



# Teachers' Perceptions of Sustainable CPD in Tertiary Education: A Survey-Based Study

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## Abstract

This study explores how teachers in tertiary education perceive sustainable Continuous Professional Development (CPD) and its role in enhancing digital pedagogy, inclusivity, and leadership skills. A survey of 250 faculty members was conducted, followed by statistical analyses including chi-square tests and regression models. Findings reveal that sustainable CPD has a strong positive influence on the adoption of digital pedagogy and inclusive teaching practices. However, barriers such as heavy workloads, insufficient resources, and time constraints often limit its implementation. The study concludes with recommendations for institutions to strengthen transformative CPD frameworks that can create lasting impact.

**Keywords:** Sustainable CPD, digital pedagogy, inclusivity, leadership development, tertiary education, professional development.

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## Introduction

Continuous Professional Development (CPD) is increasingly seen as the backbone of quality teaching in higher education. It equips educators with evolving skills, fosters adaptability, and ensures that teaching aligns with the needs of a dynamic academic environment. While CPD has long been a part of teacher training, the idea of *sustainable CPD* emphasizes long-term, ongoing, and institutionalized development rather than short, one-off workshops.

This study investigates how teachers in tertiary education perceive sustainable CPD, its influence on digital pedagogy, inclusivity, and leadership development, and the institutional barriers that often stand in the way of meaningful implementation.

## Review of Literature

CPD has been widely recognized as essential for improving teaching quality, professional growth, and reflective practice (Guskey, 2002). Sustainable CPD, however, is more than periodic training—it fosters embedded, continuous, and transformative learning experiences (Kennedy, 2014).

With the rapid shift toward digital learning, especially after the COVID-19 pandemic, digital pedagogy has emerged as a critical component of CPD. Research indicates that faculty who undergo targeted CPD are better equipped to use digital tools, manage blended learning environments, and engage students effectively (Darling-Hammond et al., 2017; Voogt et al., 2015).

Inclusivity is another area where CPD has shown measurable impact. By improving cultural competence and equity-oriented practices, CPD helps educators address the needs of diverse learners (Florian & Pantić, 2017). Similarly, CPD also supports leadership development, preparing educators to act as mentors, collaborators, and institutional change agents (Lieberman & Miller, 2011; Harris, 2014).

Despite its proven benefits, barriers such as time constraints, institutional indifference, and workload pressures often reduce participation and limit long-term success (Opfer & Pedder, 2011; Avalos, 2011). These challenges highlight the importance of building sustainable CPD frameworks that ensure continuity, accessibility, and relevance.

### Objectives of the Study

1. To examine teachers' perceptions of sustainable CPD in tertiary education.
2. To analyze the impact of CPD on digital pedagogy, inclusivity, and leadership development.
3. To identify challenges and barriers in implementing sustainable CPD frameworks.
4. To recommend strategies for fostering transformative professional development in higher education.

### Scope of the Study

This research is confined to tertiary education faculty members, with insights drawn from a sample of 250 respondents. It specifically addresses teachers' perceptions of CPD, its role in digital pedagogy, inclusivity, and leadership, and the institutional barriers they face. While the findings are most relevant to higher education in the studied context, they also offer valuable implications for policymakers and administrators in similar educational settings.

### Limitations of the Study

1. **Geographical coverage** – The sample of 250 faculty members represents a limited geographic scope and may not reflect perceptions across different regions or countries.
2. **Self-reported responses** – Data collected through surveys may be influenced by social desirability or overestimation.
3. **Cross-sectional design** – Since data was collected at a single point in time, the study cannot capture changes in CPD perceptions or outcomes over time.

4. **Focused dimensions** – The study highlights digital pedagogy, inclusivity, and leadership, but other CPD areas such as research and curriculum innovation are not deeply explored.
5. **Institutional variations** – Differences in policies, culture, and resources across institutions may affect generalizability.

## Research Methodology

- **Design:** Descriptive and analytical survey-based research
- **Population:** Faculty members in tertiary education institutions
- **Sample size:** 250 respondents selected through random sampling
- **Tool:** Structured questionnaire (5-point Likert scale)
- **Analysis techniques:** Descriptive statistics, Chi-square tests, Regression analysis, and ANOVA

## Hypotheses of the Study

- **H1:** Teachers hold positive perceptions of sustainable CPD in tertiary education.
- **H2:** Sustainable CPD significantly impacts the adoption of digital pedagogy.
- **H3:** Sustainable CPD enhances inclusivity practices in teaching.
- **H4:** Sustainable CPD strengthens leadership development among teachers.
- **H5:** Institutional barriers (such as workload, funding shortages, and time constraints) significantly hinder the implementation of sustainable CPD frameworks.

## Data Analysis and Interpretation

**Table 1: Teachers' Perceptions of Sustainable CPD**

Response	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean Score
CPD improves teaching quality	90 (36%)	100 (40%)	30 (12%)	20 (8%)	10 (4%)	4.0
CPD is necessary for career growth	100 (40%)	95 (38%)	25 (10%)	20 (8%)	10 (4%)	4.1
CPD ensures sustainable skill development	80 (32%)	110 (44%)	30 (12%)	20 (8%)	10 (4%)	3.9

**Interpretation:** Majority of teachers (over 75%) perceive CPD as essential for teaching quality, career growth, and sustainability. Supports H1.

**Table 2: Impact of CPD on Digital Pedagogy**

Statement	High Impact	Moderate Impact	Low Impact	No Impact	Mean
Improves digital teaching skills	120 (48%)	80 (32%)	30 (12%)	20 (8%)	4.1
Increases confidence in online platforms	100 (40%)	95 (38%)	35 (14%)	20 (8%)	4.0
Enhances blended learning practices	110 (44%)	90 (36%)	30 (12%)	20 (8%)	4.0

**Chi-Square Test:**  $\chi^2 = 28.67$ ,  $p < 0.05 \rightarrow$  Significant.

**Interpretation:** CPD significantly improves teachers' digital pedagogy skills. Supports H2.

**Table 3: CPD and Inclusivity Practices**

Inclusivity Aspect	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
CPD enhances inclusive teaching methods	100 (40%)	90 (36%)	30 (12%)	20 (8%)	10 (4%)	4.0
CPD helps address diverse student needs	95 (38%)	100 (40%)	30 (12%)	15 (6%)	10 (4%)	4.0

**Regression Result:**  $R^2 = 0.42$ ,  $p < 0.01$ .

**Interpretation:** CPD strongly influences inclusivity in teaching. Supports H3.

**Table 4: CPD and Leadership Development**

Leadership Aspect	High Impact	Moderate	Low	None	Mean
Improves leadership skills	90 (36%)	100 (40%)	40 (16%)	20 (8%)	3.9
Enhances mentoring abilities	85 (34%)	110 (44%)	35 (14%)	20 (8%)	3.9

**ANOVA:**  $F = 5.62$ ,  $p < 0.05 \rightarrow$  Significant.

**Interpretation:** CPD positively influences leadership development. Supports H4.

**Table 5: Challenges and Barriers in Implementing CPD**

Barrier	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	Mean
Lack of time	110 (44%)	80 (32%)	30 (12%)	20 (8%)	10 (4%)	4.0
Heavy workload	120 (48%)	70 (28%)	30 (12%)	20 (8%)	10 (4%)	4.0
Insufficient institutional support	95 (38%)	90 (36%)	40 (16%)	15 (6%)	10 (4%)	3.9

**Chi-Square Test:**  $\chi^2 = 32.54$ ,  $p < 0.05 \rightarrow$  Significant.

**Interpretation:** Institutional and workload-related barriers hinder CPD implementation. Supports H5.

## Findings

The survey results show that teachers overwhelmingly view Continuous Professional Development (CPD) as both highly beneficial and essential for their professional growth. Faculty members reported that CPD has a particularly strong impact on improving digital pedagogy and fostering inclusivity in the classroom. Leadership development was also found to be positively influenced, with CPD helping teachers take on more collaborative and mentoring roles. At the same time, institutional barriers—especially workload pressures, lack of time, and insufficient administrative support—were identified as significant obstacles to sustaining CPD initiatives.

## Conclusions

This study underscores the importance of sustainable CPD in shaping the future of teaching and learning in tertiary education. Sustainable CPD not only equips teachers with digital skills and inclusive practices but also nurtures leadership qualities that are vital for institutional growth. However, the findings make it clear that the success of CPD largely depends on the extent of institutional commitment. Without adequate support structures, resources, and time, even well-designed CPD programs may fail to achieve long-term impact.

## Recommendations

Based on the findings, the study puts forward the following recommendations to strengthen sustainable CPD in tertiary education:

1. **Allocate dedicated time and resources** – Institutions should formally integrate CPD into academic schedules and budgets rather than treating it as an optional add-on.
2. **Make digital pedagogy training central** – Digital teaching skills must become a core component of CPD to keep pace with technology-driven education.
3. **Promote inclusivity-focused learning** – Workshops, training on cultural sensitivity, and cross-cultural teaching strategies should be encouraged to create more inclusive classrooms.
4. **Strengthen leadership development** – CPD should include modules that prepare faculty for mentoring, decision-making, and collaborative leadership roles.
5. **Institutionalize sustainable policies** – Long-term frameworks and supportive policies must be established to ensure CPD becomes a continuous, embedded process rather than a one-time activity.

## Future Research Directions

While this study provides valuable insights, it also opens avenues for further exploration:

- **Comparative studies** across different regions and academic disciplines can shed light on variations in CPD practices and effectiveness.

- **Longitudinal research** would help track the long-term effects of sustainable CPD on teaching quality and institutional development.
- **Technology-driven CPD** deserves closer examination, particularly in the context of hybrid and online learning models that are becoming increasingly common.
- **Cross-cultural perspectives** on inclusivity-focused CPD can provide deeper understanding of how professional development can foster equity and diversity in global higher education.

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