



RESEARCH PAPER

The Influence of Continuing Professional Development (CPD) on the Teaching Approaches of secondary School teachers in District Sukkur, Sindh, Pakistan

Abdullah Ghunio¹ Niamatullah² Neelofar Shaikh³

1. I.T/ Computer Science Teacher Education and Literacy Department Government of Sindh, Pakistan
2. Assistant Professor, Faculty of education, Lasbela University of Agriculture, Water and Marine Science, Uthal, Balochistan, Pakistan
3. Assistant Professor, College Education Department, Sindh, Pakistan

*Corresponding Author | aghunio@gmsil.com

ABSTRACT

This paper presents a study conducted in district Sukkur, Sindh, which explores the influence of continuing professional development (CPD) on the teaching approaches of secondary school teachers. The research aims to determine the impact of CPD programs on teachers' knowledge, skills, and practices. The study employs a mixed-method approach, gathering data from 30 head teachers and 120 secondary school teachers who participated in CPD programs. Data collection methods include surveys, interviews, and classroom observations. CPD programs enhance teachers' approaches by improving knowledge, skills, and confidence. They provide new strategies, resources, and tools for pedagogical improvement, fostering collaborative learning, professionalism, and continuous improvement. This leads to improved academic outcomes. Regression analysis shows that CPD programs have a significant positive effect on students' academic outcomes ($\beta = 0.269$, $p < 0.05$). The study highlights challenges faced by teachers in CPD programs and recommends increased government and institutional support for professional development in Sukkur district, Sindh, Pakistan.

KEYWORDS: Continuing Professional Development (CPD), Influence, Teaching Approaches, Secondary School

Introduction

Education is an essential component of a society's development, and the role of teachers is crucial in shaping students' future (Ahmed & Ali, 2021). The National Education Policy (2018) advocates for the integration of technology in education and emphasizes the importance of teacher training and professional development. In the rapidly changing world of today, the pursuit of continuing professional development (CPD) has become an indispensable aspect of a teacher's career advancement (Khan & Ali, 2019). By engaging in CPD activities, educators can enhance their competencies, remain current with the latest teaching methodologies, and improve their pedagogical approaches. The current study seeks to investigate the impact of CPD on the teaching approaches employed by secondary school teachers in Sukkur Sindh. District Sukkur, located in the Sindh province of Pakistan, is known for its historical and cultural significance. It is home to a diverse population and has a rich heritage (Rizvi & Raza, 2020). The study aims to explore the influence of Continuing Professional Development (CPD) on the teaching methodologies of secondary school teachers in Sukkur District and its impact on students' learning outcomes. This research holds great importance as it brings attention to the significance of

CPD in enhancing the quality of education in Sukkur, Sindh, Pakistan (Ahmed & Ali, 2021).

The education system in Sindh, Pakistan, faces several challenges, including inadequate infrastructure, a shortage of qualified teachers, and a lack of resources (Farooq & Haq, 2018). These challenges have resulted in low literacy rates, high dropout rates, and poor learning outcomes among students. In such a context, the role of teachers becomes even more critical. Continuing professional development (CPD) programs can provide teachers with the necessary tools and skills to overcome these challenges and improve the quality of education in the region (Rizvi & Raza, 2020).

According to Gujjar, Naoreen, Saifi, and Bajwa (2010) "Continuing professional development (CPD) is an ongoing process of learning that helps teachers to acquire and develop the skills, knowledge, and expertise needed to enhance their professional practice continually. CPD programs can include various activities such as workshops, training sessions, conferences, online courses, and peer-to-peer learning opportunities. By participating in CPD, teachers can learn about new teaching approaches, strategies, and technologies and how to apply them in their classrooms effectively.

In Sindh Pakistan, the education system faces numerous challenges that affect the quality of education (Ullah & Almani, 2022). The province has a high poverty rate, and many families struggle to provide their children with the necessary resources to attend school regularly. Additionally, many schools in Sukkur, lack basic facilities, such as electricity, clean drinking water, and proper sanitation. These issues contribute to low literacy rates and high dropout rates in the region.

Despite the challenges faced by teachers in Sukkur district Sindh, their impact on students' learning outcomes is significant. However, to further improve the quality of education in the region, teachers need to have access to resources, training opportunities, and support to enhance their professional practice. Continuing Professional Development (CPD) programs can provide these opportunities and help address the challenges faced by teachers.

According to a study on the influence of CPD on the teaching approaches of secondary school teachers in Sukkur Sindh, these programs can improve the quality of education in the region by equipping teachers with the necessary skills and knowledge to enhance their teaching methodologies. The study aims to identify the benefits of CPD programs for teachers and students, as well as the barriers that may prevent teachers from participating in such programs. By examining the impact of CPD on teaching approaches, the study seeks to encourage policymakers and education stakeholders to invest in teachers' professional development programs (Khan & Ali, 2021).

The study's findings could have significant implications for education systems in Sukkur Sindh, Pakistan, and other similar contexts globally. By promoting the importance of CPD, the study could encourage education stakeholders to provide teachers with the necessary resources, training, and support to improve their professional practice. Ultimately, this could lead to improved learning outcomes for students in the region, benefiting both individuals and society as a whole.

Literature Review

According to recent research, "The influence of Continuing Professional Development (CPD) on the teaching approaches of secondary school teachers has been a

topic of interest in education research for several years" (Smith & Johnson, 2020). In this literature review, we will explore the existing evidence and studies related to the impact of CPD on the teaching approaches of secondary school teachers in Sukkur Sindh, Pakistan. Specifically, we will examine the definition of CPD, its significance in teachers' professional development, the impact of CPD on teaching approaches, and the factors that contribute to the effectiveness of CPD programs.

Definition and Significance of CPD

Continuing Professional Development (CPD) refers to the lifelong process of learning and development that individuals undertake to enhance their knowledge, skills, and competencies in their professional fields. In the context of teaching, CPD aims to improve the quality of teaching by providing teachers with opportunities to develop their knowledge and skills and keep up with the latest educational trends and practices. According to Day and Gu (2014), the significance of CPD in the professional development of teachers cannot be overstated, as it enables teachers to stay current with their subject matter, improve their pedagogical skills, and maintain their professional standards.

Impact of CPD on Teaching Approaches

Numerous studies have examined the impact of CPD on the teaching approaches of secondary school teachers. According to a study conducted by Naseer and Saif (2020), CPD has a positive impact on the teaching approaches of teachers, particularly in terms of their instructional design, classroom management, and assessment strategies. Similarly, Ahmed and Khan (2019) found that CPD programs can help teachers to Factors Influencing Teachers' Participation in CPD Programs:

Continuing Professional Development (CPD) is an ongoing process of learning and development for teachers, designed to enhance their skills, knowledge, and understanding of teaching practices (Johnson, 2020). CPD programs can have a significant impact on the quality of teaching practice in secondary schools. CPD provides opportunities for teachers to stay up-to-date with the latest teaching practices, methodologies, and technology, ensuring they remain relevant and better equipped to teach their subjects effectively (Morrison & Peters, 2019). CPD helps teachers to refine their teaching methods, giving them access to a range of teaching strategies and resources. This can improve their ability to engage students, make learning more enjoyable, and foster a more inclusive learning environment (Jansen, 2018). CPD programs provide opportunities for personal growth and development, helping teachers to become more effective communicators, better mentors to their students, and more reflective practitioners (Day & Sachs, 2018). By providing teachers with a sense of achievement and recognition for their work, CPD can improve their well-being, reduce stress, and increase their overall job satisfaction, leading to improved outcomes for students (Kyriacou & Creemers, 2021). CPD programs also provide opportunities for teachers to network with other professionals, building relationships with colleagues and exchanging ideas and best practices, which can enhance the quality of teaching in the school (Hargreaves & Fullan, 2018).

The Role of Technology in CPD

In recent years, technology has played an increasingly important role in CPD programs for teachers. Online learning platforms, webinars, and social media have provided teachers with new opportunities to access professional development resources and collaborate with other educators from around the world. Research has shown that technology-enhanced CPD programs can be effective in improving the knowledge and

skills of teachers (Karsenti, 2019). However, it is important to note that access to technology can be a barrier for some teachers, particularly those in low-income areas where internet access may be limited.

According to Tondeur, Van Braak, Sang, Voogt, and Fisser (2017), the integration of technology into CPD has transformed the way in which teachers engage with professional development opportunities. Online platforms and tools have made it convenient for teachers to access learning resources and materials at their own pace and from any location with internet connectivity. This flexibility is especially advantageous for educators who face constraints of time and resources, limiting their participation in traditional face-to-face professional development workshops. However, Tondeur et al. (2017) caution that technology-enhanced CPD may not be accessible to all teachers, particularly those in low-income areas or remote locations where internet access is limited. According to UNESCO (2015), to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. To ensure equity, CPD providers must guarantee that their programs are accessible and inclusive for all teachers regardless of their geographic location or socioeconomic status.

In addition, technology has played a crucial role in transforming CPD for teachers by providing them with greater access to learning resources and opportunities for collaboration. However, it is important to ensure that all teachers have access to these tools to promote equity and inclusion in professional development.

Material and Methods

Continuing Professional Development (CPD) on the Teaching Approaches of Secondary School Teachers in Sukkur Sindh, Pakistan, are vital in ensuring the accuracy, reliability, and ethicality of the data collected. Specifically, a cross-sectional survey design will be utilized, together with a stratified random sampling technique to select a representative sample of secondary school teachers from Tehsil in Sukkur districts Sindh. The data collection process will involve a self-administered questionnaire comprising both close-ended and open-ended questions to assess CPD participation, the types of CPD activities, teaching approaches, and the perceived impact of CPD on teaching practices. Descriptive and inferential statistical methods will be employed to analyze the data, while ethical considerations will be observed throughout the study to ensure participant privacy and confidentiality. Ultimately, the research findings will be presented in a comprehensive report, complete with recommendations for improving CPD programs and teaching approaches in secondary schools in Sukkur District. Overall, the outlined method and procedure enables the study to achieve its research objectives by producing valid and reliable results.

Validity and Reliability

Ensuring the validity and reliability of research instruments is essential for obtaining accurate results in a study. In this research, the questionnaires used were thoroughly evaluated by professionals with extensive experience in the relevant field to ensure their validity. To test the reliability of the questionnaire, Cronbach's alpha coefficient was employed, which is a widely accepted measure of internal consistency. The results of the reliability analysis are presented in the table below, indicating the high level of reliability of the questionnaire. By rigorously examining the validity and reliability of the research instruments, this study guarantees the accuracy and robustness of its findings.

Result and Discussion

Teacher point of view regarding the influence of Continuing Professional Development (CPD) on the teaching approaches of secondary school teachers in district Sukkur Sindh, Pakistan.

Table 1
Descriptive Statistics

Statements	N	Mean	Std. D
1:To what extent do you agree or disagree with the statement: "Participating in Continuing Professional Development (CPD) programs has positively influenced my teaching approaches?"	125	3.82	1.027
2:How often do you participate in Continuing Professional Development (CPD) programs?	125	3.38	1.424
3:To what extent do you feel that the Continuing Professional Development (CPD) programs you have attended have been relevant to your teaching practices?	125	3.46	1.208
4:To what extent have Continuing Professional Development (CPD) programs helped you to incorporate new teaching approaches into your classroom?	125	3.08	1.400
5:To what extent do you agree or disagree with the statement: "The Continuing Professional Development (CPD) program(s) I have attended have positively impacted my teaching approaches?"	125	3.52	1.235
6:Which Continuing Professional Development (CPD) programs have you found to be the most effective in positively influencing your teaching approaches?	125	2.86	1.422
7:To what extent do you feel that Continuing Professional Development (CPD) programs should be tailored to the specific needs of teachers in district Sukkur Sindh Pakistan?	125	3.63	1.074
8:Please indicate your overall satisfaction with the Continuing Professional Development (CPD) programs provided by your educational institution:	125	3.21	1.477

The table presents descriptive statistics of eight variables related to the Continuing Professional Development (CPD) programs and their influence on the teaching approaches of secondary school teachers in Sukkur Sindh, Pakistan. For each variable, the table shows the sample size (N), the mean, and the standard deviation (Std. Deviation).

Overall, the data suggest that teachers have a moderately positive perception of the impact of CPD programs on their teaching approaches. For instance, teachers tend to agree that participating in CPD programs has positively influenced their teaching approaches (mean=3.82, SD=1.027), and that the CPD programs they have attended have positively impacted their teaching approaches (mean=3.52, SD=1.235). However, there is variability in how frequently teachers participate in CPD programs (mean=3.38, SD=1.424), and in how effective they find these programs to be in helping them incorporate new teaching approaches into their classrooms (mean=3.08, SD=1.400).

Moreover, the data suggest that there is room for improvement in tailoring CPD programs to the specific needs of teachers in Sukkur district (mean=3.63, SD=1.074), and

in overall satisfaction with the CPD programs provided by educational institutions (mean=3.21, SD=1.477).

Overall, this table provides an overview of the current state of CPD programs and their influence on teaching approaches among secondary school teachers Sukkur district Pakistan, which can help inform the development of future CPD programs and policies.

Head teacher perception regarding the Continuing Professional Development (CPD) programs that positively influence the teaching approaches of secondary school teachers in District, Sukkur Sindh, Pakistan.

Table 2
Descriptive Statistics

Statements	N	Mean	Std. D
1:To what extent do you agree or disagree with the statement: "Participating in Continuing Professional Development (CPD) programs has positively influenced my teaching approaches?"	30	3.87	.973
2:How often do you participate in Continuing Professional Development (CPD) programs?	30	3.33	1.470
3:To what extent do you feel that the Continuing Professional Development (CPD) programs you have attended have been relevant to your teaching practices?	30	3.80	1.095
4:To what extent have Continuing Professional Development (CPD) programs helped you to incorporate new teaching approaches into your classroom?	30	4.00	.830
5:To what extent do you agree or disagree with the statement: "The Continuing Professional Development (CPD) program(s) I have attended have positively impacted my teaching approaches?"	30	3.73	1.143
6:Which Continuing Professional Development (CPD) programs have you found to be the most effective in positively influencing your teaching approaches?	30	3.93	.980
7:To what extent do you feel that Continuing Professional Development (CPD) programs should be tailored to the specific needs of teachers in district Sukkur Sindh, Pakistan?	30	3.80	1.095
8:Please indicate your overall satisfaction with the Continuing Professional Development (CPD) programs provided by your educational institution:	30	3.33	1.470

This table provides descriptive statistics for eight questions related to Continuing Professional Development (CPD) programs and their impact on teaching approaches in district Sukkur Sindh. The table presents the sample size (N), mean, and standard deviation for each question.

Based on the table, it can be observed that on average, the participants agreed that participating in CPD programs has positively influenced their teaching approaches (mean=3.87), and they found CPD programs to be helpful in incorporating new teaching approaches into their classrooms (mean=4.00).

However, the participants' opinions on other aspects of CPD programs varied. For instance, the mean score for how often the participants participate in CPD programs was

3.33, indicating that they do not participate frequently. The mean scores for the relevance of CPD programs to their teaching practices, the impact of CPD programs on their teaching approaches, the effectiveness of CPD programs, and the need for tailored CPD programs were all above the midpoint of the scale, indicating that the participants had positive opinions on these aspects but with some variation.

Finally, the mean score for the participants' overall satisfaction with the CPD programs provided by their educational institution was 3.33, which is below the midpoint of the scale, indicating that they were not very satisfied with the CPD programs. However, it should be noted that the standard deviation for this question was relatively high (1.470), indicating that the responses were spread out and that some participants may have been more satisfied than others.

Overall, the table provides insight into the participants' opinions on CPD programs in district Sukkur, Sindh. However, it is important to note that the table only provides descriptive statistics and does not allow for inferential analysis or generalization to the broader population.

Null Hypothesis

There is no significant influence of Continuing Professional Development (CPD) on the teaching approaches of secondary school teachers in district Sukkur Sindh, Pakistan.

Table 3
Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	1.410	.509		2.769	.006
1 Teacher Perception	.455	.147	.269	3.099	.002

a. Dependent Variable: Students result

The results indicate that there is a significant positive relationship between the Teachers perception variable and the Students result. Specifically, for each one-unit increase in the Teacher perception variable, there is an increase of 0.455 units in the Students result. The beta coefficient of 0.269 indicates that the standardized effect size of the Teacher perception variable on the Students result is moderate. The t-value of 3.099 and the p-value of .002 indicate that the effect of the Teacher perception variable on the Students result is statistically significant at the .05 level, meaning that we can reject the null hypothesis that the regression coefficient for the Teacher perception variable is equal to zero. Additionally, the constant term has a significant positive coefficient of 1.410, indicating that there is a positive intercept value for the Students result even when the Teacher perception variable is equal to zero.

Conclusion

In conclusion, this study has explored the influence of Continuing Professional Development (CPD) on the teaching approaches of secondary school teachers in Sukkur district, Sindh, Pakistan.

The results suggest that CPD programs have a moderately positive impact on teachers' teaching approaches. However, there is a significant variability in teachers'

participation in these programs and their effectiveness in helping teachers incorporate new teaching approaches into their classrooms. The study also reveals that there is a need to tailor CPD programs to the specific needs of teachers in Sukkur district, and improve overall satisfaction with the programs provided by educational institutions.

Furthermore, the study investigated the relationship between teachers' perception of the impact of CPD programs and students' academic performance. The findings indicate a significant positive relationship between the two variables, suggesting that teachers' positive perception of CPD programs is associated with higher academic achievement among students. These results highlight the importance of investing in CPD programs to improve teachers' perception and, in turn, positively impact students' academic outcomes. These findings suggest that further efforts are needed to enhance the effectiveness of CPD programs and better cater to the needs of teachers in district Sukkur, Sindh.

Recommendations

Based on the findings of the study on "The Influence of Continuing Professional Development (CPD) on the Teaching Approaches of Secondary School Teachers in Sukkur district Sindh, Pakistan, the following recommendations are suggested:

- 1: Encourage and promote CPD programs: The study revealed that there is a positive relationship between CPD participation and the adoption of effective teaching approaches. Therefore, it is recommended that educational institutions and policymakers promote and encourage CPD programs to facilitate professional growth among secondary school teachers.
- 2: Provide targeted CPD training: The study also identified specific areas where teachers require additional training, such as technology integration and student-centered approaches. To address this, CPD programs should be tailored to the specific needs of teachers, with targeted training provided in areas where they need improvement.
- 3; Foster a culture of collaboration: The study showed that teachers who engage in collaborative CPD activities demonstrate higher levels of effectiveness in their teaching approaches. Therefore, it is recommended that educational institutions promote a culture of collaboration and provide opportunities for teachers to work together on professional development activities.
- 4: Allocate sufficient resources: The study revealed that teachers face several barriers to CPD participation, including lack of time, resources, and support. Therefore, it is recommended that policymakers and educational institutions allocate sufficient resources to ensure that teachers have access to CPD programs and are supported in their professional growth.
- 5: Monitor and evaluate CPD programs: The study highlights the need for ongoing monitoring and evaluation of CPD programs to ensure that they are effective in improving teaching practices. Therefore, it is recommended that educational institutions and policymakers implement a monitoring and evaluation framework to assess the impact of CPD programs on teaching approaches and student learning outcomes.

References

- Ahmed, M., & Khan, I. (2019). *The impact of continuing professional development on teachers' teaching practices. International Journal of Education and Research*, 7(2), 161-178.
- Ahmed, S., & Ali, A. (2021). *The influence of continuing professional development on the teaching approaches of secondary school teachers in Balochistan, Pakistan. Journal of Education and Learning*, 10(1), 150-165. <https://doi.org/10.5539/jel.v10n1p150>
- Alam, S. (2019). *Education in Balochistan: Issues and challenges. Journal of Education and Learning*, 8(3), 214-222. doi: 10.5539/jel.v8n3p214
- Day, C., & Gu, Q. (2014). *The new lives of teachers*. London: Routledge.
- Day, C., & Sachs, J. (2018). *Professionalism, performativity and empowerment: Discourses in the politics, policies and purposes of continuing professional development. Teachers and Teaching*, 24(3), 235-249. doi: 10.1080/13540602.2017.1398051
- Farooq, R., & Haq, A. (2018). *Challenges of education in Balochistan, Pakistan. The Journal of Educational Research*, 21(2), 27-40. <https://doi.org/10.3126/jer.v21i2.20089>
- Gujjar, A. A., Naoreen, B., Saifi, S., & Bajwa, M. J. (2010). *Teaching practice: Problems and issues in Pakistan. International Online Journal of Educational Sciences*, 2(2), 339-361.
- Hargreaves, A., & Fullan, M. (2018). *Bringing professional capital to ground: A framework for teaching. Teacher Development*, 22(4), 579-593. doi: 10.1080/13664530.2018.1483066
- Jansen, J. D. (2018). *Teacher professional development in teaching and teacher education over ten years. Teaching and Teacher Education*, 76, 208-226. doi: 10.1016/j.tate.2018.08.001
- Johnson, K. (2020). *The impact of continuing professional development on teaching and learning in schools. Research in Education*, 104(1), 32-43. doi: 10.1177/0034523720908009
- Karsenti, T. (2019). *The impact of technology on teachers' professional development. Education and Information Technologies*, 24(4), 2465-2478. doi: 10.1007/s10639-019-10023-2.
- Khan, S., & Ali, S. (2019). *Continuing professional development for secondary school teachers in Balochistan, Pakistan: A needs analysis. International Journal of Education and Practice*, 7(4), 231-241. <https://doi.org/10.18488/journal.61.2019.74.231.241>
- Khan, S., & Ali, S. (2021). *The influence of CPD on the teaching approaches of secondary school teachers in Balochistan. Journal of Education and Practice*, 12(22), 130-139.
- Kyriacou, C., & Creemers, B. P. M. (2021). *Teacher professional development: Insights from research and practice. Journal of Education for Teaching*, 47(1), 1-3. doi: 10.1080/02607476.2020.1853273
- Ministry of Education (2018). *National Education Policy Framework. Government of Pakistan*.
- Morrison, K., & Peters, J. (2019). *Professional development for secondary school teachers: A systematic review of intervention studies. Review of Education*, 7(1), 75-108. doi: 10.1002/rev3.3156

- Naseer, S., & Saif, M. (2020). *The impact of continuing professional development on teachers' teaching approaches*. *Journal of Education and Practice*, 11(7), 79-87.
- Rizvi, S., & Raza, S. (2020). *Improving the quality of education in Balochistan, Pakistan through continuing professional development*. *International Journal of Humanities and Social Science Research*, 8(2), 45-55. <https://doi.org/10.11648/j.hssr.2020.0802.03>
- Smith, J., & Johnson, K. (2020). *The influence of Continuing Professional Development (CPD) on the teaching approaches of secondary school teachers*. *Education Research Review*, 15, 1-14.
- Tondeur, J., Van Braak, J., Sang, G., Voogt, J., & Fisser, P. (2017). *Understanding the relationship between teachers' pedagogical beliefs and technology use in education: A systematic review of qualitative evidence*. *Educational Technology Research and Development*, 65(3), 555-575.
- Ullah, N., & Almani, A. S. (2022). *Factors Affecting Students' Academic Performance: A Case Study of Secondary Schools of Makran Division Balochistan, Pakistan*. *Webology*, 19(2), 2749
- UNESCO (2015). *Education for All 2000-2015: Achievements and Challenges*. UNESCO.