Perspectives of Teacher-Education for Prospective School Development

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ABSTRACT

Teacher education has a significant role in promoting school development. The essence of school development is the performance of the teachers in schools. The more they perform, the better they perform, the more the status of the schools is upgraded. Teachers have multiple roles to play as an educator, psychologists, as well as a classroom managers, a teacher has an intrinsic potential to be a social reformer. In the modern age, the responsibilities of teachers have increased in number like managing mid-day meals, conducting field-work and excursions, tracking scholastic and non-scholastic developments of the learners, managing parents' queries related to the teaching profession learners' performance, and also maintaining different administrative prerequisites, reporting duties to District Inspector of schools and Sub-Inspector of schools regularly. This article focuses on the needs and importance of teachers' attending resource-development sessions and short-term training programmes so that scholastic improvement happens simultaneously with non-scholastic activities. This study adopts an Intensive survey method to look up Central and State Government-conducted survey on the dissemination of Teacher-Education programmes and consequent development in School education. It is concluded that school development is a coordinated effort of the teachers, learners, and curriculum transaction that can be mastered well by undergoing teacher-education programmes.

Keywords: In-service teacher-education, Pre-service teacher-education, Teacher attitude, Language proficiency, Sociogram, Sarva Shiksha Abhiyan.

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INTRODUCTION

Teachers are the most valuable resource for school development. Resource modification and resource dispersion are important characteristics of teaching faculty in a school setup. Other physical resources and technical resources are controlled by teachers only. If teachers are trained and undergo teacher education programs, a significant change is noticed in a school set-up and positively affects the learners. Teacher education is a wide term to include all possible measures for teacher development. Teacher education pertains to the psychology of education, sociology of education and pedagogy. The teacher is a major spear-holder who is essential for a school setup. Other technical and clerical accessories are assistance to the teaching professionals.

Objectives of the study

Identifying the objectives of a study clarifies the purpose of the study and these specify the precise aims of the study. The objectives aid researchers in selecting the most appropriate research methodologies, ensuring that the study is pertinent and meaningful, maximizing their focus and productivity, and giving a clear direction to the study. The salient objectives of the study are:
- To find out the importance of teacher education for teacher development
- To investigate the impact of teacher education of learner development
- To find out the status of school development under the guidance of teachers having undergone teacher-education programmes

METHODOLOGY OF THE STUDY

This study adopts an Intensive survey method to look up Central and State Government-conducted surveys on the dissemination

of Teacher-Education programmes and consequent development in School education. Available data is qualitatively interpreted to assess development in school education in different states in India and simultaneously, improvement in teacher-education programme is surveyed in the states to conclude any impact of teacher-education programme on school development.

Theoretical implication of the study regarding the impact of Teacher Education on School teachers

Malik & Hooda (2022) state that "India ranked third in the education system has not been able to achieve and maintain quality parameters and standards of general and teacher education." The learning community is supervised by the teachers only. Teachers address the presence of learners in a school. The teachers demarcate the ethical standard. The teachers do the instructional designs. Teacher education boosts the level of efficiency of the teachers. The following are the importance of teacher education for school teachers:
- Teacher Preparation: Teachers are better prepared to provide high-quality instruction when they have had a solid and thorough education. They are informed about academic theories, teaching techniques, and subject matter. In order to engage students, manage classrooms, and satisfy a variety

of learning needs, instructors require the skills, methods, and pedagogical knowledge that effective teacher education programmes provide them with.

- Effective instruction: Teachers who have received quality training are more likely to use strategies that encourage student learning and achievement. They are able to incorporate suitable evaluation techniques, modify their instructional approaches to accommodate various learning styles, and give students insightful feedback. The development of a teaching strategy repertoire that can meet the various demands of pupils is facilitated by teacher education.
- Continuous professional development is essential for instructors to stay abreast of the most recent developments.

Pre-service teachers' education

Pre-service teachers' education imparts psychological lessons to the teachers to formulate lessons as per the psychological need and capacity of the learners. On the other hand, the pedagogical standards and choices make learning effective. The knowledge of sociological foundations makes teachers sympathetic and socially responsible. The moral standards make teachers a model for the learners to follow the teachers throughout their life. Moreover, emphasis is given on foundational knowledge in Educational science, school internships and enhancement of professional capacities of student-teachers along with a solid base of theoretical perspectives of teaching and evaluation. These are done under the recommendation in NCFTE 2009 that goes a significant step ahead to create a new vista of education that revolves round a dynamic periphery of education to give it an inclusive and multidimensional view. It is inclusive in that it covers all sections of society irrespective of individual differences in respect of abilities and disabilities.

Attitude of teachers

Teachers' attitude is formed well during teacher-education programs like B.Ed., D.El.Ed., and M.Ed. and it has a fruitful impact on school development. School development implies infrastructural development, learner development, parents-teacher relationship development, grant-in-aid from the Government, NGOs, well-wishers, etc. A good school setup creates a productive sociogram among teachers, parents, community participants, learners, Government and educationists. This has a far-reaching impact on a school at a local level, National Level and International Level.

Teacher Education and School Accreditation

A good school can receive international acclamation and the teachers play a central role. Teacher education programs prepare the soil for the schools' glory, fame and prestige. Cultural orientation like singing, dancing, drawing, painting and other projective activities sharpens the creativity of the learners. This type of practice places a school in an outstanding position in a community. It makes learning real and tangible.

Teacher Education and Learners

Usually, the learners are always in a dilemma and confusion in their academic careers. Only trained teachers with a professional bent of mind can appease the learners and lead them to the right path. It is a great contribution of a teacher to the learners in stress management. Teachers motivate the learners in performing curricular and extra-curricular activities and teachers help represent the school in sports, games, intellectual activities, quiz contests and attract the attention of Higher Authorities like the Department

of School Education Ministry for receiving honor and funds for development. According to L. Millard, "Well-motivated teachers convey their enthusiasm to their students, encouraging them to learn. Teachers can be helped to maintain their motivation by knowing that they are doing a good job: that they are helping students to learn effectively."

The experiences and results of learners are substantially influenced by teacher education. Students' learning, academic success, and general development are positively impacted by well-prepared teachers with solid pedagogical knowledge, differentiated instruction abilities, effective classroom management strategies, and an emphasis on student support and involvement.

Schools are now participating in providing facilities for internship activities for student-teachers of Teacher-Education programs as prescribed by the Universities. This helps the learners get in touch with young professionals and the teachers get trainee teachers to work under them and guide them. It is a great contribution of the schools to promote teacher education in the locality and this adds a significant mark to school development. In schools, a sociogram is an important classroom communication presentation in a diagrammatic form to show how interaction takes place among students. This is an important group dynamic in the classroom as a productive student response to teacher behavior. Positive interaction results from meaningful teacher instruction underlying the preparedness of teachers in a classroom. The following figure shows the multidirectional feature of sociogram in a classroom:

Simultaneous multidirectional interaction among students creates a healthy learning environment in the classroom. In this sociogram, the interaction among A, B, C and H is not unidirectional, but it shows a reverse interaction too between B and A, C and B, H and A. In the same way, interaction among D, H, and G also shows two-way interaction that implies a mutually exclusive as well as open interaction. This is an important prerequisite of healthy classroom communication under teachers' facilitative and productive guidance. In this diagram, the position of F in notable as it shows passivity in interaction and the learner's sheer disinterest in interacting with others. Teachers should look into such issues and remove possible obstacles to ensure fluidity of ideas and openness of learner interaction in the classroom.

According to Holloway & Long (1998), "there is both reflection and reflexivity on the part of a teacher to think over what to do and to feel for the learners automatically and directly responding to the needs and query of the learners. In this course, the author has mentioned John Dewey's concept of reflective action in teaching and the cyclical and spiraling process of teaching."

Teacher Education and Professional Development

Teachers are invariably indispensable in school development, and Teacher education programmes pave the ground for this. NPE 2020 has stressed on integrated teacher education programmes so
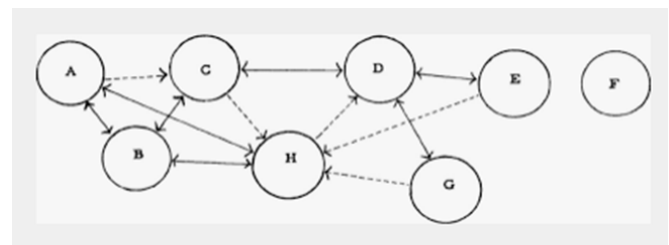

Figure 1: Source AOM Journals - Academy of Management

that, only those with a teaching bent of mind can pursue teacher-education courses. This will ensure quality education and proper development of schools. The School Education Quality Index (SEQI) was created to assess how well States and Union Territories (UTs) are performing in the field of education. The index gives States and UTs a platform to assess their strengths and weaknesses to bring out an outcome to focus on education policy to upgrade. As presented in The School Education Quality Index (SEQI), the indicators are:

Domain 1: Learning Outcomes

Domain 2: Access Outcomes

Domain 3: Infrastructure & Facilities for Outcomes

Domain 4: Equity Outcomes

Available Data on development in school education in various states in India and their interpretation

The following figures show an improvement in the quality of School-Education in India:

In Figure 2, it is observed that in the large states of India, overall performance improvement in the quality of school education has been made possible but all the states are not showing similar rate of improvement. The matter of interest lies in the fact that the overall performance rate is much higher than the Governance process aiding optimum quality improvement in almost all the states in the diagram, especially in Andhra Pradesh, Jharkhand, Karnataka, Maharashtra, Rajasthan, Telangana, and Uttarakhand.

In this figure, a reverse scenario is also evident in states like Assam, Chhattisgarh, Gujarat, Jammu & Kashmir, Odisha, Punjab, Tamil Nadu, and Uttar Pradesh, in which overall performance is lower than Governance governance-aiding process. In some states, both Governance aiding process and overall performance improvement are at the same rate as found in the states like, Himachal Pradesh and Madhya Pradesh. Thus, figure 2 makes it clear that overall performance rate of school education is higher than the rate of Governance aiding process for the improvement of school education. In some states, despite higher rate of Government aiding process, the overall performance rate is low. For some states, both Government aiding process rates and overall performance rates merge, indicating development in school education. Still, it is not consistent with Government aiding process rate as it is sometimes higher or lower. This variation indicates the presence of internal motivators for improvement of overall performance of school education in the states that overtake rigid Government aids for better school education and here the performance of teaching resources goes a long way to achieve this target that is somehow inculcated by teacher-education programmes in concerned states.
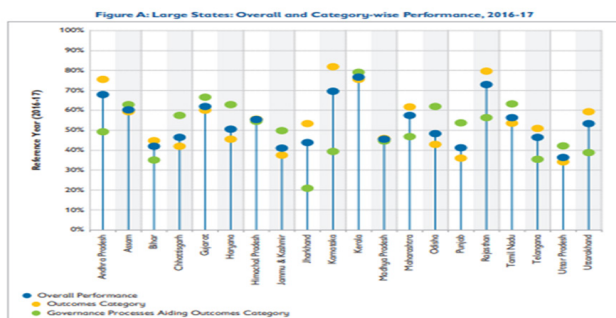
Source: SEQI, Niti Aayog, MHRD, GOI

Figure 2: Improvement in Quality of School education in the year 2016-2017 in Large States in India
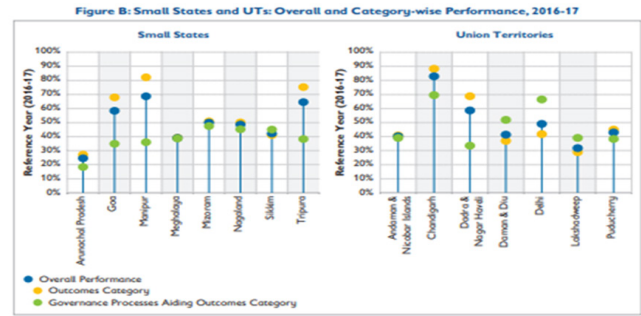

Source: SEQI, Niti Aayog, MHRD, GOI

Figure 3: Improvement in Quality of School education in the year 2016-2017 in small States and Union Territories in India.

Figure 3 shows that in the small states of India, especially Goa, Manipur and Tripura, the overall performance rate of school education goes beyond Governance aiding process and implies the intrinsic excellence of the institutions in these states. On the other hand, a reverse scenario is observed in the Union Territories where it is observed that proactivity of Governance aiding process, especially in the territories of Daman & Diu, Lakshadweep and Delhi but the performance of school education did not reach as high as expected; whereas Andaman & Nicober islands and Puducherry are much close to the rate of Governance aiding process in respect of school education improvement showing optimum improvement.

Both the figures indicate overall improvement in the quality of school education over time. But simultaneous fluctuations in Government aid and education outcomes are observed, which need to be resolved to make education productive and regenerative.

In the pie-chart above, Government Process shows an average of 49% active (Code 1), leading to positive outcome of education by 54% (Code 2) and overall performance attained in large states at 53% (Code 3). This indicates that in spite of low Government support, overall improvement in education is comparatively high in the year 2016-17.
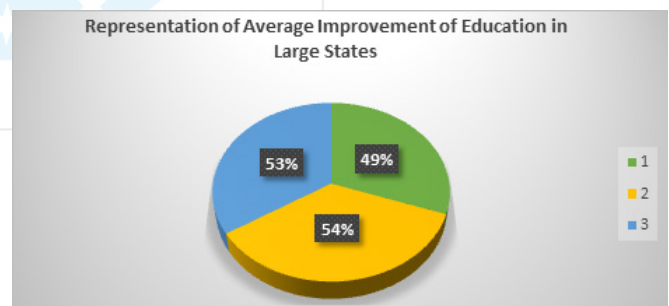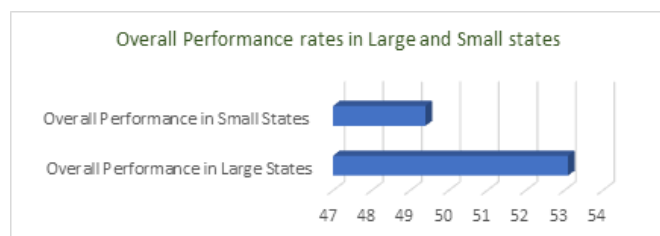

Figure 4: Improvement of School Education in Larger States
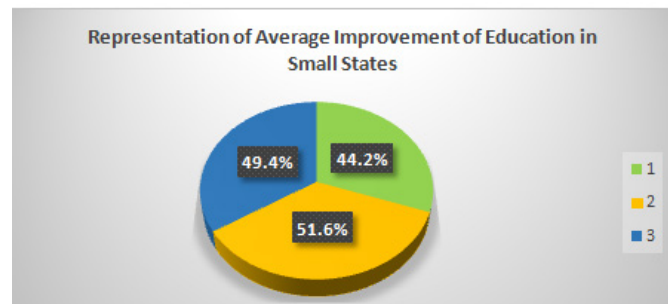
Figure 5: Improvement of School Education in Smaller States

Figure 6: Performance Rates of Schools in India

In the pie-chart above, Government Process shows an average of 44.2% active (Code 1) in the small states and it led to a positive outcome of education at 51.6% (Code 2) and overall performance attained at 49.4 (Code 3). This indicates that Government Aiding process was low but did not hinder improvement in education to raise it to a higher rate in the year 2016-17.

In the above bar-graph, the difference in overall performance of schools between Large and small states is clearly observed as the large states attained 53% and the small states attained 49.4%. This shows both types of states are improving closely despite low Government Process support.

According to Educational Resource Information Centre (ERIC), Professional development refers to activities to enhance professional career growth. Such activities may include individual development, continuing education, and in-service education. It also includes curriculum writing, peer collaboration, study groups, coaching, and mentoring. Professional development goes beyond the term 'training' with its implications for learning skills. It encompasses a definition that includes formal and informal means of helping teachers learn new skills and develop new insight into the pedagogy. This will help the students and teachers develop an insight into the topic of teaching and learning and both can concentrate on developing the learning essence and evaluation mechanism.

Teacher-Education and Subject-Expertise

The subject-teacher is not only a subject expert but also an earnest companion of the students who seek help at any time. The teacher is ready to extend a helping hand to satisfy the learners' curiosity. The language teachers are the founder-teacher for ensuring learners' language development. This language development plays a fundamental role in proficiency in other subjects. Language proficiency helps the learners comprehend writing and narrate in their own way. The learners' literature and language proficiency develop by attending the language classes, but also understanding mathematics-narration and scientific explanation develop by developing language proficiency. This is a core proficiency that has contributed to other subject-proficiency also. According to Ingersoll et al. (2014), teachers with adequate teacher training are less likely to leave their jobs and more likely to manage their classes with adequate dexterity. As Stein et al. (1988) find, the implementation of teacher education has resulted in "Significant increases in both teachers' levels of success and their perceptions of self-efficacy."

Like the Language teachers, the science and math teachers play the major role. Math teachers take a responsible stand to solve numerical problems and science teachers solve the problems of natural sciences like Biology, Physics and Chemistry. These subjects are very important for sharpening critical thinking abilities and giving special knowledge about natural objects. Subjects like Geography and history enrich our knowledge of the earth and its past features. So academic subjects help us improve our knowledge so that we can think of the modern perspectives of these. Other than the academic subjects, Physical Education, SUPW, Drawing, Singing, and Dancing are also important projective art to keep our health fit and develop the learners' aesthetic sense. Together, the subject experts make a joyful association in a multi-disciplinary way for the total development of the school. Teacher education prepares the teachers with the planned organization of these activities so that the teachers can execute their training for the learning efficacy of the students.

Teacher education empowers teachers to be innovative, strategically strong and good in decision-making. According to NEP 2020, "Teacher empowerment means investing teachers with the right to participate in determining school goals and policies and to exercise professional judgment about what and how to teach. (Bolin, 1989) When teachers are engaged in the reform process, they need freedom and control over their work. This makes them feel empowered, motivates them to work harder and enhances their commitment to their learners."

Teacher education programs focus on core courses to understand education, the psychology of the learners, and the methodology of teaching with skill development through micro-teaching, simulation and practice-teaching. This training makes student-teachers well-aware of the professional aspects of their subject expertise. Teacher-education programs make teachers socially responsible and it leads to community mobilization. Along with this, the teacher-education program helps the trainee-teachers participate in curriculum transactions and reviews. In extreme cases, teachers need to conduct action research on immediate issues. There is always scope for educational research because education is always an experimental subject in a modern context.

Pre-service and in-service teacher education and need for integration

In-service teacher training programme should comprise 3-20 days of intensive training every six to seven months and this is meant for "staff development by updating their knowledge, expertise, skills and competence in the teaching profession" (Osamwonyi, 2016). It should actually include a wide range of topics but now, little focus is given on the teaching-learning process and this training turns mostly fragmented and discontinuous. Prominent strategic gaps are observed while methodological discussions are conducted. Mostly, in-service trainings are lecture-based while these need to be demonstration-based and practical workshop orientation is very much needed. Most of the time, in-service trainings include experiential lecture to a large extent with a connotation of personal matters without directly being relevant to the training session's key aspects. So, in many ways, in-service teacher training eludes productive discussion on effective teaching strategies. But, effective in-service teacher-education programme boosts the professional skills of working teachers as in Tamil Nadu, State Council for Science and Technology organizes service training for teachers in subjects such as Physics, Chemistry, Biology, and mathematics so that updated syllabus in school curricula can be taught effectively to the students. In addition to the recommendations and programs of various all-India committees that stressed the need for in-service education, several organizations such as educational institutions, teacher organizations, educational departments of the state and private organizations have arranged from time to time, in-service education of different types. These activities vary in nature in different states in India.

The pre-service teachers training programme dates back to 1937-38 when Mahatma Gandhi started Basic Education programme and basic training College was established in

Allahabad. Recommendations of Secondary Education Commission 1953, Kothari Commission (1964), NPE 1968, NPE 1986, NCF 2005, National Knowledge Commission (2007), and National Curriculum Framework for Teacher Education (NCFTE) 2009 led to rapid increase in Teacher-education Institutions in India. The rise in the number of Teacher-education was at its peak after the year 2019-20 (Malik & Hooda, 2022) when self-financed teachers training institutions were encouraged to conduct teacher-education programmes with proper affiliation and recognition. Lack of infrastructure and investment was evident in pre-service teachers training institutions in the last decade of 20th and first decade of 21st century. It was a genuine problem in the Government sponsored teachers' education institutions that resulted in the establishment of many self-financed teachers education institutions.

As need for trained teachers was affirmed and reaffirmed by different commissions, move was made to implement policy recommendations. It was, on one hand, a joint responsibility of District Institute of Education and Training (DIET), and Institute of Advanced Studies in Education (IASE) at the Government Level and in-service Training of a large number of untrained teachers of Primary and Secondary Level at Self-financed colleges as Government utilized the resources of self-financed Institutions for in-service training of teachers. Rajan (2013) discusses that quality teacher-education 'strengthens the ideals of social justice, equity, secularism and pluralism'. An appreciable initiative of the University of Delhi to set up Maulana Azad Centre for Elementary Social Education and upgrading it to an important part of teacher-education in 1995. India launched another prestigious program which is known as Sarva Shiksha Abhiyan (SSA, 2001). Its goal was that all children should be in school by 2003 and complete 5 years of primary schooling. By 2007, quality improvement in teaching is focused to bridge social and strategic gaps with an aim at universal return to school and retention by 2010. After the implementation of SSA, a huge amount of material, financial and human resources was allocated for refurbishing educational institutions at Primary and level. All possible measures were taken to attain the objectives of universal primary and elementary education.

Proper integration of Pre-service and in-service Teacher training lead to a continuation of updating skills and methods of teaching as well as keeping a pace with changing scenario of teaching under the intervention of contents, interest of learners and technology. The research finding of Husain (2011) shows a positive effect of successive Pre-service and in-service teacher training programme for improvement in teachers' ICT skill. A similar tenor is felt in the findings of Spaulding (2013) that there is "a need to continue pre-service and in-service initiatives to effectively integrate technology into the classroom".

Special Orientation Programs

A special orientation program for primary school was launched in the year 1993-94 to improve the quality of primary and elementary education as part of the strategy to achieve. As pointed out by Chandi (2020), "continuous up-gradation is necessary to help a teacher to disseminate the qualitative knowledge in a better way." The main focus of this program is implementing the MLL identified for the primary stage. Full training in the use of Operation Blackboard materials was provided to primary school teachers and encouraged teachers to adopt a child-centric approach to Teacher Education. During the past few years, these 2 schemes of mass orientation have been covered by including more than 2,000,000 teachers to strengthen with media support films on various themes covering the course design or shown to teachers during programs.

Teacher education programs are being organized by the establishment of the DIET and IASE for conducting special orientation programmes. As mentioned in the functions of DIET, 'it would need to engage consultants/resource persons for short durations, to meet its manpower requirements (1989). Regarding IASE, Patel & Chaudhari (2013) discuss that these institutes "are required to take up initial and incumbent teacher training, planning and management of the secondary, adult and non-formal education of the district, research and development (R&D)". These institutes give training and resource support to the primary school teachers and existing institutes are upgraded by the provision of appropriately qualified staff to ensure professionalism they are also being provided infrastructure support in terms of building and equipment wherever there is a need for new institutes being set up.

CONCLUSION

Thus, Teacher-education is an important staircase for preparing the teachers for a better job; holistically, it supports the development of the school in general. Facilitative roles of the teachers have been important in introducing computer-assisted instruction (CAI) for making learning successful while making learning self-paced and self-monitored. This leads to self-learning and also in a child-centric method. The teacher education institutions train the teachers to handle this situation so that programmed instructions are followed in making computer-assisted learning materials. This will definitely attract the attention of the learners and the learners become involved in the lesson in a motivated way. The figures indicate an overall improvement in the quality of school education over time. This is the teachers' success in making learning materials and becomes an important staircase for school development. A healthy classroom atmosphere is created with productive interaction in the classroom and also with effective communication with the stakeholders of education. Mere conservation and transmission of facts do not ensure the productivity of education. The most important prerequisite is the transformation of information and an effective delivery mechanism that can make learning effective and fulfill the need of the time. So, school development is a coordinated effort of the teachers, learners, curriculum transaction and learning materials and preparation of learning materials. This coordination makes learning effective and the learning outcome is gradually becoming optimally successful.

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