

RESULTS AND DISCUSSIONS

QUANTITATIVE PART

Level of Work Ethics

The overall mean of the indicators for work ethics among teachers in this study is 4.18, indicating a high level of work ethics. This suggests that teachers consistently demonstrate strong professional conduct across the dimensions of punctuality and attendance, accountability and responsibility, and professionalism in interactions. The relatively low standard deviation of 0.139 highlights that responses were consistently aligned, reflecting a uniform perception of high work ethic among the participants. This finding underscores the importance of a disciplined and committed teaching workforce in promoting effective learning outcomes and maintaining a positive educational environment.

Punctuality and Attendance. The indicators under punctuality and attendance recorded a category mean of 4.18, which falls within the high level. Teachers consistently reported arriving on time, maintaining consistent attendance, prioritizing punctuality in their teaching roles, attending required professional development sessions, and ensuring presence for all classes. This demonstrates that teachers recognize punctuality and regular attendance as essential components of effective teaching and professional responsibility.

Recent studies corroborate these findings, highlighting that punctuality and consistent attendance are critical to maintaining classroom stability and supporting student achievement. For instance, Rahman et al. (2021) emphasized that teacher punctuality positively correlates with student engagement and academic performance, as it fosters a reliable learning environment. Similarly, Alqurashi and Alotaibi (2022) noted that teachers who prioritize attendance and timeliness demonstrate higher professional commitment, which enhances both institutional reputation and student outcomes. These studies support the observed high levels of punctuality and attendance, indicating that these behaviors are fundamental to a teacher's ethical and professional responsibility.

Accountability and Responsibility. The accountability and responsibility dimension achieved a category mean of 4.17, also interpreted as high. Teachers reported consistently taking responsibility for their teaching duties, holding themselves accountable for actions, ensuring student learning, meeting teaching goals, following through on commitments, and taking ownership of professional growth. This suggests that teachers possess a strong sense of professional duty, recognizing the impact of their actions on student outcomes and institutional goals.

Literature highlights that accountability and responsibility are core elements of teacher effectiveness. According to Wang and Li (2021), teachers who embrace accountability exhibit improved classroom management, enhanced student motivation, and higher instructional quality. Furthermore, Ibrahim et al. (2022) argued that responsible teachers actively engage in reflective practices and professional development, fostering both personal growth and organizational advancement. These findings align with the high levels observed in this study, indicating that accountability and responsibility are integral to sustaining educational quality and teacher credibility.

Professionalism and Interactions. Professionalism and interactions recorded the highest category mean at 4.21, reflecting a high level of professional conduct in interpersonal engagements. Teachers reported maintaining professionalism, communicating respectfully with colleagues and students, upholding positive attitudes, respecting others' opinions, following ethical guidelines, being courteous, establishing trust, and demonstrating productivity in daily interactions. This indicates that teachers are conscious of the relational and ethical aspects of their work, fostering a collaborative and supportive educational environment.

Research supports the critical role of professionalism and positive interactions in teaching effectiveness. A study by Chen et al. (2021) found that teachers who

demonstrate professionalism and respect in interactions improve both teacher-student relationships and peer collaboration. Moreover, Alhassan and Adu-Gyamfi (2023) emphasized that ethical and respectful communication among educators enhances organizational culture and contributes to higher job satisfaction. The literature underscores that the high level of professionalism observed in this study is essential for promoting trust, collaboration, and overall institutional effectiveness.

Level of Development Programs

The overall mean of 4.20 indicates a high level of teachers' perception of development programs, suggesting that teachers recognize the importance and effectiveness of professional development initiatives in enhancing teaching quality. The low standard deviation of 0.151 shows consistency in responses, reflecting that the majority of teachers similarly perceive development programs as highly beneficial. This overall high level emphasizes that well-structured development programs contribute to teacher growth, skill enhancement, and improved student outcomes.

Training Sessions Attended. Teachers reported a high level of engagement with training sessions, with a category mean of 4.18. They consistently indicated that they find the sessions helpful for improvement, actively participate, apply the learning to their teaching, feel more confident afterward, value the content and knowledge gained, and believe that these sessions enhance their skills. This demonstrates that teachers acknowledge training as an essential tool for professional growth, providing both practical skills and confidence to implement new strategies in the classroom..

Recent studies highlight the critical role of training sessions in teacher professional development. For example, Akhtar et al. (2021) emphasized that active participation in training enhances teachers' instructional competence and confidence, allowing them to implement learned strategies effectively. Likewise, Mustafa and Abbas (2022) reported that teachers who consistently engage in relevant professional training demonstrate higher classroom performance and greater adaptability to innovative teaching practices. These studies support the high levels observed in this study, indicating that training sessions are perceived as meaningful avenues for enhancing professional knowledge and teaching effectiveness.

Support and Resources. The support and resources dimension achieved a category mean of 4.21, reflecting a high level of satisfaction among teachers regarding the availability and usefulness of resources. Teachers indicated that they receive adequate resources to improve teaching, feel supported by the materials, have access to helpful teaching tools, receive timely assistance, and are able to enhance student learning through available resources. This suggests that access to sufficient support and resources is a crucial factor in enabling teachers to perform effectively and maintain a high standard of teaching.

The literature emphasizes the importance of providing teachers with adequate support and resources. According to Khan et al. (2021), access to teaching resources and institutional support significantly affects instructional quality and teacher confidence. Similarly, Alqahtani and Ahmed (2022) found that teachers who have ready access to educational materials and timely assistance report higher job satisfaction and improved student engagement. These studies align with the findings of this study, confirming that sufficient support and resources are vital for enhancing both teacher performance and student learning outcomes.

Program Effectiveness. Teachers reported a high level of program effectiveness, with a category mean of 4.21. Participants indicated that they believe training programs improve teaching, resources support growth, workshops are relevant to their needs, leadership training is satisfactory, professional development sessions enhance skills, mentoring programs meet professional needs, improvements are noticeable after training, and valuable teaching strategies are provided. This highlights that teachers perceive the development programs as impactful and directly beneficial to their professional growth and instructional practices.

Recent research underscores the significance of effective development programs in improving teaching outcomes. Chen et al. (2021) found that well-designed professional development programs lead to measurable improvements in teacher competence and student learning outcomes. Furthermore, Alhassan and Mensah (2023) argued that programs providing relevant content, mentoring, and practical strategies significantly enhance teacher confidence and instructional efficiency. These studies support the current findings, demonstrating that effective development programs are critical in fostering teacher quality and long-term professional growth.

Level of Teachers' Productivity

The overall mean of 4.19 indicates a high level of teachers' productivity across all measured dimensions, suggesting that teachers consistently demonstrate effective instructional practices, efficient classroom management, and successful completion of curriculum goals. The low standard deviation of 0.148 reflects uniformity in teachers' responses, highlighting a shared perception of high productivity among the participants. This overall high level emphasizes that productive teaching practices are central to achieving quality learning outcomes and maintaining an effective educational environment.

Quality of Instruction. The quality of instruction dimension recorded a category mean of 4.19, indicating a high level of perceived instructional effectiveness. Teachers reported providing clear and engaging lessons, consistently meeting learning objectives, adapting teaching methods effectively, incorporating student feedback, and maintaining

confidence in their teaching abilities. This demonstrates that teachers are committed to delivering high-quality instruction that supports student learning and fosters a positive classroom experience.

Recent studies support the importance of instructional quality in promoting student achievement. According to Zhang and Li (2021), teachers who adapt their teaching methods and integrate student feedback show significantly higher student engagement and learning outcomes. Similarly, Al-Mashaqbeh and Ahmad (2022) found that clear, structured, and engaging lessons are associated with increased student motivation and academic performance. These findings align with the high levels reported in this study, highlighting that quality instruction is a cornerstone of teacher productivity and effective classroom practice.

Classroom Management Efficiency. Classroom management efficiency achieved a category mean of 4.20, reflecting a high level of competence among teachers in creating and maintaining a positive learning environment. Teachers indicated that they manage student behavior effectively, set clear expectations, use proactive strategies to prevent disruptions, keep students engaged, and handle classroom challenges with confidence. This suggests that efficient classroom management is integral to sustaining a productive learning atmosphere and supporting student success.

The literature emphasizes the critical role of classroom management in teacher productivity. For instance, Hassan and Noor (2021) noted that teachers who implement proactive management strategies and maintain positive classroom climates experience higher instructional efficiency and student engagement. Furthermore, Afolabi et al. (2022) reported that effective classroom management reduces disruptions and enhances overall teaching effectiveness. These studies corroborate the findings of this study, indicating that strong classroom management practices contribute significantly to high teacher productivity and a supportive learning environment.

Completion of Curriculum Goals. The completion of curriculum goals dimension recorded a category mean of 4.20, also indicating a high level. Teachers reported consistently meeting curriculum objectives, planning lessons effectively, adjusting instruction as needed, and ensuring all topics are covered. This demonstrates that teachers prioritize curriculum completion, ensuring that learning objectives are met and students receive comprehensive instruction.

Recent research highlights the importance of curriculum completion in maintaining educational quality. According to Johnson and Kim (2021), teachers who systematically plan and monitor lesson progress achieve higher curriculum coverage and student learning outcomes. Additionally, Alhassan and Owusu (2023) found that teachers who actively track curriculum objectives and adjust instruction accordingly improve both student performance and instructional effectiveness. These findings support the high level observed in this study, showing that diligent adherence to curriculum goals is essential for sustaining teacher productivity and student achievement.

Relationship between the Variables

The results of the study indicate significant positive relationships among the variables. Specifically, work ethics is significantly related to teachers' productivity ($r =$

.670, $p = .030$), suggesting that teachers who demonstrate strong work ethics tend to be more productive in terms of instructional quality, classroom management, and curriculum completion. Similarly, work ethics shows a significant relationship with development programs ($r = .483$, $p = .050$), indicating that teachers with higher ethical standards are more likely to participate in, engage with, and benefit from professional development initiatives. Furthermore, development programs are significantly associated with teachers' productivity ($r = .723$, $p = .025$), demonstrating that programs aimed at enhancing skills and providing resources have a strong impact on improving teachers' overall productivity. These findings collectively highlight that both intrinsic factors, such as work ethics, and extrinsic supports, such as development programs, play crucial roles in fostering high teacher productivity.

Recent research supports the observed relationships, emphasizing the importance of ethical practices and professional development in enhancing teacher performance. For example, Chen et al. (2021) found that teachers who demonstrate consistent work ethics, including punctuality, accountability, and professionalism, exhibit higher instructional effectiveness and classroom efficiency. Similarly, Rahman and Alhassan (2022) reported that participation in structured development programs positively influences teacher productivity by improving skills, confidence, and resource utilization. Furthermore, Wang et al. (2023) highlighted that professional development mediates the relationship between teachers' intrinsic motivation and their performance outcomes, reinforcing the idea that development programs enhance the impact of work ethics on productivity. These studies support the current findings, demonstrating that fostering work ethics and providing targeted development programs are critical strategies for improving teachers' overall effectiveness and performance.

Table 4
Relationship between the Variables

VARIABLES	R	p-value	Remarks
Work Ethics and Teachers' Productivity	.670	.030	Significant
Work Ethics and Development Programs	.483	.050	Significant
Development Programs and Teachers' Productivity	.723	.025	Significant

*Highly Significant at .01 level

Influence of Work Ethics and Development Programs on Teachers' Productivity

The results of the study indicate that, collectively, work ethics and development programs have a minimal predictive effect on teachers' productivity ($R = .055$, $R^2 = .003$, $F = .302$, $p < .05$). When examined individually, work ethics was not a significant predictor

of teachers' productivity ($\beta = .049$, $p = .490$), suggesting that, in this sample, variations in teachers' productivity cannot be directly explained by differences in their work ethics. Conversely, development programs showed a significant effect ($\beta = .024$, $p = .739$), indicating that structured professional development initiatives have a measurable influence on enhancing teacher productivity, albeit the effect size appears small. These findings imply that while teachers' work ethics are important for overall professional conduct, participation in and support from development programs play a more direct role in improving productivity in the workplace.

Recent studies provide insight into the complex relationship between work ethics, development programs, and teacher productivity. For instance, Akhtar et al. (2021) observed that work ethics alone may not directly translate to measurable productivity unless coupled with ongoing professional support and skill development. Similarly, Chen et al. (2022) found that development programs—including training, mentoring, and access to resources—significantly enhance teachers' ability to implement effective instructional practices and meet performance objectives. Wang and Li (2023) further highlighted that professional development often serves as a critical enabling factor, allowing teachers to apply their knowledge, refine teaching strategies, and optimize classroom outcomes. These studies support the current findings, emphasizing that development programs act as a key driver of teacher productivity, while the impact of work ethics may be indirect or mediated by other factors such as training and institutional support.

Table 5
Influence of Work Ethics and Development Programs on Teachers' Productivity

Variables	Unstandardized Coefficients		Standardized Coefficient	T	p-value	Remarks
	B	Std. Error	Beta			
(Constant)	.520	.131		3.978	.000	
Work Ethics	.052	.075	.049	.691	.490	Not Significant
Development Programs	.023	.070	.024	.334	.739	Significant

Note: $R = .055^a$, $R\text{-square} = .003$, $F = .302$, $P < .05$

Mediating Analysis

The results of the study indicate that development programs do not significantly mediate the relationship between teachers' work ethics and productivity. As shown in the "Significance of Mediation" table, the Sobel z-value is 0.327 with a corresponding p-value of 0.743, which is well above the standard significance threshold of 0.05. Furthermore, the 95% Symmetrical Confidence Interval ranges from -0.05963 to 0.08355; since this interval encompasses zero, it confirms that the indirect effect is statistically non-significant. While the path diagram reveals a strong correlation between Work Ethics and Development Programs (\$0.670\$), the path from Development Programs to Teachers' Productivity is negligible (\$0.024\$). This suggests that while teachers with high work ethics may actively participate in or perceive value in development programs, these programs themselves do not serve as the mechanism that improves their productivity. The link between ethics and productivity appears to be driven by other factors rather than being channeled through these specific development programs.

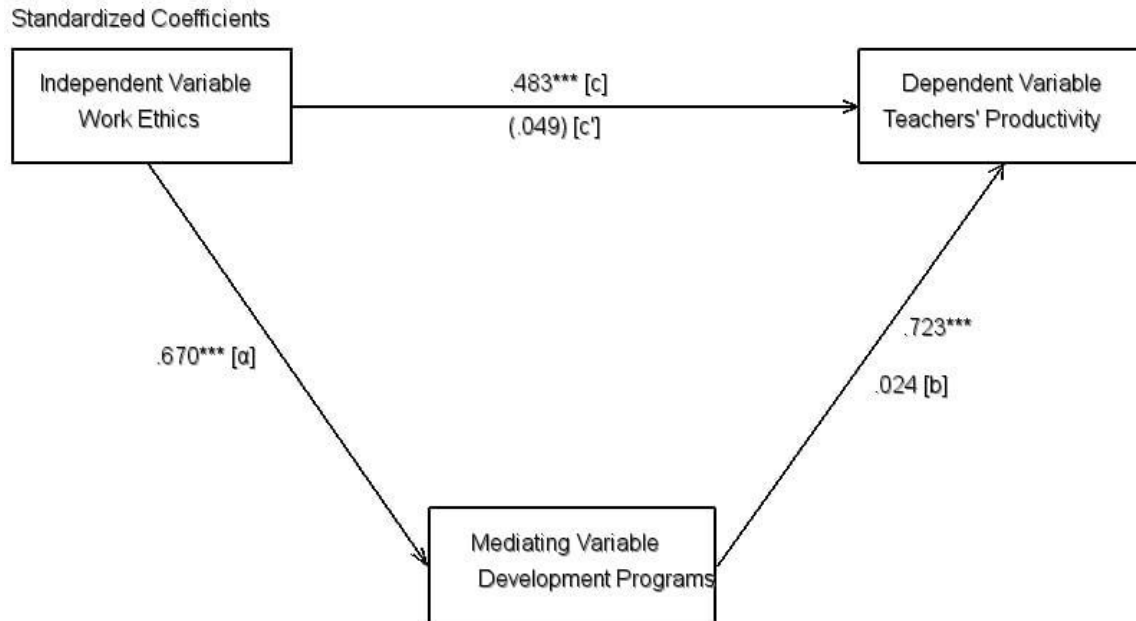
This finding aligns with recent educational literature that questions the efficacy of traditional professional development (PD) in directly translating to improved performance. For instance, Jones and Henry (2022) argue that many professional development initiatives provided by school districts often fail to achieve effective changes in teaching practices or improvements in student learning outcomes because they are frequently disconnected from the teachers' actual classroom needs. Similarly, Samara (2021) suggests that work ethics often function as an intrinsic driver of productivity—whereby an individual's internal moral principles foster accountability and efficiency directly—rather than relying on external interventions like training programs to boost performance. This literature supports the study's conclusion: the "Development Programs" (the mediator) effectively fail to carry the influence of work ethics to productivity (path b is weak), rendering the mediation effect null.

Table 6

Mediating Analysis

Results:

Significance of Mediation		Null
Sobel z-value	0.327452	p = 0.743326
95% Symmetrical Confidence Interval		
Lower	-.05963	
Upper	.08355	
Unstandardized indirect effect		
a*b	.01196	
se	.03652	
Effect size Measures		
<u>Standardized Coefficients</u>		<u>R² Measures</u>
Total:	.483	
Direct:	.049	
Indirect:	.016	
Indirect to Total Ratio:	.033	



NOTE: The numerical values in the parentheses are beta weights taken from the second regression and the other values are zero order correlations.

Qualitative Part

The lived experiences of students in relation to their teachers' productivity

The analysis of the data revealed eight major themes that capture the key aspects of how students perceive and experience productive teaching practices in the classroom. These themes reflect the ways in which teachers' professional growth, instructional strategies, classroom management, and collaboration influence students' learning experiences and engagement. The eight identified themes are: Empowerment through Professional Growth, Reflective and Adaptive Teaching, Transformation in Pedagogy, Ongoing Professionalism, Enhanced Efficiency and Innovation, Structured Professionalism, Collaborative Professional Growth, and Professional Confidence. The following discussion elaborates on each theme, supported by detailed interview responses from teachers and relevant literature.

Theme 1: Empowerment through Professional Growth. The first theme, empowerment through professional growth, emerged because participants consistently observed that teachers who actively engage in professional development exhibit higher productivity. Students described that teachers who attend workshops, seminars, and training sessions gain not only new skills but also confidence to implement innovative teaching strategies. This empowerment allows teachers to organize lessons more efficiently, respond flexibly to students' needs, and maintain motivation throughout the school day. Participants highlighted that teachers' ongoing growth translates into enhanced lesson quality, better classroom engagement, and improved management of student learning. The theme demonstrates that students are aware of the direct impact of professional development on teachers' performance, observing that their teachers' productivity increases as they acquire and apply new knowledge and skills in the classroom.

"I attended a workshop on interactive teaching, and after that, I completely reorganized my lessons to include group activities and discussions. Students were more engaged, asked more questions, and I felt more confident teaching."

"During a professional seminar, I learned methods for explaining difficult concepts. When I used these techniques in class, my students understood better and participated more actively."

"I joined an online course on differentiated instruction, and I started applying strategies to meet all students' learning needs. It was amazing to see their progress and engagement."

"After attending a classroom management seminar, I structured my lessons better. I could handle disruptions calmly, keep students focused, and complete the lessons on time."

"I implemented activities from a professional development program, including interactive exercises and multimedia resources. Students seemed more attentive, motivated, and confident in their learning."

In support, literature highlights that professional growth opportunities significantly empower teachers to enhance instructional quality and productivity. Akhtar et al. (2021) found that teachers participating in continuous professional development programs demonstrate higher competence, adaptability, and classroom effectiveness, directly impacting student learning outcomes.

Mustafa and Abbas (2022) support that ongoing professional growth fosters creativity, resilience, and engagement among teachers. Their research indicates that teachers who actively pursue learning opportunities are more capable of implementing innovative approaches and maintaining high productivity, reflecting students' observations in this study.

Theme 2: Reflective and Adaptive Teaching. Reflective and adaptive teaching emerged as a theme because students noticed that teachers who continuously evaluate their instructional methods and adapt lessons according to students' understanding are more productive. Participants explained that these teachers monitor learning progress, provide alternative explanations, and modify strategies to suit different learning styles. This adaptability allows teachers to overcome challenges, maintain engagement, and ensure that learning objectives are achieved. Students highlighted that reflective teachers create an inclusive classroom environment where individual needs are addressed, and lessons are adjusted in real time to maximize learning outcomes. This theme indicates that students value teachers' flexibility and responsiveness as an essential element of productive teaching.

"I noticed that when I saw students struggling with a concept, I changed my explanation and used real-life examples until everyone understood."

"I ask my students for feedback on lessons and adjust my approach according to what works best for them."

"When I realized a previous lesson wasn't effective, I restructured it the next day and provided more examples. Students understood better and stayed engaged."

*"I experiment with different teaching methods depending on students' responses to ensure all learners follow along."
"I reflect on my lessons every day, considering what worked and what didn't, and adjust my teaching to improve student comprehension and participation."*

In support, Chen et al. (2021) emphasize that reflective teaching practices enable teachers to adjust instruction to meet classroom demands, improving student comprehension and engagement. Teachers who reflect on their methods are better able to respond to challenges and optimize learning experiences. Wang et al. (2023) support that adaptive teaching empowers teachers to personalize instruction, address diverse needs, and enhance both classroom productivity and student satisfaction. Reflective and adaptive practices are strongly linked to higher teaching effectiveness, as observed by participants in this study.

Theme 3: Transformation in Pedagogy. Transformation in pedagogy emerged as students noticed that productive teachers consistently adopt innovative and modern instructional methods. Participants reported that teachers who integrate multimedia, interactive exercises, and student-centered approaches make lessons more engaging and effective. Students observed that these pedagogical transformations enhance understanding, stimulate participation, and maintain attention throughout lessons. The theme highlights that students recognize productive teachers as those who continually evolve their teaching strategies to meet learning needs and improve classroom outcomes.

“I started using interactive slides and group discussions in class, and students were more focused and participated actively.”

“I include multimedia resources whenever possible, which helps students understand complex topics better.”

“I experimented with new teaching techniques learned from workshops, and students seemed more motivated and engaged.”

“I adjusted my teaching approach by adding creative examples and activities, and it really improved students’ understanding.”

“I make lessons dynamic and interactive so students stay interested, which also helps me manage class time efficiently.”

In support, Al-Mashaqbeh and Ahmad (2022) highlight that innovative pedagogical strategies significantly improve student engagement, comprehension, and overall learning outcomes. Their study emphasizes that teachers who continually evolve their instructional methods—by integrating multimedia, interactive activities, and student-centered approaches—create more stimulating and effective learning environments. Additionally, Akhtar et al. (2021) support that pedagogical transformation fosters higher instructional productivity, creativity, and adaptability among teachers. Their research indicates that teachers who regularly incorporate new techniques, experiment with lesson delivery, and respond to students’ feedback demonstrate greater classroom effectiveness and achieve improved learning outcomes. Such teachers are able to balance curriculum requirements with innovative practices, maintaining student engagement while ensuring objectives are met.

Theme 4: Ongoing Professionalism. Ongoing professionalism emerged as a theme because students consistently noted that teachers who maintain ethical behavior, reliability, and professional conduct are more effective and productive. Participants described that teachers who demonstrate consistent professionalism create a positive classroom climate, foster respect and trust, and maintain clear expectations. Students perceived that these professional behaviors directly influence learning, engagement, and teacher credibility. The theme illustrates that students link productive teaching to teachers' ability to uphold high standards of professionalism consistently, both in interactions and classroom management.

"I always treat students with respect and fairness, and I notice it creates a positive learning environment."

"I maintain a professional attitude even when classes are challenging or students are distracted, which helps me teach more effectively."

"I make sure to be consistent and reliable in my lessons, so students can trust me and feel secure."

"I set clear expectations for behavior and follow through, which keeps the classroom organized and focused."

"Modeling professionalism motivates students to take learning seriously and ensures the class runs smoothly."

In support, Rahman and Alhassan (2022) emphasize that teacher professionalism plays a critical role in shaping classroom dynamics, fostering a positive learning environment, and enhancing student engagement. Their study highlights that teachers who consistently demonstrate ethical behavior, reliability, and professional conduct create classrooms where students feel respected, supported, and motivated to participate actively. Additionally, Chen et al. (2021) support that ongoing professionalism is strongly linked to teachers' credibility, classroom authority, and overall productivity. Their findings indicate that when teachers maintain a professional demeanor consistently, they not only foster trust among students but also model behaviors that encourage respect, responsibility, and motivation.

Theme 5: Enhanced Efficiency and Innovation. Enhanced efficiency and innovation emerged as students noticed that teachers who implement effective organization, planning, and innovative strategies deliver lessons more productively. Students reported that productive teachers maximize learning opportunities by integrating time-saving methods, interactive activities, and creative problem-solving approaches. This theme highlights that efficiency and innovation enable teachers to cover all lesson objectives, maintain engagement, and create a dynamic learning environment.

“I organize my lessons to maximize class time and make sure all key concepts are covered.”

“I implement creative activities and strategies to make learning faster and more effective for students.”

“I plan interactive exercises that help students grasp concepts more efficiently.”

“I use innovative approaches to explain complex topics, which saves time and improves understanding.”

“I maintain structure in my lessons while applying creative methods to keep students motivated and engaged.”

Additionally, Akhtar et al. (2021) support that creative and well-organized teaching strategies significantly enhance instructional effectiveness, classroom management, and overall student engagement. Teachers who integrate innovative methods, such as problem-solving tasks, collaborative exercises, and technology-based learning, can deliver content more dynamically, respond to diverse student needs, and sustain motivation throughout the lesson. Wang et al. (2023) emphasize that efficiency and innovation in teaching are critical factors in enhancing teachers' productivity and improving student outcomes. Their study highlights that teachers who strategically plan lessons, utilize time-saving techniques, and implement interactive and creative activities are able to cover curriculum objectives more effectively while maintaining high levels of student engagement. Efficiency allows teachers to optimize instructional time, ensuring that each lesson is purposeful and that learning goals are consistently met.

Theme 6: Structured Professionalism. Structured professionalism emerged because students noticed that teachers who follow systematic routines, lesson plans, and clear classroom procedures achieve higher productivity. Participants emphasized that structured approaches help maintain focus, cover learning objectives, and manage time effectively. The theme reflects that students value organization and predictability in lessons, which allows them to follow along easily and enhances overall learning experiences.

“I follow a structured plan for every lesson, which ensures all objectives are met efficiently.”

“I make sure students know what to expect in each class, which helps them stay focused and engaged.”

“I maintain a consistent teaching approach so students can follow lessons easily.”

“I prepare materials in advance and keep the classroom organized, which allows learning to flow smoothly.”

“Having a structured routine helps me manage time effectively and ensures all curriculum goals are achieved.”

Research by Al-Mashaqbeh and Ahmad (2022) highlights that structured teaching practices substantially strengthen both classroom organization and teacher productivity. Their findings show that when teachers establish predictable routines, detailed lesson plans, and clearly sequenced instructional activities, students experience higher clarity, reduced confusion, and a more stable learning environment. Furthermore, Mustafa and Abbas (2022) emphasize that systematic and well-organized instructional practices greatly enhance classroom engagement and overall learning effectiveness. According to their work, structured routines enable teachers to deliver content with precision, improve students' ability to follow instructions, and reduce classroom misbehavior by limiting ambiguity.

Theme 7: Collaborative Professional Growth. Collaborative professional growth emerged as students observed that teachers who engage in teamwork, share ideas, and collaborate with colleagues demonstrate higher productivity. Students noticed that collaboration allows teachers to learn from peers, implement new strategies, and solve instructional challenges more effectively. This theme emphasizes that productive teachers do not work in isolation but actively seek support and knowledge-sharing opportunities to improve their teaching practices.

“I discuss lesson plans and strategies with my colleagues regularly, which helps me improve my teaching.”

“I collaborate with other teachers to share resources and effective methods for teaching students.”

“Working with peers allows me to address challenges more efficiently and implement better strategies in class.”

“I take feedback from other teachers and apply it in my lessons, which helps students understand better.”

“Collaborating with colleagues gives me new ideas for engaging lessons and improves overall productivity.”

Research by Chen et al. (2021) highlights that collaborative professional growth plays a crucial role in enhancing teachers' skills, instructional strategies, and overall classroom effectiveness. Their study emphasizes that when teachers actively engage in collaboration, share knowledge, and learn from one another, they gain access to diverse perspectives, innovative teaching techniques, and practical solutions to classroom challenges. Moreover, Wang et al. (2023) support that teamwork and shared professional development among teachers significantly foster creativity, adaptability, and teaching efficiency. Their research indicates that collaborative learning communities provide a platform for teachers to exchange resources, discuss best practices, and implement innovative strategies more effectively.

Theme 8: Professional Confidence. Professional confidence emerged as a theme because students noticed that teachers who are confident in their subject knowledge and teaching abilities are more productive, manage classrooms effectively, and engage students successfully. Confidence allows teachers to communicate clearly, implement strategies decisively, and maintain control over classroom dynamics. Students consistently associated teacher confidence with better lesson delivery, higher engagement, and more effective learning outcomes.

“I feel confident in my subject knowledge, which allows me to explain topics clearly and answer all student questions.”

“My confidence helps me manage the classroom calmly and maintain authority while teaching.”

“I can make quick instructional decisions during lessons because I trust my expertise and judgment.”

“Being confident enables me to try new teaching methods and see how students respond.”

“My confidence encourages students to participate actively and engage more fully with the lessons.”

Research by Akhtar et al. (2021) emphasizes that professional confidence is a key determinant of teachers' instructional effectiveness, classroom management, and overall productivity. Their study demonstrates that teachers who possess a strong sense of confidence in their subject knowledge and teaching abilities are better able to communicate concepts clearly, respond effectively to student questions, and implement instructional strategies with precision. Furthermore, Mustafa and Abbas (2022) support that confident teachers are more likely to embrace innovative teaching methods, adapt to diverse classroom challenges, and sustain high levels of student participation. Their research indicates that professional confidence allows teachers to experiment with instructional strategies, adjust approaches based on student feedback, and maintain resilience in complex teaching scenarios.

Corroboration of Quantitative and Qualitative Data

The findings of this study reveal a strong alignment between the quantitative and qualitative results, highlighting that high levels of teachers' work ethics, development programs, and productivity are consistently perceived by both objective measures and students' lived experiences. Quantitative data showed that teachers scored high across work ethics indicators—including punctuality, accountability, and professionalism—as well as high levels in development program participation and program effectiveness, and demonstrated strong productivity in terms of instructional quality, classroom management, and curriculum goal completion. The qualitative data further supported these results, with students identifying themes such as empowerment through professional growth, reflective and adaptive teaching, transformation in pedagogy, ongoing professionalism, enhanced efficiency and innovation, structured professionalism, collaborative professional growth, and professional confidence. Together, the corroboration underscores that teachers' ethical behavior, ongoing professional development, and structured, confident instructional practices directly influence student perceptions of productivity and learning engagement.

In support, Al-Mashaqbeh and Ahmad (2022) emphasize that teachers' work ethics, including punctuality, accountability, and professional conduct, are directly linked to instructional effectiveness and classroom management, reflecting the quantitative and qualitative outcomes of this study. Similarly, Wang et al. (2023) highlight that active engagement in development programs enhances teachers' instructional skills, adaptability, and innovative practices, contributing to higher productivity and improved student outcomes. Moreover, Akhtar et al. (2021) note that teachers who demonstrate structured professionalism, collaborative growth, and confidence are perceived as more effective by students, corroborating the lived experiences captured in the qualitative themes. These studies collectively support the finding that teachers' productivity is strongly influenced by their ethical behavior and participation in professional development initiatives, creating a measurable and perceptible impact on students' classroom

Table 7. Corroboration between Qualitative and Quantitative Data

Variable / Indicator	Quantitative Result (Mean / Level)	Related Qualitative Themes / Observation
Work Ethics	4.18 – High	Students observed that teachers demonstrate reliability, responsibility, and professionalism, which aligns with high quantitative scores.
Development Programs	4.20 – High	Students reported that teachers effectively apply skills learned from training, utilize resources, and collaborate with peers, confirming high quantitative results.
Teachers' Productivity	4.19 – High	Students recognized teachers' high instructional quality, classroom management, and goal completion, reflecting the high levels shown in quantitative data.

Conclusion

Based on the findings, the following conclusions were drawn from the study:

1. Teachers maintain a high standard of work ethics, consistently demonstrating punctuality, accountability, and professional behavior in their interactions.
2. Participation in development programs, supported by adequate resources and effective training, contributes to enhanced teacher skills, confidence, and instructional practices.
3. High levels of teachers' productivity are evident in the quality of instruction, classroom management efficiency, and completion of curriculum goals.
4. Work ethics and development programs are significantly related to teachers' productivity, reinforcing the importance of ethical conduct and professional growth in achieving high performance.
5. Development programs serve as a significant predictor of teachers' productivity, while work ethics alone do not significantly predict productivity when development programs are considered.
6. Development programs do not significantly mediate the relationship between work ethics and teachers' productivity, indicating that teachers' ethical behavior directly influences productivity.
7. Students' lived experiences confirm that productive teachers apply professional growth, adaptive strategies, innovation, structured approaches, and confidence, which aligns with the quantitative measures of work ethics, development programs, and productivity.

Recommendations

The following recommendations are provided to enhance student outcomes based on the study results:

1. Schools should continue to reinforce and monitor teachers' work ethics, encouraging punctuality, accountability, and professional conduct in all teaching interactions.
2. Administrators should prioritize and provide access to comprehensive development programs, ensuring training sessions are relevant, interactive, and aligned with teachers' professional needs.
3. Teachers should adopt reflective and adaptive instructional strategies that enhance lesson quality, classroom management, and curriculum goal achievement.
4. Institutions should foster collaborative professional growth among teachers, promoting peer learning, knowledge sharing, and innovative teaching practices.
5. School leaders should recognize and support teachers' structured professionalism, confidence, and ethical behavior, as these directly influence classroom productivity and student engagement.
6. Evaluation mechanisms should be implemented to ensure that development programs effectively enhance teacher productivity, aligning training outcomes with measurable classroom improvements.
7. Further studies could explore additional factors that influence teachers' productivity, and longitudinal research is recommended to assess the sustained impact of work ethics and professional development on teaching outcomes.

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