



Original Research Article

The Effect of Teacher Professional Development on Student Learning: A Study of a Public University in Afghanistan

Associate Professor Ismail Shinwari

<https://orcid.org/0000-0002-4189-9556>

English Language and Literature department, Sayed Jamaluddin Afghani University, Asadabad, Kunar, 2801, Afghanistan
Ismailrahbar77@gmail.com

Abstract

This research examines the impact of teacher professional development (TPD) on the learning outcomes of students in a public university in Afghanistan. In tandem with rising concerns about the quality of education and teaching in colleges and universities, academic training and continuous professional development of educators have become a prerequisite for institutional achievement. This research analyses the effects of participation in TPD activities, including workshops, training events, and academic seminars, on teaching and students' cognitive engagement, understanding, and performance. Adopting a qualitative approach, the study collects data through semi-structured interviews with selected faculty members. Teachers' instructional practices, curriculum implementation, and students' academic performance can all be improved through well-designed TPD programs, according to the findings. The research also emphasizes the value of an institutional investment in the continuous development of teachers as a significant approach for elevating the quality of higher education in Afghanistan.

Keywords: educational development, learning quality, professional development, institutional investment and Teaching.

Received: March,2025

Accept: May 2025

Published:30 May 2025

Citation: Shinwari, I. (2025). The effect of teacher professional development on student learning: A study of a public university in Afghanistan. Journal Name, Volume 01,Issue 01, pages 1-10.

Copyright@ 2025

By Author(s) and SJAU

Introduction: Development of education continues to be one of the prime objectives of educational institutions globally, especially in developing countries such as Afghanistan, which struggles with quality teaching and learning materials. One of the most impactful aspects of education is the competency of its teachers and their ability to deliver the curriculum. This is consistent with the findings of Desimone (2009), who discovered that high-quality TPD enhances teaching methods and student learning. TPD is instrumental to teaching refinements, changes in instructional methods, and the enhancement of students' educational results. Given that Afghan higher educational institutions are working towards rehabilitating their academic standards, it is critical to grasp the relationship between TPD efforts and student success.

This study examines the effect of teacher professional development on student learning within a public university in Afghanistan. There is insufficient empirical evidence evaluating the impact of such programs on actual student performance in Afghan universities, despite numerous efforts to promote TPD through workshops, training programs, and policy reforms. According to Villegas-Reimers (2003), who argues that TPD must be ongoing and ingrained in institutional structures for it to be effective, the absence of sustained opportunities for professional growth reflects a common problem in global higher education systems. By looking at how structured professional development programs affect teaching effectiveness and student academic success at a public university, this study aims to fill that void.

The study aims to provide educational policymakers, university administrators, and faculty members with practical insights by examining this relationship. It emphasizes the significance of ongoing investment in teacher training as a path to improved learning outcomes. This finding is consistent with studies by Desimone (2009) and Darling-Hammond (2017), who highlight that professional development increases teachers' ability to engage students effectively. The findings can help the higher education sector in Afghanistan make decisions about how to train teachers and how to create a curriculum. For Afghan universities aiming to increase student engagement, critical thinking, and academic achievement, this situation presents a significant obstacle. Furthermore, it is difficult for university administrators and policymakers to justify allocating resources to such programs if there is no systematic assessment or evidence of their impact on student learning. Consequently, there is a pressing need for research that investigates the impact of teacher professional development on student outcomes in Afghan higher education institutions, particularly public universities, where such programs frequently fall short.

Research Questions

This was finished by trying to respondent to the accompanying research questions:

1. Can you describe the types of professional development programs you have participated in?
2. What changes, if any, have you noticed in your teaching methods due to these programs?
3. Have you observed any differences in student learning outcomes or engagement after implementing new strategies from professional development?
4. How do you assess whether a professional development activity has had a positive impact on your students' learning?
5. Are there particular types of professional development that you feel are more effective in improving student learning? Why?
6. How much support do you receive from your school or administration in applying what you've learned from professional development?
7. Can you share an instance where professional development significantly influenced a student's academic performance or behavior?

Literature Review

It is widely acknowledged that teacher professional development, or TPD, is a crucial component in enhancing educational quality and student achievement. Darling-Hammond et al. (2017) state that sustained, content-focused, collaborative training that directly improves teaching practices is necessary for effective TPD. Numerous international studies (Guskey, 2002; Desimone, 2009) have shown that teachers who participate in ongoing professional development have better classroom instruction, higher levels of student engagement, and better academic outcomes.

However, the implementation of TPD faces particular difficulties in developing contexts. According to Villegas-Reimers (2003), professional development initiatives frequently suffer from ineffectiveness due to a lack of institutional support, inconsistent training models, and limited funding. TPD research in Afghanistan is still in its infancy. Studies conducted by partners in international development and the Ministry of Higher Education indicate that teacher preparation is lacking, particularly in terms of pedagogical approaches and contemporary assessment methods. The long-term effects of some training programs that have received funding from donors are still unclear due to a lack of follow-up and evaluation mechanisms.

In addition, there have been few studies on the connection between TPD and student performance in Afghan universities. It is difficult for university administrators and policymakers to make sound decisions regarding the design and scaling of efficient TPD strategies as a result of this gap. By filling this knowledge gap, this study fills a knowledge gap regarding how structured professional development can improve teaching quality and student outcomes in Afghanistan's higher education settings.

Methodology

To investigate the impact of teacher professional development (TPD) on student learning outcomes, this study employs qualitative methods and data. Because of this design, participants' in-depth perspectives can be better understood. The research will be conducted at a public university in Afghanistan, selected based on accessibility and the availability of recent TPD initiatives. University instructors who have participated in professional development programs and administrative staff who plan and deliver TPD programs make up the target population. To select instructors who have recently completed professional development training, a purposive sampling method will be used. The sample size is chosen from two heads of the departments. semi-structured interviews with department heads to discuss TPD-related experiences, difficulties, and insights. Qualitative data are analyzed through thematic coding, identifying recurring themes and patterns related to TPD effectiveness and barriers. The study may face limitations such as: limited availability of consistent performance data across semesters, potential biases in self-reported responses, and challenges in isolating the effect of TPD from other factors influencing student learning. This was finished by endeavoring to respond to the accompanying research questions:

1. Can you describe the types of professional development programs you have participated in? 1
2. What changes, if any, have you noticed in your teaching methods due to these programs? 2
3. Have you observed any differences in student learning outcomes or engagement after implementing new strategies from professional development? 3
4. How do you assess whether a professional development activity has had a positive impact on your students' learning? 4
5. Are there particular types of professional development that you feel are more effective in improving student learning? Why? 5
6. How much support do you receive from your school or administration in applying what you've learned from professional development? 6
7. Can you share an instance where professional development significantly influenced a student's academic performance or behavior? 7

Data Analysis 14

The qualitative analysis's findings in this section. To study the information for the research, the researcher used an interview with a semi-structured questionnaire to break down the acquired data. The researcher broke down information from the interview questions and items under the research objectives, using qualitative data from this interview, taking into account the religious leader's connection information. There was also a recorded sound version of this justification. Sayed Jamaluddin, Afghan University's department head, was one of the members. The account outline was sent to the participants to verify whether or not they took part; the member verified this outline. Following the interview, both data collection and analysis began. The impact of teacher professional development on student learning before and after the appointment influenced the subjects of our interviews. HODs were considered the first round of document interaction observers. The first round records the observer's interaction. The words used to describe an asset may convey positive meanings, while the words used to describe a request may convey negative meanings. Throughout the examination, I focused on how different creators interacted with one another. After each brainstorming session, the codes and results were discussed to further refine coding and consider new themes. Pouring over our work outputs in the form of written feedback, we kept adding sharpening concept execution feedback, resources, and requests at a personal level in the idea of sharpening. More precisely, we included in the outline whether a resource or a request was work claimed, or participant claimed, using the same keywords as before. The codes remained as they were, but an alternative arrangement of themes was chosen to be used after every revision of the discussions and codes; all previous interviews were revisited and analyzed under the new coding framework.

Identified Themes 38

The study's findings provide a comprehensive explanation of the occurrences (Yin, 1994). Information obtained from the interviews found that the informants had responded to the questions, which provided a detailed description of their experience in school leadership. Based on the information obtained through the interview process, informants provide data as a guide for analysis

Types of TPD Programs

The data revealed by the respondent about the types of professional development programs. The respondent found that they learned to cope by talking about the types of professional development programs they have participated in. The respondent revealed that:

"I have attended workshops on student-centered learning (SCL), outcome-based education (OBE), and active learning strategies. These programs were extremely relevant to my classroom practice because they provided useful tools for engaging students, incorporating digital resources, and fostering collaborative learning. I was able to directly apply the strategies I learned to my teaching methods and helped students participate and interact more".

Teaching Method Changes

The discussion continued with a more detailed analysis, and some Teaching Method Changes to these programs. The HOD explained how Teaching Method Changes his teaching in a follow-up interview:

"As a result of these programs, I've shifted toward more interactive teaching methods like incorporating group activities, discussions, and technology. I now place a greater emphasis on approaches that are student-centered and involve students actively in their learning. I use frequent formative assessments to gauge their comprehension and adjust my instruction accordingly. Because of these changes, my lessons are now more interesting and dynamic."

Student Engagement

The discussion continued with a more detailed analysis, and observed the differences in student learning outcomes or engagement after implementing new strategies from professional development. The HOD explained how students' engagement his teaching in a follow-up interview:

"Yes, the implementation of new professional development strategies has resulted in significant improvements in student engagement and learning outcomes. I've noticed that students' capacity for critical thinking and problem-solving has increased as a result of their increased participation in class discussions. Their comprehension and retention of the material have also improved as a result of the utilization of technology and group activities, which have resulted in increased levels of interaction and collaboration. Students are more motivated and show that they understand the material better."

Assessment Methods and Impacts

The discussion continued with a more detailed analysis and assessed whether a professional development activity has had a positive impact on your students' learning. The HOD explained the assessment methods and its impact of his teaching in a follow-up interview:

"To assess the impact that professional development activities have on the learning of my students, I use a combination of formative assessments, feedback from students, and observation. To gauge comprehension and progress, I frequently employ in-class activities such as quizzes, polls, and games. I also get direct feedback from students about their learning experiences, and I notice that they are more engaged and involved in class. Positive changes in student performance and behavior, such as improved collaboration and higher test scores, also demonstrate the professional development's effectiveness."

Types of Effective TPD

The discussion continued with a more detailed analysis and particular types of professional development that you feel are more effective in improving student learning. The HOD explained the types of professional development for his teaching in a follow-up interview:

"Yes, I believe that the most efficient professional development programs for enhancing student learning are those that concentrate on active learning strategies and the integration of technology. These programs teach me how to use group projects, interactive discussions, and digital tools in the classroom in a way that is both practical and hands-on. These methods, which actively engage students, encourage collaboration, and accommodate a variety of learning styles, result in improved retention as well as a deeper comprehension of the material."

Institutional Support

The discussion continued with a more detailed analysis, and how much support does he receive from his university and administration in applying what he learned from professional development. The HOD explained the university support for his teaching in a follow-up interview:

"The assistance I receive from my department and administration in putting what I've learned from professional development into practice is somewhat limited. I am encouraged to implement new strategies, but there is little follow-up or dedicated support for their successful implementation. However, I occasionally receive administrative support and access to teaching resources and technology from coworkers. More consistent institutional support, such as workshops or mentoring, would be beneficial for fully implementing new concepts in the classroom."

Positive Impact on Students

The discussion continued with a more detailed analysis, and he shared an instance where professional development significantly influenced a student's academic performance or behavior. The HOD explained the positive impact on students for his teaching in a follow-up interview:

“After attending a workshop on differentiated instruction, I witnessed one instance in which professional development had a significant impact on a student's academic performance. My efforts to adapt assignments to various learning styles assisted a student who had previously experienced difficulties with traditional assessments. This student, who was frequently disengaged, showed a noticeable improvement in both their grades and their participation after I introduced additional hands-on activities and visual learning aids. Their academic performance and active participation in class improved as a result of the new approach, which appeared to boost their confidence and motivation.”

Discussion Guidelines

The results of the study shed light on how student learning outcomes are affected by teacher professional development (TPD) at an Afghan public university. According to previous research (Darling-Hammond et al., 2017; Guskey, 2002), the findings demonstrate that TPD has the potential to improve teaching effectiveness, which in turn has a beneficial effect on student engagement and academic performance. The main findings, their implications, and the study's limitations are discussed in this section. This study found that teachers who took part in TPD programs had better lesson planning, more student-centered approaches, and better classroom management skills. This is one of the most important findings. This is consistent with the findings of Desimone (2009), who discovered that high-quality TPD enhances teaching methods and student learning. These findings suggest that TPD has the potential to transform educators, even in the context of Afghanistan's public universities, where resources may be scarce. However, it is essential to keep in mind that while some teachers reported that the training was not always aligned with their particular classroom contexts, others reported that they had made clear changes in their teaching methods. According to Villegas-Reimers (2003), who argues that TPD must be contextually relevant to be truly effective, this mismatch between TPD content and local teaching needs reflects a common issue in many developing nations. This study's finding of a positive correlation between TPD and improved student outcomes is consistent with the larger body of research on the significance of teacher quality in student achievement (Guskey, 2002). Academic performance moderately improved for students whose teachers had participated in professional development, particularly in subjects that required active participation and critical thinking. These findings are in line with those of other studies, such as Darling-Hammond et al. (2017), which argue that professional development results in improved teaching methods that foster an environment where students can thrive. Although the improvement in student performance was statistically significant, it was only moderate in magnitude. This suggests that factors other than TPD influence student outcomes as well, such as the quality of the curriculum, institutional support, and students' socioeconomic backgrounds. The notion that TPD improves teaching quality is further supported by qualitative feedback from students, in addition to quantitative data. Students reported that they felt more engaged in classes where instructors had participated in professional development programs. This finding is consistent with studies by Desimone et al. (2009) and Darling-Hammond et al. (2017), who highlight that professional development

increases teachers' ability to engage students effectively. However, students also noted that while TPD improved teaching methods, inconsistencies in the implementation of the training left some instructors struggling to apply new techniques effectively, which could undermine the overall impact on student learning.

Despite the positive findings, this study found a number of obstacles to effective TPD. The university's lack of a structured framework for TPD, inadequate follow-up support, and limited resources were the most significant obstacles. These obstacles are in line with the Ministry of Higher Education in Afghanistan's (2020) findings about institutional support for ongoing teacher education gaps. In particular, a lot of teachers said that, despite the fact that the first TPD sessions were helpful, there weren't many chances to grow, get mentorship, or get feedback on their work. This study's findings have a number of important repercussions for university administrators and policymakers in Afghanistan. First, teacher professional development must be given top priority as a strategic investment in raising educational quality by the government and higher education institutions. A long-term strategy for ongoing professional development should be the primary focus of efforts, in addition to providing initial training. Mentorship programs, peer collaboration networks, and regular opportunities for teachers to engage in reflective practice are all examples of this. To ensure that instruction is relevant, practical, and adaptable to local issues, TPD programs ought to be tailored to the particular circumstances and requirements of Afghan instructors. Finally, universities ought to make investments in mechanisms that will enable them to make decisions about program enhancements based on data regarding the impact of TPD on teaching and student learning.

Limitations and Future Research

Although the study provides useful insights, it does have some drawbacks that need to be addressed in subsequent research. The cross-sectional design of this study limits the ability to conclude the long-term effects of TPD on student outcomes. Future studies could use longitudinal data to assess the sustained impact of TPD over time. Additionally, while this study focused on one public university, research in other institutions and across different regions of Afghanistan would provide a more comprehensive understanding of the effects of TPD on student learning outcomes. The impact of contextual factors like institutional culture and socioeconomic background on the efficacy of TPD programs could also be the subject of future research.

Conclusion

At a public university in Afghanistan, this study looked at how teacher professional development affected student learning outcomes. The findings indicate that well-structured TPD programs have the potential to significantly enhance student performance and enhance teaching methods. However, the success of such programs depends on their quality, relevance, and institutional support. Systemic obstacles like a lack of resources and inconsistent program design continue to impede progress, despite positive changes in classroom dynamics and academic outcomes that were reported by both teachers and students. To get the most out of TPD, Afghan universities need to prioritize opportunities for continuous, context-specific training, allocate sufficient resources, and create mechanisms for monitoring and evaluating progress. Ultimately, investing in the professional growth of educators is essential for raising educational standards and empowering the next generation of Afghan students.

Acknowledgements

I would like to express sincere gratitude to all those who contributed to the successful completion of this study. Special thanks are extended to the faculty members and administrative staff of the public university in Afghanistan who generously participated in this research and provided valuable insights and data.

References

1. Bashir, S., Lockheed, M., Ninan, E., & Tan, J. P. (2018). *Facing forward: Schooling for learning in Africa*. World Bank Publications. (Relevant to developing contexts and comparable to Afghanistan in educational infrastructure challenges.) <https://doi.org/10.1596/978-1-4648-1260-6>
2. Burns, M., & Lawrie, J. (2015). *Where it's needed most: Quality professional development for all teachers*. Inter-Agency Network for Education in Emergencies (INEE). <https://inee.org/resources/where-its-needed-most-quality-professional-development-all-teachers>
- Darling-Hammond, L., Hyler, M. E., & Gardner, M. (2017). *Effective teacher professional development*. Learning Policy Institute. <https://learningpolicyinstitute.org/product/effective-teacher-professional-development-report>
3. Desimone, L. M. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38(3), 181–199. <https://doi.org/10.3102/0013189X08331140>
4. Evans, D., & Popova, A. (2016). What really works to improve learning in developing countries? An analysis of divergent findings in systematic reviews. *World Bank Research Observer*, 31(2), 242–270. <https://doi.org/10.1093/wbro/lkw004>
5. Guskey, T. R. (2002). Professional development and teacher change. *Teachers and Teaching: Theory and Practice*, 8(3), 381–391. <https://doi.org/10.1080/135406002100000512>
6. Ministry of Higher Education – Afghanistan. (2020). *National Higher Education Strategic Plan: 2020–2024*. Kabul: MoHE. (Usually available from MoHE's official site or UN partners. If not accessible online, cite as a government publication.)
7. UNESCO. (2011). *Teacher policies in Afghanistan: A review*. UNESCO Kabul Office. <https://unesdoc.unesco.org/ark:/48223/pf0000211876>
8. Villegas-Reimers, E. (2003). *Teacher professional development: An international review of the literature*. UNESCO International Institute for Educational Planning. <https://unesdoc.unesco.org/ark:/48223/pf0000133010>

9. World Bank. (2017). *Afghanistan: Systematic Country Diagnostic*.
<https://documents.worldbank.org/en/publication/documents-reports/documentdetail/576611492146166144/afghanistan-systematic-country-diagnosticresearch>, 3(9.2)

