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A Case Study on Professional Development of Teachers in India

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Continuous Professional Development (CPD) practices in India, as articulated in policy documents exhibit a paradox. These documents oscillate between managerialist and democratic ideologies, consequently giving rise to conflicts and inconsistencies in practice. Furthermore, while teachers are often portrayed as agents of social transformation in policy documents, there is a failure to account for the realities of their professional lives and work environment. Consequently, with the introduction of the National Education Policy 2020, several new structures of CPD are being implemented, rearticulating the vision of a transformative teacher professionalism in India. Hence, in the relatively under-studied context of Goa, it was important to investigate the current CPD practices and whether they are aligned to the transformative policy vision.

A qualitative case study methodology was employed through a socio-constructivist paradigm. Various stakeholders in the field of teacher education in Goa, including teachers, government officials, and resource persons, provided data through semi-structured interviews. This qualitative data underwent abductive thematic analysis, resulting in six key themes: 'Structure and Implementation of CPD', 'Purpose of CPD', 'Constraints of teacher autonomy', 'Relevance of training', 'Teacher motivation', and 'Systemic issues'. These themes offered comprehensive answers to the research questions. Finally, the study proposed potential policy implications and areas for future research.

Keywords: continuous professional development, teacher training in India, transformative professionalism, case study

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Oulu

List of Acronyms

CBSE..... Central Board of Secondary Education

CPD...... Continuous Professional Development

DIET..... District Institutes for Education and Training

DPEP..... District Primary Education Programme

MHRD Ministry of Human Resource and Development

NAS...... National Achievement Survey

NCERT... National Council of Educational Research and Training

NCF...... National Curriculum Framework

NCFTE National Curriculum Framework of Teacher Education

NCTE National Council of Teacher Education

NEP..... National Education Policy

NGO...... Non-governmental Organization

NISHTHA.. National Initiative for School Heads' and Teachers' Holistic Advancement

NPST...... National Professional Standards for Teachers

PISA...... Programme for International Student Assessment

OECD... The Organization for Economic Cooperation and Development

SCERT State Council of Educational Research and Training

SDG...... Sustainable Development Goal

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1 Introduction

The teaching profession in India faces a decline in social status and loss of the respect it once enjoyed, as it awaits a much-needed professional rejuvenation. Batra (2005, p. 4347) observes that the socio-cultural archetype of the ideal Indian school teacher as an inspiring, value imparting agent of personal transformation is now more myth than reality. The mythos of the Indian Guruⁱ is in a stark contrast to the contemporary professional in today's state-led school systems, who frequently finds themselves underqualified, poorly compensated, overworked and largely demotivated (Batra, 2005, p. 4347; Mooij, 2008, p. 521; Ramachandran, 2005, p. 2141; Subitha, 2018, p. 79).

In post-colonial India, policies had envisioned a different role for the teachers within Indian society. Teachers were expected to play a central role in building a democratic nation and effecting social transformation (Batra, 2005, p. 4347; 2014, p. S7; Subitha, 2018, p. 79). National policy documents such as the Kothari commission 1966, emphasised the importance of improving the economic status and civic rights of the teacher towards fulfilling this role (National Council of Educational Research and Training [NCERT], 1970, p. 74). Contemporary policy documents such as the National Curriculum Framework (NCF) 2005 and National Curriculum Framework of Teacher Education (NCFTE) 2009 reaffirm this crucial role of the teacher in bridging caste, gender, and socio-economic gaps (Batra, 2009, p. 129). However, research conducted by Batra (2014, p. S7), Sriprakash (2011, p. 7) and Subitha (2018, p. 77) reveal that policy and research discourses in India tend to position teachers as agents of social change without taking into consideration the realities of the work, life, and context.

While Subitha's (2018) characterisation of an Indian school teacher as "an intellectual mediocre" might seem harsh, it reflects the reality faced by many teachers in the profession today (p. 79). According to Batra (2005), schoolteachers in India view the profession as a "safe fall-back option" rather than a deliberate career choice (p. 4347). Often, she explains, the profession serves as a refuge for "educated unemployed youth, part-time businesspeople and young women seeking to find a part-time socially acceptable profession away from a competitive university education system" (p. 4347).

The disconnect between the envisioned teachers and the reality they face is further exacerbated by the challenges of pre-service training environments. The NCFTE 2009, acknowledges issues

with the pre-service institutions and programs, such as proliferation of sub-par private training institutes, regulatory issues, isolation from centres of research, short duration of the training courses, and a shortage of quality teacher educators. Consequently, new teacher graduates face difficulty passing the central Teacher Eligibility Test (required before hiring teacher graduates) (Khan, 2017, p. 15); with a meagre thirty three percent of 1,276,071 qualified teachers clearing it in 2023 (CBSE, 2023). Moreover, Subitha (2018, p. 3) observes that the profession does not offer adequate support and compensation and both Batra (2005, p. 4349) and Sriprakash (2011, p. 24) concur that teachers work in increasingly challenging conditions as issues such as poverty, migration, caste, child labour, gender disparities and large class sizes are prevalent in many public Indian schools. Additionally, student learning outcomes have not been able to keep up with the rise in enrolment figures. Some research blames teachers for this problem (Kumar & Wiseman, 2021, p. 6).

The Indian government has recognised the importance of Continuous Professional Development (CPD) for promoting teacher growth to ultimately improve student learning outcomes (NEP 2020). According to Evans (2008, p. 21), Kennedy (2014, p. 691) and Sachs (2016) effective professional development is a key component of raising professional standards and enhancing societal growth capacity by refining policies and practices in education. Powers et al. (2015, p. 237) show that successful professional development programs can promote student engagement; van den Bergh et al. (2015, p. 148) demonstrates positive relations between professional development and teachers' classroom behaviour. Similarly, Fischer et al., (2018) provides empirical evidence that CPD participation produces growth in teachers' knowledge and skills that improves classroom instruction. Guskey (2002, p. 381) suggests that CPD is expected to impact three areas: teachers' classroom practices, attitudes and beliefs, and students' learning outcome. However, Kennedy (2014, p. 691) argues that most of the emerging literature looking at the impact of CPD views it primarily as means of improvement in students' learning results.

Kennedy (2014) asserts that policies of CPD have risen in prominence by the global hyper narrative that "improving teacher quality will improve pupil outcomes, which will increase nation-states economic competitiveness" (p. 691). Such agendas promote CPD structures which privilege efficiency, compliance, and externally imposed accountability, supporting what Evans (2008, p. 31) or Sachs (2016, p. 6) would term a managerialist approach to CPD. These approaches squeeze out autonomy and instead reward compliance and uniformity. Conversely,

Kennedy (2014, p. 691) observes that policy reforms are less likely to acknowledge social-democratic ideologies that view teachers as agents of social transformation.

However, Indian policy documents such as the NCF 2003 and NCFTE 2009 support the central role of teachers as agents of social transformation. Furthermore, the newly formulated NCF 2023 states that "Professional development of Teachers must be such that they become competent and reflective individuals with the ability to drive educational improvement" (p. 594). Teachers here are envisioned to be autonomous professionals, displaying what Sachs (2016, p. 7) describes as democratic professionalism, which emphasises collaboration, teacher agency, and social justice. At the same time, the plan for CPD in India envisages professional development activities that focus on providing innovative pedagogies or content knowledge, delivered through centrally prescribed online and offline courses (NEP 2020). Typically, such practices indicate that professional development is something that is delivered to the teacher, where teachers do not have to take charge of their own learning, reflecting a managerialist approach to CPD. Thus, the policy document imagines professional development through both managerialist and democratic ideologies, which creates tensions and paradoxes.

This paradox is clear in the following statement of the National Education Policy 2020:

The new education policy must help recruit the very best and brightest to enter the teaching professional levels, by ensuring livelihood, respect, dignity, and autonomy, while also instilling in the system basic methods of quality control and accountability. (Ministry of Human Resource and Development [MHRD],

2020, p. 4)

Within the same frames of thought, complementary ideas of autonomy and control emerge, complicating the policy's broader purpose. Day and Sachs (2004, p. 5) contend that these different discourses frequently coexist, creating paradoxes, as often governments promote democratic professionalism while at the same time strengthening external monitoring and surveillance of teachers' work. Batra (2014, p. S7) and Subitha (2018, p. 4) observe that in India, policy makers' rhetoric often focuses on the need to enhance the quality of teachers while policy enforcement seeks to ensure teacher accountability rather than teacher development.

Furthermore, the Indian education system faces the complex challenge of providing professional development to over 200,000 newly qualified teachers and 7.2 million in-service teachers annually (Khan, 2017, p. 17). Bolitho and Padwad (2013, p. 7) argue that there is a very narrow

view of CPD in India, which is normally equated to the one-off, infrequent in-service training events. The NCFTE 2009 recognizes only formal training solutions by the central and state governments, with schools typically supporting only those activities approved and managed by these authorities. As a result, teachers' professional development is limited in autonomy and agency, and the existing system may be insufficient or irrelevant to teachers' needs and interests.

Consequently, teachers across most Indian states report that professional development programmes are poorly planned, burdensome, or irrelevant to their needs (Ramachandran, 2005). Ramachandran and Pal's (2005) study makes astounding observations about regulatory issues of these programs:

[...] In some remote districts, where the state government is not able to monitor if the training programme actually happened - teachers reach the venue, collect their travel allowance and are asked to disappear for three to four days - ticking off the activity as done. (p. 2143)

Further challenges such as lack of access to training, teacher educator shortages, inadequate infrastructure, and resistance to adopting innovative technology further hinder the effectiveness of CPD programs and professional growth for teachers in India (Khan, 2017, p. 14).

1.1 Research Gap

There are few accredited sources that have researched professional development and professionalism of Indian Teachers. The existing research on this subject area mainly explores the impact of CPD on teaching practice in India (Mahapatra, 2020; Srivastava et al, 2015); or examines innovative CPD approaches (Goel, 2019); or investigates challenges of the current CPD implementation (Dyer et al., 2002; Khan, 2017; Mooij, 2008; Ramachandran & Pal, 2005). According to Kennedy (2014, p. 689), there is a lack of research that theorises CPD structures to broader concerns of policy, power, and professionalism. Few studies such as the ones by Subitha (2018) and Batra (2014) explore the policy and practise imperative in India; however, they evaluate CPD policies from a broader national perspective. Studies that perform such research at a zoomed in grassroot level, especially in the chosen context of Goa were not found. The importance of context is emphasised by several studies when planning for effective CPD structures (Evans 2008; McChesney & Aldridge, 2021; van den Bergh et al. 2015). However, positivistic frames of research in India in teacher education have marginalised the specifics and

the contextual (Pandey, 2004, p. 218). Consequently, I am not aware of any such studies that examine the CPD policy and practice rhetoric in the context chosen Goa.

To address this research gap, a qualitative study on professional development of teachers in the state of Goa, India is undertaken for this thesis. Teachers, teacher-educators and government officials in charge of implementing CPD in Goa have been interviewed to understand their perspectives on CPD approaches. In a recent National Achievement Report 2021, the state of Goa showed poor learning outcomes in mathematics compared to the national average (Ministry of Education, n.d). As a result, the state's education minister condemned teachers for the low performance and called for subject specific professional learning courses for the teachers ("Amid Drop in Education Standards, Goa CM Talks Tough," 2022). In this context, this study can gain insight into how the decentralised CPD practice, and the centralised courses are implemented and received by educational professionals.

Hence, the research questions are:

- How do different educational stakeholders in Goa perceive and experience Continuing Professional Development (CPD) programs?
- what factors contribute to the gap between CPD practices and policy vision in Goa?

My familiarity with Goa's school personnel and languages makes it easier for me to facilitate meaningful research in this context and answer the research questions. The first question aims to understand the CPD practices in Goa from the perspectives of the stakeholders involved. The second question investigates the factors, according to stakeholders, that hinder the effective professional development of Goan teachers. By answering these research questions, the aim is to build a holistic understanding of the case of professional development of teachers in Goa and explore what factors may contribute to its ineffectiveness. Further, this case study is intended to offer larger insights into issues with the reforms and practices of professional development programs mandated by the government for all teachers across India. It is important to note that professional development programs across the country follow a centralised, predetermined structure (Bolitho & Padwad, 2013, p. 32; Subitha, 2018, p. 5). Thus, this case study could prove instrumental in offering implications for similar programs in other states of the country. These finding can provide implications for future policy reforms in CPD. Alternately, it also

provides a voice to all the educational professional who face challenges with CPD structures in Goa.

1.2 The Study Context

The state of Goa is geographically the smallest state in India, located on its western coast. It has a population of 1.8 million and an estimated literacy of 80 per cent (Government of Goa, n.d.). Goa was a Portuguese colony from 1510 to 1961. The four and a half centuries of colonial rule left a deep impact on the social culture, religion, cuisine, architecture, and the education system in the state. One of the first education institutes in the state was established as part of

the Jesuit missionary agenda (Malvankar, 2015, p. 301). Today, the educational infrastructure in Goa continues to be supported by multiple religious groups and trusts.

In Goa, there are 10 initial teacher education institutes recognised by the government, out of which 9 are privately owned (NCTE, n.d.). As mentioned in the National Curriculum Framework for Teacher Education, teacher education has become a lucrative business, substandard private training institutes have sprung up with short-term training programs, high tuition fees and a lack of quality teacher educators (NCTE, 2009). Mathew (2020) reports that, "The quality of



Figure 1. Map of India, highlighting Goa Note: From Goa in India [Photograph], by Ed g2s, 2005, Wikimedia Commons, CC by SA 3.0

the teacher training institutions [in Goa] remains with a few exceptions, either mediocre or poor" (p.17). In-service teachers in Goa are required to complete 50 hours of CPD activities per year by attending workshops or online teacher development modules (MHRD, 2020). Further, multiple actors are responsible in the state for teacher CPD activities with redundant responsibilities. The workshops for professional development are the responsibility of three government bodies: the State Council of Educational Research and Training, the District Institute of In-

Service Training and the Sarva Shiksha Abhiyan (MHRD, 2020). While online training modules are operated under a new central platform called NISHTHA: National Initiative for School Heads' and Teachers' Holistic Advancement (MHRD, 2020).

1.3 CPD and Sustainable Development Goals

Continuous Professional Development (CPD) as explained by Bolitho and Padwad (2013, p. 7) is a process of lifelong learning for teachers based on their conscious and voluntary efforts organized through formal or informal avenues. CPD for teachers could be actualised through in-service training programmes, attending conferences, acquiring additional qualifications, mentoring or forming learning communities. In this thesis, the terms professional development and CPD are at times used interchangeably.

Several studies have demonstrated the impact of CPD on teachers' classroom practices, attitudes, beliefs, and student learning outcomes (Guskey, 2002, p. 382; Kennedy, 2014, p. 690). However, a study by Jacob and McGovern (2015, p. 9) in the US found weak links between professional development and teacher improvement despite enormous investments of time and money in CPD, suggesting that evidence supporting effective teacher improvement strategies is limited. Similarly, Fischer et al. (2018, p. 114) found weak links between teacher' CPD and improvement in student learning outcomes. Despite these findings, both studies recognize the importance of CPD structures and advocate for innovative approaches to improve them.

The Sustainable Development Goal 4 (SDG4) focuses on ensuring inclusive and equitable quality education for all (United Nations, n.d.). Its target 4.c commits to, "by 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States" (United Nations, n.d.). However, this target fails to address the issue of equitable deployment of qualified, competent teachers in hard-to-reach, marginalised contexts, according to Nakidien et al (2021, p. 10). Furthermore, it does not address competencies required by teachers to teach in contexts riddled with crime, violence and poverty. In addition, CPD is not mentioned in global documents or in SDG 4 goals and targets (Nakidien et al, 2021, p. 11). The target focuses on pre-service qualifications of teachers and neglects the importance of CPD in addressing issues such as unqualified and underqualified teachers, which are of im-

portance in India (UNESCO Institute for Statistics [UIS], 2019). Teacher support remains peripheral to SDG4's aims of achieving universal quality education, when it should be central to it.

1.4 Positionality of the Researcher

Education in-equity in India is a well-documented problem, and teachers are often held responsible for this unfortunate reality (Kumar & Wiseman, 2021, p. 3). It appears, however, that the teachers in India are not given sufficient support, training and resources to meet the expectations set upon them. My interest in this research topic stems from two personal connections. Firstly, my mother and sister are dedicated and passionate teachers practicing in Goa, making this research particularly relevant to addressing the challenges they face in their profession. Secondly, my work with an NGO at a low-income public school in Maharashtra, India, exposed me to the struggles teachers experienced in addressing the diverse learning needs of their students. Despite the state government's efforts to support teachers, it was striking to listen to the negative experiences they faced with professional development programs. These observations led to the development of this research topic.

During my time working in the Indian education system, I encountered instances of false discourses of teacher empowerment, often driven by ulterior agendas, sharing a similarity with the observations made by (Batra, 2009, p. 127). One such instance I encountered was a senior official from a national teacher council suggesting that teachers who are truly passionate and empowered must be willing to answer late-night calls from students. Despite the reality of overburdened teachers dealing with average class sizes of fifty or more students, such misguided expectations further diminish the profession as they are detached from the realities of practice. Furthermore, teaching in India is a female dominated profession, and women in India have traditionally managed most of the household work and childcare responsibilities. This raises questions about whether professional neglect is due to the traditional acceptance of unpaid caregiving tasks (Dogra & Kaushal, 2021, p. 12).

As a novice researcher transitioning from an engineering background, I am still learning the intricacies of research and the concepts of education, philosophy, sociology, and ethics. My aim is to present a thesis that is accessible, transparent, and which embraces the subjectivity of knowledge while encouraging critical interpretations among readers. My familiarity with the Indian education system qualifies me to investigate this issue, however, it may also give rise to preconceived notions. Yin (2014, p. 76) asserts that case study research is ethically unsound if

used to substantiate such preconceived notions. Hence, I have strived to maintain an openness to contrary evidence that unbiased research necessitates. Furthermore, it is crucial to recognize the perceptions participants may have of me as a student in a foreign university. Vuorela (2009, p. 20) has written about the paradox of having a subaltern voice while in a position of power, which can create unintended complicity. Researchers who identify with the Global South working in academia in the Global North confront this notion of complicity, influencing their functioning and treatment during research. Hence as a researcher from the Global South, it was important for me to be aware of my own positionality in order to avoid inadvertently reinforcing oppressive power dynamics.

1.5 Structure of the thesis

Chapter 2 begins with a historical overview of professional development of teachers in India. It delves into the evolution of professional development policies, the impact of colonialism and culture on teacher development and certain challenges teachers face in preparation for their role as educators. Additionally, this chapter reviews professional development policies currently in play within the education system in India. This is aimed towards helping the reader understand the current structure and implementation of CPD policies and programs in the country along with their purpose.

Chapter 3 describes the theoretical framework used for the study. It describes the theory of transformative professional development which is a form of professional development that seeks not only to provide educators with new skills, but also to instigate broader change within the education system. It also introduces the theory of activist, critical or transformative professionalism, which challenges the status quo and advocates for the empowerment of teachers. The chapter is concluded by an analysis of the purpose of Professional Development and its connection to professionalism.

Chapter 4 delineates the methodology of the research, starting with the choice of methodology. This entails positioning of the researcher within the case study and providing a detailed design of the case study, including defining the case, justification for the type of case study chosen against its alternatives, and the research questions considered for this thesis. The data collection and analysis methods are also outlined in this chapter, covering participant selection, a description of the interview process, and the specific techniques employed for interpretation of the data.

Chapter 5 present the findings resulting from the study. It begins by analysing the structure and implementation of CPD, shedding light on issues such as the top-down approach to policy enforcement followed, constraints on teacher autonomy, effect of training relevance and teacher motivation on learning outcomes and various systemic issues. It highlights areas of success while simultaneously identifying gaps where improvements can be made, thereby linking these findings back to the issues discussed in previous chapters.

Finally, Chapter 6 discusses the findings presented in Chapter 5. This involves interpreting the data within the context of the theoretical framework established in Chapter 3. This discussion serves to synthesise the study's findings and offer potential implications for the future of CPD of teachers in India. The intention is to stimulate conversation and future research, as well as to provoke thought on how CPD practices can be better aligned with the policy vision and teacher's needs.

2 Professional Development of teachers in India

The Indian education system is vast and intricate. Serving a population of 1.8 billion, it is estimated that there are 1.5 million schools with nearly 260 million students enrolled from preprimary to higher secondary levels and more than 9.5 million teachers (Unified district information system for education, n.d.). Further, Indian education is a concurrent list subject, which means both the central government and state governments are responsible for regulating and implementing education policies. For instance, the National Council for Teacher Education (NCTE) which is a statutory body of the central government oversees policies for teacher education and development for the entire country (Khan, 2017, p. 13). Parallelly, each state in India observes their own policies and standards, generally following the national ones with local adjustments. Hence, the substantial planning and implementation of the teachers' professional development programmes are carried out by both central and state teacher training agencies (Khan, 2017, p. 14).

2.1 Historical overview of CPD in India

This section provides a historical overview of the evolution of professional development in India, from the time of its independence to the present day. Additionally, it briefly explains how colonial and cultural influences have given shape to teacher education programs in the country.

2.1.1 Evolution of professional development in India

In the newly liberated India, in-service teacher education was on the agenda right from the start. The Secondary Education Commission in 1952-53 recommended the establishment of Extension Service Departments in teacher training institutes to provide in-service training (NCERT, 2022, p. 3). Subsequently, the Education Commission in 1964-66 proposed the creation of 'school complexes' with a central school responsible for organizing professional development of teachers at the state level (NCERT, 2022, p. 3).

A significant transformation in the landscape of in-service teacher education occurred with the National Policy on Education in 1986. This policy recommended the establishment of District Institutes for Education and Training (DIET), which would be a local body in every state providing in-service training (NCERT, 2022, p. 3). Additionally, programs such as the 'Programme of Mass Orientation of School Teachers' and the 'Special Orientation Programme for

Primary Teachers' were launched to quickly align teachers with the goals of the policy (Pandey, 2004, p. 215; NCERT, 2022, p. 4). According to Pandey (2004, p. 214), various research studies conducted in India have shown notable enhancements in teachers' academic concepts and positive changes in classroom practices achieved by these mass programmes. However, these studies also highlight the insufficient infrastructure, including inadequate physical facilities at training centres, limited availability of training materials, and the absence of media support during training sessions (Pandey, 2004, p. 215).

In the mid-1990s, the District Primary Education Programme (DPEP) was implemented to achieve universalization of elementary education and further decentralize the education land-scape (Dyer et al., 2002, p. 337). The DPEP focused on enhancing infrastructure, revising content, deploying additional teachers, and providing recurrent training (NCERT, 2022, p. 4). However, instead of strengthening the existing structures, it introduced new district, block, and cluster-level structures in each state for in-service education.

The enactment of the Right of Children to Free and Compulsory Education Act in 2009 further emphasized the importance of elementary education for all children aged 6-14 years in India. The Sarva Shiksha Abhiyan supported this effort by mandating 20 days of in-service training for teachers each year (NCERT, 2022, p. 6). The 2000s also saw the utilization of satellite technologies for teacher professional development. EDUSAT, an interactive satellite-based communication system, was developed to reach remote and rural educational institutes. Similarly, the recent National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA) program leverages technology for teacher training (NCERT, 2022, p. 4). In alignment with the New National Education Policy 2020, the mandated duration of Continuing Professional Development (CPD) has been revised to 50 hours, accompanied by the implementation of comprehensive career management plans that include adherence to National Professional Standards for teachers (MHRD, 2020, p. 22).

Due to the constant emergence of new government bodies and implementation of multiple inservice training programs over the years, Pandey (2004) reports that, "there has been multiplicity of teacher training programmes with considerable overlap, which sometimes confuses teachers more than clarifying the concepts" (p. 218). Pandey (2004, p. 218) explains that despite several departments being given the responsibility to conduct research in teacher education, research continues to be their weakest area. Moreover, decentralization efforts in teacher education have faced significant challenges. Dyer and Choksi (2002) note that the current approach adopted by decentralized local bodies deviates from the intended participatory and democratic approach, instead following top-down directives. Thus, the history of in-service teacher education in India reflects a continuous effort to improve the professional development of teachers. Various policies, programs, and initiatives have been introduced over the years, aiming to enhance the quality of education and support teachers in their professional growth. However, the effectiveness and coordination of these efforts remain areas of concern.

2.1.2 Colonialism and culture in shaping teacher education

When we examine the professional development of teachers in India through a socioconstructivist lens, it is crucial to consider the long-lasting effects of colonial influences, which have shaped the social and ideological contexts of teacher education. Batra (2014) explains that the system of teacher training in India has mirrored the "monitorial and pupil teacher systems" of 20th-century Britain, considered suitable for a large population of teachers (p. S9). This approach has led to the institutionalized intellectual isolation of teachers and a limited engagement with pedagogy as merely a technique (Batra, 2014, p. S9).

Batra (2014, p. S9) and Dyer & Choksi et al (2002) both highlight that the disconnect between teacher education institutes and research centres, even within the same universities, creates a culture of insularity. These institutions become closed spaces that discourage novel ideas and perspectives, leading to a stifling intellectual environment. This has perpetuated a patronizing culture where teacher-educators control and prescribe behaviour, reducing the opportunity for critical thinking and adaptability in teachers (Batra, 2014, p. S9). Furthermore, the idea of disciplining children is deeply rooted in cultural and colonial understanding about children and their relationship with adults (Batra, 2014, p. S10).

Moreover, the belief that practical knowledge is derived from teaching practice is pervasive in pre-service education. This perspective narrows the scope of teacher knowledge to a set of pre-defined skills. Dyer & Choksi et al (2002, p. 337) have observed that decentralized in-service training sectors, like the District Institutes of Education and Training (DIETs), predominantly follow this skills and knowledge-based approach. Furthermore, as noted by Pandey (2004, p. 217), Indian research in teacher education has largely been dominated by behaviourist perspectives, demonstrating a tendency to view teaching solely from this angle.

2.2 Professional development policy in India

The National Education Policy (NEP) 2020 of India has emphasised the importance of Continuous Professional Development (CPD) for educators. As per the policy, teachers and school principals are required to complete a minimum of 50 hours of CPD each year, with a focus on current pedagogies, competency-based learning, and a diverse range of teaching methodologies (MHRD, 2020, p. 22). This directive is meant to rectify shortcomings of the existing in-service teacher programs. For instance, Bolitho and Padwad (2013, p. 7) observe that the understanding of CPD in India is quite narrow, typically reduced to infrequent inservice training events. This limited perspective results in professional development programmes that are often not well designed, burdensome, or irrelevant to the teachers' needs, as reported by teachers in most Indian states (Ramachandran & Pal, 2005).

It provides various avenues for learning and self-enhancement, incorporating workshops and online modules across local, regional, state, national, and international levels (MHRD, 2020, p. 22). Additionally, mechanisms to share successful practices and innovative ideas will be established (ibid). The new policy delineates that for school principals and leaders, CPD will focus on leadership and management skills, with the same minimum requirement of 50 hours per year (ibid). The NEP 2020 also envisions linking CPD with career management of teachers. In light of this, it has proposed developing a common guiding set of National Professional Standards for Teachers (NPST). These standards will guide performance appraisals, pre-service teacher education programmes, and all aspects of teacher career management (MHRD, 2020, p. 22).

The recent document "Guidelines for 50 Hours of Continuous Professional Development for Teachers, Head Teachers and Teacher Educators" based on the NEP 2020 provides more specific directives for the implementation of CPD (NCERT, 2022). The purpose of the Continuous Professional Development (CPD) policy in India, as outlined in this policy document, is to foster lifelong learning and growth in teachers, beginning from initial teacher education phase and continuing till retirement (MHRD, 2020, p. 22). The envisioning of the teacher in the policy document is stated as follows:

a professional teacher is not merely a master of their subject and a highly skilled 'technician' [...], but a 'transformative intellectual' (capable of thinking critically and reflexively about why they are doing what they have been doing and constantly striving to understand the

nature of schooling and work towards bringing liberatory change to education. (NCERT, 2022, p. 2)

The policy guidelines present a multifaceted vision of a professional teacher. The teacher is not seen merely as a skilled practitioner of teaching methods. Rather, they are perceived as a transformative intellectual.

3 Theoretical Framework

In this chapter, the theories and concepts used to construct the theoretical framework are examined. Schwandt (1993, as cited in Merriam & Tisdell, 2016, p. 84) contends that "atheoretical research is impossible", and thus, a theoretical framework is essential to situate and frame qualitative research. This study is based on the theory of transformative professional development of teachers as proposed by Kennedy (2005, 2014), Mockler (2005) and Sachs (2016).

3.1 Teacher Professionalism

The meaning of the term professionalism has evolved over time reflecting the changing sociopolitical and organisational contexts in which occupations exist. Professionalism used to be
understood as an occupational value, an optimistic perspective of the term defined through
"trust, competence, strong occupational identity, and cooperative" values (Sachs, 2016, p. 418).

Professionalism in this sense, was associated with enhancing the quality of service and professionals taking greater responsibility for defining their work (Evans, 2008, p. 22; Hargreaves,
2000; p. 152). However, the contemporary understanding of professionalism has shifted
towards an ideology, used in the discourses of managerial control (Sachs, 2016, p. 418). This
perspective portrays professionalism as a tool used by managers to guide occupational change
within organisations. This understanding aligns with the recent shift where external forces, such
as managers or government policies, exert increased control over professions (Evans, 2008, p.
22; Sachs, 2016, p. 418).

This revised conception of professionalism has permeated the sphere of teacher professionalism, where various stakeholders are engaged in an ongoing struggle to define it. Mockler (2005, p. 734) highlights the significant roles played by the government, parents, teacher unions, and school communities in shaping the understanding of teacher professionalism. Furthermore, within the field of teacher education, there is a growing trend to quantify teachers' professional knowledge and skills (Hargreaves, 2000, p. 152; Mockler, 2005, p. 734). This is evident in the development of professional standards and the pursuit of reducing teaching and learning processes to measurable and scientifically certain criteria. However, both Hargreaves (2000, p. 152) and Mockler (2005, p. 734) argue that such endeavours can undermine or overlook the equally important emotional dimensions of teachers' work. These emotional dimensions include

their passion for teaching and their commitment to students' learning and well-being.

Additionally, these efforts fail to acknowledge the contextual and reflexive nature of their work.

As the definition of teacher professionalism becomes increasingly dictated by managerial discourses, the professional development of teachers in many countries is seen merely as a state tool to enforce accountability and performativity (Day and Sachs, 2004, p. 4; Hargreaves, 2000, p. 151; Sachs, 2016, p. 414). Conversely, in some other contexts, it is utilized to improve teacher quality standards where pre-service programs may fall short. Consequently, Day and Sachs (2004, p.4) maintain that it is no longer possible to characterize professionalism as a politically neutral concept, as was previously done. In the modern lexicon, teacher professionalism and the professional development strategies inherently hold a political agenda! Where professional development or CPD is no longer an option for teachers but an expectation (Day and Sachs, 2004, p. 4). This section will explore the objectives and factors that contribute to varying forms of teacher professionalism.

3.1.1 Performativity

Ball (2003) defines performativity as "a technology, a culture and a mode of regulation that employs judgements, comparisons and displays as means of incentive, control, attrition and change based on rewards and sanctions (both material and symbolic)" (p. 216). This performance-oriented mode of regulation has become integral to education policy and practice globally, as it aims to ensure student learning by raising standards of teacher performance (Day and Sachs, 2004, p. 3; Sachs, 2016; Mockler, 2005). Kennedy (2014) notes that the "global hypernarrative" promotes professional development of teachers as a means to improving student learning outcomes, ultimately boosting a nation's economic competitiveness (p. 691). For instance, to improve global standings in PISA (Programme for International Student Assessment), policy reforms often adopt pedagogic recommendations from international organisations like the OECD, despite these often overlooking the contextual nature of teachers' knowledge (Tikly et al, 2022, p. 13).

Performance cultures often depend on technologies to provide governments with information on selective indicators of teacher performance (Sachs, 2016, p. 415). They usually imply a low level of trust in the profession (Ball, 2003, p. 219). Thus, the tools of performativity appear as objective or rational indicators, through which governments can foster trust in their education systems (Ball, 2003, p. 217).

Performativity in educational reform goes beyond demonstrating technological or structural changes. Ball (2003) posits that the dynamics of performativity can have varied impacts on individuals within the education system. For some teachers, the performance-based metrics can pave the way to personal success and recognition, highlighting their competency and commitment. For others, the constant measurement and comparison can induce inner conflicts, inauthenticity, and resistance. Furthermore, it can reshape the social identity of teachers, this transformation due to performativity, as Ball (2003) describes, is a "struggle over the teacher's soul" (p. 217). In India, for example, Batra (2014) notes that large-scale corporate and civil society organization funded research shaped a discourse on teacher quality using indicators such as "teacher absenteeism, motivation, accountability, and instructional time-on-task" (p. S7). This research on these performance indicators positioned the schoolteacher as the chief reason for declining education quality in India, leading to an anti-teacher discourse and marginalisation of teachers from the education process (Batra, 2014, p. S7).

3.1.2 Accountability

Further, Sachs (2016) argues that "the project of accountability is inherently a political one" (p. 415). Given the huge financial investment in education systems and focus on fulfilment of global agendas, the discourse in many countries around accountability and transparency of teaching practices is not surprising. Politicians often invoke these concepts when scrutinizing education systems or student outcomes (Sachs, 2016, p. 416). As Sachs (2016) observes, accountability is frequently leveraged in political rhetoric because it suggests "transparency and trustworthiness" (p. 416).

Different forms of accountability exist at the systemic level, which can have different effects on the enactment of teacher professionalism. The two forms of accountability distinguished by Halstead (1994, as cited in Sachs, 2016) are contractual and responsive, and recognizing their differences is important for policy scrutiny. Contractual accountability tends to be measurement driven and outcome focused, while responsive accountability focuses more on bottom-up decision making, processes over outcomes and involves self-regulation (Sachs, 2016, p. 416). At its worst, (contractual) accountability can lead to overregulation, which can punish teachers through a sophisticated network of surveillance, eroding trust and creating risk averse dispositions towards the profession (Sachs, 2016, p. 416).

Further, teacher standards serve as a tool for supervising and managing teacher accountability, defining the competence levels expected of teachers, either for entering the profession or for measuring ongoing performance. For example, in India, despite graduating from teaching programs, prospective teachers must pass the central Teacher Eligibility Test before they can be employed (Khan, 2017). Similarly, the new National Education Policy 2020 in India has advocated the use of National Performance Standards for Teachers (NPST) for in-service teachers in every state (MHRD, 2020, p. 22). Teacher standards often evaluate the teaching profession as a whole, rather than focusing on individual teachers (Sachs, 2016, p. 417). Mockler (2005, p. 741), however, cautions that the current discourse surrounding teacher standards often standardizes practice and stifles debate, leading to an erosion of trust in teachers rather than recognizing the intricacies and diversity of teaching practices.

3.1.3 Types of Professionalism

Day and Sachs (2004, p. 6) observe that managerial and democratic professionalisms are the two main types prevalent in educational discourse, of which managerial has gained more dominance due to its impact. Managerial professionalism privileges efficiency, compliance, and externally imposed accountability, while democratic professionalism emphasises collaboration, openness and teacher agency (Sachs, 2016, p. 419). The managerialism of Sachs (2000, p. 79) is an ideology that claims that efficient management can solve any problem; and that managerial practices used in private enterprises or corporate worlds can also be used in the public sector. Managerial professionalism "gains legitimacy through the promulgation of policies and allocation of funds associated with those policies" (Day and Sachs, 2004, p. 6). Both these authors claim that governments are most often drawn to endorse managerial professionalism while teachers favour democratic professionalism (Day and Sachs, 2004, p. 6; Sachs, 2016, p. 419). Democratic professionalism on the other hand, suggests that teachers take wider responsibility beyond just their classroom, by fostering collective and community approaches to decisions regarding their profession (Day and Sachs, 2004, p. 7).

In addition, Sachs (2016) describes an activist form of teacher professionalism which "relies on a conscious form of social movement where trust, respect and reciprocity exist among various stakeholders working together to improve teachers' working conditions and status" (p. 419). Mockler (2005) refers to this form of professionalism as 'transformative', while Boylan et al. (2023) use the term 'critical' (For clarity only the term transformative is used). Sachs (2000) summarises the characteristics of transformative professionalism as follows:

- Promoting inclusiveness rather than exclusiveness,
- collective and collaborative action,

- effective communication of aims and expectations,
- recognition of the expertise of all parties involved,
- creating an environment of trust and mutual respect,
- being responsive and responsible,
- acting with passion,
- experiencing pleasure and fun. (p. 87)

Mockler (2005) and Sachs (2000) suggest conditions and cultural aspects necessary for transformative professionalism. These elements are required at both macro- and micro-levels within schools and society. The first element is active trust, which must be established, allowing teachers to act autonomously, recognize their own learning needs, and enabling collaborative work with other teachers to constantly develop their understanding and expertise (Mockler, 2005; Sachs, 2000). Secondly, linked to active trust is the willingness to take risks, contrasting with managerialist discourses that audit teachers' autonomy. Transformative professionals value divergent and risky thinking and help their students develop critical and transformative capacities (Mockler, 2005). Lastly, transformative teaching necessitates courageous leadership at both school and systemic levels, with leaders willing to be transformative themselves – building trust, taking risks, and thinking critically (Mockler, 2005).

In conclusion, this exploration of teacher professionalism identifies performativity and accountability as key contributing factors. Performativity seeks to improve student learning by elevating teacher performance standards, although its impacts can vary among individuals. Accountability in education serves as a tool for transparency, though it can sometimes lead to overregulation and erode trust in teachers. Several types of professionalism are observed, with managerial professionalism focused on efficiency and compliance, democratic professionalism emphasizing collaboration and openness, and transformative professionalism advocating social justice and collective action.

3.2 Teachers' Professional Development

Evans (2008, p. 30) notes a lack of definitions of professional development in existing literature, reflecting its neglected representation. Consequently, Evans (2008) defines it as the "process whereby people's professionality and/or professionalism may be considered to be enhanced" (p. 30). Bolitho and Padwad (2013, p. 6) provide a three-stage framework for teacher careers:

preparation, induction, and ongoing development. They argue that the strength of the profession depends on how effectively these stages are managed. In the ideal scenario, the preparation or pre-service education phase strikes a balance between theoretical learning and practical application, setting the foundation for professional readiness (ibid). The induction process, marked by mentoring, internships, team collaborations, and shadowing, complements this preparation in a structured and gradual manner (ibid). For the ongoing development stage, there are multiple avenues available, including training, conferences, personal studies, research, online courses, among others. This phase, characterized as Continuous Professional Development (CPD), signifies a lifelong commitment to professional growth and enhancement.

3.2.1 Model of Continuous Professional Development

Analysing the way in which professional development is organised and structured for teachers may provide insight into both the motivation behind such structures and the nature of professionalism (Kennedy, 2014, p 690; Day and Sachs, 2004, p. 6). In Kennedy's (2005) analysis of Continuous Professional development (CPD) practices, eight models are proposed which address issues of power relations, teacher agency, and profession-wide autonomy, as seen below in Table 1. These models include: Training, Deficit, Cascade, Award-bearing, Standards-based, Coaching/mentoring, Community of Practice and Collaborative professional inquiry models.

Table 1. Models of CPD

Model of CPD	Characteristics
The training Model	Supports a technocratic view of teaching wherein CPD supports the teachers to update their skills. Usually delivered through an expert, through a predetermined module and takes place off-site. "The training model provides an effective way for dominant stakeholders to control and limit the agenda, and places teachers in a passive role as recipients of specific knowledge" (Kennedy, 2005, p. 238)
The Deficit Model	This CPD model addresses a perceived deficit in teacher performance. It usually attributes the blame for educational shortfalls on individual teachers where collective responsibility or systemic problems are not considered.
The Cascade Model	As part of the cascade model, teachers participate in training events and then disseminate the information to their colleagues. It is commonly employed in situations where resources are limited.

The Award Bearing Model This CPD practice encourages the completion of award bearing courses which are usually validated by universities as a means of quality assurance.

The Standards-based Model This model relies on externally imposed accountability measures or standards which might indicate a denigration of teaching as a complex, context-specific political and moral endeavour. Additionally, it emphasises the competence of individual teachers and their rewards at the expense of collaborative and collegiate learning.

The Coaching/Mentoring Model Characterised by one-to-one relationships between two teachers or a teacher and an expert to support CPD. This relationship could be collegiate but usually is hierarchical in nature.

The Community of Practice Model Group of individuals support CPD through shared knowledge and interactions within the community. Issues of power are common with such a model where individuals might engage in the proactive or passive learnings.

Collaborative professional inquiry Models CPD practices that involve an element of collaborative problem identification and subsequent activity where the teachers inquire into their own practice and learn about other practices, perhaps by engaging with existing research.

These models vary in their focus, from addressing gaps in teachers' skills and knowledge (deficit model) to fostering professional growth within supportive learning communities (Community of Practice model). They are not exclusive or exhaustive, but they enable deeper analysis and a means to discuss the fundamental issues of purposes of professional development practices (Kennedy, 2005, p. 248). The spectrum of CPD models presented above are further categorized based on their purpose from transmissive to transformative, as illustrated in Figure 2. These categories are also linked to the increasing capacity for teacher agency and autonomy across models as discussed further.

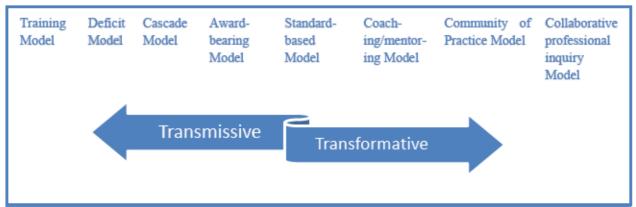


Figure 2. Purpose of CPD models (Kennedy, 2014, p. 693)

For a transmissive purpose, CPD provides teachers with the necessary skills to implement reforms determined by others (usually the government), whereas for transformative purposes CPD can empower teachers to inform, contribute to, or critique reforms and policies (Kennedy, 2014, p. 692). However, it should be noted that there is no single model of CPD that can be viewed as supporting a specific category of purpose on its own; rather, the categories are intended to assist us in identifying patterns and trends in individual teacher experiences as well as in analysing institution and system wide approaches to CPD (Kennedy, 2005, p. 248). Furthermore, rather than implying that all CPD practices must be transformative in nature, Kennedy (2014, p. 693) acknowledges that some teaching skills may be better learned through transmissive methods. However, the framework suggests that particular models of CPD privilege the desired transformative orientation over others.

Furthermore, Kennedy (2014, p. 693) posits that the capacity for professional autonomy increases as one moves across transmissive to transformative models. However, she argues that this autonomy is only ever transformative if it is translated into agency and used in practice for positive change. According to Kennedy (2005, 2014), autonomy is not only an individual construct that contributes to teacher agency, but also a profession-wide construct that determines how teachers are governed, regulated, trusted, and respected. In Kennedy's (2005, 2014) views, transformative professional development involves teachers having the agency to reflect on power dynamics, critiquing reforms, and promoting democratic or transformative professional-ism.

3.2.2 Transformative professional development

The field of teacher professionalism and professional development is in constant evolution and being reimagined as an approach to social and educational transformation as seen above (Kennedy, 2005, 2014; Mockler, 2005; Sachs, 2016). This change is in part, due to the ever-increasing demand for evaluating teacher performance based on effectiveness, efficiency, measurability, and accountability by a narrow set of standards (Mockler, 2005). In the sections above, Sachs (2016) compellingly advocates for an activist teaching profession, while Mockler (2005) explores the notion of a transformative teaching professionalism. Meanwhile, Kennedy (2005, 2014) offers models of professional development spanning from transmissive to transformative forms. Collectively, these studies have contributed to the emergence of transformative professional development as a distinct concept.

Transformative professional development as describes by Mockler (2005) fosters a teaching profession where "the best and most important teaching is that which sees its aim as the transformation of society through the contribution it makes to the formation of human beings who think critically, act ethically and seek justice throughout their lives" (p. 733). Boylan et al. (2023), Mockler (2005) and Sachs (2016) concur that this form of professional development emerged as a reaction to neoliberal marketisation and performance cultures in teacher education policies and practices in anglophone countries. For example, in Australia, these performance cultures, characterised by increased accountability and enacted through teacher performance standards, have led to a conservative and risk-averse teaching profession (Sachs, 2016).

In India, Batra (2014, p. S7) characterises the pre-liberalisation educational discourse as citizen-based, underpinned by a critical scientific perspective and emphasising teachers' role as agents of social transformation at the core of educational policy. However, the advent of neoliberal policies in the 1990's led to stricter teacher monitoring and competency-based evaluation, destabilising the pre-liberalization agenda of teachers as agents of social transformation (Batra, 2014, p. S6). While the National Curriculum Framework (NCF 2005) and the teacher education curriculum (NCTE 2009) continue to emphasise the central role of teachers as agents of social transformation (Subitha, 2018, p. 79); both Batra (2014) and Subitha (2018) agree that policy enforcement focuses more on ensuring teacher accountability rather than teacher development. This gap has been the focus of investigation in this thesis, utilizing the theories discussed above.

Lastly, Kennedy (2014) cautions that national CPD policies are not easily categorised into one type of professionalism; instead, she emphasises that professional development policies are intricate and multifaceted, requiring an analysis of their components to understand the system's overall position. Similarly, Day and Sachs (2004, p. 5) assert that different types of professionalism frequently coexist, creating paradoxes, as often governments promote democratic professionalism while at the same time strengthening external monitoring and surveillance of teachers' work. Hence Kennedy (2014) proposes the following factors for analysis of professional development such as "overall purpose", "unit of focus", "teacher engagement with policy", "dominant underpinning perspectives on teacher learning", "focus of learning", "motivation" and "accountability" (p. 694). By examining various aspects of CPD policies, schools, local governments, states, or countries can identify key elements that might be inconsistent with their broader perspective on professionalism.

3.3 Limitations of theory

According to Boylan et al (2023, p. 4), a significant criticism of the theory of professionalism is its overlapping terminology. The theory seems to use numerous terms that essentially convey the same concept, creating potential confusion. Furthermore, there's a lack of consensus about how these theoretical ideas manifest in real-world practice (ibid). To investigate and enhance this link, a clearer conceptual understanding of these constructs and their practical application is needed. It's also important to note that most contributors to this theory are from the global North, including Kennedy from Scotland and Sachs and Mockler from Australia. Applying this theory to examine CPD in the global South, in India may be challenging, due to different sociocultural contexts.

4 Methodology of Research

As previously delineated, the primary objective of this thesis is to investigate the discrepancy between the policy vision and practice of continuous professional development of teachers through the accounts of the educational professionals in the State of Goa, India. To address this objective, a qualitative case study methodology is employed. The case study methodology allows researchers to explore contemporary phenomena such as the ongoing practices of professional development in Goa within its real-life context (Merriam & Tisdell, 2016, p. 37; Yin, 2014, p. 12). Further, it supports the use of multiple sources of evidence to build an understanding of the phenomenon's particularities (Creswell & Poth, 2018, p. 153). In the following section each step of the research process, encompassing the choice of methodology, research paradigm, research design, data collection, analysis, validity, and limitations of methodology are addressed to maintain transparency of methods, an important criterion for "excellent" qualitative research (Merriam & Tisdell, 2016, p. 240).

4.1 The choice of Methodology

Prominent authors in the field of qualitative research, such as Creswell and Poth (2018, p. 35), Merriam and Tisdell (2016, p. 5) and Stake (1995, p. 35) have highlighted that qualitative researchers are interested in learning how people interpret their experiences, construct their worlds, and assign meanings to them. The difference between the qualitative and quantitative approaches are explicated by Stake (1995) as:

The distinction is not directly related to the difference between quantitative and qualitative data, but a difference in searching for causes versus searching for happenings. Quantitative researchers have pressed for explanation and control; qualitative researchers have pressed for understanding the complex interrelationships among all that exists. (p. 37)

As explained by Stake (1995, p. 37), the choice between the two approaches is not merely a matter of the type of data, rather it relies on the underlying purpose behind the research. For this thesis, the qualitative approach is particularly suitable due to its ability to capture the richness and complexity of human experiences. Central to this thesis are the narratives of the

educational professionals in Goa, who will enrich our understanding and provide deep insight into the phenomenon and practices of professional development. While both qualitative and quantitative approaches can offer valuable insights into professional development, qualitative approaches elucidate the complexity of phenomena and everyday occurrences (Merriam & Tisdell, 2016, p. 5; Stake, 1995, p. 35). The use of case study methodology as a methodological approach, further enhances the depth of understanding in this thesis.

Case study is a commonly used methodology in qualitative research frequently employed by researchers whose interests are in understanding a real-life phenomenon and its particularities (Stake, 1995, p. 4; Yazan, 2015, p. 139; Yin, 2014, p. 4). During the initial conceptualization of case studies, Adelman et al. (1980, as cited in Bassey, 1999, p. 23) posited that this method is "strong in reality" and capable of recognising the nuances and complexities of social truths. By understanding phenomenon bounded within their social environment, case studies represent the discrepancies and conflicts of viewpoints and ideas about the phenomenon which can facilitate the exploration of alternative interpretations (Stake, 1995, p. 20; Bassey, 1999, p. 23). Moreover, this methodology enables extensive data collection from multiple sources of information (Creswell & Poth, 2018, p. 153).

Creswell and Poth (2018) offer a comprehensive definition of the qualitative case study research methodology:

a qualitative approach in which the investigator explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information (e.g., observations, interviews, audiovisual material, and documents and reports), and reports a case description and case themes. The unit of analysis in the case study might be multiple cases (a multisite study) or a single case (a within-site study). (p. 153)

Building upon this definition, this thesis investigates the case of professional development practices of teachers in India, focusing specifically on the experiences of educational professionals in Goa. This single-case approach was chosen due to the unique context of Goa, allowing for an in-depth exploration of the policies and practices of professional development of teachers in this region, while simultaneously being instrumental in advancing understanding of professional development in other states of India due to its centralised, top-down structure (Bolitho

& Padwad, 2013, p. 8; Subitha, 2018, p. 81). Thus, this methodology acknowledges the uniqueness of professional development practice within this context and enables an in-depth exploration through multiple sources of data to facilitate provisional implications for its conceptualisation and design.

This methodology has been used in several studies in educational research for similar purposes. For example, Van den Bergh et al. (2015, p. 142) conducted a case study in a Dutch primary school on how teachers regulate their learning during CPD programmes. The study found that individual teachers direct their learning differently and hence differentiated feedback is an important feature of effective professional development (Van den Bergh et al., 2015, p. 150). Similarly, Noonan (2022, p. 10) examined a sole case of a teacher's engagement in CPD activities in the US, highlighting the importance of teacher motivation and facilitator-teacher relationships. Both studies appropriately utilised the case study methodology for in-depth analysis of teacher experiences. Moreover, this methodological decision can also be viewed as an attempt to empower the participants whose experiences are recorded. Noonan's (2022, p. 5) study observes that CPD is often considered as something that teachers need to be done to them, rather than something that they engage in as competent professionals. Similarly, several studies in India such as Subitha (2018, p. 78) and Bolitho and Padwad (2013, p. 145) confirm that teachers are most often passive recipients of CPD directives which discourage their engagement as competent professionals.

4.2 Positioning the case study researcher

The researcher's views, beliefs, and assumptions influence every stage of the research process, from the selection of a study topic to the choice of methodologies, and the presentation of findings. These beliefs encompass aspects of ontology (the understanding of reality), epistemology (nature and production of knowledge), axiology (the role of values in research), and methodology (the research process) (Creswell & Poth, 2018, p. 54). Essentially, a researcher's standpoint on these philosophical ideas forms the foundation of the research project they design and implement (Yazan, 2015, p.136). These views eventually combine into a research paradigm or framework, guiding the researcher towards specific thought patterns and steering their research decisions (Bassey, 1999, p. 42; Yazan, 2015, p. 136). The philosophical underpinning of epistemology, ontology and axiology and discussed in this section, which have guided the choices in the methodology.

Stake (1995, p. 8) posits that qualitative case study research gathers interpreted (not objective) knowledge to construct a reality that can be reconstructed by the reader based on the context in which the reader is situated. Consequently, he argues case study research leans towards an interpretivist or constructivist paradigm, positioning itself as a suitable qualitative approach-this viewpoint is shared by both Creswell and Poth (2018) and Merriam and Tisdell (2016). This paradigm sees the world as being socially constructed and subjective, and it recognizes the value of participants perspectives and experiences.

Because I am a novice researcher, my ideas regarding my own philosophical positionality are constantly evolving. My background in engineering has developed in me a positivistic leaning, a paradigm that values objective evidence and perceives reality as independent of our minds. This still has an influence on certain aspects of how I perceive the world and conduct this research. Further my work in the development sector has necessitated a pragmatist approach. Pragmatism as a research paradigm is focused on actions and solutions. It is concerned with outcomes and effects, which may mean using a mixture of methods and working with various types of data (Creswell & Poth, 2018, p. 64).

However, within the thesis I primarily position myself as a social constructivist researcher. Social constructivism argues that individuals' knowledge is produced and constructed within their social contexts, and the intangible realities of those contexts define what knowledge is (Creswell & Poth, 2018, p. 60; Stake, 1995, p. 99). In this way, the ontology or reality of professional development programmes in Goa is constructed by the individuals (teachers, school heads, policy designers, or PD instructors) bound by the case being studied. To understand or engage with this knowledge, the reader must realise that it is entirely subjective, and bound by time and space. Furthermore, researcher's preconceived biases or assumptions may easily influence data collection or data analysis (Chenail, 2014, p. 33). As the researcher of this study, I also acknowledge that my personal, cultural and historical experiences within the Indian context and the understanding of teacher education have influenced the research process.

Stake's (1995) views concerning case study research differ from Yin's (2014). Creswell and Poth (2018, p. 64) observe that Yin advocates both quantitative and qualitative approaches for developing case studies. While some scholars, such as Yazan (2015) and Boblin et al (2013, p. 1267), both view Yin's work as being more positivistic, they advocate for his straightforward and methodical approach that makes case study methodology accessible to novice researchers.

Hence, aspects of case study design based on Yin's (2014) method are used in this thesis. However, as a constructivist researcher, philosophical dissonance with Yin's ideology meant that there was a constant back and forth with the methodological choice and my socio constructivist beliefs. As a result, this research's case study design follows some aspects of Yin's (2014) case study design while primarily drawing on the works of constructivist scholars such as Merriam and Tisdell (2016), Creswell and Poth (2018) and Stake (1995).

4.3 Case study Design

This section discusses different aspect of the case study design. The chosen case is properly defined, following which the categorisation of case studies is discussed. Lastly the formulation of research questions for this thesis is elaborated on.

4.3.1 Defining the case

The concept of a case has been defined differently by different authors. Early definitions of a case drew parallels to the research process. According to Kemmis (1980), "research is not the process of thought going out to embrace its object as if it lay there inert, waiting to be discovered" (cited in Bassey, 1999, p. 25). The research process is dynamic and active, just like the case chosen to be studied. A more recent definition by Yin (2014) describes a case as "a contemporary phenomenon in its real-life context, especially when the boundaries between a phenomenon and context may not be clearly evident" (p. 55). The dotted line in Figure 2 indicates that the boundaries between the context and the case are blurry; Since it is impossible to understand this phenomenon without considering the context in which it occurred. The case in this study is the contemporary practices of professional development in Goa, India, which cannot be considered without the study setting of the Goan educational landscape. This particular case was chosen because it satisfies Yin's (2014, p. 51) "critical" rationale and, hence can be called a single case study rather than multiple case study. Yin's (2014, p. 51) "critical" rationale refers to cases that are particularly suitable for illuminating and examining important theoretical concepts, such as the theory of transformative professionalism used in this thesis.

Similarly, Stake (1995) explains a case as a "bounded system" with simple, complex, or purposive functioning parts (p. 436). Such a bounded system is defined by Stake (2005, p. 436) as one bounded by time and space. Merriam and Tisdell (2016) contend that "if the phenomenon you are interested in studying is not intrinsically bounded, it is not a case" (p. 39). Like Stake's (2005, p. 436) and Merriam and Tisdell's (2016, p. 39) explanations, Thomas (2010) observes,

"Your case study is defined not so much by the methods you are using to do the study, but the edges you put around the case" (p. 21). Drawing upon the explanations of Merriam and Tisdell (2016), Stake (2005) and Thomas (2010), for this thesis, the case is bounded by the context of Goa and within the CPD practices mandated for the government schools. Hence private schools and their training are excluded from this study. Furthermore, within the educational landscape of Goa, only urban schools were studied, as inclusion of rural schools and their practices would not have been feasible for this study. Thus, this case is bounded within the educational ecosystem of Goa, which may share similarities in structure with other Indian states but differs in terms of socio-cultural and political context. Such a boundary provides a clear scope for the research study.

4.3.2 Types of Case Study

Case study research designs may differ based on their purpose (Stake, 1995); or may be categorised into different types with unique design approaches (Yin, 2014). Based on the purpose of the research, Stake (1995) identifies three types of case studies: intrinsic case studies, instrumental case studies and collective case studies. An intrinsic case study is conducted for cases with unique characteristics while instrumental case studies provide insight into an issue or redraw generalisations (Stake, 1995). Stake (1995) explains that in instrumental case studies, the researcher's interest lies elsewhere, so the case is used as a medium to understand that interest or issue. A collective case study could be viewed as a subset of instrumental studies, which examines multiple cases to understand a particular phenomenon or issue (Stake, 1995).

This research can be categorised as a single case, instrumental study since the purpose of this study is to investigate whether the policy vision aligns with the practices of professional development in India with the single specific case of its implementation in Goa. This case study is intended to offer insights into issues with the professional development programs mandated by the government for all teachers across India. As mentioned earlier, professional development programs across the country follow a centralised, predetermined structure (Bolitho & Padwad, 2013, p. 145; Subitha, 2018, p. 78). Therefore, this study cannot be seen as an intrinsic case study but rather an instrumental one that can provide implications for other similar programs in the country.

In addition to the above categorisations, Yin (2014) divides case studies into three different types: descriptive, explanatory, and exploratory. The purpose of a descriptive case study is to provide a comprehensive description of a case, while an explanatory case study explains issues related to a case through propositions of causal explanations (Yin, 2014). An exploratory case study is conducted when there is not much research done on a particular topic of interest and the researchers are attempting to discover theoretical concepts about a phenomenon which could be used for future inquiry (Bassey, 1999, Yin, 2014). The purpose of this case study is to add to the current knowledge base concerning the phenomena under investigation and hence is exploratory in nature.

4.3.3 Research questions

According to Yin (2014, p. 10), case study research questions are typically of the form "why" or "how". These questions seek an explanation for a phenomenon by uncovering "operational links that need to be traced over time" (Yin, 2014, p. 10). Conversely, other questions of nature "who" or "where", may instead identify the frequency of happenings or nature of occurrences of a phenomenon (Yin, 2014, p. 10). Furthermore, some types of "what" questions might help to explore a phenomenon to develop "a pertinent hypothesis and proposition for further inquiry", which makes it a justifiable rationale to use them in case studies (Yin, 2014, p. 10). Particularly in exploratory case studies, the research questions answered are typically "how" and "what" in nature, as seen in this study (Yin, 2014, p.10).

Additionally, Stake (1995) highlights the importance of bringing attention to issues and concerns in developing research questions for a case study, noting that issues can reveal the nature of people and systems as they struggle with "the complex background of human concerns" (p. 17). Accordingly, the research questions for this study were developed to uncover systematically whether the CPD programs in Goa are fulfilling the desired expectations or goals. Hence, the research questions are as follows:

- How do different educational stakeholders in Goa perceive and experience Continuing Professional Development (CPD) programs?
- What factors contribute to the gap between CPD practices and policy vision?

For this thesis, case study methodology was selected for the following reasons: (a) It allows for a constructivist, qualitative approach which is grounded in reality; (b) it offers the use of multiple sources to perform an intensive study; (c) It allows for an exploration of a contemporary,

bounded phenomenon (on CPD programs of teachers within the context of Goa); (d) It is intended to be an instrumental case and analysis of a single unit; (e) Finally, it is of exploratory interest by investigating through "what" and "how" questions.

4.4 Data Collection

The hallmark of the case study approach is that it allows the use of many forms of qualitative data such as interviews, observation or documents to build an in-depth analysis of your case (Creswell & Poth, 2018, p. 155; Merriam & Tisdell, 2016, p. 40; Yin, 2014, p. 105). It is generally not sufficient to rely on just one data source for a case study, as multiple sources allow different perspectives to be taken into consideration and answer the research questions more meaningfully.

In this thesis, each type of interviewee- namely 'Government School Teachers,' 'Government Officials,' and 'Resource Persons (Teacher Trainers)'-is treated as a distinct source of qualitative data, providing their own perspectives on teachers' CPD in Goa. Additional qualitative insights are derived from websites and documents shared by participants during the interview process. Figure 2 illustrates the convergence of these distinct sources to generate a comprehensive picture of the case. The data from interviews serves as the primary material for analysis, while the data from documents and websites supplements the discussion and fills in potential gaps. These supplementary sources serve to corroborate and reinforce the findings and are represented by a dotted line in Figure 2.

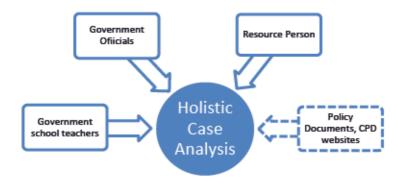


Figure 3. Convergence of Evidence

Several participants from each source were delineated using purposeful sampling, following the approaches outlined by Creswell and Poth (2018, p. 224) and Merriam and Tisdell (2016, p. 96). Data was collected through semi-structured interviews. These processes, including the

criteria for selection and the method of data collection, will be elaborated upon later in the section.

As depicted in Figure 2, multiple sources were used to corroborate findings which allows for the validity approach, that promotes collection of disconfirming evidence (Creswell & Miller, 2000, p. 128; Stake, 1995, p. 110; Yin, 2014, p. 121). As part of the research process, findings were also shared with some participants, to preserve the narratives they meant to convey. While efforts towards validity, within a constructivist paradigm, to establish the 'correct' or 'best' interpretation can be deemed futile due to the subjective nature of the study—these efforts nonetheless help to reduce researcher biases and allow for additional interpretations to emerge within the research (Stake, 1995, p. 114). Further discussions on the validity and reliability of this case study are found in subsequent sections (see Chapter 7).

Finally, it is worth noting that in case study research, Yin (2014) cautions that using multiple data sources can increase costs and challenge the skills and training of the researcher. Indeed, the extensive data collected in this thesis required diligent documentation. The process of documentation is explained later on in this section.

4.4.1 Participants of study

Purposeful sampling, as Creswell and Poth (2018, p. 224) explain, involves choosing "individuals and sites for study as they can purposefully inform an understanding of the research problem and central phenomenon in the study" (p. 224). This approach also required a criterion established ahead of time (Merriam & Tisdell, 2016, p. 97). Since multiple sources were used in this case study, different criteria were set for each source, with a more specific criteria set for teachers compared to government officials or teacher trainers.

Participants from the latter sources i.e., government officials and teacher trainers, were associated with CPD training in Goa. They were selected based more on convenience rather than stringent criteria, primarily because these participants were less willing to participate in the study. Hence, their inclusion was more opportunistic and based on their availability and willingness to contribute. This selection strategy aligns with what Merriam and Tisdell (2016) describe as convenience sampling, a type of purposeful sampling, where the sample is chosen based on factors such as "time, money, location, availability of sites or respondents, and so on" (p. 98).

Government schoolteachers were the first source of information interviewed for this thesis.

They were selected based on the criteria described in Table 3 below.

Table 2. Criteria for selecting teachers

Criterion

The teacher should be a staff at a government or government aided school in Goa in an urban area.

The teachers should be teaching a secondary grade, to limit the scope of the study.

The teachers should have participated in online training as well as in-person CPD training during their teaching tenure.

Teachers across different schools in Goa should be selected to maintain diversity.

Teachers with varying tenures provides diversity in perspectives.

The selection criteria employed a maximum variation sampling approach to thoroughly capture multiple perspectives on the phenomenon, a strategy often used in case study research (Creswell & Poth, 2018, p. 159; Merriam & Tisdell, 2016, p. 98). This involved selecting teachers from a variety of sites (different schools) and with different teaching experiences, thus offering a contrast of social and contextual conditions. As highlighted by Patton (2015, cited in Merriam & Tisdell, 2016, p. 98), common patterns emerging from such a broad variation are particularly insightful and valuable. These shared patterns help in capturing the core experiences and central aspects of a setting or phenomenon.

Within the Goan context a total of eight participants- five government-aided schoolteachers, one resource person (facilitator) and two government officials agreed to participate in the study. The profiles of the participants are described in Tables 4 and 5 below, using pseudonyms and untraceable information to maintain participant anonymity.

Table 3. Profiles of the Teachers

Participant Pseu- donym	Urban Govern- ment aided schools	Tenure (years)	Gender	Interview type
Arya	School A	20	Female	Face-to-face interview
Bhavna	School A	20	Female	Face-to-face interview
Chavi	School A	10	Female	Face-to-face interview
Divya	School B	9	Female	Face-to-face interview
Esha	School C	3	Female	Phone interview via WhatsApp

Table 4. Profiles of facilitators and government officials

Pseudonyms	Position	Tenure (years)	Gender	Interview type
Rajesh	Resource person (Facilitator), also works as a vice-principal at a government school	10+	Male	Face-to-face interview
Shreya	Government official at Sarva Shiksha Abhiyan (Department of Education, Goa)	10+	Female	Phone interview via WhatsApp
Tarun	Government official at SCERT (Department of Education, Goa)	10+	Male	Face-to-face interview

During the data collection process for this study, a variety of methods were employed to recruit and engage participants. I began the process by conducting in-person visits to two schools located in different districts of Goa, where contact was established with school principals. These principals were presented with a document outlining the purpose of the research and seeking permission to interview teachers within their respective schools (see Appendix 1).

Subsequently, the principals connected me with teachers who met the criteria set for my study. Through this approach, I successfully recruited four teachers who expressed their willingness to participate in the research. One notable example was Arya, a veteran teacher who found the interview process cathartic and openly discussed the challenges she had faced with professional development programs throughout her 20+ year teaching career. Further, to capture a range of perspectives, both novice and veteran teachers had to be included in the interview pool guided by the sampling criterion. As indicated in Table 4, Esha, a relatively new teacher, was personally invited to participate in the study through WhatsApp, utilizing connections I had previously had in Goa. While four teachers were interviewed face-to-face on the premises of their respective schools, Teacher Esha's interview was conducted remotely over WhatsApp.

Rajesh, a resource person and vice-principal at one of the schools I visited (see Table 5), agreed to participate in the research and shared valuable insights. With his extensive knowledge in STEM subjects and years of experience as a teacher, he actively volunteered as a resource person or teacher trainer/facilitator. The Department of Education in Goa regularly called upon his expertise to conduct trainings for teachers. His interview took place in his school office in February.

As mentioned earlier, it was challenging to get government officials to participate in the research. It took several visits to the education departments in Goa, accompanied by a permission letter and a detailed explanation of the interview questions (see Appendix 1). Initially, only one official, Tarun from the State Council of Educational Research and Training (SCERT), agreed to participate (see Table 5). The reluctance observed among these officials can be attributed to their concerns about potential misrepresentation or critique of the government in a study that may be perceived as an international portrayal of Goa's educational landscape. The interview with government official Shreya, who works at Sarva Shiksha Abhiyan, happened by chance through personal connections, and was conducted over WhatsApp. In Table 5 above, the respective departments where these officials worked have been mentioned with permission, as they are important to understand the CPD structure in Goa. However, specific details regarding

their roles and tenure have been intentionally omitted to maintain their anonymity. Similarly, when presenting the findings, care has been taken to preserve the confidentiality of the participants and their personal information. All participants were provided with a 'Privacy Notice' and an 'Informed Consent Form' before the interviews to maintain their privacy (see Appendix 2).

Additionally, the education professionals shared relevant documentary evidence during the interviews, further enriching the findings. Tarun, the government official, provided valuable insights into ongoing CPD schemes in Goa and shared a list of websites for reference. Teachers also shared government circulars, which are public documents and have been included in the findings to provide additional depth to their statements.

4.4.2 Interview Process

The research questions were formed based on a deductive approach and guided by the theoretical framework discussed earlier. The interview questions were based on the themes put forth by Kennedy (2014, p. 695) such "overall purpose", "unit of focus", "teacher engagement with policy", "dominant underpinning perspectives on teacher learning", "focus of learning", "motivation", and "accountability" to build an understanding of the practices of professional development of teachers in Goa (see Appendix 3). The interview process followed a semi-structured interview approach, providing a balance between predetermined questions and the flexibility to explore emerging themes (Merriam & Tisdell, 2016, p. 110).

The interviews were audio-recorded using the iOS voice recorder tool to ensure accuracy in documenting participants' responses and typically lasted between 20 to 30 minutes. Subsequently, I noted memos during the interview process in my personal journal. All this data was stored only on my personal devices, systematically labelled for each participant. While most interviews were conducted in English, they occasionally included some words in Konkani, a regional language spoken in Goa. Microsoft document transcription services were used for transcribing most interviews. The transcripts maintain participants natural mode of speaking, staying authentic to their actual speech (Thompson, 2022, p. 1412).

The interview with Shreya, however, was conducted entirely in Konkani, which was a timeintensive transcription process. Given that Konkani is a niche regional language and not yet supported by the tool, the process of transcribing Shreya's interview presented a unique challenge. It required not only my linguistic knowledge of Konkani but also an understanding of the nuances and intended meanings conveyed by the participant. As a result, in the presentation of findings, I have chosen to retain certain Konkani words within the quoted statements. This is done keeping the Goan reader in mind, as these words hold a certain significance and add a layer of authenticity for those familiar with the language.

The timing of the interviews varied, with a preliminary interview with Teacher Divya conducted in July 2022 and the remainder occurring between February and March 2023. This staggered approach is supported by Stake (1995, p. 49) who does not provide a specific time to conduct data gathering in case study design. It also allowed for a progressive refinement of the interview questions based on theory and a deeper understanding of the case.

4.5 Data Analysis

After data collection, the next step involves analysing and interpreting the data to derive meaningful insights. Given the vast amount of data collected through various sources, data analysis was one of the most overwhelming steps of this research. In order to navigate through this challenge, it was important to prioritize the research questions and keep them at the forefront of the analysis process. Both Merriam and Tisdell (2016, p. 202) and Yin (2014, p. 134) emphasize the significance of anchoring the analysis process with the research questions to reaffirm the goal of finding answers to them. The two main research questions for the case study were: How do different educational stakeholders in Goa perceive and experience Continuing Professional Development (CPD) programs? And what factors contribute to the gap between the policy vision and implementation of CPD?

Thematic analysis is used widely in case study research, as highlighted by Mills et al. (2010, p. 926), and Creswell and Poth (2018, p. 155). According to Creswell and Poth (2018), "A key to generating the description of the case involves identifying case themes" (p. 155). Similarly, Mills et al. (2010, p. 926) emphasize that thematic analysis serves as a sensemaking approach, enabling researchers to manage large volumes of data without losing the context of the case (p. 155). In line with these perspectives, this study adopts a unique approach to thematic analysis called abduction. Through abductive thematic analysis, qualitative data gathered from interviews with teachers, government officials and resource persons is analysed. Notably, data from policies and websites related to CPD have not been analysed and only serve as secondary sources as explained earlier.

4.5.1 Abductive thematic analysis

An abductive approach seeks to strike a balance between inductive and deductive methods. It is not driven solely by data (inductive) or by pre-existing hypotheses (deductive), but instead conducts a simultaneous and equal engagement with empirical data and pre-existing theoretical understandings (Thomson, 2022, p. 1411; Timmermans & Tavory, 2012, p. 180). The theoretical framework utilized in this thesis (as explained in chapter 3), draws upon the concepts of professionalism and transformative professional development outlined by authors like Mockler (2005), Sachs (2016), and Kennedy (2014) and so on. Thus, given the policy vision of transformative CPD practices for teachers in India, this theory serves as a central guiding principle to answer the research questions, by informing the analysis of the qualitative data gathered from different stakeholders.

Abductive research is characterized as recursive and iterative, meaning that it involves an ongoing process of generating new theory while also refining and developing existing theoretical frameworks (Timmermans & Tavory, 2012, p. 180). This iterative process allows theoretical contributions to surface and extends a degree of generalizability beyond the particular social context under study, which is beneficial in the context of an instrumental case study. More discussions on the challenges of generalizability in case studies and qualitative research are presented in Chapter 7. Moreover, when unexpected or surprising data arise from the findings, this supports the formulation of new theories (Mills et al, 2010, p. 1; Thomson, 2022, p. 1411). This characteristic of abductive research further supports a constructivist approach as it aids in the search for disconfirming or contradictory evidence, thereby strengthening the overall study's validity (Crewell & Miller, 2000, p. 127).

Thomson (2022, p. 1415) suggests that the theorization of data involves examining the extent to which existing theoretical knowledge and frameworks can explain the relationship between themes. For instance, Kennedy's (2014) theory explores the connection between transmissive CPD models (non-transformative) and teacher autonomy and agency. Therefore, some of the themes in this study aim to understand the structure or model of CPD in Goa while others explore teacher autonomy and agency. Alternatively, it is important to note that existing theory may sometimes fully account for or explain empirical findings (Thomson, 2022, p. 1415), resulting in a confirmatory study with limited theoretical contribution. Nonetheless, even "small interactions, exchanges, or contextual anomalies" can lead to small theoretical developments (Thomson, 2022, p. 1415).

Furthermore, given my extensive experience in the Indian education system, which motivated me to explore this topic, I wanted to be able to incorporate this experience without compromising the research's integrity. Consequently, abductive reasoning acknowledges the researcher's role by embracing their prior experience as a necessary and inevitable component in the analytical process (Conaty, 2021, p. 2; Thomas, 2010, p. 578).

4.5.2 The Analysis Process

The analysis process for this case study, as depicted in Figure 3, involved several steps: 'Interview, Transcription and Familiarization', 'Coding', 'Development of Themes', 'Reporting Findings', and 'Theorizing'. These steps broadly follow the abductive analysis process described by Thomson (2022, pp. 1411-1416).

The process of analysis was initiated during the interviewing stage itself, adhering to Merriam and Tisdell's (2016, p. 196) assertion that the analysis could and should take place concurrently with data collection. As the interviews unfolded, interpretive memos were written with the issues I found prominent based on the participants' narratives, all of which were meticulously recorded in my personal journal. This served as the first stage in familiarizing myself with the data. The familiarization phase continues by an initial review of the transcripts produced from the interviews. During this review, additional interpretations and insights that emerged from the data were systematically recorded under each participant's memo. This exercise enabled a deeper connection with the data and facilitated the subsequent stage, which was coding.

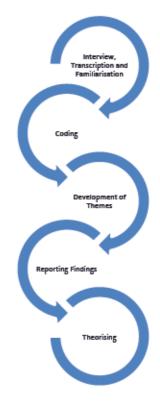


Figure 4. Process of Analysis

The coding process was executed using the NVivo content analysis tool. This stage, being rigorous and extensive, spanned over several weeks. The coding methodology applied was predominantly inductive, resulting in the generation of a substantial number of initial codes. Further, codes that showed strong relations were grouped together in NVivo as parent and child codes. For instance, related codes like 'lack of teacher choice' were clustered under a parent code 'compelled participation'. This strategy substantially reduced the quantity of codes. These

initial codes, through iterative reviews, were distilled into fifty-six codes shown in Table 6 below.

The ensuing stage, 'Development of Themes', involved the identification of relationships between the various codes. As Thomson (2022) details, " developing themes begins by looking at relationships between different codes and sorting them based on their ability to collectively explain the story behind the data" (p. 1414). To initiate this process, all codes were exported into an Excel spreadsheet and organized into broader relational themes. This organization yielded fifteen emergent themes, which were then further grouped guided by a latent approach using the theoretical framework, resulting in six main themes. The six themes, as shown in Table 6 below, include 'Structure and Implementation of CPD', 'Purpose of CPD', 'Constraints of teacher autonomy', 'Relevance of training', 'Teacher motivation', and 'Systemic issues'. Not all themes are not deductively picked from the theoretical framework but guided by the framework to explore main issues to foster further theorizing. The complete thematic analysis has been displayed in Table 6 below.

Table 5. Abductive thematic analysis

Codes	Sub-themes	Themes
Restructure		
Centrally decided training		
Cascade Model	Top-down approach	
Multiple reforms in CPD		
Universal and accessible training		Structure and Implemen-
E-learning websites		tation of CPD
School Management training or NGOs	External avenues	
Change of Resource person		
Queries remains unaddressed	Feedback	
Dishonest positive feedback		

Codes	Sub-themes	Themes
Unaware how feedback is handled		
Workload hinders collaboration		
Group work during training	Teacher collaboration	
No team building trainings		
Plagiarism		
Innovative Pedagogy		
Policy information	Content of training	
Paper pattern, syllabus and 10th marks distribution		
Mental health and yoga training		Durmana of CDD
Advocates explaining teachers' rights	Wellbeing training	Purpose of CPD
Numeracy and literacy		
Learning outcome focussed	Student outcome oriented	
Improving NAS results	Student outcome oriented	
Reducing rote learning		
Teacher knowledge deficit		
Monitoring through inspections	Lack of trust in teachers	
Parents questioning the teacher	Lack of trust in teachers	Constraints on teacher au-
Passive to Reform		tonomy
Compelled participation	Training selection	
Headmaster decides who attends	Training Selection	
Concepts taught not relevant	Topics found irrelevant	Relevance of training
Not practical for classroom	•	

Codes	Sub-themes	Themes
Training meant for CBSE schools		
Subject training is good for us		
NISTHA training on inclusion was		
Teaching practices	Topics found relevant	
Textbook guided training needed		
Face to face training helps clear		
Less effort taken by trainers	Teacher-facilitator relation-	
Experienced teacher made training relevant	ship	
Repetitive training		
Online modules not engaging		
Overly theoretical	De-motivating factors	
Waste of time		
Other priorities		Teacher Motivation
Certificates	Promotion as incentive	
Promotion based on training	Tronsacon as incentive	
Techniques to help challenging students	Intrinsic	
Small spaces and old buildings		
Lack of land for school infrastruc- ture growth	Infrastructure	
Large teacher cohort		Systemic issues
More manpower needed	Population scale	
Teacher recruitment		
Little time to implement reforms		

Codes	Sub-themes	Themes
Scheduling of training	Insufficient time	
Short duration of schools		

The next stage involved reporting findings which were done following a unique approach for case study reporting outlined by Stake (1995, p. 123). The findings were organized and presented based on the six main themes that were derived in the previous phase. The final stage of the analytical process was theorizing, which was carried out in the chapters titled 'Discussion'. The aim of this stage was to move beyond the specific context of the case study i.e., Goa to develop more generalizable insights that could contribute to the whole country. The findings from the case study were compared and contrasted with the existing theoretical framework, and implications were theorised.

5 Chapter Findings

This chapter presents the main findings from the case study, which have been organized into six themes: Structure and implementation of Continuous Professional Development (CPD), Enforcement of CPD policy, Constraints of teacher autonomy, Relevance of training, Teacher motivation and Systemic issues. The initial two themes provide a comprehensive description and understanding of how the case under study, i.e., the professional development practices of teachers in Goa, is operationalized. The remaining themes describe overarching issues identified within the case.

The findings are presented based on a reporting style put forth by Stake (1995, p. 128) and subsequently revisited by Creswell and Poth (2018, p. 160). The findings open and close with vignettes. As Stake (1995) observes, "a vignette often is an extreme representation, quite atypical" (p. 128). These vignettes were crafted based on participant raised issues noted in the journal kept during the interviews. They are not meant to be accurate depictions of the case, but as fictional scenarios emphasizing the predicaments I perceived as concerning, warranting attention and introspection from the reader. The opening vignette invites the reader into the professional development practices within the context of Goa, "to get a feel of the place and time" (Stake, 1995, p. 123). While the closing vignette is a way of ending on an experiential note, "reminding the reader that the report is just one person's encounter with a complex case" (Stake, 1995, p. 123). By bringing certain issues into focus, the vignettes enhance the reader's understanding of the themes that follow.

Opening Vignette:

A group of teachers from different schools in Goa arrive at the Department of State Council of Educational Research and Training (SCERT). It's 8 o'clock, and the annual training session is about to begin. Among them is Rekha, a dedicated teacher from Margao city. Her day started well before dawn as she navigated through the morning chaos to prepare meals for her family, anticipating her absence during lunch. She had to travel 34 km, a long journey she reluctantly made to fulfil her 50-hour mandatory professional development obligations.

Upon arrival, the teachers are ushered into a room that will be their learning ground for the next three days. The room is filled with a sea of chairs, anticipating the arrival of about a hundred teachers. The training begins with a resource person, a well-known mathematics professor, who introduces himself and outlines the agenda:

"Today's focus will be on the paper setting pattern for the 9th standard final exams. In light of the NAS 2021 report and Goa's less than satisfactory performance in Mathematics, we'll also delve into concept-based teaching in Maths. Furthermore, we'll explore practical strategies for making Mathematics more accessible to our students. I've prepared a presentation to guide our discussion, and I'll be happy to entertain any questions at the end."

The training agenda is familiar. Paper setting patterns, syllabus changes, and innovative pedagogies are recurring themes. Rekha is looking forward to the concept-based instruction part of the training, since her students haven't been performing well in Mathematics. This face-to-face session is a welcome change from the impersonal online training sessions that took place during the pandemic, where she was forced to memorize concepts to meet the module completion requirements. At least here she has a platform to voice her doubts and seek clarifications.

As the training continues, the novice teachers, eager and attentive, scribble down notes with fervour. The senior teachers, having attended a similar session not so long ago, listen to the familiar concepts, some as mere spectators. Intriguingly, these teachers seldom question the directives from the government. Why should they challenge the system that is striving to enhance student learning outcomes, the fundamental goal of their profession? The concept-based teaching, while theoretically effective, feels daunting amidst the daily classroom responsibilities. The resource person is unaware of the practical challenges faced by the teachers in their classrooms. A sense of hopelessness permeates the room, as many teachers silently look forward to the end of this exercise.

Meanwhile, 34 km away, a commotion erupts inside a school in Margao city, sixty 9th graders are stirring up a storm. The classroom teacher's absence has thrown the day's schedule into disarray. Noticing the disturbance, the principal steps in as a substitute teacher for the class. The school day continues, in the absence of the math teacher.

In this vignette of a typical day in Goa's education landscape, the constraints of the teacher professional development training are highlighted. Teachers, like Rekha, find themselves navigating a system that compels them to adhere to mandated professional development regardless of its relevance to their practical classroom challenges. The principal, although in a position of authority, is forced to send teachers for the government-scheduled training and the resource person, despite academic prowess, lacks insight into the ground realities of the teaching environment. In Goa's education system, the strings for the teachers' profession are pulled from afar. The practices that maintain such a profession are discussed in the following section.

5.1 Structure and implementation of CPD

This first main theme of the analysis addresses the structure and implementation of Continuous Professional Development (CPD) in Goa, India. This theme is composed of four subthemes: Top-down approach, External avenues, Feedback, and Teacher collaboration. These subthemes were grouped together under this theme as seen in Table 7 below because they each reflect a critical aspect of the CPD structure and its implementation. The top-down approach characterizes the decision-making process; external avenues explore alternatives to the mainstream CPD; feedback demonstrates the response to queries or suggestions from teachers, and teacher collaboration examines the cooperative learning aspect within the CPD.

In the following sections, I will review each subtheme in detail. Quotes from the participants are presented in italics and are supplemented by policy documents that corroborate the discussions wherever needed (A pattern followed in each theme).

Table 6. Structure and Implementation of CPD

Codes	Sub-themes	Themes
Restructure		
Centrally decided training		
Cascade Model	Top-down approach	Structure and Implemen- tation of CPD
Multiple reforms in CPD		
Universal and accessible training		

E-learning websites	
School Management training or NGOs	External avenues
Change of Resource person	Feedback
Queries remains unaddressed	
Dishonest positive feedback	
Unaware how feedback is handled	
Workload hinders collaboration	
Group work during training	Teacher collaboration
No team building trainings	

Top-down Approach

The recent consolidation of several educational departments into the Goa Samagra Shiksha body seems to be a significant structural change in the educational system in Goa. Government officials Shreya and Tarun's insights provide valuable perspectives on the integration scheme, the structure of this new body and its division of responsibilities.

All the departments have joined together to become Samagra Shiksha Abhyan. It's been one year since it became so! (Shreya, Government Official, coded Restructure)

Basically, now in Goa, Samagra Shiksha is formed. The SCERT and DIET are now part of Goa Samagra Shiksha. It has three sections: 1st to 8th standard is the responsibility of Sarva Shiksha Abhiyan, 9th to 12th is the responsibility of Rastriya Madhyamik Shiksha Abhyan and Teacher Education is looked after by the SCERT and DIET. (Tarun, Government Official, coded Restructure)

The education departments which were earlier separate, such as the State Council of Educational Research and Training (SCERT), the District Institute of Education and Training (DIET) and the Sarva Shiksha Abhiyan now are combined under the umbrella body called Goa Samagra Shiksha. This combined entity now takes on the responsibility of teacher training across different stages of schooling. The delineation of roles may streamline processes and make the system more efficient in Goa. The objective of this integration specifically towards professional development of teachers is explained with the help of the Samagra Shiksha websites:

The integration of Teacher Education would facilitate effective convergence and linkages between different support structures in school education through interventions such as a unified training calendar, innovations in pedagogy, mentoring and monitoring, etc. This single Scheme will enable the SCERT to become the nodal agency for conduct and monitoring of all in-service training programmes to make it need-focused and dynamic. (Samagra shiksha, para 10, n.d.)

This new integration scheme, as described on its official websites, strives to improve the quality of school education by focusing on "teacher and technology" (Samagra shiksha, para 9, n.d.). Within the scheme's framework for Continuous Professional Development (CPD), the department of SCERT within each State is given the responsibility of conducting professional development programmes. Furthermore, the use of online portals such as National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA) are emphasized with the following reasoning: "online training of teachers so that standardized/need based training programmes can be provided to large numbers of teachers within a short span of time" (Samagra Shiksha, 2019, p. 158). The framework also introduces the National Professional Standards for Teachers which are meant to delineate the competencies and skills of a teacher at every stage. It is intended that these standards are adopted by every state through the SCERTs. These new structure and technologies in CPD trainings are welcomed by the government officials such as Tarun, who explains:

You cannot have one particular "Sacho" [Konkani word for formula]. Need at urban levels and village is different and accordingly the teachers must plan and take care of their classrooms. This freedom is given by the National Education Policy 2020. That is also why NISHTHA is come. Because everyone can use it anywhere. It also gives subject specific trainings. Also, general trainings. (Tarun, Government Official, coded Universal and accessible)

Tarun highlights the significance of platforms such as NISHTHA in offering customized teacher training that is accessible to remote regions in Goa. However, despite acknowledging

the importance of tailoring the training to individual needs, the content for the training is determined centrally.

They have set up a structure like this since at national level they want it to be in one particular way everywhere. According to me it is a good initiative! (Tarun, Government Official, coded centrally decided training)

The government official appears to support the coexistence of both need-based and standardized training approaches, aligning with the policy objectives mentioned earlier. The standardisation of training content might be seen as a means to achieve consistency in teachers'
knowledge and skills, which is of vital importance to India. However, this approach faces criticism from teachers like Arya, who feel that the centrally chosen topics do not cater to the
specific contexts of her school.

So, then what is the point in having a workshop like that? It was designed for the central government. Means for the CBSE schools. (Arya, Teacher, coded centrally decided training)

Yet, government official Shreya's account highlights how a decentralized training structure, in contrast, offers comprehensive support to all schools in Goa, with Resource Persons (facilitators) such as Rajesh, designated for clusters of schools.

We have 23 resource persons, and they are clustered according to the panchayat [village council] and each panchayat has a school cluster, one resource person is responsible for the school cluster and is called a cluster resource person. That person is responsible for all the data of the school and even school management committee training [parent group training]. (Shreya, Government official, coded cascade model)

Additionally, Shreya notes that the Resource Persons responsible for school clusters are required to receive training from master trainers, who then pass on their knowledge to the teachers. The training and content provided by the master trainers, who typically travel to Delhi to receive their training, are decided at the central level.

The topics are decided in Delhi under MHRD [Ministry of Education] and are implemented all over India. A master trainer is required to go to Delhi [central body in the capital]. The subject-specific master trainers then train the subject-specific cluster resource person from each Taluka. (Shreya, Government official, coded cascade model & centrally decided training)

The professional development practices of teachers in Goa seeks to strike a balance between standardized training and need-based training. While the centralized content decision-making is welcomed by government officials such as Tarun, it faces criticism from teachers like Arya, who feel that the centrally chosen topics do not consider their specific school contexts. Yet, a comprehensive decentralised training structure exists in Goa, involving cluster resource persons and master trainers. However, the contents they teach are also decided at the centre.

External avenues

The concept of Continuing Professional Development (CPD) encompasses various forms of skill development that are not primarily decided by the government. This sub-theme explores alternative avenues of CPD that teachers in Goa have engaged in. For instance, the accessibility to online platforms has provided teachers with an opportunity to further enhance their professional skills. Teachers like Esha can engage in self-directed learning and pursue personalized CPD pathways that align with their specific interests.

Two years back, I had applied for this course on. What's that app? It was on psychology. So basically, I was having trouble understanding some children in my classroom [...] So, to increase my understanding on Udemy I applied. (Esha, Teacher, e-learning websites)

The use of such e-learning platforms, however, seems to present a generational gap among teachers. Esha in the quote below reflects that senior teachers are often reluctant or unaware of these digital tools. On the contrary, teachers from younger generations seem to embrace these platforms more willingly.

Senior teachers, I don't think they do that because they're not aware. Technology is easier for younger teachers you know, like there's another teacher who joined with me. She's one year elder to me. So, the same generation. So, she does it. Yeah. And there are some other friends of mine also of my age who do it, who are teachers and they do it. (Esha, Teacher, e-learning websites)

Besides e-learning websites, Rajesh, a resource person elucidated on the increasing presence of NGOs in organising trainings, providing teachers with ample opportunities to participate and grow professionally.

Actually, nowadays there are many NGOs in Goa and now there are various workshops conducted. It is not that that teacher doesn't get the opportunity. There are opportunities throughout the year to attend the workshops. (Rajesh, Resource Person, coded School Management training or NGOs)

Similarly, Bhavna, a teacher who has experienced trainings from her school management during the pandemic, reflected on the past year when traditional offline training methods were replaced by online ones. The training sessions were conducted by extension services from her school, demonstrating the active role that school management bodies played during the rapid transition.

Last year, hardly they were any offline, because it was online, right? [due to the pandemic] It was for online help, it was like how to make, save, how to record videos, how to do our lessons.

Online lessons, which apps to use, conducted by [school A] extension services. (Bhavna, Teacher, coded School Management training or NGOs)

Overall, teachers in Goa seem to have diverse options for CPD, ranging from e-learning platforms to workshops organized by NGOs and school management bodies. It's important to note that while these examples highlight alternative CPD avenues, they may not represent the norm, as external avenues for training were mentioned by a limited number of participants.

Feedback

Feedback post-training remains a challenge, with teachers like Arya, Chavi, Bhavna and Divya explaining their experiences in the quotes below.

They ask us for our suggestions, yeah. And we have given them n number of suggestions saying what are the difficulties that we face here and what needs to be changed. But not a single change. (Arya, teacher, coded Queries remain unaddressed)

They never asked for feedback. They will always ask you the last question. Was it helpful? Yes. And what is the next topic you want? They will never tell. Means you don't tell. Actually, even if you don't like we write always: it is effective. [...] No, but like we go for somebody's training, standing up there means the resource person. Even that person is forced to do it. And that person is doing his duty well. We can mean, OK. (Bhavna, Teacher, coded Dishonest positive feedback)

Till now no and I don't even know whether they have submitted the feedback like that to the government also. I'm not aware about it, so whatever workshops we attend, we are giving the feedback to them, but where the feedback goes, what they are doing with that, we have no idea. (Chavi, teacher, coded Unaware how feedback is handled)

Only you do not have any feedback as such. If Chaklit [online training App] asks for feedback. So, you can't address your difficulties. So, there's no platform for that as such. (Divya, Teacher, coded Queries remain unaddressed)

Teachers report that feedback is often not asked for, and when provided, is not taken into account. This raises questions about the authenticity of the feedback process and its effectiveness in shaping future training sessions. Consequently, when asked about the feedback process the government official Shreya explained,

Yes! Otherwise, we change the resource person and ask the State for a new one. But the change of the resource person depends on the demand of the teachers; for example, if only 5-10% of the teachers did not understand a concept [give negative feedback] then we don't change the Resource Person. (Shreya, Government Official, coded Change of Resource person)

Feedback which should improve the quality of trainings seemingly affected only the employment status of the Resource Person in-charge. What remains unclear, however, is the method by which a teacher's concerns and doubts are handled by the government bodies.

Teacher collaboration

Teacher collaboration is an important aspect of teachers' professional development allowing teachers to learn from each other and enhance their teaching practices. Teacher Esha recalls a positive experience of a collaborative group activity at a recent training she had attended.

It as a group only. So, we were given this one activity where we were provided with the minimum materials like the cotton given to us. [...] This was a Group activity where we had to make a chart or anything else creative, a teaching learning material. (Esha, Teacher, coded Group work during training)

However, Esha also highlights how the collaboration ends at the training centres due to their busy work schedules in the quote below, leaving little time for teachers to continue collaborating in their daily routines. A similar intensive work schedule is mentioned by most teachers.

Too busy doing other things like the timetable and teaching and making the teaching aids. So, a lot of time goes into this, but we hardly have time to discuss. (Esha, Teacher, coded Workload hinders collaboration)

On the other hand, Arya expresses dissatisfaction with the training sessions focused solely on subject-related knowledge, lacking essential components like team building or school culture development.

But here absolutely no training sessions of that kind. No team building. Nothing. I think if you join this institution, then you just run after the portion[syllabus] and complete the portion (Arya, Teacher, coded No team building)

Summary

The structure and implementation of Continuous Professional Development (CPD) in Goa, India presents a conflicting attempt to offer both standardized and need-based training. Along with the top-down centralised decision-making structure that determines content, there is also a comprehensive decentralized training infrastructure involving cluster resource persons and master trainers in Goa. Alternative avenues of CPD, from e-learning platforms to workshops organized by NGOs and school management bodies, might not represent the norm. Criticisms from teachers mainly arise due to a lack of consideration for individual school contexts in centrally decided topics and the unclear process for addressing teacher doubts and suggestions. Opportunities for collaborative learning exist but are often hindered by the workload of teachers, leaving them with limited time for ongoing collaboration post-training.

5.2 Purpose of CPD

This theme explores how educators and government officials interpret the purpose behind these professional development practices in Goa. This theme was deductively chosen from the theoretical framework, being a significant aspect in understanding the professional development. It is composed of three subthemes: Content of trainings, Wellbeing training, and Student-outcome oriented, which were generated inductively from the codes. The Table 8 below shows how the themes were grouped during analysis.

Table 7. Purpose of CPD

Codes	Sub-Theme	Theme
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Plagiarism Innovative Pedagogy Policy information	Content of training Wellbeing training	Purpose of CPD
Paper pattern, syllabus and 10th marks distribution Mental health and yoga training		
Advocates explaining teachers' rights		
Numeracy and literacy	Student outcome oriented	
Learning outcome focussed		
Improving NAS results		
Reducing rote learning		

Content of training

When teachers were asked to recall the professional development sessions they participated in, teachers reported several trainings that had taken place post-pandemic, encompassing topics like Plagiarism, Toy-based Learning, Innovative Pedagogies, Policy Information, 3D Printing, ICT, syllabus structuring, exam paper patterns and 10th-grade mark distribution. The accounts from the educators are listed below:

I have attended regarding 3D printing in Don College of engineering. [...] regarding that ICT work like how to inculcate your computer skills or that technology into your main subject. (Chavi, Teacher, coded Innovative pedagogy)

So, one workshop was in Dada Vaidya College of Education, wherein they just taught about plagiarism or something like that. Just about copying down content from internet. So that is not relevant for the school level. (Chavi, Teacher, coded Plagiarism)

How to use to say teaching methods like you can use toys. How you have to include all type of students in your toy-based learning, how to include all type of students, how to cater to their needs. (Bhavna, Teacher, coded Innovative pedagogy)

So that NIPUN Bharat [new policy reform] is all about the literacy and numeracy skills. (Esha, Teacher, coded Policy Information)

Mostly making various teaching aids in science and concept-based teaching in mathematics (Rajesh, Resource Person, coded Innovative Pedagogy)

The content of the trainings was aligned with the policy vision of "Teacher and Technology," as cited on the Samagra Shiksha Website, mentioned in Theme 1 (Samagra shiksha, para 9, n.d.). This vision encourages the integration of technology in teaching, a direction well-reflected in the reported trainings. Courses like ICT, 3D Printing, and Innovative Pedagogies attest to this focus, aiming to provide teachers with the necessary skills to use technology effectively in their classrooms. Whether teacher find these trainings relevant will be discussed further. Several teachers also mentioned attending training on exam paper setting, syllabus discussion and 10th grade examinations. This focus highlights the emphasis on syllabus completion and exam preparation, setting a clear roadmap for teachers to follow.

Wellbeing training

Notably, none of the teachers interviewed recalled attending any mental health or wellbeing training, despite government officials such as Shreya mentioning the organization of special sessions on these topics.

Mental health, yes. We have separate yoga trainings. They also have counselling training and training on teacher's rights and duties are given by a good advocate. (Shreya, Government official, coded Mental health and yoga training, and Advocates explaining teachers' rights)

Shreya described special training on mental health, yoga training, and recalled how lawyers were called to explain to the teachers their rights. However, teacher Arya, reports the unaddressed need for mental health training, saying,

What exactly are the challenges that we face in class? How do we go about it? Or how it affects our mental health? That is not addressed at all in the training sessions that we have in government schools (Arya, teacher, coded Mental health).

The reported disconnect between the government officials account and the teachers account on the wellbeing trainings could be because of a lack a communication or lack of awareness about these sessions. It could also be due to limited choice of teachers in attending these trainings. Yet, it reflects a need for an approach to the professional development of teachers in Goa, which includes not just subject-specific or technology-driven training, but also focuses on practitioners' wellbeing.

Student outcome oriented

The overarching focus of the professional development trainings appears to be the improvement of numeracy and literacy, as well as student learning outcomes. As Shreya stated,

Our main focus is numeracy and whatever new policy is being implemented, we tell them about it and how to implement it in their classes. The main concept is 'Learning Outcomes'. The government is focusing on this metric, which is meant to measure what exactly the students are meant to learn based on what you teach. (Shreya, Government Official, coded Numeracy and literacy, and Learning outcome focussed)

This objective aligns with the policy's goal of addressing the student learning deficit in India. Concerns about the mathematics performance of Goan students in the National Achievement Survey (NAS) 2021 were recurrent throughout all the interviews. Rajesh, who works as a volunteer Resource Person, highlighted the gravity of the situation, and shared insights about the government's response:

Yeah, presently in Goa for maths, especially, government has taken very seriously because, yeah, the standard of mathematics in Goa in the National Assessment Survey, it has come below the national average. So, government is thinking seriously to you know raise the standard of mathematics teaching in Goa. I was called on that committee also. (Rajesh, Resource Person, coded improving NAS results)

Rajesh's statement indicates a concerted effort towards improving student learning outcomes in mathematics in Goa. Alternately, another significant goal of the trainings, as mentioned by both Resource Person Rajesh and teacher Esha, is to train teachers to educate their students without resorting to rote learning.

In yesterday's news I read rote learning has spoiled everything, and generally this rote learning takes place not in the school. It is parents sometimes and tuition classes where it has become a fashion. (Rajesh, Resource Person, coded Rote learning)

In India, it is true what the survey says, that you know, most of the children in India, it's the trend that people do rote learning. Yeah. Students are encouraged to do rote learning. (Esha, Teacher, coded Rote learning)

Summary

The theme highlights one of the pitfalls in the purpose of teachers' professional development programs in Goa. These trainings predominantly focus on technological integration and syllabus completion, mirroring the national educational policy's vision. However, they appear to lack focus on wellbeing and mental health trainings for teachers. The core aim of these professional development sessions is to enhance student learning outcomes, particularly in numeracy and literacy. This focus aligns with the broader educational goal in India as well as Goa, seeking to address the learning deficit seen in large scale assessments like the National Achievement Survey 2021. However, while the focus on student outcomes is the need of the hour, it's crucial to balance this with attention to the teachers' holistic development, an aspect that currently appears undervalued in Goa's professional development agenda.

5.3 Constraints on teacher autonomy

This theme seeks to provide an understanding of how the CPD practices in Goa affect teachers' agency and autonomy. The theme has been divided into two smaller sub-themes: Lack of trust in teachers and Training Selection. This theme has not been directly adopted from the framework assessing managerial versus democratic approaches but emerged during the interviews and analysis as shown in the Table below.

Table 8. Constraints on teacher autonomy

Codes	Sub-Themes	Themes
Teacher knowledge deficit		
Monitoring through inspections	Lack of trust in teachers	Constraints on teacher autonomy
Parents questioning the teacher		

Passive to Reform		
Compelled participation	Training calcution	
Headmaster decides who attends	Training selection	

Lack of trust in teachers

During the interviews with government officials and Resource Person Rajesh, a recurrent theme that emerged was a perceived lack of confidence in teachers' abilities. Government Official Shreya expressed concern that teachers may prioritise completing their syllabus over ensuring students' genuine understanding of concepts. She stated:

If what you are supposed to learn, if the concept is not learnt, then the students "vhavath vhachapak zayna" [they should not lose their way]. Meaning, only for the sake of completing the portion [syllabus], they should not carry on completing it. Mainly, what the students should learn and what the teachers should teach, there is no clarity on this. (Shreya, Government Officials, coded Teacher knowledge deficit)

This sentiment was echoed by Resource Person Rajesh, who emphasised the need for a conceptbased approach to teaching. He asserted that teachers need to first understand the concepts themselves to be able to impart them effectively to the students.

So, these are certain concepts-based teaching required. Concept should be made clear to the teachers and then teachers will do it for the students. (Rajesh, Resource Person, coded Teacher knowledge deficit)

Both Rajesh and Shreya believed teachers lacked clarity of what concepts should be taught. Furthermore, Shreya highlighted the role of parents in holding teachers accountable for their children's learning outcomes. She indicated:

Parents can read these learning outcomes, and they have the right to question the teacher if they feel their child has not learnt the concepts. (Shreya, Government Officials, coded Parent questioning the teacher)

This not only implies a more parental involvement in student learning, but also a degree of teacher accountability held through parent intervention. Furthermore, the need for monitoring and evaluation of teachers to enhance their performance and maintain accountability was also highlighted. Shreya described how they ensure the effectiveness of post CPD trainings in Goa:

So after the training session, once the teachers go back to their schools, we send one of our staff members for a 2-day or 3-day visit to the school where they sit in on a class being taught by the teacher and check if they are making use of the training that was given; for example we check if they have given out the worksheets that were meant to be handed out to students. (Shreya, Government Official, coded Monitoring through inspection)

Such post-training assessments often involve monitoring teachers' integration of new policies and reforms, such as the recently emphasized learning outcomes, into their teaching practices. In the quote below, Divya's comment suggests that government reforms are imposed from the top and that teachers are expected to comply without much input or discretion.

After every chapter we would require these worksheets specially in the lower classes 5th standards and would be made compulsory to have a set of worksheets after every chapter only in maths. (Divya, Teacher, coded Passive to reform)

Similarly, the interviews from Shreya and Rajesh further highlighted the top-down approach to professional development, where the government prescribes what teachers should do in their classrooms.

Our main focus in numeracy and whatever new policy is being implemented we tell them about it and how to implement it in their classes. (Shreya, Government Official, coded passive to reform)

NISHTHA what that they are conducting trainings at present is to know the teacher about what the new education policy is. That that is not helpful for classroom teaching as such, for classroom teaching, we need a different sort of workshop. (Rajesh, Resource Person, coded passive to reform)

Rajesh even suggests in the quote above those the current training sessions, such as those through NISHTHA, primarily inform teachers about new education policies, rather than provide practical classroom teaching strategies. This implies that teachers are passive to policy reforms.

The top-down approach, along with the lack of confidence in teachers' abilities and possibility of parents questioning teachers' methods, suggests an overarching lack of trust in teachers' professional judgement and expertise.

Training Selection

A common theme that all teachers agreed upon was the lack of autonomy in picking which training sessions to attend.

But here there is no choice like that. Whatever comes from the department this subject teacher you go for this training. So, we have no say in the trainings that we want to attend or no suggestion also to give that this is what I require. (Arya, Teacher, coded Compelled participation)

Like, because it was government initiative, so we had to otherwise would have got some punishments, some memo and all they would have given. So, we had to. (Bhavna, Teacher, coded Compelled participation)

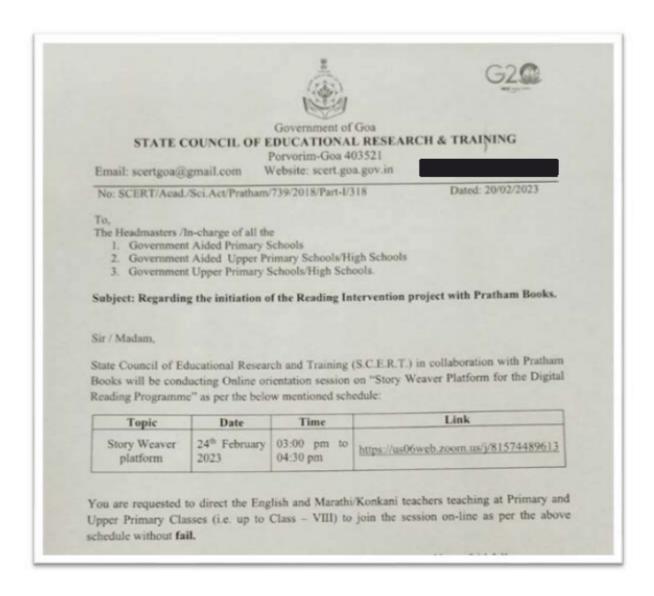
No! (laughs) Because that is given to us by the head of the institution. So, when she puts the name, you have to go. (Chavi Teacher, coded Headmaster decides who attends)

So in-service trainings, as in when I joined from the first year onwards, it was like a must for us to join. So, we had. No option (Divya, Teacher, coded Compelled participation)

No, we don't have a choice because basically the, the, the headmistress itself decides where you go for which training. It's not like maybe I need, maybe I need training in a certain area, you know, concerning my teaching, but then it's never like that. (Arya, Teacher, coded Compelled participation, Headmaster decides who attends)

Teachers revealed that the school principal typically decided which training they should attend. It was found that the principal would usually suggest a teacher for training if the teacher had not completed the given hours of mandated training in that year.

Document below presents an instance of a government circular (shared by one of the teachers) directed at heads of institutions, instructing them to ensure teachers' attendance at a scheduled training session. Such circulars typically serve as formal announcements of government policy, frequently delivering information or outlining rules related to legislative matters.



Significantly, the language used in the circular – specifically the final line which states, "you are requested to [...] without fail" – highlights the restricted autonomy both heads of institutions and teachers have in deciding whether or not to participate in these training sessions. This command-like tone implies an obligatory nature to these trainings, suggesting that attendance is not just recommended but required. Consequently, this reinforces the notion that choices related to professional development are often dictated by a top-down approach, limiting the agency of educators in shaping their own professional growth.

5.4 Relevance of training

This theme delves into the relevance of Continuous Professional Development (CPD) as perceived by educators in Goa. It consists of three sub-themes: 'Topics found irrelevant,' 'Topics found relevant,' and 'Teacher-facilitator relationship,' as illustrated in the following Table 10. The first two sub-themes directly address relevance, while the final sub-theme, 'Teacher-facilitator relationship,' emerged as a compelling finding related to the theme. The overall significance of this theme lies in addressing the factors for the irrelevance, as multiple prior studies within the Indian context have shown that teachers often do not find CPD programs to meet their needs.

Table 9. Relevance of training

Codes	Sub-Theme	Theme
Concepts taught not relevant		
Not practical for classroom	Topics found irrelevant	
Training meant for CBSE schools		Relevance of training
Subject training is good for us	Topics found relevant	
NISTHA training on inclusion was helpful		
Teaching practices		
Textbook guided training needed		
Face to face training helps clear doubts		
Less effort taken by trainers	Teacher-facilitator relation- ship	
Experienced teacher made training relevant		

Topics found irrelevant

This sub-theme emerged prominently as most teachers mentioned a lack of relevance in the training to their daily classroom realities. Arya found the concepts discussed in the training not applicable to her day-to-day classroom teaching:

Now, recently we had that NISHTHA which was an online training session which was, I mean, there was nothing relatable to class as such in that. [...] because they were talking about how

hands on learning, we never do that here. Our learning most of it is memorizing, rote learning and so what they were explaining how those toys can help. But where do we do that in our class? (Arya, Teacher, coded Not practical for classroom; Concepts taught not relevant)

Her concern lay in the focus on hands-on learning and toy-making, concepts which, she believed, did not fit into their predominantly memorization and rote learning-based approach in schools. Arya's frustration reflects a disconnect between the concepts discussed in training and the real-world classroom applications.

It was also mentioned that the trainings, while useful, sometimes cannot be applied to the classroom for different reasons. Arya and Bhavna say:

So, then what is the point in having a workshop like that? It was designed for the central government. Means for the CBSE schools. (Arya, Teacher, coded Training meant for CBSE schools)

To some extent it is helpful, but when you go to the class and what they do over there. It's quite different. They tell you so many things like B.Ed. when we do it is different from what we really see in the class. (Bhavna, Teacher, coded Not practical for classroom)

Arya highlights a training that could not be applied to her classroom as it was designed forschools run by the central government (CBSE board of education). Bhavna, while acknowledging that the trainings are useful to some extent, found them too theoretical and not applicable in her classroom. Further, Chavi and Divya mentioned:

Have gone for 3D printing now, so I was taught so many things over there, [...], but then if I come over here and if I see the infrastructure which we have. It's not useful for me to apply that knowledge over here. (Chavi, Teacher, coded Not practical for classroom, Concepts taught not relevant)

Apart from that, like there was a topic I remember something called Toy based learning and that is not applicable for institutes like these. (Divya, Teacher, coded Concepts taught not relevant)

The quote from Chavi addresses the issue of training teachers to use new technologies in their classrooms without ensuring that the infrastructure or equipment is available for use. Divya comments on the inapplicability of a training she attended on "Toy-based learning" to the

institute she teaches at. Both these comments point out difficulties in implementing innovative pedagogies that are presented during the trainings.

Along similar lines, another quote from Chavi touches upon a training she received on plagiarism in the classroom. She found this training to be irrelevant at the classroom level and perceived it to be more applicable to students at higher education levels.

wherein they just taught about plagiarism or something like that. Just about copying down content from internet. So that is not relevant for the school level at least, because we don't give projects now like that in school level. So, it is like for the college level students[...] was a waste of time attending over there. (Chavi, Teacher, coded Concepts taught not relevant)

All the quotes above reflect a common sentiment of dissatisfaction among teachers over the disparity between their training and the realities of their classrooms. The teachers express concerns about the impracticality of concepts like hands-on learning and toy-based education in a system that largely relies on rote learning. Additionally, they find that the trainings are either not designed for their school or designed without considering equipment availability. These concerns highlight a perceived mismatch between the training they receive and the real-world teaching contexts they encounter in their classrooms and schools.

Topics found relevant

This sub-theme focuses on aspects of the trainings that teachers found actively relevant to their classrooms. Context-specific trainings were found to be useful by Divya:

So, when these, this NISTHA thing happened for inclusive education especially, [...] itself were quite good enough for us to help us to handle these students especially with the children with special needs. (Divya, Teacher, coded NISTHA training on inclusion was helpful)

She reported appreciating a training session she received on Inclusive Education as her school had a student with special needs. Similarly, novice teacher Esha found a training she attended helpful in her practice, as it assisted her in dealing with particularly challenging students in her classroom:

I was surprised. Yeah, I used that way. Whatever techniques they taught in that Chalklit app. So certain techniques are good. (Esha, Teacher, coded new Techniques)

Both accounts indicate that teachers engage more with the sessions they perceived as relevant to their classrooms, hence signifying the positive impact of context-specific training. This feeling was echoed by Bhavna:

So, Goa means yeah whenever they give anything new, they should give some, it should be training related to the subject. Whatever. It's not like some other topic only. (Bhavna, teacher, Subject training is good for us)

In the opinion of government official Shreya, the teachers mainly request to be trained on how to teach from textbooks. She says:

In Goa, teachers want us to give them trainings on exactly how they should be teaching in the classrooms: to take the textbook in hand and tell them how to teach. (Shreya, government official, coded Textbook guided training needed)

This sentiment was also reflected in this quote by Arya:

Right now, our mentality exams are this many days, we need to complete this portion. We are not bothered about whether the child has understood whether, the child is really gaining something out of this. So, learn this. Learning this will comes for exam. Our teaching is based on what is going to be asked in the exam and not what the child should actually know for that particular standard, yeah. (Arya, Teacher, coded teaching practices)

Arya highlights the pressure teachers are under in making sure they cover all the curriculum that would appear in an exam, with scantly any time remaining to invest in new pedagogies.

Additionally, teachers found in-person trainings to be superior to on-line events, as commented on by Divya:

Have a physical one rather than having it online. [...] You can clarify your doubts or like any queries that you have then and there (Divya, teacher, coded face-to-face training)

All these accounts signify that the teachers prioritize practical training that translates well to the style of pedagogy in their classroom rather than innovative methodologies that might be impractical and not implementable. Due to the rote-based learning approaches followed in many classrooms in Goa, textbook based teaching methods were preferred. Context-specific training that provided teachers with the knowledge to deal with specific issues, such as challenging or special-needs students, were highly appreciated along with the ability to interact face-to-face with training personnel.

Teacher facilitator relationship

The relationship between teachers and facilitators emerges as an important factor determining teacher engagement in training programs. Chavi recalled a science subject training facilitated by an experienced teacher, which she found helpful and easy to follow because it was directly related to classroom situations.

For science, it was really good. It was very helpful just to the point, because they brought one teacher only who could explain, who was very experienced teacher, and he could explain like what the problems are faced by the teacher over the years by evaluating enough but some other subject was like they brought some college lecturer. That person had no connection with the school, so he explained his own thing and he was that person was teaching how to teach in the school, that is different. (Chavi, Teacher, coded Experienced teacher made training relevant)

On the other hand, some teachers found that the training facilitators didn't put enough effort into conducting the sessions. Bhavna complained about the way these sessions were facilitated, a sentiment shared by other teachers. These trainings were usually conducted through projection of presentation slides on a screen.

First thing they put it on the projector and It's very easy. You know, they just go on reading it, the slideshow. [...] Actually, it's not like they are very knowledgeable. Resource person means they have to be really good at it, right? But they just put it on the projector and just you can read it. (Bhavna, Teacher, coded Less effort taken by trainers)

The qualifications and experience of facilitators along with the perceived effort they put into the training sessions were found to be factors that promote teacher engagement. Also, teachers found it easy to relate to a facilitator who had previously been teachers.

Summary

It is seen that teachers reported better engagement with the training content when it was relevant to the challenges they face in their day-to-day jobs. Practical methods of teaching, such as from a textbook, were appreciated more over pedagogies that were perceived as impractical, either due to lack of infrastructure, lack of applicability to their curriculum or due to being designed for a different school board. The perception of the facilitator by the teachers was also found to be important, as teachers reported better learning engagement from relatable instructors.

Notably, teachers did not find innovative pedagogies helpful in their work, perhaps indicating a failure on the facilitators side in explaining the relevance of these concepts to contemporary teaching practice. The reluctance to adopt innovative pedagogies might point to a denial of constructivist approaches to learning which these pedagogy techniques largely try to foster. Furthermore, perceiving important topics such as plagiarism as irrelevant and only applicable to higher level education might indicate that students are not taught to produce novel knowledge, or this knowledge is not held to a very high bar in terms of originality. Hence, this theme additionally showcases underlying pedagogical practices within the classrooms in Goa.

5.5 Teacher motivation

This theme explores the motivations and willingness of teachers to attend CPD training programs in Goa, as encountered during the interviews. It consists of three sub-themes; 'Demotivating factors', 'Promotion as incentive' and 'Intrinsic' as described in Table 11. The sub-theme 'De-motivating factors' addresses reasons that negatively impact teacher participation in CPD. The second sub-theme, 'Promotion as Incentive', scrutinizes external motivations embedded within the operational framework of CPD that encourages teacher participation in such programs. Finally, the sub-theme 'Intrinsic motivation' delves into the teachers' self-driven learning journeys. Each of these sub-themes is now presented in detail, supported by the primary quotes that underscore the inclusion of the theme into this analysis.

Table 10. Teacher Motivation

Codes	Sub-Theme	Theme
Repetitive training	De-motivating factors	Teacher Motivation
Online modules not engaging		
Overly theoretical		
Waste of time		

Other priorities		
Certificates	Promotion as incentive	
Promotion based on training	Promouon as incentive	
Techniques to help challenging students	Intrinsic	

De-motivating factors

This sub-theme explores factors that negatively impacted the motivation of teachers to attend CPD training sessions. Teachers encountered training sessions with repetitive content, i.e., content similar or identical to that seen in sessions they had attended previously. Divya expressed her disappointment at facing this issue:

Most of that I think I have nearly attended for 5 trainings on preparing worksheets only. (Divya, teacher, coded Repetitive training)

However, government official Asha clarified:

The same trainings are not repeated for a single teacher by both departments. (Asha, GO, coded Repetitive training)

These two accounts suggest a disconnect between the stakeholders involved in the scheduling of training sessions. Teachers additionally considered some training sessions to be a waste of time as they did not add any value to their already busy schedules. Arya and Divya elaborate:

It was time-consuming and not required. (Arya, Teacher, coded Waste of time)

that would take even more longer time. So, preparing worksheets this workshop would be nearly I think 3 days workshop. So, a lot of time. (Divya, teacher, coded Waste of time)

Another opinion expressed regularly by teachers was the lack of engagement when attending or working through online training sessions. Divya expressed dissatisfaction with the learning outcomes from training videos she was mandated to watch:

Now, watching those videos also would be like, you could skip the videos, you could just directly go to the question answer set. So, no learning as such was happening. (Divya, Teacher, coded Online modules not engaging)

Similarly, Esha elaborated on how teachers in her school worked on the quizzes presented after the online NISHTA training sessions in a group, hence side-stepping self-critical evaluation of the learning outcomes from the session.

All the teachers would sit together in the staff room, and we would just discuss the answers with each other. Alright, so we answered it together. You know with everyone's help, yeah. (Esha, teacher, coded Online module not engaging)

Furthermore, she expressed discontent with the theoretical nature of the training sessions, commenting on the lack of practical material:

I found it very theoretical like it wasn't as what we call that there were there were no variety options, it was just reading, reading, reading. And then a test. (Esha, Teacher, coded Overly theoretical)

This sub-theme shows that the theoretical content of training sessions, format of delivery and amount of time spent in trainings negatively affect a teacher's motivation to attend further sessions and work through them diligently. Compelling teachers to attend sessions with the same content multiple times reduces their engagement in the session and made them critical about the need for future sessions. Hence, it is important to highlight these factors as they should influence future policy decisions aiming to increase CPD effectiveness.

Promotion as incentive

In this sub-theme, an extrinsic motivation to attend CPD programs is explored. I refer to 'Promotion as incentive' as extrinsic since it highlights the systemic pressure imposed on teachers and the incentives offered for career progression via training sessions. As Divya explained,

It adds up to our upgradation[promotion] part of it. So for our upgradation, we require a certain number of courses or these in-service trainings to be done, 20 plus or so. The more we attend, the better it is for us, the faster will be our upgradation. (Divya, teacher, coded Promotion based on training, Certificates)

Government official Shreya confirmed this practice, elaborating on how the certificates obtained from training sessions serve as a basis on which promotions are handed out. Additionally, she mentions that, at the time of a teacher's retirement, the number of CPD training hours throughout their career are tallied:

The benefits are two-fold: firstly, one is for hierarchy (promotion) purposes. Secondly, at the time of retirement, they are asked how many hours of teacher training programs they have attended. (Shreya, Government Official, coded Certificates, Promotion based on training)

Towards this end, some teachers admitted to utilizing online training portals, especially the NISTHA portal, solely for the purpose of certificate attainment. Divya says regarding the online NISHTA trainings:

[...] because our aim was to finish it off, get the certificate. That's it. (Divya, Teacher, coded Certificates)

This sub-theme shows that a teacher does not always attend a training session to gain or update knowledge relevant to their classrooms; rather, there exists a systemic pressure to attend for the sake of career progression. Hence, using promotions as an incentive to attend training sessions possibly dilutes the effectiveness of CPD sessions.

Intrinsic

Finally, the sub-theme 'Intrinsic' encompasses motivations driven by a teacher's self-evaluated need for improvement. Esha, a novice teacher, explains how attending a training session helped her develop new methods to work with children that exhibit specific learning deficiencies. She describes here specifically how she found a training session delivered via the Chalklit app to prove useful in her classroom:

Like I try to see what the child is talented in that see there are some children who are weak, [...] I tried to teach in tables through hopscotch. And then within like, just by playing the hopscotch 2 times. Over a single table he just learned it. [...] Whatever some techniques they teach, they thought in that Chalklit app. So certain techniques are good. (Esha, teacher, intrinsic)

Summary

In this section, the motivation behind a teacher's willingness to attend CPD training sessions was explored. It is seen that motivation can be impacted negatively by issues that arise due to repetitive content, perceived lack of concern for a teacher's time as well as ineffectiveness of the methods used to deliver online training. It additionally shows that teachers may attend training sessions for reasons unrelated to their classroom. While, perhaps, the mechanisms put in place to track the number of training sessions attended by a teacher are meant to promote participation, they often lead to lacklustre engagement in the programs and foster a culture of certificate collection for the sake of career advancement. Finally, as seen in the last sub-theme on 'Intrinsic' motivations, teachers often show a keen interest in improving their own skills, either through self-evaluation of gaps in their knowledge or in response to challenges faced in the classroom.

5.6 Systemic issues

This theme explores the systemic issues that underly the effective implementation of CPD programs in Goa. The three sub-themes, 'Infrastructure', 'Population scale' and 'Insufficient time' represent systemic challenges in the educational landscape of Goa. The sub-theme "Infrastructure" encompasses issues arising from physical assets that are required for effective outcomes. "Population scale" addresses issues that arise due to India's large population. Finally, the sub-theme "Insufficient time" describes challenges that arise due to time constraints.

I now delve into these sub-themes and support the rationale behind each by producing the quotes that lead to their inclusion in this analysis. In my opinion, an analysis of CPD training programs in India that does not consider these systemic issues would be incomplete.

Table 11. Systemic issues

Codes	Sub-Theme	Theme
Small spaces and old buildings Lack of land for school infrastructure growth	Infrastructure	Systemic issues
Large teacher cohort	Population scale	
More manpower needed		

Teacher recruitment		
Little time to implement reforms		
Scheduling of training	Insufficient time	
Short duration of schools		

Infrastructure

Several systemic challenges were mentioned during the interviews. These challenges are mainly rooted in lack of infrastructure and the sheer scale of the education system as present in India. As mentioned by government officer Shreya,

The development hasn't happened yet. If there is a hub of schools or colleges at the taluka level in one place, it would be nice but there is no system like that. That system cannot be changed because there is no space and no one is willing to give up their land. (Shreya, Government official, coded Lack of land for school infrastructure growth)

This quote highlights infrastructural issues that arise when implementing CPD at the scale required in Goa. Shreya mentions the need for having a hub of schools in one place for each taluka that cannot be achieved due to difficulties in attaining land.

Population Scale

The vast population even in a small state like Goa gives rise to certain unique challenges in implementing CPD programs that do not arise in more developed countries. Shreya clarifies:

The problem is, for example, if there are many teachers of 5th standard, we call only the science teacher for the science training. In some schools with larger enrolment numbers there are more teachers. For example, in Almeida, there are 100+ teachers. (Shreya, Government official, coded Large teacher cohort)

Sometimes we have to accommodate around 120 teachers for effective training. They need place to sit right. (Shreya, Government official, coded Large teacher cohort)

Based on this quote and considering that the average classroom in Goa has 40 students, it is illustrative to realise that a single CPD training facilitator (called a resource person) directly impacts the learning outcomes of 4800 students in Goan classrooms.

Government official Tarun understandably reported the need for more manpower, i.e., a larger number of qualified professionals are required to train teachers effectively.

There is a requirement of manpower resource. There is deficiency in the staff in Goa, shortage of the staff who conduct the trainings. (Tarun, Government official, coded more manpower needed)

Rajesh, a resource person, further describes that, due to a general lack of teachers to accommodate the number of students in Goa, teachers often must teach subjects for which they have no prior training. He explains:

those teachers who are not maths graduate sometimes they are biology graduates, sometimes they are arts graduate, sometimes they are PE teachers, sometimes computer teachers. They teach maths. (Rajesh, Resource person, coded Teacher recruitment)

These accounts describe the unique problems faced by education systems in developing countries with a vast population, such as India. Even for a small state, the education system in Goa caters to cohort of students every year that is unparalleled in size in any education system in the developed world.

Insufficient Time

This sub-theme addresses factors unique to the operational landscape of the education system in Goa, namely the schedules of the schooling system and teacher training sessions. Government official Shreya reported that teachers are given very little time to implement reforms handed down by the central government. These reforms are presented to teachers during the CPD training sessions. She further mentions that teachers frequently ask for more time when new reforms are announced. She explains,

Yes, that problem is there. It's not wrong what the teachers ask for when new policies are implemented and for the teachers it's difficult to implement these new reforms because they have to learn them first, and they're not permitted enough time for it. There is no time gap. Every teacher is busy preparing for the end of year exams (board exams) because the papers

are being sent from the government center. Every teacher tries to do their best to finish the curriculum, so it is difficult to implement these new reforms. (Shreya, Government official, coded Little time to implement reforms)

She further goes on to elucidate on the unique schedule of the schooling system in Goa compared to the rest of India:

They need time to guide the students properly. The 5 and a half hour duration of the school day is not enough. The schools in other states have full-day teaching, Goa is the only state where it is half-day. And there are climatic reasons behind it, since in Goa students cannot sit in the class for so long in this climate. (Shreya, Government official, coded Short duration of schools)

Additionally, she explains the practice of conducting separate morning and evening schools in the same physical space limits the changes possible to this schedule:

the environmental and also physical considerations, since we do not have that much infrastructure and for example we run school sessions in the morning and evening separately, so they cannot sit in the building the full day. (Shreya, Government official, coded Short duration of schools)

In this sub-theme encompassing time-related issues faced by teachers, it is seen that Goa faces unique challenges when it comes to providing teachers with adequate time to implement reforms in the classroom. Often, these time constraints are ignored by administrators which leads to hap-hazard and rushed attempts at incorporating these changes into a teacher's day-to-day instruction.

Summary

In this theme 'Systemic Issues', it is shown that Goa, as a small state in the developing world, faces unique challenges in implementing effective CPD programs. These challenges, related to scale of the population, infrastructure availability and schedules of the schooling system are unique and represent a vastly different landscape than observed in more developed countries. It is paramount that these issues are addressed, not through the lens of Western ideologies on teacher training, but rather through indigenous efforts by Indian scholars and policy makers. This theme also provides me with the necessary context to approach an answer to my second

research question addressing the gap between policy and implementation of CPD programs in Goa.

Closing vignette

As the training program draws to a close, the resource person distributes feedback forms to everyone. The form contains two familiar questions:

- 1. How did you find the training?
- 2. What would you like to learn next?

Rekha ponders over the questions, uncertain about the extent of honesty she should express in her feedback. The training, in her opinion, wasn't particularly beneficial. It left her with numerous lingering doubts which weren't really clarified. Yet, a part of her is just eager to return home. She glances at the resource person, aware that their employment may hinge on the feedback received. After a moment's hesitation, she picks up her pen and writes, "It was good!" on the form, leaving the rest of the spaces blank.

6 Chapter Discussion

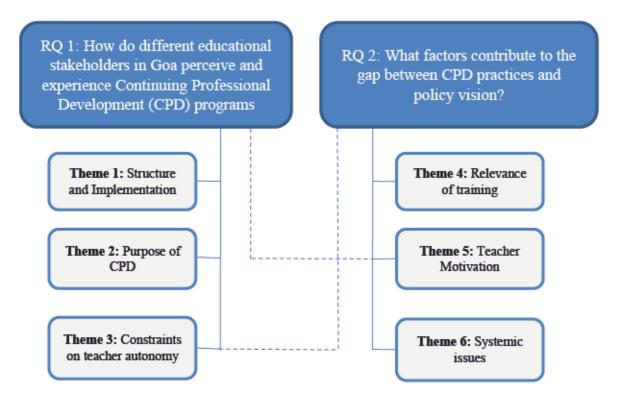


Figure 5. Summary of Findings

The purpose of this thesis was to understand the discrepancies between the practices of Continuous Professional Developemnt (CPD) in Goa and the transformative policy vision. There were two main research questions posed: How do different educational stakeholders in Goa perceive and experience Continuing Professional Development (CPD) programs? And what factors contribute to the gap between CPD practices and policy vision? These research questions are addressed in this section. Figure 4 displays which themes answer which research questions, and can be used as a point of reference for the themes mentioned in the discussion.

6.1 Case study and Findings

Continuous Professional Development (CPD) practices in India, as articulated in policy documents, inherently exhibit a paradox. These documents, as reviewed by scholars like Batra (2014, p. S7) and Subitha (2018, p. 4) oscillate between managerialist and democratic ideologies, consequently giving rise to conflicts and inconsistencies in practice. Furthermore, while teachers are often portrayed as agents of social transformation in policy documents, there is a failure to account for the realities of their professional lives and work environment (Batra, 2014;

Sriprakash, 2011; Subitha, 2018). Consequently, with the introduction of the National Education Policy 2020, several new structures of CPD are being implemented, rearticulating the vision of a transformative teacher professionalism in India (MHRD, 2020, p. 22). Hence, in the relatively under-studied context of Goa, it was important to investigate the current CPD practices and whether they are aligned to the transformative policy vision.

A detailed examination of teacher professional development in Goa was undertaken for this purpose. Interviews were conducted with a range of stakeholders involved in teacher education in Goa, including teachers, government officials, and resource persons. This approach, known as maximal variation sampling, strengthens the validity of the research by providing room for various viewpoints (Creswell & Poth, 2018, p. 159; Merriam & Tisdell, 2016, p. 98).

The multiple views from different participants provided a holistic and comprehensive picture of the case, which would not have been possible if only a single stakeholder was studied. The findings discuss multiple instances of contradictions between stakeholders' views and understanding. For instance, while government officials welcomed the centralization of CPD modules, teachers critiqued it (Theme 1). Also, while officials insisted that training events were not repetitive, teachers disagreed (Theme 5). Such overlaps and conflicts serve as necessary basis of policy understanding and reform, as various accounts are taken into consideration (Padwad and Dixit, 2013, p.11).

Numerous studies in India have shown teacher dissatisfaction with training relevance (Dyer et al., 2002; Khan, 2017; Mooij, 2008), a sentiment echoed in this case study. Although government officials and resource persons were aware of this issue and admitted that teachers sought text-based trainings, no local adjustments were made to address it (Theme 5). The case study further highlighted a lack of agency at all levels, including government officials who, despite their willingness to make changes, were caught in a larger bureaucratic struggle. Hence the case study approach provided a holistic understanding of the case which was intended.

6.2 Perceptions and Experiences of CPD

Transformative professional development is characterized by collaboration, openness, teacher agency, and social justice, aligning with the ideals of democratic professionalism as opposed to managerial professionalism (Mockler, 2005; Sachs, 2016). In light of this theory, the current CPD practices among teachers in Goa as explained by the stakeholders indicates an inclination

towards a managerial approach with its centrally dictated topics and monitoring of teacher performance by resource persons (Themes 1 and 3). Further, the integration scheme called Samagra Shiksha Abhiyan, under the New National Education Policy 2020, also introduces the National Professional Standards for Teachers which are meant to delineate the competencies and skills of a teacher at every stage and are to be adopted by every State (Theme 1). Such standards or metrics, as discussed by Mockler (2005) and Sachs (2016), have emerged as cornerstones of educational policy and practice as a means of ensuring student learning through improved teacher performance and accountability. This focus on standardization and accountability evaluated against externally set benchmarks is reminiscent of a top-down, managerialist approach to professional development.

Kennedy (2014) posits that professional development has a dual purpose. A transmissive purpose, which equips teachers with skills to execute externally set reforms usually decided by the government, and a transformative purpose, which empowers teachers to influence, contribute to, or critique these reforms and policies. Kennedy's (2005, 2014) professional development models range from transmissive to transformative.

Based on these models, the current continuing professional development (CPD) system in Goa primarily follows a complex cascade model (Theme 1). Ideally, a cascade model should encourage knowledge sharing through peer interaction, where information learned during training sessions is spread amongst colleagues (Kennedy, 2014). However, the findings indicate that this model faces challenges in the field. Overburdened with their workloads, teachers find it difficult to collaborate with peers once back at school (Theme 1). Consequently, the cascade model does not reach all teachers effectively, with only those attending the trainings being privy to the shared knowledge. Additionally, the findings highlight that the trainings also adopt a deficit approach, pinpointing and addressing perceived gaps in teacher performance. These areas may include enhancing teachers' technological prowess, introducing innovative teaching methodologies, or reducing rote learning (Theme 2, Theme 3). Such an approach often unjustly pins educational shortcomings on individual teachers, neglecting the broader, systemic issues at play (Kennedy, 2014). Kennedy (2014) categorizes both the cascade and the deficit model as being transmissive in nature. These models are theorised to reduce teacher autonomy and agency, limiting their active involvement in their professional development and growth (Kennedy, 2014).

Consequently, it was observed that the autonomy of teachers in selecting their desired training sessions was limited. Teachers frequently found themselves compelled by school principals to participate in training sessions to fulfil the mandatory 50-hour CPD requirement stipulated by the government (Theme 3). Similarly, teachers engaged passively with the newly introduced online trainings modules such as NISTHA merely to achieve the certification (Theme 5). This suggests that the motivation of teachers to attend the professional development practices are externally imposed, thereby diminishing teacher agency—an aspect contrary to transformative professional development that advocates for empowering teachers to direct their own professional journeys (Kennedy, 2014; Mockler, 2005; Sachs, 2016).

However, the presence of a complex decentralized training infrastructure, comprising of cluster resource persons and master trainers could potentially provide room for teacher input and collaboration through democratic approaches (Theme 1). Additionally, alternative avenues for CPD, such as e-learning platforms and workshops organized by NGOs and school management bodies, hint towards a more participatory model, though these are not the norm. Instances of trainings intended for professional wellbeing were cited only by one government official and none of the teachers (Theme 2). Therefore, the current CPD practices in Goa appear to be largely driven by managerialist approaches based on the experiences of the teachers and other stakeholders. By answering my research question 1 above, I have also demonstrated a misalignment between CPD practices in Goa and the transformative policy vision.

6.3 The Misalignment between Practice and Policy

The misalignment between Goa's continuing professional development (CPD) practices and its transformative policy vision can be linked to several factors, including the training selection process, the relevance of content to the classroom, the perception of training as a burden, the quality of facilitator engagement, and extrinsic motivation (Themes 3, 4, and 5). All teachers agreed upon the lack of autonomy in picking which training sessions they get to attend (Theme 3). Training sessions often failed to align with teachers' classroom realities, rendering them less engaging (Theme 4). This finding echoes previous studies by Batra (2014, p. S7), Sriprakash (2011, p. 7), and Subitha (2018, p. 77) that highlight the importance of contextual relevance in professional development.

Furthermore, teachers often perceive training sessions as burdensome, which exacerbates their already demanding schedules (Theme 5). This perception aligns with Ramachandran's (2005) findings and poses another hurdle in the effective implementation of CPD. It was also found

that the quality of the teacher-facilitator relationship influenced teacher engagement (Theme 4). Extrinsic motivations, such as mandatory attendance and the achievement of certificates for promotions, seem to be the main driving factors for teachers' participation in the trainings, further contributing to this disconnect (Theme 5).

Moreover, systemic challenges offer a crucial context for the implementation of CPD structures in Goa. The immense scale of the education system, combined with infrastructural limitations, allows little time for comprehensive and effective implementation of reforms (Theme 6). These challenges are unique and represent a vastly different landscape than observed in more developed countries. It is paramount that these issues are addressed, not through the lens of Western ideologies of professional development, but rather through theories of Indian scholars and policy makers. Understanding these systemic challenges brings us closer to bridging the gap between the transformative policy vision and actual CPD implementation in Goa.

6.4 Propositional Implications of Research

One implication of this research speaks to both the current state of educational goals/needs in India and the direction of its future reforms. An interesting finding of the study was that the teachers' expressed desire for trainings that guide textbook-based teaching, which would assist in preparing students for examinations (Theme 4). This was also the reason they didn't find the trainings relevant, because the new-age socio-constructivist approaches employed in the trainings were contradictory to the prevalent behaviourist approaches to teaching they employed in their classrooms (Dyer & Choksi et al, 2002, p. 337; Pandey, 2004).

Consequently, teachers appear to have internalized the notion that the primary objective of schooling is to optimize student outcomes in final examinations. This observation aligns with findings by Bertram and Mxenge (2022), who discovered similar attitudes among novice teachers in South Africa (Global South). This can largely be attributed to the emphasis placed on summative examinations, particularly in the 10th grade in Goa and the rest of India. This reveals a prevailing exam-centric education culture where teaching and learning are heavily oriented towards performance in summative assessments, potentially at the cost of fostering comprehensive understanding, critical thinking, and lifelong learning skills i.e., transformative learning in students. Ironically, meeting the teachers' stated needs in this case could potentially exacerbate the problem of rote learning in India, a teaching practice heavily criticized for its limited educational value.

Interestingly, not all participants were opposed to the managerialist models of CPD in Goa. Government officials, the Resource Person, and some teachers seemed to embrace this accountability-based training. This aligns with the views of Ball (2003), who argues that such systems present opportunities for some to achieve personal success while causing inner conflicts, inauthenticity, and resistance for others.

Further, a lack of agency was observed at all levels of practitioners, from teachers to resource persons to government officials. Government officials in Goa were bound by centrally prescribed training structures determined by the union government in Delhi, while teachers largely complied with policy directives. Interestingly, none of the practitioners challenged the existing CPD structures, despite the adverse effects they were having on their work. This could be largely attributed to these practitioners being unaware of what professional agency truly entails or what transformative practice, as prescribed by the policy, truly means. This critique extends to the policy documents themselves, which seem to have adopted Western theories uncritically such as 'Transformative Professional Development', without considering whether they are appropriate for the specific context they are meant to serve.

6.5 Suggestions for future research

Through the implications of this study, there are several opportunities for future research that could provide significant value to the practice of CPD in India and the policies that guide them.

Given the pronounced disconnect between teachers' perceived needs and the objectives of CPD programmes, it becomes imperative for future studies to explore mechanisms to bridge this divide. For example, an examination of interventions that cater to teachers' preferences for textbook-based teaching methods while introducing elements of socio-constructivist approaches might be a meaningful starting point. This could potentially initiate a gradual shift towards a more comprehensive and less exam-oriented approach to education.

There is also an apparent need for deeper inquiry into the lack of agency among various stakeholders. Understanding the underlying reasons for this could shed light on the structural or systemic issues that cause this. As part of this exploration, an examination of power dynamics between different stakeholders could further illuminate the challenges that exist, which was not possible to conduct within the scope of this study.

The relevance and appropriateness of Western theories like 'Transformative Professional Development' within the Indian context is another critical area for scrutiny. This calls for a reassessment of the feasibility of such goals, objectives, or visions, in light of the country's population scale and systemic issues. Future research might also consider the development of in house models of professional development that are rooted in the context of Goa and India. Such an approach would ensure that the contextual realities are taken into account, potentially enhancing the effectiveness and relevance of CPD initiatives.

7 Further Reflections

This chapter discusses several limitations of this thesis. Furthermore, issues of validity, reliability and quality are discussed. Lastly, ethical considerations that arose during this thesis are delved into

7.1 Limitations

There are several limitations that I recognize within this case study. One of the primary limitations is the small number of participants involved in the study. While this small sample size allowed for an in-depth exploration of individual perspectives, it raises concerns about the validity of the findings. For instance, in this study, only the accounts of one teacher trainer or resource person was taken, while there were multiple participants for other stakeholders. Furthermore, only teachers from government-aided schools were interviewed, excluding teachers from government or rural schools who, according to Mooij (2008, p. 521), face more substantial challenges regarding professional development. Consequently, the implications of the research and the ensuing theorization for Continuous Professional Development (CPD) are based on a relatively narrow perspective. Furthermore, conducting qualitative case study research can be a time-consuming process (Cresswell and Poth, 2018, p.161). As an international student in Oulu, my available time to refine the thesis was limited on account of program logistics. Additionally, this study didn't include analysis of policy papers and documents obtained during the research. This exclusion is a limitation, as the analysis of such materials could have provided valuable insights into the factors contributing to the gap between CPD policy and practice in Goa, India.

Authors such as Yin (2014, p. 7) and Thomas (2010, p. 575) discuss that one challenge of the case study methodologies is its perception as the second-best choice or as suitable only for preliminary purposes, despite their widespread use in qualitative research. Hence, there were moments during the research process where I had doubts about this choice. Furthermore, Creswell and Poth (2018, p. 161) highlights that one of the greatest limitations of case studies is maintaining rigor due to the contested nature of this methodology. Initially, I adopted Yin's approach to case study methodology, however, as a novice researcher, it took me time to understand that Yin's positivist stance didn't align with the constructivist positioning of my

study. Eventually, I employed a different approach, one that was more suitable while simultaneously ensuring quality.

Further, a significant limitation of a single case, instrumental study, as explained by Bassey (1999, p. 31) and Yin (2014, p. 20), is the issue of generalizability. Since this case study focuses on just one case, it doesn't provide a strong basis to generalize the findings to broader populations or settings. However, the primary purpose of this study was to understand the instrumental insights into the professional development of teachers in India through the specific context/case of Goa.

It's worth noting that the concept of generalizability in qualitative research is a subject of debate among scholars. Creswell and Poth (2018, p. 161), for example, argue that some researchers entirely reject the notion of generalizability in qualitative research, while others, such as Stake (1995, p. 8), underscore the importance of 'particularization,' or the highlighting of unique features in a case. Stake (1995) promotes the use of naturalistic generalizations and propositional generalizations (assertions). Naturalistic generalizations encourage readers to have an immersive experience in the study, which is why vignettes were provided in the Findings chapter (Stake, 1995, p. 86). Moreover, the Discussion chapter includes propositional generalizations or assertions that, are speculative and subjective but provide depth to the understanding of the case (Stake, 1995, p. 12).

Qualitative case study research is deeply dependent on the researcher's interpretive lens and subjective understanding of the collected data. Conducting this research in my hometown, Goa, provided me the advantage of researching within a context I am familiar with, and in languages I fully comprehend. This closeness, while advantageous, also meant that my personal history, biases, and pre-existing notions could potentially influence all aspects of the research, from data collection to analysis, and the interpretation of findings. Finally, my analysis was guided by an abductive approach, leading me to develop certain theoretical implications. However, there's always the risk of the theoretical framework dominating the actual data in this approach. A theoretical framework is both a means to reveal and conceal the meaning and understanding of the issues under study (Anfara & Mertz, 2014; Merriam & Tisdell, 2016). By using a framework generated by theories established in the global North for the Global South, it proves to be limiting.

7.2 Validity, Reliability and Evaluation

For my thesis, I have strived to ensure honesty, credibility, and depth in my work, while faithfully capturing the unique experiences of the participants to maintain validity. In this pursuit, I have adhered to the guidelines proposed by Creswell and Miller (2000), which vary according to the qualitative lens and paradigmatic stance of the research. My study is grounded in a constructivist approach, hence, the recommended procedures include seeking "disconfirming evidence", committing to deep and "prolonged engagement with the field", and "providing thick, rich descriptions" (p. 126).

In terms of seeking disconfirming evidence, I employed a maximum variation sampling approach during data collection, which facilitated the exploration of multiple perspectives on the phenomenon of interest (Creswell & Poth, 2018, p. 159; Merriam & Tisdell, 2016, p. 98). Moreover, the abductive thematic analysis approach utilized enhances the validity of the study as it aligns with the constructivist approach through the deliberate search for disconfirming or contradictory evidence. As for the depth of field engagement, my past experiences in the Indian education sector, extending beyond the confines of this research study, allow me to claim a robust immersion in the field. Lastly, to provide rich, context-specific descriptions, I offered a description of the context of professional development in India in Chapter 2 for the reader.

The notion of reliability, though contested within qualitative research due to its inherent subjectivity, is understood in my study as ensuring the thoroughness and consistency of my research procedures and findings. In this regard, the study's reliability is underpinned by the detailed account of the case study design and the care taken to maintain data through good quality field notes and consistent and reliable devices. Creswell and Poth (2018, p. 345), explains an approach to reliability through ensuring intercoder agreement. Since I was the only research in this thesis, this is not applicable for my study.

Moreover, I used member checking to enhance the reliability and validity of the study (Stake, 1995, p. 114). This involved returning the findings to the participants for review, ensuring the accuracy of their narratives and demonstrating respect for their voices. This strategy particularly addressed the concerns of government officials in the study, who expressed a desire to preserve their anonymity. Consequently, these methodological steps strengthen the reliability and validity of my research.

Next, I evaluate my study based on the evaluation criteria attached in Appendix 4 given by Stake (1995). The case study has been written to maintain clarity and ease of read, with a clear structure and straightforward language to facilitate comprehension. The conceptual structure or background literature has been provided on the issues related to the case study in chapter 1, 2 and 3. The case of professional development of teachers in India is well-defined and examined from multiple perspectives. The findings unravel like a story, engaging the reader through vignettes, providing vicarious experiences. Quotations have been used effectively to highlight key points and perspectives, in the findings. The report employs headings, figures, and appendixes in a way that is provided by the University of Oulu template Editing and Polishing the thesis has been a challenge given the constraints of time, which are also mentioned in the limitations. The assertions or propositional generalizations are based on the theory and I have tried to not over-interpret or misinterpret the data. Data for this thesis, was collected from eight participants, and is sufficient for the scope of this thesis. Data sources have been well-chosen and diversified, ensuring holistic findings. Triangulation strategies have not been used, instead a strategy called "disconfirming evidence" closely related to triangulation has been employed. The role and point of view of the researcher is transparently articulated, enhancing the credibility of the study (Creswell and Miller, 2000, p. 126). The positionality of the researcher has been explicitly delineated. Empathy is consistently demonstrated towards all stakeholders, and personal intentions and biases have been examined and stated. No individuals were put at risk in the study. Confidentiality and ethical considerations have been duly maintained throughout the research process, ensuring the participants' welfare.

7.3 Ethics

Case study research can present multiple ethical challenges which have to be addressed appropriately. As this case study involves semi structured interviews, care was taken to ensure that participants were treated with dignity and respect. Furthermore, the American Psychology Association outlines ethical standards which were followed during this research (American Psychological Association, n.d.). Yin (2014) notes that case study research is ethically unsound if it is used to "substantiate a preconceived notion" (p. 228). Yin (2014, p. 288) further explains that unbiased research requires a researcher to be open to contrary evidence. Towards this end, constant efforts were made by me to prevent any preconceived notions about the education system in Goa from affecting the interview setup, questionnaires and data analysis. Participants were not harmed or coerced to participate in this thesis. Privacy notice and consent form (Appendix 2) was made available to all participants before each interview and duly signed.

8 Conclusion

In conclusion, the primary objective of this thesis was to explore the discordance between the actual practice of Continuous Professional Development (CPD) in Goa and the transformative vision outlined in policy. The two main research question driving the research were: How are CPD programs viewed and experienced by different educational stakeholders in Goa? And what elements lead to the divergence between the transformative policy vision and the actual execution of CPD?

Indian CPD practices, as detailed in policy papers, inherently display a contradiction, as identified by researchers such as Batra (2014, p. S7) and Subitha (2018, p. 4). These policies swing between managerialist and democratic ideologies, inevitably leading to contradictions and conflicts in their application. Further, despite the common portrayal of teachers as catalysts of social change in these policies, there is a neglect of the tangible circumstances of their professional lives and work settings (Batra, 2014; Sriprakash, 2011; Subitha, 2018). In response to this, the National Education Policy 2020 introduced numerous new CPD structures, restating the vision for transformative teacher professionalism in India (MHRD, 2020, p.). Therefore, in the less explored context of Goa, it was crucial to examine the prevailing CPD practices to ascertain their alignment with the transformative policy objectives.

The research was effectively carried out using the case study approach, leading to the emergence of themes that clearly addressed the research questions. Suggestions for future research were also provided.

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Appendix 1: Call for Participants

Call for participants- Permission letter given to school-heads

Date: 27 February 2023

To Principal

School Information (redacted)

Subj. Requesting permission to conduct interviews with teachers to collect data for thesis

purposes.

Respected Sir/Madam,

I am writing to request permission to conduct interviews with schoolteachers for my research

project titled "Professional Development of Teachers in the state of Goa, India." I am currently

pursuing my MA degree in Education at University of Oulu in Finland. The purpose of my

research is to study the implementation of continuing professional development (CPD)

programs for teachers in Goa and to understand the perspectives of various stakeholders,

including teachers, government officials and teacher educators.

I kindly request your cooperation in granting me permission to approach teachers in your

school, and I assure you that I will be respectful of their time. The interviews will be conducted

within 20-30 min, and they will have the option to decline the interview or withdraw their

consent at any time.

I have also attached Informed consent form and privacy notice with the research purpose for

your perusal. I would be grateful if you could review these documents and connect me with

teachers I could interview.

100

Thank you for considering my request. I believe that the insights gained from the interviews

will be invaluable in advancing my understanding of teacher professional development in Goa.

Sincerely,

Bhumika Bandodker

Call for participants- Permission letter given to Government Officials

Date: 23 March 2023

Director

State Council of Educational Research and Training

Alto Porvorim

Goa - 403521

Subj. Requesting permission to conduct Interviews with SCERT staff to collect data for thesis

purposes.

Respected Sir,

I am writing to request permission to conduct interviews with government officials or teacher

trainers responsible for in-service teacher training at SCERT in Goa, for my research project

titled "Professional Development of Teachers in the state of Goa, India." As you may be aware,

the purpose of my research is to study the implementation of continuing professional

development (CPD) programs for teachers in Goa and to understand the perspectives of various

stakeholders, including government officials, teacher educators, and teachers.

I understand that the staff of SCERT may have a busy schedule, and I assure you that I will be respectful of their time. The interviews will be conducted within 20-30 min, and they will have the option to decline the interview or withdraw their consent at any time.

I was looking for your assistance in identifying two government officials or teacher trainers who could answer the following Interview questions:

- 1. Could you describe the process of implementation of CPD or professional development of teachers in Goa? Face to face, online or group sessions?
- 2. What would be your role and responsibility towards this process?
- 3. What do you think are the most important components/topics/actors of professional development of teachers in Goa?
- 4. How are the topics for professional development of teachers decided? What role does teacher feedback play in this decision?
- What challenges do you anticipate in implementing CPD programs for teachers in Goa?
- 6. In your opinion, how effective have CPD programs for teachers in Goa been in improving teaching and learning outcomes? (Online and Face to Face)
- 7. What improvements or changes would you suggest for CPD or professional development of teachers in Goa or India based on your experiences?

I have also attached Informed consent form and privacy notice with the research purpose for your perusal. I would be grateful if you could review these documents and provide any feedback or suggestions you may have.

Thank you for considering my request. I believe that the insights gained from the interviews with the SCERT members will be invaluable in advancing my understanding of teacher professional development in Goa.

Sincerely,

Bhumika Bandodker

Appendix 2: Informed Consent Form



PARTICIPANT INFORMATION AND CONSENT FORM

Researcher: Bhumika Sanjay Bandodker

You are invited to participate in my master's thesis research on "Teachers' Continuing Professional Development (CPD) practices in Goa". This research is a qualitative study designed to explore the experience of teachers and instructors who have participated in or associated with CPD programmes or in-service trainings organised for teachers within the state of Goa, India. This informed consent form provides you as a research participant general information about the research, its purpose and your rights as a participant.

General information

I am a master's student in the Education and Globalisation programme, at the Faculty of Education and Psychology, University of Oulu. As a part of my studies, I am conducting research in Continuing Professional Development (CPD) practices in Goa. My research will examine how professional development for teachers in Goa is carried out and why it is successful (or not). I kindly request your consent for collecting information from you for the research purpose by participating in this interview.

All information will be used anonymously, respecting your dignity. No personal details that enable identifying you will be included in the analyses and reporting. Systematic care in handling and storing the information will be ensured to avoid any kind of harm to you. After all the information leading to identification of a person has been removed, the information will either be destroyed after the thesis has been assessed and approved by the Faculty of Education and published, or latest by December 2023; or archived electronically, following the guidelines of the Finnish Social Sciences Data Archive

Voluntary participation

Please note that there are no 'right' or 'wrong' answers and all views are valid and valued. The research seeks to understand rather than judge.

Your participation will involve a discussion with me, lasting approximately 20-30 mins, focused mostly on your ideas about, and experiences of CPD programmes in Goa, which will be audio recorded. Your participation is completely voluntary. You have the right to withdraw from the research at any time without any consequences. Observe that information collected before your withdrawal may be used. You have the right to get information about the research and may contact me, if you have questions.

Confirming informed consent

- I am willing to participate in the research.
- I allow the use of the interview data for research purposes.
- I allow the information that I have provided to be stored and archived for further research use.
- I do not allow the information that I have provided to be stored and archived for further research use.

Date//20	
Signature and name (in capital letters)	
Researcher	
Bhumika Sanjay Bandodker	
bhumika.bandodker@student.oulu.fi	
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This thesis research is supervised by:

Audrey Paradis PhD

University lecturer

Values, ideas and social contexts of education

More information about research ethics and informed consent:

Finnish Board on Research Integrity

http://www.tenk.fi/en/ethical-review-in-human-sciences

Social Sciences Data Archive

http://www.fsd.uta.fi/aineistonhallinta/en/informing-research-participants.html#partIV-examples-of-informing-research-participants

http://www.fsd.uta.fi/aineistonhallinta/en/anonymisation-and-identifiers.html

Appendix 3: Interview Questions

For Government Officials and Resource Persons

- 1. Could you describe the process of implementation of CPD or professional development of teachers in Goa? Face to face, online or group sessions?
- 2. What would be your role and responsibility towards this process?
- 3. What do you think are the most important components/topics/actors of professional development of teachers in Goa?
- 4. How are the topics for professional development of teachers decided? What role does teacher feedback play in this decision?
- 5. What challenges do you anticipate in implementing CPD programs for teachers in Goa?
- In your opinion, how effective have CPD programs for teachers in Goa been in improving teaching and learning outcomes? (Online and Face to Face)
- 7. What improvements or changes would you suggest for CPD or professional development of teachers in Goa or India based on your experiences?

Specifically for teachers:

- Recall if any the in-service training/professional development courses which are currently ongoing or that you have participated in recently? (Online and Face to Face)
- 2. Describe your experience with this training. (Online and Face to Face)
- 3. Tell me how professional development activities have influenced your teaching in the classroom?
- 4. Are there challenges to attend the training sessions?

- 5. Have there been other professional development courses you have looked out for/participated in on your own?
- 6. What topics would you want professional development in?
- 7. Do you feel like you have a choice in participation or decision-making process of your professional development?
- 8. What encourages and what inhibits your professional development?

Appendix 4: Evaluation Criteria

Evaluation Criteria Provided by Stake (1995):

- Is the report easy to read?
- Does it fit together, each sentence contributing to the whole?
- Does the report have a conceptual structure (i.e., themes or issues)?
- Are its issues developed in a serious and scholarly way?
- · Is the case adequately defined?
- Is there a sense of story to the presentation?
- Is the reader provided some vicarious experience?
- · Have quotations been used effectively?
- Are headings, figures, artifacts, appendixes, and indexes used effectively?
- Was it edited well—and then again with a last-minute polish?
- Has the writer made sound assertions, neither over- nor misinterpreting?
- Has adequate attention been paid to various contexts?
- Were sufficient raw data presented?
- · Were data sources well chosen and in sufficient number?
- Do observations and interpretations appear to have been triangulated?
- Is the role and point of view of the researcher nicely apparent?
- Is the nature of the intended audience apparent?
- · Is empathy shown for all sides?
- Are personal intentions examined?
- Does it appear that individuals were put at risk? (p. 131)

Notes

ⁱ Is a sanskrit word for a supreme teacher, a mentor or a spiritual guide, "the Guru image that is emphasised by teachers is insistence on the student's respect for the teacher and his unquestioned faith in the teacher's authority, knowledge and indispensability" (Kale, 1970, p. 371)