

## Article

**REDESIGNING TEACHER EDUCATION SYSTEM IN PAKISTAN: INSIGHTS FROM SINGAPORE MODEL FOR TEACHER DEVELOPMENT****Kiran Pervez Noorani \***

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**Abstract:** Effectiveness of an education system is greatly dependent upon teacher education and its quality. The National Education Policy (2009-2015) of Pakistan specifies the country's Planning Commission Vision 2030 focusing on change of mindset which exhibits commitment to a new set of societal goals. The policy also advocates commitment(s) of the Government of Pakistan towards Education for All and Millennium Development Goals (MDGs) coupled with inclusive and child friendly education that will provide platform for materializing Sustainable Development Goals, as quality education is an important pre-requisite for development. In Pakistan, there is an immense need to trace teacher education development and reforms in terms of the major questions that have driven the field and the sometimes in which these questions have been constructed, debated, and enacted in research, policy, and practice. Through employing case study research design, this study is focused at critical analysis and deep understanding of Teacher Education System in Pakistan and Singapore along-with the opportunities and challenges for reforming Teacher Education in Pakistan. This study also bears importance due to post-eighteenth amendment in the Constitution of the Islamic Republic of Pakistan resulting in hampering the process of accreditation of Teacher Education programs and emergence of provincial Higher Education Commission(s) and accreditation bodies. Subsequently, Indigenous Model of Teacher Education in Pakistan has been proposed incorporating essential components of teacher education pertaining to admission criteria, curriculum, training of teacher education, uniform teacher recruitment policies and introducing accreditation and licensing across the board. This study may also inform evidence based and data led policy development with special reference to Teacher Education being central to all the educational reforms.

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A process that empowers people to build up their personal satisfaction having a serene social life is education. This enables a person to assist in the advancement of the nation in line with the logical changes of the country. The social growth along with stable and symphonic development of knowledge, perception, soul and body are regarded as the educational basic aims.

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The world's thrift moved from manufacturing and production to information-based thrift. The maintainable advancement of the general public purely depends on the efficiency of the system of education and the worldwide perceived key factor of this system is teacher. Teacher as a key factor is clearly recognized by all the policies of education in Pakistan. In order to achieve the ultimate aim of education as to develop energetic and responsible change agent of the society the role of teacher is considered as the significant pillar in the education system. In an educational institution, teacher quality does not depend upon accelerating number of teachers. Therefore, to improve the quality of teacher is an essential feature to achieve quality in education. Many of the developing countries have education negligence (UNESCO-EFA, 2011). On the contrary, there are other countries as well that consider education as a significant element to achieve success. To accomplish the goals of the provision of excellence in education, Pakistan is still far away as compare to other developing countries. According to National Education Assessment System (NEAS) and Boards of Intermediate and Secondary Education (BISEs) of Pakistan, there is an enormous shortfall in achieving desired learning results. This has led to believe that Pakistan's education system has not yet been prepared to develop 21<sup>st</sup> century skills including critical thinking and other skills significant to prepare a responsible and cognitive global citizen that could assist students to become efficacious living being. The renewed educational commitments to extend quality education to all are in line with the Section 25 of the Constitution of the Islamic Republic of Pakistan, requirements of Sustainable Development Goal No. 4 and the Government of Pakistan Vision 2025. The Vision 2025 aimed to lay down the foundations of a prosperous, just and harmonious society much before the year 2025 for which it rightly recognized human resource development as 'Pillar 1'. The renewed target of extending quality education to all is a gigantic task and can be realized only in a phased manner.

To establish a comprehensive and desirable teacher education system in all the provinces of Pakistan is a critical and significant issue of our Education System in all the provinces. The needful preparation before entering into teaching profession along with incapability of teachers to achieve the set targets and difference between the teachers and their proficiency are the three elements of unsuccessful teachers which are highlighted in a comparative study in 2007 in Singapore, Hong Kong, China, US, Korea, Thailand and Japan. In Pakistan along with these factors hiring of teachers is also a feature that requires significant attention. Top graduates are not given the priority for job sector. In-service teachers lack professional development which is clearly affecting students learning outcomes. Funds, budget and resources are mismanaged by senior management of relevant authorities and bodies. In the year 1997, the maximum budget allocated to education was 3.02% of GDP whereas the minimum budget allocated yet was 1.58% in the year 1972. Surprisingly, Pakistan invested 2.65-2.76% of its GDP in year 2015-2017, which is not enough for professional development of in-service and novice teachers. This range of budget will no further contribute in maintaining the high students' performance and quality of teacher education across the country.

Singapore in its early years was a country that lacked natural resources and a collapsing economy. In the later years, they invested in their education system and human resource which resulted in the today's Singapore where education is guiding its economy. To achieve such a state, the aim was to enrich the country socially, culturally and economically through establishing a comprehensive quality system for educating teachers that formulate attraction and adaptability for countries, which pledge the excellence for novice teachers and for those who are already teaching, which pledge the excellence of pre service and in service teachers, which promotes high level of responsibility, accountability and dispositions in this profession. Though the example of Singaporean education systems carries contextual and cultural differences in terms of its framework, a number of best practices can be adapted which will help Pakistani teacher education system to make reforms.

With regard to educational system, Singapore has achieved the top position globally (OECD 2015). The success lies in the fact that the teacher education system of Singapore has a remarkable approach towards grooming and developing teachers. Other significant features of this system include the fact that around 98% of teachers obtain the needful training before entering into the profession, along with specialized professional growth and ability to work in a learning team as indicated by Teaching and Learning International Survey (TALIS). The education system in Singapore has vibrant aims and objectives and all the end results are clearly documented and expressed. This assists in preparing the national curriculum, implementation of various teaching strategies, modification of examination process, specialized and proficient teachers training and to prepare novice teachers all the features collectively to achieve the significant desired goals of this education system.

Teacher Education in Pakistan is not different from other developing countries that are not in-line with today's and future demand. Pakistan is therefore far away from achieving the goals of excellence in and access to education

due to poor education system. It is mainly because of the lack of quality teachers who may work professionally and possess love and devotion for their work. Many are pre-occupied with the mindset that everyone can become a teacher which is actually a misconception. Lack of quality teachers, dubious recruitment process and lack of teacher developmental model(s) are few of the leading problems. Thus, for developing an effective education system, rigorous and meticulous arrangements are required to be made on priority. It is need of an hour for Pakistan to invest in human capital rather than just targeting population to be considered as “literate”.

After analyzing the teacher developmental model in Singapore, Indigenous Teacher Education Model for Pakistan is proposed in this study. As it is widely accepted that teacher is a sole driving force behind the whole education system, it is mandatory to create quality teaching workforce and to ensure their continuous professional development from recruitment to retirement. However, we cannot adopt the educational teacher development model of Singapore rather implement and familiarize some of its aspects that would be appropriate in the Pakistani context. The proposed framework of Teacher Development Model in this study may provide a map of policies and practices for the relevant policy making bodies in the country to reform teacher education system in Pakistan.

## LITERATURE REVIEW

### *Concept of Teacher Education*

For preparing teachers, Teacher Training Program was formulated in 1906-1956, the result produced the operators and processors under the name of teachers. Thus, lack of sharpening the skills was clearly identified having inadequate and restricted paradigm. The skills, attitude and knowledge required for the functioning of teaching and learning process are the essential elements to be developed during teachers’ training. However, the teacher education program should provide ample opportunities and training to inculcate the skills, knowledge, approaches and character-building capabilities that could assist them in implementation phase. The teacher education is divided into three stages mainly termed as: training teacher at preliminary step, induction along with on-going professional grooming of teacher. Professional assurances or characteristics that are inclined towards amendment need to be the part of teacher development. The educational excellence and basis along with inclusion of fundamental elements in teaching and learning process are the key roles of teachers; therefore, there is a significant need that special attention should be given to the teachers’ education and training programs. American Commission (1996) stated that “The quality of a nation depends upon the quality of its citizens. The quality of its citizens depends not exclusively, but in critical measure upon the quality of their education, the quality of their education depends more than upon any single factor, upon the quality of their teacher.”

### *Quality of Teacher Education System*

Lucy Steiner (2010) Teacher education is clearly interconnected to education and other developmental sites indeed. Quality of education will not possibly achieve in absence of a quality teacher. To accomplish the planned aims and objectives of the schools and to support the well-being of the community teacher’s involvement play a crucial role. The character building along with the education of an individual is specifically depended on teachers. According to Rice (2003) and Weaver (2019) in order to measure teacher education features the following major factors are utilized:

1. The quality of education, time and resources invested on educating and training teachers;
2. Highly selective criteria for admission and recruitment;
3. Quality of financial and educational support provided during and after teaching practices;
4. Competing to the world best teacher education system and Comprehensible.

Radha Mohan (2013) explained that education serves the manpower function when it seeks to provide economy with personnel for fulfilling the demands of sufficient various professions. Teachers being a key role player in the whole education system are responsible for imparting best practices in profession along with students’ effectual of nurturing. Even though stating for the need of teacher education for America, Clinton (1996), emphasized that disposition of effective teachers in all the classroom is fundamental. To achieve the better preparation of children and youth for the demands and challenges of 21<sup>st</sup> century then it is indispensable to recruit effective teachers and to plan and spend in the provision of quality training mechanism to achieve better results. In 21<sup>st</sup> century, one of the crucial aspects of education is the teacher’s role to become mediator of modification, supporting students in comprehension and developing the traits of patience and acceptance of others as indicated in a report submitted to UNESCO by the International Commission on Education (1996).

### ***Education System for Teachers in Pakistan - National Education Policy (2009-2015)***

A great variation in titles/ designations, entry qualification and in the salary structure for various levels of teaching positions is observed from one province to the other. The standards of all the provinces except Punjab includes the provision of PTC and CT/DIE as the employment rules; although these have been stopped in teacher education institutions. Employment rules are not applicable in the private and public-private-partnership schools which are commonly hiring unqualified teachers at extremely low salaries- less than half of the per capita GDP. To develop the content and teaching strategies of the teachers the latest model that is the successive model is considered as the successful model. Most of the teacher education institutions do not have the capacity to offer concurrent Bachelor degree programs, particularly B.Ed. (Hons.) Secondary that requires school subject equivalent to sixteen years schooling. Even the teacher education departments at general universities lack such capacity due to the compartmentalized subject- based departments at universities not allowing students from other departments to enroll in their courses. In all the provinces of Pakistan there is constantly increasing number of untrained, less educated and untrained teachers. Less salary, inappropriate or no opportunity to involve in the process of designing scheme of work, selection of publisher and the mode of examination has made this profession an unworthy profession.

### ***Comprehensive System of Singapore's Education System for Teachers***

In the world, one of the most coherent employment and teacher education system is considered as the Singaporean system; additionally, globally Singapore has ranked first or second for Science and Mathematics as indicated in one of the global surveys for Math and Science. The most significant priority was given to the education system including the training of teachers to enable their new generation and youth to learn globally recognized English language, to strengthen the language of their country and to become an active participant in building the nation. The initial teacher preparation is responsibility of NIE in the country. In the recent years most of the students are diverted towards selecting this program; whereas there is no such solitary institute in Pakistan that can provide uniform teacher education across the provinces. Student learning is specifically influenced through teachers' teaching quality as proved in numerous researches. The comparison of Pakistan's education system with Europe and Far East provides a vast difference and shows the low graph in terms of quality education. This indicates the need of reviewing other nation's education system to improve the same for our country.

### ***Key Factors of Education System of Singapore***

In the early years of Singapore, it lacked in terms of natural resources and considered as a poor country. In the later years and now, it is considered as a glossy universal center for economics, transportation and trade with a pride of achieving great success among the Asian countries. Globally, its education system is considered as one of the best quality education system. The thoughtful policies on selection, preparing and rewarding teachers and other educational stakeholders are the significant features of the education system of Singapore. Fundamental features of the system include:

- **Selection of Teachers:** A number of applications are collected from which the appropriate person is selected and hired for teaching. Recruitment, assisting and nourishing an efficient teacher is a significant concern of the school stakeholders.
- **Preparing Teachers:** In Singapore, at the time of entry in the teachers training program organized by National Institute of Education (NIE) at Nanyang Technological University, the applicants are divided in segments of diploma and degree course according to their qualification. There is a strong coordination among the training institute and the schools, to monitor the teachers' progress after their recruitment.
- **Professional Growth:** Every year, teachers have to complete 100 hours of their professional growth. This could be achieved in any of the described manner i.e., either entering into any of the course at NIE for the enhancement of content along with teaching strategies or teachers could be the part of schools in-house training including learning of unique and specific pedagogies
- **Performance Evaluation:** According to OECD (2013), for accelerating the efficiency of teachers, their performance-based evaluation is considered as one of the key features of the overall teacher training program. It is a systematic, helpful and progressive process to synergize teachers' effectiveness.
- **Career Growth:** Recognition of potential skills and then providing opportunity for its growth are also the key elements of Singaporean education system. At the completion of three year bound every teacher's three years' evaluation report is reviewed and according to their talent they are promoted either as the master teacher, or part of the curriculum and research team or become stakeholder of the school along with the increase in the salary.

## METHODOLOGY

### *Research Design*

This research study is both qualitative and descriptive in nature. It inquires about problems, practices and policies of existing teacher education system for developing a preferred system of teacher education in Pakistan by taking insights from Singaporean Model of Teacher Development.

### *Sampling Technique*

The maximal variation sampling was used that is a purposeful sampling approach. The sampling criterion was that the informants were already part of teacher education system as serving in universities or colleges. They were known to present situations of teacher education system and teaching profession in the country.

### *Research Participants*

Two deans of the education faculty or chair of the Department(s); two educators/head of the subject or department, two pre-service and in-service teachers/faculty members at each institution; two-three prospective teachers and two alumni who were graduated by these teacher training institutes were selected as the research participants.

### *Data Collection and Analysis*

A simple document was formulated to note down the identified themes from the collected information. Data was categorized as themes which are significant, arising, insignificant and minor. The initial analysis was formulated on the basis of categorized themes from the collected information (Creswell, 2009). The data collection instruments' selection was based on the research questions and the basic phenomenon. Themes and sub-themes and data analysis were based on the collected data, observation check-list, individual and focus group interviews of the research participants.

## RESULTS

According to Patankar, & Megha, (2013), the process of curriculum development also considers the society needs and education system stakeholders and based on traditional, future, creative, engaging, child focused, adaptability, character building and pride of work principles. Similar thoughts have been shared by one of the interviewees from focus group, according to whom "the most important component of the teacher-education curriculum should be to make teacher pedagogy literate" and also that "an effective curriculum along with proper budgeting for its implementation should encompasses combined efforts and opinions of the on-ground members and board members". Another interviewee was of the opinion that "teachers along with other stake holders can play more important role in curriculum making".

There are number of researches that suggest that the teachers' qualification, experience and characteristics of teachers are not the only aspects which contributes to the student's results, but there are other components of teacher training and teachers' adaptability with the society and environment (Goldhaber, 1999 in US; & Burgess, Davies & Slater, 2009 in UK).

The education system of Pakistan realized the significance of National Professional Standards for Teachers (NPST) and made it a part of National Education Policy (2010). There is still need to integrate NPST in curriculum development undertakings of the Higher Education Commission of Pakistan, and all other public and private teachers' training institution to make it an integral part of its curriculum along with the all the educational institutions to include in their policies. Besides making teachers training is vital for the educational institutions, most of the reputed private schools in Pakistan also provide compensation to motivate teachers for their professional growth and in turn assist in improving quality of teachers that leads to improve quality of education.

While reviewing the data for this study, the author came across only a few impact studies, for example in one of the study conducted by Shakoor and Farrukh (2016) revealed that for every accreditation standard the percentage of the competent pointers raised; thus, implies progressive effect on the improvement of teacher development that proves the efficiency of National Accreditation Council for Teacher Education (NACTE) accreditation. Recognition of the programs for teacher education plays a significant role for mechanism of the assertion and enrichment of the program's quality.

## DISCUSSION

Individual interviews and the document analysis carried out for the present research revealed that teacher education program's quality is one of the determiners for the country's education system as it is strongly believed by Pakistan Education System. Thus, proving the fact that that quality of intake of the participants and the formulation or planning of the training program are the key features which contribute towards the accomplishment of achieving the best results for the training program. Therefore, the training programs organized by government teacher training institutes lack in terms of content, pedagogy and practicum, but attracted by the teachers from low socio-economic status; whereas the private teacher training institutes that impart quality training programs are heavily prized and thus attract elite prospective teachers. This has already been reported by the Government of Pakistan (2009) that low social and self-esteem are the major factors that hurdles in teachers' quality pre-service or continuous professional development. Additionally, after training, job placement is also one of the concerns that is not been catered by any of the Teacher Training Program in Pakistan and thus resulted in generating issues in the recruitment process of teachers; as on regular basis the educated people do not select teaching profession (Cobb, Hammond & Murangi, 1995). Moreover, the medium of instructions, lack of teaching basic skills for utilizing information technology, required skills and attitudes, logical and critical thinking are the key elements which are lacking in the teachers training programs; as highlighted by Casey (2005), he also emphasize that the skill of communication in the native or common language is also one of the key factor which hinders teachers in translating their learning or training in the classroom due to the difference in the medium of instruction at the training programs. On the contrary, if we compare Teacher Education Model of Pakistan with the Singapore's Teacher Education Model which is referred as "Teacher Growth Model", it explicitly implies that in Singapore's model the trainers work on the growth and development of teachers through making the program coherent with the interest of teachers, education institutions' requirement and in line with the National Curriculum. This results in enhancing teachers' knowledge and pedagogies and eventually students' learning (Bautista et al. 2015 p.9). Consequently, teachers training program in Pakistan focusses on some traditional skills, but lack in developing the 21st century skills of critical thinking, computer skills, research and other strategies like collaborative and inquiry-based approaches, thus neglecting the global requirement of students. The reason for comparing Pakistan's Teachers' Education Model specifically with the Singapore's model is that both the nations since their inception have made considerable efforts in nurturing their National Education Policy as well as their Teacher Education Programs. Additionally, both the nations have firm belief that quality of education could be enhanced through upgrading the quality of teachers. Unfortunately, Pakistan is still struggling with upgrading the curriculum and the teacher education program; whereas, Singapore's teacher education program has become internationally renowned model with the inclusion of research and development as the core areas of the model and now moving towards developing new teachers in the schools for the progressive communication, solidification of practice and theory connections, for the program's globalization and for its future improvement (Jason & Guangwei, 2019).

In a nut shell this could be concluded that to bring improvement in the program of teachers' training content enhancement and strategic advancement is significant (Gopang, 2016). "there is an admitted problem in trying to train teachers like seals, but there is little chance of their implementing the desired changes if left alone" (Holmes, 1998 p.254). Additionally, Malik et al. (2014) suggested that since the inception of our country, numerous strategies and courses have been developed for the teachers' education with the required infrastructure; the need of time is the up-gradation of the existing facilities in line with the global demands and restoring teachers' training programs. According to Zuhu (2013), to enhance the program of teachers' training it is significant to develop an enhanced teacher training model and the most significant pillars of teacher education program include the relevancy and usefulness of the content, to involve teachers in meaningful discussion to learn active learning and the coherence in the whole teacher education program (Garet et al. 2001). In the light of these suggestions, interviews of the research participants and the literature it is diverting attention towards the requirement of teachers' training program that would encompasses all the requirement of NPST along with the global content and pedagogies and that should be focusing on the development, assessment, evaluation, merit-based job placement.

## CONCLUSION

In the backdrop of data analysis and findings, An Indigenous Model for Teacher Development has been formulated keeping all the key stakeholders in consideration. Additionally, to improve this model and make connection with the global models of teacher education; induction, recruitment, continuous professional development monitoring and evaluation along with the reward and retention fund needs to be adapted from the Singapore's model of Education. These factors would be helpful to support the teacher education program to

develop such educators who could cater students' learning needs and who could promote education which is healthy, free from exploitation and violence. That could lead to develop students who would be able to become visionary, decision maker, global and responsible citizen, respect diversity and pluralism and effective practitioners and leaders. For the reason that the quality of content that need to be research-based and promote self-evaluation cater to the most significant factors to improve and maintain the quality (Van der Bij et al. 2016). Furthermore, to promote quality development in the educational organizations greatly depends on the effective monitoring and evaluation along with the performance-based rewards and retention fund mechanism (Gaertner, 2013). In this manner, we could achieve the quality education standards provided by UNICEF (2012) stating that every child has the right to get quality education under the supervision of teachers trained in innovative ways; these teachers are equipped with child-friendly strategies to enhance teaching learning process to make learning relevant and connected to the requirements of the community as well as the whole globe.

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