

Integrated Teacher Education Programme: An Analysis through Comparative Perspective

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Abstract

Teacher education curriculum is perhaps the most experimented curriculum in the reform making process and this has led to rapid and vigorous changes in the past. The latest National Education Policy, 2020 in its spirit recommends a Teacher Education Program offering the highest quality training in content, pedagogy and practice by mandating interdisciplinary mode of teaching in integrated manner. Most of the developed countries of the world have witnessed the fruits of quality teacher education through successful implementation of the integrated model of teacher education. Countries like Finland and Singapore offer the best model of teacher education. The traditional integrated programme in India was based on international model of American Teachers' Training of that time and has been sustaining through present RIEs. In the present paper an attempt is made to compare the modalities of integrated mode of teacher education in Finland and Singapore with India. The choice of the two international countries has been done due to the unprecedented fact that both these two nations have been consistently performing well in the international student assessments such as PISA and TIMSS. The comparative analysis shall support to understand the modalities of implementation of four-year Integrated Teacher Education Program (ITEP) which is the mandate of present governance of the country.

Keywords: *Integrated Teacher Education Program (ITEP), Finland, Singapore, Comparative perspective.*

A Brief History of India's Teacher Education Program

The most important resource owned by a country is perhaps its' human resource and education plays a significant role in its making. Further, the faith of the education rests on the quality of its teachers and no individual can rise above the level of the teaching of his/her teachers. Finally, teacher is the key person to start with for introducing any reform process in the society. The teacher education program in India is the most experimented program yet it awaits quality changes. As cited in doctoral research of Pathak (1969), according to Mukherji

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(1960) teacher education in the country has developed through three distinct stages viz. a) Pupil-teacher system, b) Teacher training and c) Teacher education.

In the beginning of 19th century, a system called monitorial system was devised to meet the requirement of expansion of primary education with minimum of inputs to the advance pupil for monitoring the progress. This system was gradually replaced by the teacher training program mainly through the interventions of educational societies in the main provinces of the country namely, the Bombay, Madras and Calcutta. Normal schools were established aiming to provide adequate teacher training for preparing primary school teachers. As cited in doctoral research of Pathak (1969), S.N. Mukherji (1960) mentioned the new grant-in-aid rules framed after Stanley Dispatch of 1859 provided a salary grant to schools only for those teachers who obtained a certificate of teacher training. However, the training program primarily focused on the subject matter knowledge and less on professional knowledge. The courses included what the teacher had to teach, and practically nothing about pedagogy. Hence there were some gaps between the content and pedagogy of teaching in this very initial format of training. Government Normal School, Madras (1866) and Lahore Training School (1881) were the only two training colleges which were dedicated to training of secondary teachers, admitting both graduates and under-graduates in the same class.

The Indian Education Commission (1882) and Government of India's Resolution on Educational Policy (1904) were significant with regard to training of teachers in subsequent times. It was upon the recommendation by the commission that separate training for graduate and post graduate teachers was initiated leading to increase in the number of training institutions with the provision of separate training for graduate, under-graduate and primary teachers. Also, a special provision of attaching a practicing school to the training institutions was made. The Hartog Committee (1929) recommended the strengthening of the teacher training both through the in-service and pre-service mode. The post-independent period witnessed the third stage of development in the history of teacher education which was called teacher education. The first commission of independent India, University Education Commission (1948) critically evaluated the then existing teacher education programmes and recommended for the development and improvement of the programme through its remodelling and highlighted the importance of attached schools for practical training and especially recommended on increasing the time for school practice. The free Republic of India expected a much-needed change in the education system which in turn effected the teacher training program. The new nomenclature of teacher education encompassed various issues pertaining to education system such as issues of universalization of elementary education, demand and supply of trained teachers and role of teachers in nation building.

The University Education Commission remarked that the secondary stage of education is the weakest link in our educational machinery and it needed urgent reforms. This remark came way ahead immediately after independence but its significance holds validity even today. Subsequently secondary training schools and teacher training colleges were opened across nations under the departments of education. The different states department of education offered curricula with slight variation but more or less uniform structure of teacher training.

The secondary training schools offered lower secondary or higher primary classes generally for under-graduates. The teacher training colleges offered B.Ed., Dip. in Education, or L.T. degree certificate in different universities with a one-year course of theory and practical. Further newer development happened in the form of post graduate course of M.Ed. and research in the field.

The four-year integrated model of teacher's training for secondary level was adopted for the first time in the country following the pattern of American Teacher's college for training of teachers. It was institutionalized for the first time in Kurukshetra University in July 1960 on the recommendation the then Vice Chancellor of Punjab University. The four Regional Colleges of Education at Ajmer, Bhopal, Bhubaneswar, and Mysore, and the Central Institute of Education at New Delhi then decided to organize training courses for teachers and administrators who wish to improve their qualifications. The new inter-disciplinary approach to teacher training is the most remarkable feature of the work of these Regional Colleges now known as Regional Institutes of Education (RIEs). The four-year integrated course which emphasizes all the three aspects of teacher training, the basic notions, professional specialization, and practical experience was introduced after trying it out in the Kurukshetra University. In RIEs the traditionally both B.A. B.Ed. and B.Sc. B.Ed. programmes of four-year duration were started at the entry point of +2. In these four-year programmes, teacher-trainees study few papers on Education in every year along with their core subjects. They specialize in the core subject of either science or arts discipline and it is only in the fourth year that they undergo internship in the attached schools of RIEs. The whole last year is devoted to teachers' training in the schools with one to two theoretical courses.

The policy framing with regard to Teacher Education Program had been always of national relevance and it gained momentum perhaps more precisely in past two decades after the NCTE (National Council for Teacher Education) gained a statutory body status in 1993. At present Indian system offers the teacher education at three levels: the pre primary, elementary and secondary level. The pre-service, in-service and distance education model are offered by both governmental and private bodies approved through NCTE, RCI (Rehabilitation Council of India), DEC-IGNOU Distance Education Council, Indira Gandhi National Open University). Very recent development in the year 2019 states Government has introduced four-year Integrated Teacher Education Programme (ITEP) to boost the teaching profession in the country. This program is exclusively targeting the quality enhancement. Further this format is being thought to be implemented across nation and the draft National Education Policy (NEP) 2019 in its spirit recommended it for the betterment of the teacher education programme (Chapter 15, NEP 2019).

Problem Behind India's Education System: The Misalignment of Content, Pedagogy and Practice

India is home to most complex network of school education system of the world and the backdrop of this system is not very pleasing in the light of Millennium Development Goals. The elementary, secondary and higher secondary levels of education cannot be

strengthened in lack of reliable teacher training for each level. The outcome of national education goals is assessed at international platforms to have an understanding of real growth and development in the field of education. Both PISA and TIMSS have been used by many countries for benchmarking this growth in education (Yee, Lange & Schmidt, 2000). TIMSS (Trends in International Mathematics and Science Study) established by IEA (International Association for the Evaluation of Educational Achievement) was first conducted in 1995 and performed every four years assessing 4th and 8th graders in mathematical and scientific literacy. It is longest running assessment programme of its kind. PISA (The Programme for International Student Assessment) first conducted in 2000 is organized by OECD (Organization for Economic Co-operation and Development) and it conducts 15-years-old school pupils' scholastic performance on science, mathematics and reading after every three years. For more than a decade, Finnish students have been reported world best performers in international assessment of PISA. They are equally doing good in TIMSS. More than 6 million students participated in TIMSS 2015 and Singapore ranked first in TIMSS scores for both 10 and 14-year group and that too both in Math and Science. Singapore students are best in both the international benchmarking assessments. Sadly, India's performance has been very disheartening at international platform. If the performance of Indian students in the two international studies, TIMSS and PISA is analyzed, it is found that they have no recognition. Recently OECD released the results of 2015 global ranking and Singapore is the proud country to top the charts in all three areas of mathematics, reading and science. Asian countries, namely, China, Korea, Japan, and Singapore are some of the high performing countries in TIMSS. In both these world ranking studies we stand nowhere (Kaur, 2018). Only in PISA 2009, India was a participating nation only for two states of the country namely Tamil Nadu and Himachal Pradesh. For PISA, 2009 India was hardly recognized for her performance, ranking 71 out of 73 participating nations. India has not participated so far in TIMSS (Deccan Herald, Jan-28, 2019). The Government of India declared that India will be participating in PISA 2021 which was consequently post-poned to 2022 due to post-Covid disturbances in education.

The NEP, 2020 recommends heavily in alignment with Indian dream of enabling Indian school students to participate in international assessment by indirectly targeting the quality enhancement of ongoing teacher education programs. Unfortunately, India is not a participating nation in 2022 as well and many factors of hurdles needs recognition in the light of latest promising national policy. The National Education Policy (NEP), 2020 has focused on revamping the teacher education program in the country in order to ensure that teachers are given the highest quality training in content, pedagogy and practice by mandating interdisciplinary mode of teaching in integrated manner. Both elementary and secondary teacher training programs needs to be aligned to integrated format as specified in NPE, 2020. The spirit of patronizing the teaching profession has been envisaged in all major national policies and commissions of education. The teacher education functions on the demand and supply of trained teachers in the schools where there is a problem of mismatch. This drop-out in school goers has a heavy bearing on kind of teachers produced by existing teacher education system of the country. Lack of teachers and absentia of teachers have been found to be important factors for drop out of students especially at middle and secondary school levels.

A good teacher is by product of both the intrinsic and extrinsic factors acting upon him or her in the process of making. On the one hand where the self-determination and inner urge to become a good teacher is must for a prospective teacher, on the other hand the outside the teacher many factors decide the possibility of becoming a good teacher. The present seminar aims to hold deliberate and extensive discussions on different issues, challenges, prospect within Indian teacher education system and analysis into intrinsic and extrinsic level factors that are involved in making of best teachers. Draft NEP, 2019 states, “Teacher preparation requires sufficient time and space to develop educational perspectives, and understanding of subject and pedagogy, along with developing an identity as a teacher-for this, theory must be integrated with continuous graded practice. This is best done in a true multidisciplinary knowledge environment.” The solution to prevailing problems of educational system of India states that integrated model of teacher education is a better alternative over the traditional model. The NEP, 2020 greatly emphasizes on the alignment of content, pedagogy and practice as represented in all the successful integrative models of teacher education.

Teacher Education Model of Finland

The Finnish education system consists of pre-primary and basic education, general and vocational education and higher education, comprising of comprehensive schooling (nine years for the whole age cohort starting at the age of 7), secondary education (three years of general education in an upper secondary school or two to six years of vocational education), higher education, and adult education. Elective pre-school education is offered to 5-to-6-year-old children. The compulsory schooling consists of one-year pre-primary education for six-year-olds and nine-year basic education for children aged 7-16. Post-compulsory education consists of general and vocational upper secondary education that leads to the national matriculation. There are two pathways of education for the students to opt after these compulsory years of schooling, first is the general academic pathway to higher studies and second is the vocational education pathway. They may choose between two pathways depending on their interests and preferences. Again, the students have freedom to change their pathway at higher level as both the path way lead to equivalent levels of qualifications. So, the pathway is quite flexible to accommodate the interest of learners at any point of time of their education.

The Finnish model of teacher education is perhaps the world’s best model that prepares teachers meant to be teachers only. The comprehensive teacher education program which spans five years is tailored to prepare efficient and effective teachers for each level of education viz. pre-primary, primary, lower secondary, upper secondary, vocational levels. Finnish teacher education has two traditional lines of development, firstly the older line concerns the education of teachers for secondary education, and the second line refers to the education of teachers for elementary schools and pre-primary education has a close association with the later line (Kansanen, 2003). Before 1970s the primary school teachers received a three-year education in teacher-training colleges unlike the secondary school teachers who were expected to receive academic discipline education for five years and then directly receiving practical training in

schools attached to the universities and teacher training colleges. But following the recommendations of Committee report 1975, there was a inbuilt requirement of unifications of different teacher education programme with a common core but facilitated with flexibility and a strong research orientated training. The teacher education program thus moved one step ahead to a two-tier degree system where all teachers need to have a three years Bachelor's degree and a two years masters degree, except for the kindergarten teachers who need a bachelors degree only, however they undergo professional development through their career.

There are two main type of teachers who are prepared by these training program, class teachers who can teach lower grade (1-6) of comprehensive schools and are trained to teach all subjects and are responsible for the whole personal development of children. The second category is that of the subject teachers who teach the upper levels of the comprehensive schools (7-9) and the upper secondary schools (10-12). They specialize in one or two subjects (one major and one minor) and teach only those subjects. The teacher education common core curriculum meant to be covered by all kinds of teachers, generally comprises of pedagogical Studies; communication, languages and ICT studies; personal study plan. The curriculum for classroom teachers separately comprises of educational studies split into general, intermediate and advance studies. The curriculum follows European Credit Transfer System (ECTS) where in a candidate have to complete 180 credits at bachelors' level and 120 credits at master's level i.e., 60 credit a year (1 credit= 26 hours of work). Every classroom teacher has to undertake a study project compulsorily with two seminar and a masters degree thesis. There is a special component of practice studies deeply embedded throughout the five years of training. Thus, the teachers while preparation benefit from the close tie-up of pedagogical studies while studying for their bachelor's degree.

Further the curriculum of subject teachers is differentiated with the provision of their specialization in a subject such as geography major, maths major. Here student can apply to the subject departments of universities and during the second year if they meet the stipulated criteria of being a subject teacher, they opt for it and begin their studies in education from the third year. Thus, along with their 120 ECTS in the major subjects the subject teachers have to complete one another 60 ECTS in any other school subject and 60 ECTS in pedagogical studies which is part of their common core. A similar preparation goes into preparing different vocations, music, arts and sports. Everyone has to comprehensively undergo the compulsorily credits of common core curriculum.

The Singapore Model of Teacher Education

The National Institute of Education (NIE), Singapore is the national teacher education institute in Singapore that has defined the benchmark of excellence in providing world class quality program for teachers' professional education. NIE is an autonomous institute of the Nanyang Technological University (NTU) and is the only institute offering this program pertaining to small size and population of the country. However, within its small span of existence, the institute has emerged out to be one of the best systems offering quality teacher education. NIE, Singapore has a teacher Education for 21st Century Model where a firm believe

is laid into the value driven and student centric paradigm both in education and teacher education. Historically the education of Singapore underwent through three phases in post independent period. The initial period of 1965-1979 was mainly a Survival Driven Education System where emphasis was given on imparting basic literacy and numeracy skills to the students, the second period was based on the demand of technical skills and high drop out rate of students wherein 18-20% dropped after completing compulsory schooling. This leads to shift in the emphasis on Efficiency Driven Education System where different tracks were laid out for different students. Towards the post 90s when the world moved from industry-based to knowledge-based society, the emphasis shifted to an Ability Driven Education System. Singaporean Education system is a compact tripartite model where there is a close alignment between Ministry of Education (MOE) Policies, School Practices and Teacher Preparation Institutions all of which revolve around the fundamental goals of education. Each component of this tri-partite system is very conscious of of desired goals of education. This is also otherwise referred as the PPP Model. The model emphasizes that a policy will not be a policy unless it is coherently implemented to achieve its outcome in tandem and alignment with the the teacher preparation. It is crucially the teacher preparation institutions that are helping in achieving the desired educational outcomes by translating policies into practices.

NIE has laid out three career tracks for teachers, one for teaching, second for leadership and the third for specialist education. The NIE provide different types of pre-service teacher education programs for entering at different points as prospective teacher. The fresh school leavers with GCE they will be enrolled in a 4-year Bachelor of Arts (Ed.) or Bachelor of Science (Ed.) program. For individuals who have already had their university degrees, they will be enrolled in the 16-month Post-graduate Diploma in Education (PGDE) program. After completion of these course these prospective teachers will be posted to schools across Singapore by the MOE serving a service bond between three to four years (Tan, 2018).The NIE provides all levels of teacher education, from initial teacher education programmes to professional development programmes for in-service and executive leadership programmes for Principles, Departmental Heads and other school leaders(Lim, 2013). The Initial Teacher Education Programme(ITEP) prepare teachers for all government schools ranging from primary schools to Junior Colleges in Singapore. There are various pathways for qualified candidates to complete initial teacher education at NIE viz. Diploma in Education for primary or secondary level(2 years), Bachelor of Arts(Education) / Bachelor of Science (Education) for primary and Secondary level(4 years), Bachelor of Education for Primary level (3 years part time +0.5 years full time), Post Graduate Diploma in Education(PGDE) for primary, secondary and junior college (1 year/ 2 year for physical education) and Diploma in Special Education for Special and allied education (1 year). The NIE ongoing professional development programme is one of the key factors in Singapore's Educational success by holding exchange of ideas with many schools from professional learning community, learning from best practices of the world and implementing it in contextualised fashions.

Missing links and Gaps Identified

After reviewing the integrated model of teacher education in Finland and Singapore and its comparison with India's Integrated Model i.e., the ongoing 4-year B.Sc. B.Ed. in RIEs, many differences and gaps emerge out to the surface.

The main differences between Indian Integrated Teacher Education Program and Finnish Teacher Education Program are as following:

- The Finnish teacher education is the tight integration of theoretical aspects with practice during studies.
- In India there is no exposure to 'pedagogical studies' while doing bachelor's degree rather teachers are trained in isolation to their subject mastery whereas in the Finnish system this is not the case.
- The biggest difference emerges out to be the academic requirement of the teachers to be a teacher of different levels.
- The Finnish system of teacher education focuses on research work wherein students have to come with their Master's thesis and doctoral work whereas in India no such condition is placed before students.
- Teacher's autonomy is a key striking difference which makes the Finnish Education system superior.
- A very tough screening multi layered examination goes into the selection process of teachers where the best talent is screened with the acceptance rate of the top 15% of applicants thus attracting the best talent into the teaching profession.
- A very competitive compensatory package of salary is provided to the teachers offering them a life -long professional growth in their career.
- Teaching profession is a serious profession where experience is the key input, hence teachers cannot leave their responsibilities in-between.

The main differences between Indian Integrated Teacher Education Program and Singapore Teacher Education Program are as following

- The Singaporean System of Education is a very tight tri-partite realisation where there is a systemic coherence between government policy, school practices and teacher preparations.
- The system enables learning from the best practices of the world through multiple collaborative and exchange programmes.
- It attracts the best people for the teaching profession through a two-stage admission process where shortlisting is based on NIE'S criteria and interviewing is itself done through MOE (Ministry of Education).

- The 21st century teacher education programme heavily relies on values, skill and knowledge known as V³SK (Learner centred values, teacher identity values and professional values; Skills and Knowledge). NIE's Graduate Teacher Competency framework represents a holistic integration of the V³SK Model and the MOE competencies framework for beginning teachers, using the three performance dimensions viz. professional practices, leadership and management and personal effectiveness.
- Integration of pedagogical practices with the content knowledge is an inbuilt component of the programme wherein students are asked to have some assistance experience in local schools before they apply for the programme in order to see their interest in teaching profession.
- There is a strict adherence to value of being in a teaching profession and MOE take the undertaking from the prospective teachers to abide by values of the profession. Basically, everything revolves around the value system and is self automated.

Concluding Remark

A very heavy machinery of time, space, energy and money has been pumped into the weakest links of education ladder since independence, mainly the government targeted to raise the quality of both primary and secondary education. In spite of planned efforts, the system has suffered full blown crises which need to be put in order through much needed reforms in teacher education program especially for secondary level of school education. For that matter teacher education program in the country has been witnessed to see changes right into the planning stage through transaction and the evaluative stages of teacher education curriculum. Curriculum and syllabus in order to match the requirement of national mandate needs constant accommodation and assimilation of much needed changes but not at the cost of dismantling the existing structure and modalities. Every national policy has been followed by appropriation of an action plan to reform educational system of the country and this in turn has its heavy bearing and implication on teacher education program of the country. It is felt seriously that integration of content, pedagogy and practices in Indian teacher education system had never been in to-to alignment within the teacher training institution and outside institution it did not respond well with the national policies and school practices. It seems that policies, training and practices are not thoroughly communicating with each other, thus resulting into situations where national goals are left unachieved. The present RIE model however provides a sound solution for quality enhancement of the programme but still very few researches have focussed on minutely analysing the missing links in integration of content, pedagogy and practice. Hence there is a serious need to align the missing links and improvise on the existing ITEP modules of the country. However, the two comparative examples presented here i.e., the Finnish and Singaporean Model have been only chosen on the basis of consistent high-quality performance of school students of different age groups in the recent decade but as far as terms of size, population, diversity of all possible types, socio-economic status are concerned, there are huge differences where these countries have no match. Hence the problems of India are very different but there is always an opportunity to learn from the

best practices of the world and it is a high time for nation to trigger this start having the youngest population of the world.

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