

History, Policy-Based Directions for Secondary Teacher Training Programs in Sindh Government Institutions

Asma Bhatti ^{1*} Abida Siddiqui ² Abdul Haque ³ Sumera Khan ⁴ Shahar Bano ⁵

¹ PhD Scholar, Faculty of Education, University of Sindh, Jamshoro, Sindh, Pakistan.

Email: asma.bhatti051977@gmail.com

² Associate Professor, Faculty of Education, University of Sindh, Jamshoro, Sindh, Pakistan.

Email: abida.siddiqui@usindh.edu.pk

³ PhD Scholar, Faculty of Education, University of Sindh, Jamshoro, Sindh, Pakistan.

Email: abdul.haque@scholars.usindh.edu.pk

⁴ PhD Scholar, Faculty of Education, University of Sindh, Jamshoro, Sindh, Pakistan.

Email: khansumera1981@gmail.com

⁵ PhD Scholar, Faculty of Education, University of Sindh, Jamshoro, Sindh, Pakistan.

Email: Shahar.bano@scholars.usindh.edu.pk

ABSTRACT: This study attempts to explore the policy direction, institutional structure, and gaps in the implementation of secondary school teacher training in government schools in the province of Sindh, in a historical perspective. The present study is a secondary qualitative research study that uses document analysis and thematic content analysis of selected education policies, government reports, institutional records, and scholarly literature from 1947 to 2017, and Wood's Dispatch of 1854 as historical background. Some of the key policy documents are the National Education Conference 1947, the Education Commission 1959, National Education Policy 2009, National Professional Standards for Teachers 2009, Minimum Standards for Quality Education in Pakistan 2017, National Curriculum Framework 2017, and Draft National Education Policy 2017. The analysis indicates the gradual growth of teacher training institutions from colonial-era normal schools to diversified teacher training institutions such as PITE, STEDA, and Government teacher Training institutes in Sindh. Results show an increase in institutional presence, course diversity, teacher licensing, teacher standards, and professional development. It suggests more robust implementation of policy, harmonization of curricula, institutional capacity enhancement, hands-on training in schools, better licensing systems, and better linkages with federal and provincial agencies.

KEYWORDS: Teacher Training, Government Institutions, Historical Evolution, Education Policy, Content Analysis

Introduction

Overview

Teacher training institutions in government schools are key to the creation of an effective and sustainable education system. These programs enhance the quality of teaching by offering teachers ongoing academic, professional, and

Pages: 246 – 267

Volume: 5

Issue: 7 (July 2026)

Corresponding Author

Asma Bhatti

✉ asma.bhatti051977@gmail.com

Cite this Article: Bhatti, A., Siddiqui, A., Haque, A., Khan, S., & Bano, S. (2026). History, Policy-Based Directions for Secondary Teacher Training Programs in Sindh Government Institutions. *The Regional Tribune*, 5(7), 246-267.

<https://doi.org/10.55737/trt/v-vii.374>

instructional assistance. Quality teacher education also helps to enhance student learning outcomes and better institutional performance (UNESCO, 2025).

Teacher training programs evolve as a result of shifts in social, political, economic, and educational policies. Historical research into teacher education can shed light on how teacher education systems developed, evolved, and adapted over time in response to administrative and educational needs (Dove, 2026; OECD, 2025). The formal training of teachers started in the subcontinent during the colonial period. In 1854, Wood's Dispatch paved the way for teacher education to be recognized as a formalized system and contributed to the establishment of formal teacher training schools (Pratheesh, 2024). It was the first time that teaching was presented as a formal profession.

Pakistan gained independence in 1947 and took over the teacher training system of the colonial era and subsequently modified it on the basis of a series of educational reforms. Restructured teacher education was greatly influenced by the recommendations of the 1959 Education Commission. Subsequent reforms, such as the National Education Policy 2009, also tackled the challenges of teacher training, institutional quality, and educational governance (Zeeshan, 2025).

Secondary teacher education in Pakistan encompasses the specialized academic and professional training necessary to attain certification as a teacher for middle and high school students (Grades 6–10). It provides educators with fundamental pedagogical competencies, discipline-specific strategies, and classroom management skills to teach effectively in both public and private sectors of the country.

For conceptual clarity, key terms require definition. The Oxford English Dictionary defines a “teacher” as a person who teaches, especially in a school, while “training” refers to instruction in a particular skill or behavior (Oxford University Press, n.d.). Merriam-Webster defines a “program” as a planned series of activities and an “institution” as an established organization devoted to education, public service, or culture. Government refers to the system or group responsible for directing and controlling an organized community or state (Merriam-Webster, n.d.). Education policy refers to the organized set of rules, actions, and directives used to guide educational systems and practices (UNESCO, 2025).

In this study, teacher training programs are understood as structured systems designed to prepare and train teachers for professional practice within government-controlled institutions. These systems influence the quality of public education and the administrative development of education in developing societies (Zeb et al., 2025).

Problem Statement

Government teacher training institutions in Pakistan are important for educational reform, yet secondary school teacher training needs deeper investigation. National Education Policy 2009 emphasized standardized training, accreditation, certification, curriculum alignment, student-centered teaching, and continuous professional development (Ministry of Federal Education and Professional Training, 2009). Despite this, teacher training still faces weak planning, poor induction, limited resources, unequal distribution of trained teachers, and irregular training opportunities (Siddiqui et al., 2021). This study focuses on government teacher training courses for secondary school teachers in Sindh from 1947 to 2017 because secondary teachers need subject knowledge, assessment skills, pedagogical competence, classroom management, and professional development for grades 9 and 10 (Ullah et al., 2023). The National Professional Standards for Teachers provide a useful framework by defining teacher preparation through knowledge, values, behavior, and skills (Ministry of Education, 2009). The main issue is the gap between policy reforms and classroom practice, as teachers show awareness of professional standards but

do not apply them effectively (Ullah et al., 2022). Weak coordination between the National Education Policy 2009 and National Professional Standards for Teachers also limits teacher professionalism (Khizar et al., 2019).

This study, therefore, addresses the need for a historical and policy-based analysis of government secondary school teacher training in Sindh. It examines how selected policies from 1947 to 2017 framed teacher training, what priorities they gave to secondary school teachers, and what institutional gaps remained in training quality, professional standards, accreditation, and classroom relevance (Ministry of Federal Education and Professional Training, 2009). It also considers the Draft National Education Policy 2017 as a future-oriented vision for improving teacher training and professional development (Ministry of Federal Education and Professional Training, 2017).

Research Gaps

The gaps in research literature highlight the need for specific research on teacher training at secondary schools in Sindh, as the majority of literature does not differentiate between teacher training at secondary schools and other levels and sections of teacher training (Siddiqui, et al., 2021). The focus is relevant as secondary teachers continue to experience gaps in assessment knowledge, pedagogical practice, and implementation of professional standards (Ullah et al., 2023). Another gap is the lack of a strong connection between national policy commitments and national or on-site teacher training practices, despite the introduction of teacher training policy in the National Education Policy 2009, which set out standardized training, accreditation, certification, on-site training, and cyclic professional development (Ministry of Federal Education and Professional Training, 2009). Research continues to reveal issues with policies, induction, resources, motivation, fragmentation, and irregular training sessions (Sain et al., 2024). Weak integration of professional standards and institutional training with classroom practice, although National Professional Standards for Teachers were formulated to guide teacher knowledge, skills, values, and professional behavior (Ministry of Education, 2009). However, these standards are not being effectively implemented in secondary schools (Ullah et al., 2022). Lastly, there is limited research that applies secondary content analysis to track the development of teacher training policy from 1947 to 2017 (Khizar et al., 2019). The weaknesses of contextual integration, manual documentation, superficial observation, and limited institutional ownership of teacher professional development in teacher education are also challenges (Sadrudin & Kaukab, 2021).

This study aims to fill these gaps by concentrating on government teacher training courses for secondary school teachers in Sindh. It adopts a secondary content analysis method and analyzes selected national education policies, teacher education documents, and peer-reviewed academic studies of the period from 1947 to 2017. It also identifies policy gaps and recommends directions for enhancing the training of secondary school teachers in government schools.

Research Objectives

The objectives of the study are:

- a. To highlight the historical development of Secondary Teacher Training programs offered by Government Institutions in Sindh.
- b. To analyze major gaps in National Education policies for Teacher Training practices in Government Institutions.
- c. To suggest Policy-based directions for improving Secondary School Teacher Training programs in Government Institutions.

Scope (Delimitations)

This study is limited to government teacher training institutions in Sindh. It focuses only on teacher training courses related to secondary school teachers. The study does not include private teacher training institutions, primary teacher training, elementary teacher training, higher education teacher training, madrassa teacher training, technical teacher training, or vocational teacher training.

The study covers the period from 1947 to 2017. This period starts from the early post-independence education planning of Pakistan and ends with the Draft National Education Policy 2017, which is treated as a future-oriented policy document. Wood's Despatch of 1854 is included only as historical background because it influenced the teacher education structure inherited by Pakistan after independence.

The study uses secondary content analysis. It relies on selected national education policies, teacher education documents, institutional records, and academic literature. It does not involve primary data collection through interviews, questionnaires, classroom observations, institutional visits, or focus group discussions.

The policy focus of the study includes the National Education Conference 1947, Commission on National Education 1959, Education Policy 1972, National Education Policy 1979, National Education Policy 1992, National Education Policy 1998-2010, National Education Policy 2009, National Professional Standards for Teachers 2009, Minimum Standards for Quality Education in Pakistan 2017, National Curriculum Framework 2017, and Draft National Education Policy 2017.

Historical Context and Evolution of Teacher Training

Pre-Independence Era (Before 1947)

The historical relations between policy reforms and transforming education priorities and legacy in government institutions are evident through the broadening of teacher training programs. From colonial intervention to modern policy formulations, the changes in teacher education have been characterized by attempts at standardization in teaching, enhancement in the quality of instruction, and responsiveness to societal socio-economic needs. This part follows the four major stages of development of teacher training, as it identifies the major policies and institutional changes (Sajid & Hussain, 2025).

The history of formal teacher training in the subcontinent dates back to the colonial era of British rule, where the policy of education was largely aimed at administrative and government purposes (Kambala & Mathe, 2023). One of the most significant developments during this period was Wood's Dispatch, which established the principles of a systematic and structured approach to education. This policy was characterized by the creation of teacher training institutions to create competent instructors in order to introduce a standardized curriculum in schools (Mondal, 2024; Pratheesh, 2024).

Institutionalized teacher education introduced normal schools and training colleges. It also emphasized the significance of pedagogical training over simple subject knowledge, thus bringing about the professionalization of teaching. The number and extent of these training programs were, however, restricted, usually centered in urban centers and seldom aligned to colonial administrative interests. There were these limitations, but this era laid down the structural and conceptual framework on which future teacher training systems were to be based (GSCE Publications, 2025; Pratheesh, 2024).

Early Post-Independence Developments (1947–1980)

After gaining independence in 1947, Pakistan had inherited a disorganized and poorly developed education sector, including teacher training institutions that needed restructuring. The early years were marked by an attempt to widen access to education and enhance the quality of teaching by developing institutions. The training of teachers took center stage because the policymakers identified it as a key area in the development of the nation and human capital (Rehmatullah et al., 2026).

One notable achievement in this phase was the Education Commission in 1959, which gave broad recommendations on the reforms needed to transform the education system. Among the goals promoted by the commission was professionalization of teaching, which included the development of standard training programs, better curricula, and the restructuring of exclusively teacher training colleges. It also emphasized the significance of the constant growth of a professional and the necessity to align teacher training with national educational goals (Mufti, 2024; STEDA, 2018).

It was at this time that non-teaching government institutions increased and teacher training programs got more organized in terms of length, certification, and curriculum development. However, challenges such as resource constraints, uneven implementation, and disparities between urban and rural areas persisted, limiting the overall effectiveness of these reforms (Ullah et al., 2025).

Transitional and Reform Period (1980–2009)

The 1980-2009 period can be defined as a period of gradual change and reform, including efforts to modernize teacher training in line with evolving educational requirements. During this time, several policy initiatives and programs were introduced to improve the quality and relevance of teacher education. These involved new curriculum development, introducing new methods of teaching, and also tried to incorporate practical training aspects into the teacher education programs (Radhakrishnan, 2025; Sadiq et al., 2024).

In spite of these efforts, reforms became highly problematic. Institutional weaknesses, lack of coordination among regulatory bodies, and insufficient funding hindered the effectiveness of teacher training programs (Naz et al., 2025; NEPDF, 2024). There was also an increasing gap between intentions and realities of policy, especially in state institutions where infrastructural and faculty development continued to be substandard. It is also during this time that there was increasing recognition of the necessity of competency-based training and the integration of modern pedagogies. Nevertheless, the lack of a sound policy framework that is both coherent and implemented significantly constrained how the changes could be institutionalized (Cochran-Smith & Fries, 2008; Okwe et al., 2025).

Modern Era (2009–Present)

The introduction of the National Education Policy 2009 marked a significant shift towards quality enhancement and standardization in teacher training programs (UNESCO, 2009, 2025). The focus of this policy was on building professional competencies, introducing standardized teacher education qualifications, and harmonizing training programs with international standards. In the modern age, training of teachers in government institutions has become more oriented towards the incorporation of modern pedagogical practices, such as student-centered learning, critical thinking, and incorporation of technology into the educational process. There have been programs like continuous professional development programs and in-service training programs so that teachers are kept updated with changing educational practices (OECD, 2025; STEDA, 2018).

Nevertheless, in spite of these developments, there are still a number of challenges that persist. Such problems as the unequal application of policies, unequal institutional capacity, and inaccessibility to quality training in rural locations are still rather relevant (Ahmed et al., 2025). The policy-implementation discrepancy continues to influence the effectiveness of the teacher training programs in general. On the whole, the modern period is characterized by a more holistic and competency-centered vision of teacher education, and the necessity of a better institutional structure and policy consistency with regard to the desired outcomes (Siddiqui, 2023).

Summary

The history of teacher training in Pakistan shows a gradual shift from colonial roots to a competency-based approach to teacher training. Teacher education during the pre-independence period had been directed towards the standardization, professionalization, and establishment of teacher training institutions, though this was limited and urban-based (GSCE Publications, 2025; Mondal, 2024; Kambala & Mathe, 2023). Despite the problem of urban-rural disparities and scarcity of resources, institutional development tried to increase access, professionalize teaching, and modify the curricula after independence (Mufti, 2024; Rehmatullah et al., 2026; Ullah et al., 2025). Curriculum modernization, practical training, and competency-based approaches were introduced between 1980 and 2009, although coordination, funding, and policy implementation were found to be weak, which impeded outcomes (Cochran-Smith & Fries, 2008; Naz et al., 2025; Radhakrishnan, 2025). While standards, professional learning, and contemporary teaching methods are prioritized in the modern era, there are still obstacles to effectiveness, such as unequal access to and implementation of policies and access to education in remote rural areas (Ahmed et al., 2025; OECD, 2025; Siddiqui, 2023; UNESCO, 2025).

Teacher Education in Sindh and Pakistan

The ideas for teacher education in the subcontinent started in Madras in 1826 with the proposal and the Educational Despatch of 1854, which resulted in the formation of normal schools. The city of Karachi started its first normal school in 1854, and it was renamed Karachi Normal School before being moved to Hyderabad, while other early schools in Hyderabad and Lahore were laid down by Nizamani et al. (1998, p. 5). Between 1854 and 1947, teacher education suffered from problems of inadequate planning, limited academic scope, obsolete techniques, inadequate equipment, and poor connections with local contexts (1998 et al., 1998, p. 5).

The reforms began after Independence with the All Pakistan Education Conference of 1947, which focused on the need for well-trained teachers, short-term courses, and research departments in training institutions (Nizamani et al., 1998, p. 6). Qualifications, training, period, subject knowledge, child psychology, methodology, ethics, refresher courses, research, and better teacher status were the recommendations made by the Commission on National Education in 1959 (Nizamani et al., 1998, p. 6). The policies between 1970 and 1992 added more to teacher education by providing professional training, in-service programs, curriculum development, improving the recruitment process, and incentivizing and holding teachers accountable (Nizamani et al., 1998, pp. 8-9).

In Sindh, the number of teacher education institutions increased from 4 at the time of independence to 42 in 1980, mainly for the preparation of elementary teachers (Nizamani et al., 1998, p. 10). Elementary teacher education was managed jointly by federal and provincial governments, with postgraduate programs like B.Ed, M.Ed, and M.A. Education offered by universities (Nizamani et al., 1998, p. 14).

There are many programs like M.A (Education) & M.Ed for training secondary school teachers, but the main program offered for secondary school teachers is B.Ed. It is also the basic qualification and the necessary condition for entry into the job as a Secondary School Teacher in the Education Department. Secondary teacher education

developed through formal institutions, B.Ed programs, and curriculum reforms led by the UGC for B.Ed, M.Ed, doctoral studies, and professional orientation courses (Nizamani et al., 1998, pp. 14-15).

Assessments of teacher training in Sindh identified problems with application of content and methodology, lack of involvement of teachers, and insufficient community participation. Other reports indicated poor methodology, inadequate content, poor supervision, and inadequate hands-on training, which were recommended to be improved through better trainer selection, more effective methodology, and redesign of the program (Nizamani et al., 1998, pp. 16-17). There is a growing awareness of the importance of teacher education for a nation's development, and the focus of the teacher education program, PITE, and the introduction of multimedia training are expected to enhance teacher development in Sindh and all over Pakistan (Nizamani et al., 1998, p. 18).

Research Methodology

Research Design

This study is a secondary qualitative research design with document analysis as the main method. This method is a systematic review and analysis of available data sources to create new insights without collecting participants' data (Stanley & Robertson, 2024). It is especially well suited to the study of change over time in terms of historical developments, policy changes, and institutional evolution over time, and it can incorporate a range of documentary evidence into a coherent analytical framework (Largan & Morris, 2019). Moreover, this design is non-intrusive, affordable, allows for the analysis of large amounts of data over a long period of time, and is grounded in relevant and authoritative sources that capture policy intent, institutional practice, and scholarly opinion. It fits with the research aims of the study, which are to assess the historical development, comparative development, and trends of government teacher training programs (Hans & Sajimon, 2025).

Data Sources

Data to be used in this study are obtained through secondary sources to achieve comprehensiveness and in-depth analysis, ranging from 1854 to 2026. These include policy documents, government reports, academic journal articles, books, and institutional records of teacher training programs (Reference Number of Notification of Teaching License: NO: SO(G-III)/SE&LD/4-509/2023). The fundamental reading materials on major changes in teacher education can be found in key policy documents that include the Wood's Dispatch, the 1959 Education Commission report, and the National Education Policy 2009 (STEDA, 2018; UNESCO, 2025).

Data Analysis Technique

Thematic content analysis is a method of organizing and understanding selected documents. This qualitative approach is used to identify, analyze, and report themes in textual data; it is used to organize large amounts of information into meaningful categories (Ahmed et al., 2025). The first step is reading everything thoroughly to gain an understanding of it. It is flexible enough to be used for analyzing a variety of documentary sources (Christou, 2022). The study involves both data-driven (inductive) and theory-driven (deductive) analysis techniques, with both theme identification and grouping of the data based on predetermined analytical variables (Castleberry & Nolen, 2018) including time period and institutional factors. The method also allows for comparison over time and institutions, incorporates data from various sources, and enhances the depth and authenticity of the analysis. This is consistent with the qualitative research principles of pattern finding and creating meaningful interpretations (Braun & Clarke, 2006). As well as the role of document analysis in qualitative research (Bowen, 2009).

Data Presentation and Comparative Analysis

This section aims to integrate historical and institutional data in a consistent format that will enable cross-periodic and cross-institutional comparisons. Through the use of tabular representation, patterns, consistencies, and differences in teacher training programs in government institutions are brought to the surface and become more analytically accessible.

Overview of Teacher Training Institutes in Sindh

Table 1

Institution-wise Years and Secondary Teachers Training Courses Offered in Sindh

Division	Name of Institute	Year of Establishment
Larkana	GECE (M) Kandhkot	1964
Larkana	GECE (W) Larkana	1982
Mirpurkhas	GECE (M) Sanghar	1964
Mirpurkhas	GECE (W) Sanghar	1989
Hyderabad	GECE (M) Hyderabad	1878
Hyderabad	GECE (W) Hyderabad	1927
Hyderabad	GECE (W) Dadu	1995
Hyderabad	Govt. Agro-Tech TT Centre	1976
Hyderabad	Govt. Normal Drg. TT Centre	1953
Sukkur	GCE Sukkur	1962
Sukkur	GECE (M) Sukkur	1945
Sukkur	GECE (M) Khairpur	1942
Sukkur	GECE (W) Khairpur	—
Karachi	GECE (M) Qasimabad	1955
Karachi	GECE (W) Hussainabad	1952
Karachi	KMC Tr. Training Instt. Ancholy	1977

Sindh's teacher education has been influenced by the historical and current public and private teacher education institutions. A total of 26 institutes across five administrative divisions offer a range of teacher training programs, including Primary Teaching Certificate (PTC), Certificate in Teaching (CT), Optional Teacher Certificate (OTC), B.Ed, M.Ed, and specialized courses (Agro-Tech Training, in-service courses). Table 1 shows the division-wise details of these institutes along with their year of establishment and the programs offered (Nizamani et al., 1998).

Content Analysis

Table 2 dwells on thematic analysis over time, indicating the ways in which important aspects of teacher training have changed over time. This kind of comparative set-up enables the identification of the alteration in the policy orientation, institutional development, and program characteristics.

Comparative Analysis

Table 3 shows a comparative analysis of the continuity and transformation in teacher training programs across various periods and institutions. Though the initial systems were small and could only be used by a limited number of individuals, subsequent systems portray expansion and differentiation. However, institutional disparities and differences in data access presuppose inconsistencies in documentation and implementation. The following discussion and findings will be based on these tables; deeper analytical insights will be drawn based on the observed patterns and variations.

Table 2*Thematic Content Analysis across Time Periods*

Themes	Before 1947	Till 1980	Now	Future Plans
Introduction	Teacher training initiated under a colonial framework following Wood's Dispatch; limited access and urban concentration (Mondal, 2024; Pratheesh, 2024; Kambala & Mathe, 2023)	Expansion of government training institutions; focus on nation-building and capacity development influenced by the 1959 Education Commission (Mufti, 2024; Rehmatullah et al., 2026; STEDA, 2018)	Emphasis on quality, standardization, and professional competencies under National Education Policy 2009 (OECD, 2025; UNESCO, 2025)	Integration of digital training, competency-based frameworks, and international alignment (Ahmed et al., 2025; Siddiqui, 2023)
Institutional Development	Initial normal schools and training colleges established post-1854 (GSCE Publications, 2025; Pratheesh, 2024)	Significant increase in teacher training institutions across provinces (Rehmatullah et al., 2026; STEDA, 2018)	Expansion of universities and specialized training institutes (OECD, 2025; UNESCO, 2025)	Planned establishment of advanced teacher training centers and continuous development platforms (Ahmed et al., 2025; Siddiqui, 2023)
Courses Offered	Very limited, mainly basic teaching certifications (Kambala & Mathe, 2023)	Increased variety including diploma and certificate programs (Mufti, 2024; STEDA, 2018)	Diverse programs including B.Ed., M.Ed., and specialized certifications (OECD, 2025; UNESCO, 2025)	Expansion towards modular, flexible, and technology-integrated courses (Ahmed et al., 2025; Siddiqui, 2023)
Duration of Courses	Short-term and basic training programs (GSCE Publications, 2025)	Standardized durations introduced (1–2-year diplomas) (Rehmatullah et al., 2026)	Structured degree programs ranging from 2–4 years (UNESCO, 2025)	Flexible duration with blended and online learning options (Ahmed et al., 2025; Siddiqui, 2023)
Aims/ Objectives	Produce basic-level teachers for administrative needs. (Mondal, 2024; Kambala & Mathe, 2023)	Professionalization of teaching and improvement of instructional quality (Mufti, 2024; STEDA, 2018)	Development of pedagogical skills, critical thinking, and student-centered approaches (OECD, 2025; UNESCO, 2025)	Focus on lifelong learning, innovation, and global teaching competencies. (Ahmed et al., 2025; Siddiqui, 2023)
Administration	Centralized colonial administration (GSCE Publications, 2025)	Government-controlled institutions with emerging provincial roles (Rehmatullah et al., 2026)	Shared governance between federal and provincial bodies; regulatory authorities established (OECD, 2025; UNESCO, 2025)	Strengthening institutional autonomy with accountability and quality assurance mechanisms (Ahmed et al., 2025; Siddiqui, 2023)

Table 3*Comparative Analysis of Government Teacher Training Institutions*

Institution	Established	Course Offering	Course Duration	Aims/ Objectives
Government College for Elementary Teachers	Mid-20th Century	Limited to moderate	1–2 years (Diploma)	Preparation of elementary school teachers
Regional Institutes of Teacher Education	Late 20th century	Moderate	1–2 years	Improvement of teacher competencies and in-service training
Institutes of Education and Research	1960s–1970s	Extensive	2–4 years (Degree programs)	Advanced teacher education, research, and policy development
Directorate of Staff Development (DSD) / Quaid-e-Azam Academy for Educational Development	Early 2000s	Moderate to extensive	Short-term and in-service	Continuous professional development of teachers
Provincial Institutes of Teacher Education	1990s	Moderate	Short-term training programs	Curriculum development and teacher support

Discussion and Analytical Interpretation

Discussions

The discussion incorporates the observations made based on the literature review and comparative tabular analysis in order to critically explain the development of teacher training programs in government institutions. There is a distinct trend of expansion and diversification following the four periods identified, but this trend is not linear and not equally effective. Rather, the results reveal a rather intricate trend of the first institutionalization, followed by further growth, some attempts at reform, and the continued problems of implementation and quality control (Dove, 2026; Jameel, 2026).

In the pre-independence era, the issue of teacher training was largely dominated by colonial interests, and it was the Woods Dispatch in 1854 that laid the structural basis through which formal teacher training occurred. The discussion implies that despite the systematic training systems introduced at this stage, accessibility was low, and the essence of the undertaken training was administrative and not developmental. However, the focus on systematic training and pedagogical preparation is also a core asset that had a subsequent impact on reform (Pratheesh, 2024).

The post-independence era to 1980 shows a remarkable transition to national development and education growth. Perhaps inspired by the Education Commission of 1959, teacher training curricula became more institutionalized and more standardized. According to the literature, this step was characterized by a high level of policy investment in the professionalization process, but the tabular analysis shows inconsistent implementation in the regions. As the number of institutions and training opportunities started rising, the inequalities in the quality, infrastructure, and faculty competence started to appear, especially between the urban and rural environments (Mufti, 2024).

The period between 1980 and 2009 can be seen as the period of reformist initiatives that tried to modernize teacher training by revising the curriculum and introducing new pedagogical methods. Although such efforts have been made, there is an observed tendency toward stagnation when it comes to effective policy implementation. A

growing gap between policy formulation and real practice was caused by institutional inefficiencies, deficient funding, and weak governance structures. The problems of outdated curricula, deficiency of practical training, and absence of continual professional growth are constantly mentioned in the literature as the factors that weakened the overall performance of teacher training programs at this time (Sadiq et al., [2024](#)).

In the modern world, after the promulgation of the National Education Policy 2009, a certain direction toward the improvement of quality, standardization, and internationalization is observed. The tabular analysis indicates improvements in the diversity of courses, the introduction of degree-based qualifications, and increased emphasis on competency-based training. Nonetheless, in the discussion, it becomes evident that these developments come with intractable challenges. Problems including inconsistencies in implementation, institutional capacity, and inadequate monitoring systems still impact the quality and accessibility of training programs (Ahmed et al., [2025](#)).

Another critical pattern that comes out of the analysis is the repetitive gap between policy intent and policy implementation. While each phase introduces reforms aimed at improving teacher training, the effectiveness of these reforms is often constrained by socio-political and economic factors. There has also been political instability, scarcity of resources, as well as administrative fragmentation, which have played a significant role in shaping the outcome of teacher training programs. Furthermore, the issue of access to quality training has been affected by socio-economic differences, in which the marginalized regions are not supported institutionally (Lateef et al., [2024](#)).

Another interesting finding is the gradual transformation of a centralized and rigid training model to a more diversified and flexible model. This change, though an attempt to modernize teacher education, has had its own challenges that relate to standardization and quality control. In other instances, this growing role of various administrative units has culminated in a lack of coordination and variations in service delivery. (Mohamed et al., [2025](#)).

One of the findings is that the teacher training programs have experienced tremendous growth over the years, especially in the areas of institutional growth and the courses. Joining the small and centralized models of the pre-independence years with the diversity and degree-based programs of the modern-day era has been the obvious rise in scale and scope. This growth is an indication of the increasing appreciation of the role of teacher education in national development (Zeeshan, [2025](#)).

Another significant finding is the presence of institutional disparities, particularly between well-established institutions such as universities and research centers, and smaller government training colleges. The former are more likely to have more comprehensive programs with superior resources and faculty members, whereas the latter may experience restrictions concerning infrastructure, curriculum development, and administrative capacity. Such inequalities help to create unequal training results and influence the overall effectiveness of the education system (Shuaib et al., [2024](#)).

One of the strengths that have been revealed in the analysis is the growing focus on continuous professional growth and the use of modern pedagogical strategies in the modern era. Initiatives aimed at enhancing teacher competencies, integrating technology, and promoting student-centered learning represent positive developments in teacher training. Meanwhile, the research reveals some essential shortcomings, such as the lack of practical training, the non-standardization between institutions, and the inability to find good training in rural environments. All these difficulties point to the fact that more specific and contextual interventions are required (Lateef et al., [2024](#); STEDA, [2018](#)).

Analysis of Government Teacher Training Institutions in Sindh

Sindh has several important government teacher training institutions, which are important in the professional development of teachers. The development of these institutions is a product of the wider national educational reforms that came about due to the vision of the Quaid-e-Azam in his Education Message of 1947 and followed by later policy documents and decentralization measures like the Eighteenth Amendment of Pakistan 1991 (Siddiqui et al., 2021). The Education Message of Quaid-e-Azam, 1947, underscored the pivotal position of education in the process of building a nation and stressed the need for building a strong character-building and practically useful education system for the newly created nation. It was emphasized that education should not only provide knowledge but should also foster among citizens moral integrity, discipline, and responsibility. It emphasized the production of skilled and competent people who can contribute to economic and social development. In this vision, teachers were seen as important change agents, and their appropriate preparation and development were seen as vital to meeting educational goals. The message provided a concrete starting point for teacher training, improving quality education, and linking education to the needs of the nation.

The Provincial Institute of Teacher Education (PITE) is a central institute for curriculum development, in-service training, and professional support of teachers in Sindh. Its establishment is historically linked to the post-1980 reform period, where there was greater awareness of the need for institutional support in the form of structured support for teachers' professional development. (Ilahi et al., 2023). For the purposes of the present context, PITE priorities are related to national standards and training delivery, curriculum alignment, and capacity building. Future directions focus on digital training platforms, models for continuous professional development, and integration of competency-based frameworks (Tahira et al., 2020).

The Sindh Teacher Education Development Authority (STEDA) is a newer institutional innovation to control and standardize teacher education in the province. It is essential for accreditation, enforcement of policies, and institutional coordination. An innovative feature of STEDA is the implementation of a teaching license system, which aims to professionalize teaching and guarantee that only qualified and certified individuals enter and remain in the field of teaching (Raheem & Shaikh, 2026) [Reference Number of Notification of Teaching License: NO: SO(G-III)/SE&LD/4-509/2023]. This licensing system is in line with international practice and an expression of accountability and quality assurance. Currently, licensing implementation is in a developmental phase, and future plans are to roll out full licensing, periodic licensing, and linking licensing with professional development (Soomro et al., 2025).

The base of teacher education in Sindh is formed by the Teacher Training Institutions (TTIs), including Government Colleges for Elementary Teachers and other regional TTIs. These institutions have developed from previous models, which are based on colonial models like the Wood's Dispatch, to offer pre-service and in-service training. The challenges that are being faced by TTIs are infrastructure, faculty capacity, and relevance of the curriculum. Future plans involve enhancing these institutions by improving resources, updating curricula, and improving linkages with the provincial regulatory bodies. (Soomro et al., 2025).

Policy Analysis: From 1947 to Modern Reforms

Since 1947, Pakistan has announced more than 15 education policy regimes. The following table is representative and sufficient for the scope of this research study to keep it manageable and focus on the most impactful policies for secondary teacher preparation:

Table 4

A Comparison of the Major Educational Policies Influencing the Training of Secondary School Teachers in Government Institutions of Sindh (1947-2017)

Policy / Event	Year	Key Focus Areas for Secondary Teacher Training	Provisions for Secondary School Teachers	Strengths / Achievements	Challenges / Gaps
Quaid-e-Azam's Message to the Nation	1947	The value of qualified educators in fostering national development	Established the fundamental idea that the growth of a country depends on the quality of its teachers.	Gave future policies a guiding principle.	No particular mechanism for execution; remained aspirational
Education Commission Report	1959	Professional standards, uniform curriculum, and increased training facilities	Advised to establish universal standards for secondary teachers, expand training colleges, and institutionalize teacher training.	Pakistan's first significant attempt to standardize teacher preparation	Lack of follow-up procedures and inconsistent execution
National Education Policy	1970	Secondary teachers' emergency preparation; in-service training	128,000 new teachers were to be trained, and pedagogy would be taught at the intermediate and graduate levels.	The first policy to measure the supply and demand for teachers	Crash programs were of poor training quality and lacked pedagogical depth.
National Education Policy	1972-1980	Nationalization of education; teacher in-service training	Established cutting-edge training methods and envisioned a school for educators and educational planners.	Aiming to encourage teachers to actively participate in educational matters, this was the first policy to publicly propose in-service training.	Management issues were brought about by nationalization, and the infrastructure for training was still insufficient.
National Education Policy and Implementation Programme	1979	Islamic principles in teacher preparation: integration and enhancement of quality	PTC, CT, B.Ed., and M.Ed. curriculum should be evaluated; an Academy of Educational Planning and Management should be established; and instructors should be required to participate in at least one in-service training course every five years.	Acknowledged teachers as the "pivot of the entire education system" and offered a detailed implementation strategy.	Professional growth was occasionally eclipsed by ideological orientation, and provincial cooperation was lacking.

National Education Policy	1992	Teacher training unit; secondary teachers' on-the-job training	Created a distinct organization to oversee teacher preparation, with a focus on secondary school teachers' in-service training.	Established a specific system for teacher training	Funding was insufficient, and implementation remained disjointed.
National Education Policy	1998-2010	Teacher proficiency, subject-matter expertise, and instructional abilities; in-service training for educators without formal training	Introduced online learning, off-campus programs, and quick refresher courses (like AIOU); permitted "self-finance" programs to increase training capacity	Increased training opportunities for many unskilled instructors.	Many programs lacked instructional rigor, and quality assurance procedures were inadequate.
National Education Policy	2009	Professional standards; CPD with ICT Skills and accreditation	Created NACTE for program certification, mandated a B.Ed. for primary teachers and an M.Ed. for secondary teachers, and introduced National Professional Standards for Teachers (NPSTs).	International standards were included in teacher education, and continuous professional development (CPD) was formalized.	Particularly in public sector organizations, implementation remained inconsistent.
Eighteenth Constitutional Amendment	2010	Education devolution to the provinces and decentralization of teacher training	Sindh was given the power to create and carry out its own programs for training secondary school teachers.	Permitted need-based, context-specific training	caused resource shortages, disparities in standards, and gaps in cooperation across provinces
Sindh-Specific Initiatives (e.g., STEDA, PITE)	2011-2016	Quality control, competency-based training, and provincial teacher education reforms	Created a provincial plan for teacher education and implemented secondary school teacher licensing tests (such as the Sindh Teacher Eligibility Test).	Developed a regulatory framework and brought teacher training closer to local needs.	Slow implementation, teacher union opposition, and inadequate infrastructure in rural Sindh
National Education Policy	2017	CPD centers in every province, mandatory pre-service training before employment, and	Requires secondary teachers to have a Master's degree with a B.Ed.; requires newly recruited teachers to complete 24 days of	Establishes minimal professional requirements, clearly connects teacher	Inadequate induction training, strict staffing regulations, out-of-date materials,

		improved licensing and accreditation	in-service training; and uses scholarships to draw in high-quality students.	preparation to student learning objectives, and suggests provincial CPD academies.	administrative over pedagogical focus, and merit criteria that exacerbate shortages and gender disparities are all highlighted in evaluations.
Sindh Government Initiatives	2017 - 2022	Prioritize secondary education; teacher preparation is connected to student learning results and accountability. Mandatory three- level STEDA teaching license (50% pass)	The department pledges to train teachers and establish an accountability system; a cutting-edge teacher training institution is suggested; only applicants with credentials in science, English, math, and IT will be hired. The 2017 limits were loosened in 2022, leading to the creation of a structured Teaching License System under STEDA's supervision.	For the first time, a provincial department adopts subject- specific recruiting for secondary teachers and clearly ties teacher training to student learning results. enhanced student performance tied to licensed educators; enhanced professional status of teachers	Many initiatives remained in the planning stage due to a lack of coordinated donor support. Due to uneven access to training, there is still a persistent rural- urban pass gap.

Note: Based on sources: Malik et al. (2022), Majoka (2017), Ahsan (2003), and Qurban (2019); also Government of Pakistan (1970, 1972, 1979, 1998, 2009, 2017) policy documents; NACTE Conference Proceedings (2018). The table focuses exclusively on secondary school teacher training in government institutions of Sindh.

The policy path of teacher training in Pakistan starts with the basic guidance given in the message of education to the nation in 1947 by Quaid-e-Azam, which stresses the significance of education in nation-building and the importance of competent teachers. This vision helped pave the way for future policy developments on the expansion and enhancement of teacher education (Malik et al., 2022). In 1959, the Education Commission made a major effort to institutionalize teacher training through its recommendations for uniformity of curricula, professional standards, and increases in teacher training facilities. Subsequent policies continued to focus on quality improvement, but there was a lack of consistency in implementation (Majoka, 2017).

The Eighteenth Amendment of Pakistan brought a drastic transformation in the education sector by transferring control of education from the federal government to the provinces. This decentralization had a huge effect on teacher training, and each province, such as Sindh, was able to develop and execute its own training programs. This offered the possibility of making context-specific changes, but also raised issues of coordination, standardization, and resource allocation (Ahsan, 2003). The National Education Policy 2009 highlighted the importance of teachers' quality, professional standards and continuous improvement, in keeping with the international trend. The policy

analysis suggests, however, that there is a consistent mismatch between policy design and enactment, especially in public sector institutions (Qurban, 2019).

Comparative Analysis of Teacher Training Institutions in Sindh

The comparative analysis shows that there exists a layered structure of the teacher training system in Sindh. PITE is a developmental/training body; STEDA is a regulatory body, and TTIs are basic training providers. This division of responsibilities is an attempt to establish an all-embracing and comprehensive system, but there is still a great need for coordination among these institutions. One major area of strength is the implementation of regulatory mechanisms like teacher licensing through STEDA, which can improve the professional standard to a great extent (Raheem & Shaikh, 2026). But effective implementation, institutional capacity, and stakeholder acceptance are essential for the success of such efforts. Meanwhile, TTIs are still beset by structural constraints, suggesting that the institutions need significant investment and reform. The 18th Amendment has led to innovation at the provincial level but has revealed differences in capacities and governance (Ilahi et al., 2023).

Table 5

Comparative Analysis of Teacher Training Institutions in Sindh

Institution	Background	Present Functions	Future Projects	Policy Linkage
PITE (2026)	Established during the reform phase (post-1980) for structured teacher development	In-service training, curriculum support, capacity building	Digital training systems, CPD expansion	Linked with NEP 2009 and provincial reforms
STEDA (2026)	Recent regulatory authority for teacher education standardization	Accreditation, regulation, teacher licensing framework [Reference Number of Notification of Teaching License: NO: SO(G-III)/SE&LD/4-509/2023]	Full implementation of licensing system, quality assurance mechanisms	Strong linkage with post-18th Amendment decentralization
TTIs (2026)	Origin in colonial and early post-independence training systems	Pre-service and basic in-service training	Institutional upgrades, curriculum modernization	Influenced by all major policies from Wood Dispatch to NEP 2009

Conclusion and Recommendations

Conclusive Remarks

This analysis on teacher training within government institutions indicates a long and challenging journey informed by historical practices, policy interventions, and institutionalized changes. Beginning with the foundation of the Wood's Dispatch, teacher education was initially structured on the basis of administrative requirements, yet it generated a systematic order that has been running in various forms. Events that ensued afterwards, in particular the Education Commission in 1959, displayed a remarkable professionalization and expansion that was a critical step in the improvement of teacher training.

The era of the 2009 National Education Policy suggests the movement towards the improvement of quality, standardization, and internationalization of educational practices in Pakistan. Despite these developments, the overall assessment has revealed that the evolution of teacher training programs has been irregular and there have been

apparent gaps in policy formulation and implementation. Programs are becoming more and more institutionalized and diversified, but the problems of quality, accessibility, and consistency remain.

Also, past images of teacher training were often more structurally consistent and intentionally clear, which is one of the primary lessons that the research has taught. Modern systems, in their turn, despite being more comprehensive, have the issues of fragmentation, the absence of uniformity, and unequal resource allocation. It reflects the need to return to the basics, or a back-to-basics movement, placing emphasis on good pedagogical foundations, applied training, and institutional accountability.

Policy Recommendations

The research findings show that there are some practical and policy-based recommendations that should be implemented in order to make the teacher training program in government institutions effective.

Among the key recommendations is that the conformity between the policy objectives and performance mechanisms needs to be enhanced. Although policies like the National Education Policy 2009 have been very elaborate, the impact of such policies is low without any effective monitoring and evaluation system. Policy effectiveness can be enhanced through the establishment of clarity in accountability structures and performance indicators.

There should also be uniformity of institutions with regard to teacher training programs to curb the quality gap. This includes the design of shared curricula, accreditation standards, and evaluation frameworks to accomplish standardization in training delivery. It is hoped it will be flexible enough to allow for regional and contextual differences in the meantime.

The other area of concern is investment in institutional capacity. Infrastructure, faculty, and access to up-to-date teaching materials must be enhanced in government training institutions, particularly in underserved regions. Filling these gaps can assist in minimizing inequalities and increasing the quality of teacher education, in general.

This should be followed by the inclusion of practical aspects of training so that there is no gap between theory and practice. Structured teaching practice, mentorship programs, and school-based training models can mostly be utilized to increase the preparedness of the teachers to a great extent.

Teacher training should incorporate the idea of continuous professional development. The training programs provided to the in-service workers should be updated periodically in line with new instructional techniques, technological advancements, and new learning needs.

On the policymaking front, more levels of coordination between the federal and provincial entities should exist in order to have a sense of coherence in the planning and decision-making. The lack of cohesion in the governance systems has led to discrepancies in the training programs of teachers, and a more coordinated system is likely to improve efficiency and effectiveness.

Finally, returning to the principles of teacher education, such as high-quality pedagogical education, clearly defined institutional functions, and responsibility, could provide a solid base to support changes in the future. This back-to-basics approach does not imply a reversion to old systems; it is rather a reinforcement of the basics that have proven right over the years.

Future Research Directions

Future research on teacher training programs in government institutions should examine comparisons with private institutions, regional differences, governance quality, resource allocation, and training outcomes. Studies should also

explore how teacher training affects student achievement, teacher retention, professional development, and classroom performance over time.

Further research is needed on equity issues, especially differences between rural, urban, and provincial training systems, as well as gender-based barriers to access and professional growth. The role of digital and blended learning in improving teacher training should also be studied, especially in resource-limited settings.

The passage also highlights the need to assess whether current teacher training programs match modern educational needs and practical classroom demands. Cross-national studies and mixed-method research designs are recommended to identify best practices, understand both statistical trends and personal experiences, and improve teacher training policies in a more effective and inclusive way.

References

- Ahmed, S. K., Mohammed, R. A., Nashwan, A. J., Ibrahim, R. H., Abdalla, A. Q., M. Ameen, B. M., & Khdhir, R. M. (2025). Using thematic analysis in qualitative research. *Journal of Medicine, Surgery, and Public Health*, 6, 100198. <https://doi.org/10.1016/j.glmedi.2025.100198>
- Ahsan, M. (2003). An analytical review of Pakistan's educational policies and plans. *Research Papers in Education*, 18(3), 259-280. <https://doi.org/10.1080/0267152032000107329>
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40. <https://doi.org/10.3316/qjrj0902027>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp063oa>
- Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10(6), 807-815. Sciencedirect. <https://doi.org/https://doi.org/10.1016/j.cptl.2018.03.019>
- Christou, P. A. (2022). How to use thematic analysis in qualitative research. *Journal of Qualitative Research in Tourism*, 3(2), 79-95. <https://doi.org/10.4337/jqrt.2023.0006>
- Cochran-Smith, M., & Fries, K. (2008). Research on teacher education. *Handbook of Research on Teacher Education*, 1050-1093. <https://doi.org/10.4324/9780203938690-119>
- Dove, L. A. (2026). Teachers and teacher education in developing countries. <https://doi.org/10.4324/9781003752967>
- GSCE Publications. (2025). Wood's Despatch of 1854. https://www.gscepublishations.com/gk/2366406b-9070-4790-94a8-3dddea778a43_GKMmaterial.pdf
- Hans, V. B., & Sajimon, P. (2025). *Applied qualitative research methods for social sciences*. Pen and Paper Academy.
- Ilahi, M., Khan, U. A., Naz, T., & Ayaz, M. (2023). A comparative effectiveness of teacher training performance conducted under JICA, gtz and PITE: A case study of Khyber Pakhtunkhwa (Pakistan). *Journal of Asian Development Studies*, 12(4), 1080-1087. <https://doi.org/10.62345/jads.2023.12.4.86>
- Jameel, A. (2026). A critical analysis of primary and secondary education policies in Pakistan: A retrospective on objectives, governance, and outcomes. *Exploring Education Policy in a Globalized World: Concepts, Contexts, and Practices*, 171- 204. https://doi.org/10.1007/978-981-95-3268-1_11
- Kambala, Y. J., & Mathe, R. (2023). The impact of British colonial rule on the Indian education system: Collapse and deterioration. *International Journal of Current Innovations in Advanced Research*, 7-11. <https://doi.org/10.47957/ijciar.v6i3.188>
- Khizar, A., Anwar, M. N., & Malik, M. A. (2019). Role of National Education Policy-2009 and National Professional Standards for Teachers in Developing Teachers' Professionalism. *Bulletin of education and research*, 41(3), 101-118.
- Largan, C., & Morris, T. (2019). Qualitative secondary research: A step-by-step guide. <https://doi.org/10.4135/9781529682816>
- Lateef, A., Yousaf, S., Noor, K., Parveen, A., & Zahira, S. U. (2024). The future of education: trends to watch in the next decade in Pakistan. *Journal of Social Signs Review*, 2(6), 54-73. <https://socialsignsreview.com/index.php/12/article/view/198>
- Majoka, I. (2017). *Education policy provisions and objectives*. A review of Pakistani education policies.
- Malik, M. F., Manzoor, H., Manzoor, H., Kumar, H., Channa, S., & Raza, T. (2022). Critical analysis of educational policies of Pakistan. *Journal of Positive School Psychology*, 6(11), 1762-1778. <https://journalppw.com/index.php/jpsp/article/view/14309>

- Merriam-Webster. (n.d.). Program. In *Merriam-Webster Dictionary*. <https://www.merriam-webster.com/dictionary/program>
- Ministry of Education. (2009). *National Professional Standards for Teachers in Pakistan*.
- Ministry of Federal Education and Professional Training. (2009). *National Education Policy 2009*.
- Ministry of Federal Education and Professional Training. (2017). *Draft National Education Policy 2017*.
- Mohamed, H., Junaidi, J., & Dollah, O. (2025). Navigating Policy Silos: A Comparative Analysis of Teacher Competency Frameworks in Malaysia's Education Blueprints. *International Journal of Research and Innovation in Social Science (IJRISS)*, 9(11). <https://dx.doi.org/10.47772/IJRISS.2025.91100605>
- Mondal, S. (2024). Revisiting Wood's Dispatch of 1854: A Critical Analysis of its Impact on Indian Education. *Journal of Education and Development*, 13(24), 191. <https://www.journaledudev.in/journal/Vol-12%20Dec%202022.pdf#page=206>
- Mufti, A. (2024). *Pakistan Education Sector / Human Capital Development Policy Report*. <https://documents1.worldbank.org/curated/en/099031524124058392/pdf/P50091712b5f9e018181811fdcf75e0e093.pdf>
- Naz, R., Akhtar, R., Ahmad, M. S., Fatima, F., & Abdullah, S. M. (2025). A comprehensive analysis of educational, environmental, and social challenges in Pakistan: Bridging policy, curriculum, and community development: An integrative review. *Social Science Review Archives*, 3(3). <https://doi.org/10.70670/sra.v3i3.909>
- NEPDF. (2024). *National Education Policy Development Framework (NEPDF 2024)*. Islamabad: Ministry of Federal Education & Professional Training, GoP. [https://pie.gov.pk/SiteImage/Publication/NEPDF%202024%20\(17.12.2024\).pdf](https://pie.gov.pk/SiteImage/Publication/NEPDF%202024%20(17.12.2024).pdf)
- Nizamani, M. A. K., Malik, M. I., & Manzoor-ul-Haque. (1998). *Report for the study on critical evaluation of teacher training institution in Sindh: Under the teacher training project, Government of Sindh. No. 5-391-08-004-P March 28, 2008*. U.S. Agency for International Development Office of Inspector General 1300 Pennsylvania Ave, NW Washington, DC 20523.
- OECD. (2025). *Teacher Professional Learning: Drawing Upon International Practice for a Future Vision for Ukraine*. O. Publishing. https://www.oecd.org/en/publications/teacher-professional-learning_0cceeddf-en/full-report.html
- Okwe, P., & Caroline Tiku, T. (2025). Analyzing Policy on Teacher Training in Education. *GAS Journal of Education and Literature (GASJEL)*, 2(5). <https://doi.org/10.2139/ssrn.5439554>
- Oxford University Press. (n.d.). Teacher. In *Oxford Learner's Dictionaries (American English)*. https://www.oxfordlearnersdictionaries.com/definition/american_english/teacher
- PITE. (2026). *Provincial Institute of Teacher Education Sindh*. <https://www.pitesindh.edu.pk/>
- Pratheesh, P. (2024). The Wood's Dispatch of 1854 and the Transformation of Indian Education System. In *History of Education in Pre-Independence India (pp. 118–133)*. Swaraj Prakashan, New Delhi.
- Qurban, S., & Amin, H. (2019). Education policies, discourse of ideology and the construction of national identity in Pakistan: A critical analysis. *Global Regional Review*, IV(III), 1-9. [https://doi.org/10.31703/grr.2019\(iv-iii\).01](https://doi.org/10.31703/grr.2019(iv-iii).01)
- Radhakrishnan, G. V. (2025). *Analysing Educational Reforms: Policies, Outcomes, and Future Directions*. IPE Journal of Management, 15(1), 40–46.
- Raheem, S., & Shaikh, A. A. (2026). Teacher licensing reform in Sindh: Role and impact of STEDA: An analysis of policy, implementation, and challenges. *Voyage Journal of Educational Studies*, 6(1), 104–116. <https://doi.org/10.58622/p2kfaw74>

- Rehmatullah, R., Batool, R., & Soomro, R. (2026). Impact of Teachers' Professional Development Programs on Classroom Effectiveness at the Public Secondary Schools: Evidence from District Shaheed Benazirabad. *Pakistan Social Sciences Review*, 10(1), 352–371. [https://doi.org/10.35484/pssr.2026\(10-i\)29](https://doi.org/10.35484/pssr.2026(10-i)29)
- Sadiq, S., Fatima, S., Shah, A., & Soomro, M. A. (2024). Enhancing pedagogical competencies through continuous training: A professional approach. *Review of Education, Administration & Law*, 7(4), 253–266. <https://doi.org/10.47067/real.v7i4.379>
- Sadrudin, M. M., & Kaukab, S. R. (2021). Pakistan Perspectives on the Challenges Associated with the Standards of the Quality Assurance for the Teacher Education Programs: A Critical Review. *Pakistan Perspectives*, 26(2).
- Sain, Z. H., Thelma, C. C., & Abdullah, N. B. (2024). Advancing educators: Exploring innovative strategies for teacher training in Pakistan. *Jurnal Ilmiah Pendidikan Holistik (JIPH)*, 3(2), 115–124.
- Sajid, M., & Hussain, M. (2025). Educational policies and colonial legacy: A historical analysis of successes and failures (1835-1947). *Global Political Review*, X(I), 75–88. [https://doi.org/10.31703/gpr.2025\(x-i\).07](https://doi.org/10.31703/gpr.2025(x-i).07)
- Shuaib, M., Adnan, M., Ullah, I., & Ali, N. (2024). Exploring the challenges and effectiveness of teacher education programs in Pakistan for promoting 21st-century skills acquisition. *Journal of Social Sciences Research & Policy (JSSRP)*, 2(3), 213–234. <https://jssrp.org.pk/index.php/jssrp/article/download/101/98>
- Siddiqui, K. A. (2023). A Review of Pakistan's National Education Policy of 2009 and 2017: Similarities and Dissimilarities from ECE (Early Childhood Education) to Higher Education. *Elm və İnnovativ Texnologiyalar Jurnalı*(27), 105–114.
- Siddiqui, K. A., Mughal, S. H., Soomro, I. A., & Dool, M. A. (2021). Teacher training in Pakistan: Overview of challenges and their suggested solutions. *IJORER: International Journal of Recent Educational Research*, 2(2), 215–223. <https://doi.org/10.46245/ijorer.v2i2.91>
- Soomro, R. B. K., Zamir, S., & Soomro, A. B. (2025). Assessing teacher training quality and student learning outcomes in North Sindh secondary schools: A case study. *Professional Capital in Education*, 1(1), 19–39. <https://doi.org/10.21203/rs.3.rs-6487278/v1>
- Stanley, S. D., & Robertson, W. B. (2024). Qualitative research in science education: A literature review of current publications. *European Journal of Science and Mathematics Education*, 12(2), 175–197. <https://doi.org/10.30935/scimath/14293>
- STEDA. (2018). Continuous Professional Development (CPD) Model for Teachers in Sindh.
- STEDA. (2026). Official Website. Sindh Teachers Education Development Authority.
- Tahira, M., Hassan, A., Malik, A., & Yousuf, M. I. (2020). *Teacher Education in Pakistan: Issues and Problems*. Online Submission.
- TTIs. (2026). *Directorate of Teacher Training Institutions*. <https://dti.gos.pk/index.html>
- Ullah, S., Mazhar, S., & Baber, S. (2022). Investigation of teachers' practices through National Professional Standards for Teachers in Pakistan. *Pakistan Languages and Humanities Review*, 6(4), 432–442. [https://doi.org/10.47205/plhr.2022\(6-iv\)39](https://doi.org/10.47205/plhr.2022(6-iv)39)
- Ullah, S., Mazhar, S., & Iqbal, M. (2023). Investigation of teachers' competencies through National Professional Standards for Teachers in Pakistan. *Journal of Development and Social Sciences*, 4(1), 01–13. [https://doi.org/10.47205/jdss.2023\(4-i\)01](https://doi.org/10.47205/jdss.2023(4-i)01)
- Ullah, K., Bhaumik, A., Salman, S. A., Ahmad, S., & Awan, K. Z. (2025). Educational management in Pakistan: Key issues, problems, and solutions. *International Journal on Recent Trends in Business and Tourism*, 09(02), 31–44. <https://doi.org/10.31674/ijrtbt.2025.v09i02.004>

- UNESCO. (2009). *National Education Policy 2009*.
<https://media.unesco.org/sites/default/files/webform/r2e002/a9a9a5c08261acdc4d1cff930054a63dd4b44a6d.pdf>
- UNESCO. (2025). *Learning to teach, teaching for learning: Empowering teachers in Cambodia through Continuous Professional Development*. <https://www.unesco.org/en/articles/learning-teach-teaching-learning-empowering-teachers-cambodia-through-continuous-professional>
- Zeb, A., Khan, M., & Abdur-Rahman. (2025). Effectiveness of Teacher Education: Trainee Teachers' Perspective from Khyber Pakhtunkhwa, Pakistan. *Dialogue Social Science Review (DSSR)*, 3(8), 78–86.
<https://dialoguesreview.com/index.php/2/article/view/818>
- Zeeshan, R. (2025). *Development of Teacher Education in Pakistan*. Muslim Youth University.
<https://www.scribd.com/document/865388805/Development-of-Teacher-Education-in-Pakistan>