

Deteriorating Quality of Education in Schools

Are Teachers Responsible?

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The role of government school teachers in India is being questioned because of the deteriorating learning levels of children. There is constant criticism of teachers' performance on the grounds that despite paying high salaries to teachers, children are not performing well in examinations because the majority of teachers are not competent enough. An analysis of six Indian states offers the opportunity to address this debate from the lens of public provisioning for teachers in the school education system. The performance of teachers needs to be judged on the basis of factors like their training, working conditions, and, above all, resource allocation by the government.

In recent years, the Government of India has become increasingly interested in the relationship between the amount of resources devoted to education and student learning outcomes. Learning outcomes in government schools are compared to those of private schools to measure the quality of education. The most-cited source in this regard is the Annual Survey of Education Report (ASER), conducted by a non-governmental organisation called Pratham. It shows that for the last five years, the quality of learning has deteriorated in government schools, while private schools do better both in terms of reading and arithmetic skill (ASER Centre 2017).

This deterioration in learning outcomes has generated a debate about teachers' salary and efficiency. One argument is that teacher salaries in government schools—which account for over 80% of the spending on education—is drawing a large amount of resources and causing fiscal burden on states (Dongre et al 2014). Some scholars have argued that teachers in private schools are performing better at improving the learning outcomes of children at much lower salaries (Jain and Dholakia 2010; Milligan and Dhume 2012; Pritchett and Aiyer 2014; Muralidharan et al 2016; Ree et al 2016; Kingdon 2017). Hence, there is a push to link teachers' salaries to student outcomes in order to enforce accountability in the government school system (NITI Aayog 2017).

This narrative of measuring teachers' efficiency through cost-effectiveness and treating student achievement as measurable is overshadowing other lines of arguments. While professionally qualified teachers are necessary for better learning outcomes in government schools (Behar 2016; Jain and Saxena 2010), the assessment of what constitutes learning outcomes is influenced by several socio-economic factors (Sarangapani 2009; Vellanki 2015; Wadhwa 2015; Karopady 2014). Second, though teachers' salaries account for the largest share of the school education budget, the generalisation that teachers in government schools draw higher salaries than those in private schools is misleading (Bhatty et al 2015). Further, teachers' salaries do not directly determine their performance. The curriculum, teachers' education, and the conditions of teaching influence recruitment, retention, and teacher morale, which in turn influence learning outcomes (OECD 2005; Sarangapani 2009; Jain and Saxena 2010; Behar 2016).

Generating evidence from six states of India, this article aims to address this debate through the lens of public provisioning for teachers in the school education system. The following section describes the methodology in detail, after which there

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is a discussion of the two major challenges of the Indian school education system: teacher shortages and teacher absenteeism. This is followed by an attempt to address the continuing debate over teachers' salaries in India and a discussion on the status of teacher education in India. Finally, evidence relating to the pattern of public provisioning for teacher training and teacher education is presented, followed by a conclusion, which covers certain policy implications.

Methodology

The study covers a combination of six better and poor performing states with regard to education that represent most regions of the country: Bihar, Chhattisgarh, Maharashtra, Tamil Nadu (TN), Uttar Pradesh (UP), and West Bengal (WB). A budgetary analysis has been carried out in these states to ascertain the amount of resources the government is spending on teachers' salaries and training.

Education is placed in the concurrent list in the Constitution, implying that it is a joint responsibility of both the union government and the state governments. The Ministry of Human Resource Development (MHRD) at the union level is the nodal ministry for school education. At both levels of governance, besides the departments of school education, many other departments incur a substantial amount of expenditure on school education. Our analysis takes into account all departments that report expenditure on school education in their budgets. These departments include the Department of Women and Child Welfare, the Department of Social Security and Welfare, the Department of Minority Welfare, the Department of Tribal Welfare, the Department of Rural Development, the Department of Urban Development, the Panchayati Raj Department, the Department of Public Works, the Department of Drinking Water and Sanitation, and the Department of Planning. The Detailed Demand for Grants (DDG), which is the most detailed budget book of all the above-mentioned departments, has been analysed to record information pertaining to teachers' salaries and training (Table 1). The budgetary analysis covers four financial years: 2014–15 (actuals), 2015–16 (actuals), 2016–17 (revised estimates), and 2017–18 (budget estimates). Table 1 shows how expenditure on teachers' salaries and training has been defined by various departments in the DDG of each state.

Teachers' Place in the System

Of all the factors that determine the quality of education, the teacher is undoubtedly the most important. Teachers are

Table 1: Defining Expenditure on Teachers' Salaries and Training

Broad Category	Components
Teachers' salary and incentives	Grant-in-aid (salary), salaries, travel and medical allowances, professional and special services, pension, awards, allowances for children of teachers
Teachers' education	All expenses related to training such as administrative expenses to run teacher training institutions, construction and upgradation of teacher training institutions, salary and allowances for trainers, materials and supplies, printing and publications for training

Source: State budget documents.

facilitators of learning and are central to the effective functioning of any school and thus their role in quality improvement is paramount. The quality of teaching is determined by several factors, such as the qualifications of teachers, training, remuneration, overall working conditions, motivation, and accountability.

All major policy documents in India, including the Right of Children to Free and Compulsory Education (RTE) Act, 2009 seek to ensure teacher accountability while consciously evading any serious engagement with the professional concerns of teachers. There is very little information available in the public domain about the status of teachers in the education system.

The national-level overview of information regarding teachers is not that daunting (Table 2). However, a deeper analysis at the state level points out that the available indicators hide more than they reveal. They do not talk about the extent of teacher shortage, the working environment in school, or the issue of teacher absenteeism. All these factors are very important for evaluating a teacher's performance.

Shortage of Teachers

Timely recruitment of teachers and their rational deployment in schools are core functions that every school system has to perform. However, a common feature of the Indian education system is the shortage of qualified teachers. There is a shortage of more than 5 lakh teachers in elementary schools and 14% of government secondary schools do not meet the prescribed norm of having a minimum of six teachers (MHRD 2016). Recruitment of additional teachers has not kept pace with the rapidly growing enrolments. In states like Bihar and Odisha, there have been no regular teacher recruitments for a long time. According to the District Information System for Education, in 2014–15, 41.5% of the 7.6 lakh "primary-only" schools in the country were staffed by only two teachers, 11.6% had only one teacher, and 0.84% did not have a teacher at all (NUEPA 2015).

At the elementary level: Table 3 (p 36) highlights the extent of teacher shortage at the elementary level in six states. TN and Maharashtra are the only states to have filled up almost 95% of the sanctioned posts. Bihar and UP together have more than 4.2 lakh vacant posts, with 87,781 teacher posts vacant in WB,

Table 2: Select Teacher-related Indicators for Elementary Education

	2014–15	2015–16
Number of government schools	10,80,747	10,76,994
Total enrolment in government schools	11,89,73,934	11,69,21,077
Total teachers in government schools	46,83,353	46,74,275
Teachers' profiles		
Graduate teachers (%)	39.08	42.04
Professionally trained government regular teachers (%)	85.1	88
Professionally trained government contractual teachers (%)	60.1	61.5
Female teachers (%)	47.7	48
Working conditions		
Pupil–teacher ratio	25	24
Single teacher schools (%)	8.1	7.5
Average number of teachers per school (%)	5.5	5.6
Schools with one classroom (%)	4.4	4.2

Source: NUEPA (2016a).

out of which 32,661 posts were to be filled by the state government and 55,120 posts were to be filled under a centrally-sponsored scheme called Sarva Shiksha Abhiyan (ssa).¹ Interestingly, in 2016–17, in all the states studied, there were fewer vacant seats than that in 2017–18. This increase in vacancies in 2017–18 can be attributed to reasons like the retirement of teachers, which was not accompanied by additional recruitment, or the termination of services of teachers by the state.

Shortage of subject teachers: At the upper-primary level, there is not only a need for teachers, but particularly for subject-specific teachers with a certain level of command over their respective subject areas. As per the RTE norm, every upper-primary school should have at least one teacher each for science and mathematics, social studies, and language. However, data on subject-specific teachers presents a picture of imbalances within an overall shortage. In TN and WB respectively, 37% and 40% upper-primary schools do not have subject-specific teachers as per the RTE norm. In Maharashtra, only 23% of the schools have the required number of subject teachers. While in Bihar and UP 37% and 46% of the schools do not have subject teachers, Chhattisgarh has 25,457 surplus teachers in terms of pupil–teacher ratio (PTR).

Single-teacher schools: The national PTR for elementary schools is 24:1 and for secondary schools is 27:1. The numbers are satisfactory enough in terms of a stipulated PTR, but they do not paint the complete picture. A large number of schools in India are run with a single teacher. A report tabled in Parliament in 2016 revealed that more than one lakh schools in India were being run with only one teacher (Kumar 2016). These single-teacher schools are a catastrophe as far as education is concerned. Between 2015–16 and 2016–17, the number of single-teacher primary schools in Maharashtra has increased from 12,137 to 12,229. Likewise, in the same period, single-teacher upper-primary schools in India have increased from 15% to 20%. In UP, Bihar, WB, and Chhattisgarh, the officially

Table 3: Teachers at Elementary Level (as of March 2017)

State	Sanctioned Posts	Vacancies	Vacancies Out of Sanctioned Posts, 2017 (%)	Teacher Recruitment between 2016 and 2017
Bihar	5,92,541	2,03,934	34.4	-284
Chhattisgarh	2,00,429	48,506	24.2	-5,406
Maharashtra	3,14,938	18,671	5.9	-4,814
Tamil Nadu	1,47,982	3,788	2.6	-107
Uttar Pradesh	7,59,828	2,24,329	29.5	-49,603
West Bengal	4,54,860	87,781	19.3	-1,946

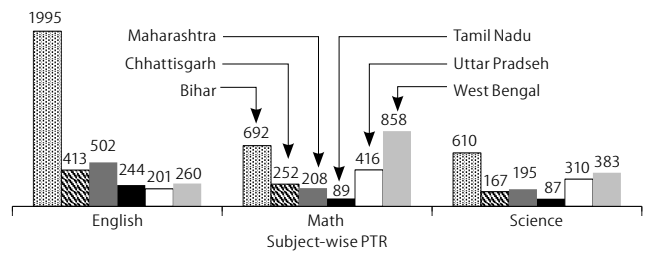
Source: MHRD (2017a).

Table 4: Teachers at Secondary Level

	Sanctioned Posts (Head Teacher)	Head Teacher Vacancies	Sanctioned Posts (Subject Teachers)	Subject Teacher Vacancies
Bihar	6,789	5,306	55,020	20,494
Chhattisgarh	1,916	1,386	28,127	8,278
Maharashtra	1,638	959	9,746	1,604
Tamil Nadu	5,879	0	6,682	1,276
Uttar Pradesh	3,700	1,806	23,171	12,008
West Bengal	7,854	2,241	57,877	3,618

Source: MHRD (2017b).

Figure 1: The Pupil–Teacher Ratio for Subject Teachers at Secondary Level



Source: MHRD (2017b).

reported numbers of single-teacher schools are 18,190, 3,697, 3,450, and 2,730, respectively (MHRD 2017a).

At the secondary level: In the last few years, an increase in enrolments at the elementary level has resulted in considerable expansion in the number of secondary schools, as well as enrolments at the secondary level. This has created a demand for a strong cadre of teachers. But, the problem of teacher shortage is more acute at the secondary level. While the demand for teachers at the elementary level can be calculated based on the PTR, assessing the demand of secondary teachers is more complicated. Given that the requirement of subject teachers at the secondary level may differ for each state (for example, the need for language teachers), the demand for teachers is also different.

Like SSA, a major centrally-sponsored scheme for secondary education is the Rashtriya Madhyamik Shiksha Abhiyan (RMSA). According to the RMSA guidelines, each school should have five subject-specific teachers and one head teacher. However, Table 4 shows that other than TN, all the other states under study are suffering from a shortage of both head teachers and subject teachers. The Bihar government has acknowledged that the issue of teacher shortage at the secondary level is critical. Owing to the low salary and the requirement of higher qualifications, the government is unable to attract qualified teachers, especially for science and mathematics. As an alternative, the state is opting for virtual classrooms in 10,000 schools, with facilities of information communication and technology. Guest teachers, who are paid an honorarium of ₹1,000 per class, are also being appointed. In Bihar and Chhattisgarh, more than 70% of all head teacher posts are lying vacant. About 52% of regular teacher posts are vacant in UP (Table 4).

However, even the large figure of vacant posts fails to capture the magnitude of the shortage of subject teachers. A significant number of teachers teach all subjects.

According to government records, the PTR for English is as high as 1995:1 in Bihar and that for mathematics is 858:1 in WB. Among the six states, the situation for subject teachers is relatively better in TN (Figure 1). Even then, the PTR for English in TN is 244:1. The third RMSA Joint Review Mission had cautioned that the shortage of science and mathematics teachers had far-reaching implications. The report mentioned that if the present cohorts of students are not able to acquire the skills and competence they need in these subjects, they would be less likely to seek scientifically-oriented degrees and employment, which in turn would further reduce the supply of such teachers (RMSA 2014).

The analysis reaffirms that eight years after the implementation of the RTE Act, states are still suffering from an acute shortage of teachers, both at the elementary and secondary levels. The problem is severe for subject teachers at the upper-primary level and in secondary schools. Instead of recruiting regular teachers, states are now in the process of deploying teachers to show a reduction in the number of single-teacher schools and that the overall PTR is as per norms under the RTE Act. In the absence of a proper policy for deployment and transfer, states often act arbitrarily. They merge or close schools with lower enrolment, withdraw teachers from those schools, and redeploy them in other schools to maintain the PTR. Indeed, rationalisation of existing teachers is needed. However, given the huge scale of the teacher shortage, mere redeployment and transfer of teachers will not help. It is high time that states appoint a regular cadre of teachers.

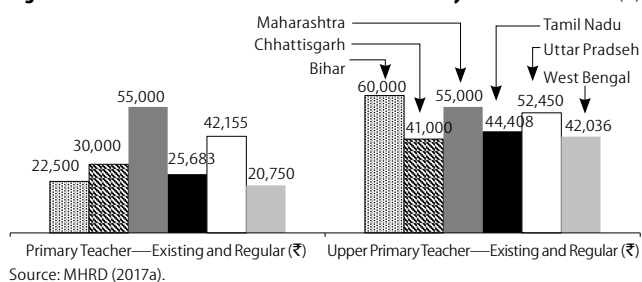
Teacher Absenteeism

Teacher absenteeism is directly associated with students' learning outcomes. Especially in a country where only 43% of children from Class 3 can read a text meant for children from Class 1, good quality teaching is imperative (ASER Centre 2017). Teacher absenteeism is often seen as the most critical issue plaguing the government school system. It is now widely used as a governance indicator for education in India. Many studies have shown remarkably high figures (24%–25%) of teacher absenteeism (Chaudhury et al 2006; Muralidharan et al 2016). Most of the time, teacher absenteeism is discussed from the lens of fiscal burden. As teachers' salaries constitute the largest component of education spending, high levels of teacher absenteeism imply a considerable waste of public funds. A recent study estimated a fiscal cost of \$1.5 billion per year associated with teacher absence (Muralidharan et al 2016). However, a study by the World Bank shows that salaries of teachers do not determine their absence; teachers who were paid more were as frequently absent as teachers on contract at a much lower salary (Kremer et al 2005). There is also evidence of a drop in teacher absenteeism when the attendance of teachers is monitored daily by cameras and when they are paid according to the number of days they are present (Duflo et al 2012).

On the contrary, many studies have argued that the absence of a teacher from school and teacher absenteeism are not synonymous. Teacher absenteeism points towards the absence of teachers in school without appropriate reasons, whereas teachers can be absent from school for many reasons, including administrative work and various other circumstantial reasons. A recent study found that on a regular day, when teacher absence was at 18.9%, teacher absenteeism without reason or because of truancy was only 2.5%; other teachers were either absent on account of official duties or because of authorised leave (Azim Premji Foundation 2017). Even in the study that reported teacher absence to be 23.6%, teacher absenteeism without reason was reported to only be 4.7% (Muralidharan et al 2016).

Hence, the exaggerated figures of teacher absenteeism are leading to ineffective policy measures that are all about controlling and monitoring teachers, which is not only unfair but

Figure 2: Variation in Teachers' Salaries at Elementary Level (₹)



also demotivating for teachers (PIB 2017; Madhavan 2017). A recent example is the proposal made in the *Economic Survey, 2016–17* to introduce biometric identification in primary schools for each scheduled class/session to address the issue of teacher absenteeism (Ministry of Finance 2017). Instead of drawing up policies for teachers based on overestimated figures, it is crucial that concerted efforts are made towards understanding the fundamental problems behind teacher absenteeism in India.

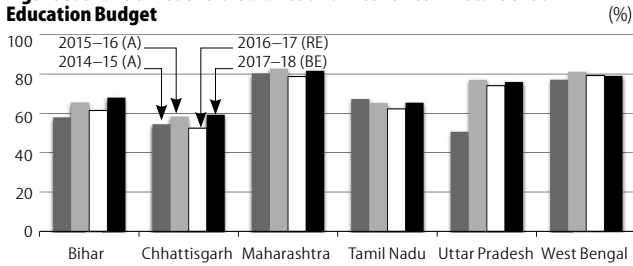
Teachers' Salaries: Myth and Reality

In the policy arena, salaries of teachers are now being discussed along with teacher absenteeism and poor performance of children in government schools. It is argued that, in spite of high salaries, teachers are not accountable to the education system, which often translates into poor learning outcomes.

This generalisation—of teacher salaries being high in government schools—is nothing but a myth. There is no uniform teacher salary across states. Even under SSA, teachers' salaries per month in primary schools vary from ₹22,500 in Bihar to ₹55,000 in Maharashtra. The salary for upper-primary teachers ranges from ₹41,000 per month in Chhattisgarh to ₹60,000 in Bihar (Figure 2). Even within a particular state, the salaries of teachers vary on the basis of their education and work experience. Moreover, due to the paucity of funds, states often fail to provide salaries on time.

A study conducted by NUEPA in nine states has shown that the actual take-home salary of a newly recruited regular teacher in a government school varies from ₹15,345 in TN to ₹36,588 in urban Punjab. In Odisha, at the primary level, the salary of a newly appointed teacher is ₹14,031; a teacher with 10 years of experience gets ₹26,659 and a teacher with 15 years of experience gets ₹27,347 (Ramchandran et al 2016). Even in countries that are members of the Organisation for Economic Co-operation and Development (OECD), on average, the ratio of the salary of a teacher with 15 years of experience to a freshly appointed teacher is 1.4, while in Japan and Korea it is 1.8, and in England and Mexico it is 1.7.

The variation is not only confined to regular teachers. There is a huge difference in salaries between regular teachers and contractual teachers and the amount also varies across states. For example, at the primary level, a *vidyarthi mitra* (a contractual teacher in Rajasthan) gets ₹4,500 and a *shiksha mitra* (a contractual teacher in UP) gets ₹3,500, while salaries are as high as ₹28,000 for contractual teachers under the SSA in Punjab (Ramchandran et al 2016).

Figure 3: Share of Teachers' Salaries and Incentives in Total School Education Budget

Source: State budget documents.

Despite being aware of the immediate need for teacher recruitment, states have stopped recruiting permanent teachers for a while now and are managing by employing contractual teachers. Historically, the lack of resources in states has been one of the major reasons for low or no recruitment. Figure 3 tries to capture how states are allocating resources for providing teachers with their salaries, pensions, transfer allowances, and other incentives like awards and incentives to children of teachers.

The share of teachers' salaries in the total school education budget varies from 60% in Chhattisgarh to 82% in Maharashtra. In UP, between 2014-15 and 2017-18, a large number of contractual teachers have been promoted as regular teachers, which has increased the share of teachers' salaries in the total education budget by 20 percentage points. This variation in the share of teachers' salaries in education budgets breaks the myth that about 80% of education budgets go towards teachers' salaries. It should be mentioned that even this share for teachers' salaries is not unusual. International experience shows that the wage premium paid to teachers in public schools contributes more significantly to the growth of per-student expenditure; the effect is stronger in middle-income countries and in countries with larger classroom sizes (Nose 2015). A similar picture is observed in OECD countries. At the primary and secondary levels of education in public institutions, OECD countries use about 79% of their expenditure on compensating education personnel (OECD 2016).

Nonetheless, the fact remains that states are under-allocating resources for teachers. Given the huge shortage of teachers, this component should be much higher than what it currently is. However, given that the overall amount of resources available for education is small, teachers' salaries constitute the larger portion of the pie. It, therefore, becomes difficult for states to increase spending on other important components of school education like teacher training, infrastructure building, or monitoring.

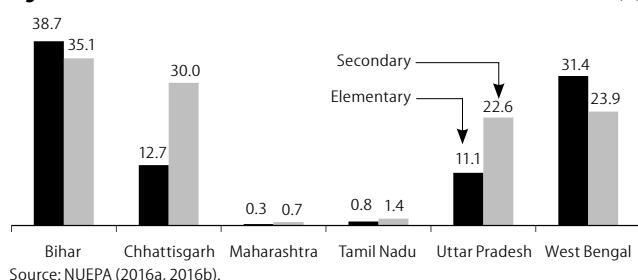
Teacher Education: A Prerequisite for Quality Education

There is constant criticism of teachers' performance in government schools. The grouse is that, despite paying high salaries to teachers, students are not performing well in examinations since a majority of teachers are not competent enough to teach effectively. Indeed, teaching is a demanding and constantly evolving profession. Hence, developing the capacities of teachers at regular intervals is imperative for quality education. However, the state has for long hesitated to focus its energies on teacher

education, a sector that has remained largely stagnant since colonial times (Planning Commission 2012). Thus, before putting the blame solely on teachers, it is also important to see how the system is developing the capacities of our schoolteachers.

The Indian school education system is held back not only by an overall shortage of teachers, but also by the dearth of professionally qualified teachers. As far back as in 1966, the education commission had raised concerns relating to teacher training education in India. Section 23 of the RTE Act mandates that all government school teachers should possess minimum qualifications laid down by the National Council for Teacher Education. Those who were not qualified had time till 31 March 2015 to complete the training. However, it seems that despite policy measures being put in place, the issue has failed to garner the attention it deserves. As of 2017, out of a total of 66 lakh teachers at the elementary level, 11 lakh are still untrained according to government records. Among the existing teachers in government schools, about 20% are untrained, while the proportion of trained and qualified teachers has almost been stagnant for the last five years (MHRD 2014). Among regular teachers in government schools, around 12% are not professionally trained, while the same is true for 39% of contractual teachers (NUEPA 2016a). The Central Advisory Board of Education's subcommittee on teachers and teaching pointed out that in 2012, Assam, Bihar, Jharkhand, Chhattisgarh, Odisha, UP, Jammu and Kashmir, and WB together had 6,06,000 untrained teachers (Arora 2017). As per official data, the share of professionally trained teachers varies from 61% in Bihar to 99.7% in Maharashtra at the elementary level and from 65% in Bihar to 99.3% in Maharashtra at the secondary level (Figure 4).

After the implementation of the RTE Act in 2010, a large number of unqualified candidates were recruited to meet the PTRs specified in the act. Due to the paucity of qualified teachers, many states were compelled to recruit unqualified and contractual teachers, overlooking the norms of the act regarding qualifications. For example, for teaching at the primary level, a two-year diploma in elementary education is mandated. Curriculum development institutions and the District Institutes of Education and Training (DIETs), the nodal agencies for teacher training, have failed to live up to their roles. More than 90% of the teacher education institutions in India are privately owned. Of the few government-run DIETs, 17% do not have their own buildings, 40% do not have hostel facilities, and 70% have no librarians. In some states, 80% of faculty positions are vacant. Most of the DIETs are situated in isolated locations. Staff and faculty members are not adequately trained. Training programmes lack innovation and faculty members have not undergone any capacity building in the last five years (Azim Premji Foundation 2010). Despite the need, spending on teacher education is constantly being neglected by both the union and state governments. This is reflected in the results of the Teachers Eligibility Test, an essential criterion for teacher recruitment which was started in 2011 under the RTE Act. Only 15% of the candidates managed to clear the eligibility test (Kohli 2015).

Figure 4: Statewise Share of Untrained Teachers (%)

Training of untrained teachers is a major issue in states like WB, Bihar, and Chhattisgarh as reported by the states themselves in the project approval board meetings of the SSA. In 2017–18, these three states together had 1.84 lakh untrained teachers at the elementary level. TN and Maharashtra are the only two states under study which have reported no untrained teachers at the elementary level. In order to ensure that all teachers possess the minimum prescribed qualifications, the government has recently amended the RTE Act, extending the time allowed to acquire the prescribed minimum qualifications to 2019 (PIB 2017).

At the secondary level, as per the project approval board minutes of the RMSA, states are suffering from the absence of an adequate number of teacher-training institutions. The Bihar government acknowledged that in the absence of adequate institutional capacity for pre-service teacher training, the state had to recruit a large number of untrained teachers in schools. As per NCTE guidelines, the state government also appointed SC/ST teachers without training to address the issue of teacher shortage. Thus, Bihar opposed the union government recommendation of no salary to untrained teachers (MHRD 2017b).

There is a provision for in-service teacher training under the SSA and RMSA programmes. However, the unit cost demarcated for such training is inadequate at both the elementary and secondary levels. For example, in Bihar, under SSA, the unit cost for in-service training of a newly appointed teacher at the elementary level is ₹2,000 for 10 days (MHRD 2017a). Under RMSA, the unit cost of in-service training for a subject teacher is ₹300 per day (MHRD 2017b). This cost also includes travel allowance and dearness allowance for resource persons and participants. Considering the inadequate funds, teachers do not get much of an opportunity to develop an understanding of the subject matter and pedagogy.

In the recent past, the government has been moving its focus from inputs towards outcomes. The three-year action agenda by NITI Aayog critically assesses the RTE Act for its “input approach” and holds it responsible for the continuing deterioration in learning outcomes (NITI Aayog 2017). In spite of the government’s concern about the poor quality of learning among children and the role of teachers in school, there has not been any serious effort to address this issue.

Among the various provisions contained in the RTE Act, the introduction of Comprehensive Continuous Evaluation (CCE) was projected as a great reform. The larger idea of CCE was to develop a system of school-based evaluation of students which covers all aspects of students’ development rather than just the

holding of examinations in the narrow and traditional sense. The act requires that CCE be implemented for each child up to the completion of elementary education.

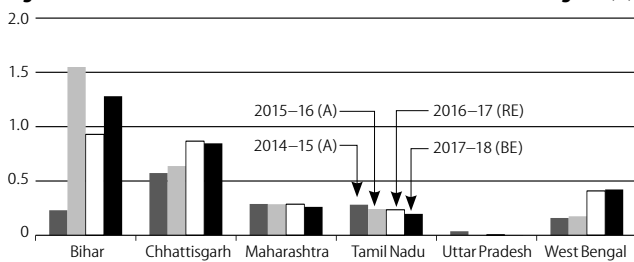
CCE, however, was stillborn. In the true sense, it never took off in government schools as the conditions were not conducive for its introduction. The role of teachers is central to the implementation of CCE. However, pre-service teacher training does not include a module on CCE and the fact that only 10 days are allotted to in-service training every year makes it very difficult to provide the required inputs for CCE. There is no conclusive guidance on the optimal strategies to implement CCE or monitor its implementation. Therefore, existing teachers were never really trained in implementing the new methods of evaluation and interpreted the policy as one that required no assessment at all. The government also failed to explain the philosophy of CCE to teachers and parents. Hence, despite being a meaningful reform, it has attracted unwarranted criticism. As a result of the faulty implementation, the reform has invited confusion and misinterpretations, with the consequence being reflected in poor learning outcomes.

Since CCE demands intensive engagement from teachers, a precondition for its successful implementation is the presence of an adequate number of well-trained teachers in different subject areas. These teachers must receive periodic inputs for capacity-building. At present, only a small fraction of all teachers receive in-service training in a given year. As a result, for the last seven years, a number of untrained teachers have been teaching children. Therefore, before putting the onus of poor quality of learning outcomes on teachers, it is important to assess how the quantum of resource states are allocating towards teachers’ education and training.

Public Provisioning for Teacher Education

Inadequate resource allocation to states has been cited as one of the major reasons for non-recruitment of professionally qualified teachers and the lack of training given to current teachers. States have failed to build adequate training institutes and institutional capacity to train teachers. As per the latest data for 644 districts, 571 DIETs have been sanctioned, of which 555 are functional (Planning Commission 2012). There are a huge number of vacancies in both academic and non-academic positions, which has further limited research activities. Moreover, DIETs have continued to conduct a pre-service course on the basis of an outdated curriculum and efforts to revise the curriculum have been limited.

However, instead of building the institutional capacity for teacher education since the implementation of the RTE Act, the government has been addressing the issue of untrained teachers only through in-service teacher training under SSA. But, SSA only provides a running cost for refresher courses. It does not cover the costs for the establishment of institutions. Besides the overall SSA budget being inadequate, the unit cost for in-service training under SSA and RMSA is also very low and varies across states. With this inadequate funding, it is impossible for teachers to get enough opportunities to develop an understanding of subject matter and pedagogy. A total of

Figure 5: Share of Teacher Education in Total School Education Budget (%)

Source: State budget documents.

7,300 teacher training institutes were approved by the NCTE in 2007. Of these, 51% were engaged in training secondary school teachers. The total seats offered for Bachelors in Education was 3 lakh and only 20,000 of these seats were university-based (Batra 2012).

It is true that building institutional capacity for teacher education is resource-intensive and that states have not invested in it for a long time. This is reflected in the share of the school education budget that is dedicated to training professionally qualified teachers. In 2017-18, the share varies from 0.001% in UP to 1.3% in Bihar (Figure 5). It also shows that other than UP, all other states have increased their spending on teacher education in 2017-18 (budget estimate) as compared to 2014-15 (actuals). A possible reason for this might be the government's 2019 deadline to give required training to all unqualified teachers. The decision to invest in teachers and to help them secure their jobs could be a political decision by the states to secure vote banks.

Conclusions

The whole narrative of linking learning outcomes of children with teachers and their salaries emerges because teachers are viewed as one input among many, whose purpose is defined with reference to quantifiable outputs, namely the learning

achievement of students (Jain and Saxena 2010). However, this narrative never questions other associated factors like training of teachers, their working conditions, teaching hours, and, above all, the allocation of resources for teachers' salaries and training and the whole teacher education system. It is clearly visible that though teachers' salaries occupy the largest share in the school education budget, the component is still under-funded, with a large number of posts vacant in most states. Also, it is a myth that teacher salaries account for over 80% of the education budget in all states. Moreover, experiences from around the globe also show that it is not unusual to spend a higher share of the education budget on providing salaries for teachers. Finally, in the absence of information about salaries of teachers in private schools, it is incorrect to assume that all regular teachers in government schools get very high salaries.

There is a constant criticism of teachers' performance on the ground that despite high salaries, the performance of children in examinations has not improved substantially. The primary reason cited for this is that the majority of teachers are not competent enough to teach effectively. Undeniably, professionally qualified teachers are a prerequisite for improving the quality of education. While the government is concerned about the poor quality of learning and the role of teachers, there is not much discussion on teacher education and teacher training from the point of view of public provisioning.

Poor allocation of funds towards teacher training both by the union and state governments is one of the major reasons for the lack of professionally qualified teachers. The analysis of state budget data for school education shows not only that the teacher education component is resource-starved, but also that it is constantly being neglected by most state governments. Far from building institutional capacity for teacher education, the government is addressing the issue of untrained teachers only through in-service teacher training under the SSA and the

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RMSA. In light of the mandate of the RTE Act and its implications for the teacher education system, there is a need to shift from a schematic approach to a holistic approach.

Hence, making teachers solely accountable for the poor quality of education in government schools is not only unfair, but also demotivating. Controlling teacher salaries will certainly not guarantee accountability. Rather, there is a pressing need

to address the issue of teacher shortage by recruiting a cadre of qualified teachers. Improvement in learning outcomes can only be expected if states allocate a substantial amount of resources in building the infrastructure for teacher training and for the training of trainers. In the absence of progressive changes in school education, the potential demographic advantage may just turn into a major liability.

NOTE

- 1 Centrally-sponsored schemes are designed by the union government, funded jointly by the union and state governments, and implemented by state governments.

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