

**The school governance environment in Uttar Pradesh, India:
Implications for teacher accountability and effort**

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Abstract

The school governance environment is an important determinant of schooling quality and thus of development. This paper explores how school governance is influenced by teacher unions and teacher politicians by presenting evidence on the political penetration of teachers, the activities of teacher unions and the stances of teachers' organisations on various decentralisation and accountability reform proposals over time. It asks how student achievement varies with teachers' union membership and political connections. Finding that students taught by unionised or politically connected teachers have significantly lower scores, it asks whether and to what extent this negative relationship works via such teachers applying lower effort.

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1. Introduction

The problem of low quality of schooling, as measured by student achievement levels, is well documented in India¹. It is also well understood that quality education requires not only physical inputs such as school buildings, trained teachers, textbooks and facilities, but also intangible inputs the most important of which arguably is teacher effort. Early concern about teacher effort in India was expressed in Weiner (1990), Drèze and Gazdar (1997) and PROBE (1999). In more recent years, studies of teacher absenteeism and of teachers' time-on-task have attempted to measure teacher effort in India (Kremer et. al, 2005; Sankar, 2007), and studies of teacher pay and professional development have considered ways to improve that effort, e.g. through performance-related pay (Muralidharan and Sundararaman, 2009; Duflo and Hanna, 2005) and performance related promotion (Pritchett and Murgai, 2007).

While teacher effort clearly depends on the presence of fair rewards, appropriate incentives and opportunities for professional development, an important aspect that also impinges on teacher motivation – but which has received less attention in the literature – is the wider governance environment of schooling. Teacher effort is likely to be greater in governance systems where there is a good system of school and teacher accountability and there are transparent information flows between schools, parents and policy makers.

However, teachers may not be only passive accepters of that wider 'school governance' environment; they may also consciously shape it to achieve certain working conditions that determine their effort levels. Teachers may influence that environment through their organizations (unions' negotiations with government) and, possibly in a more far reaching way, through their direct participation in politics, i.e. as teacher legislators who get a say in education related legislation.

This paper aims to probe these wider factors that impinge on teacher commitment and effort in India. In particular, we look at the role of teacher unions and of teachers' participation in politics, in shaping the school governance environment in Uttar Pradesh (UP), the largest state of India, and consider the implications for teacher accountability. We do this in two stages.

Firstly, we consider teachers' participation in politics. A substantial proportion of the membership of the UP legislature is made up of teachers. In probing the reasons behind the politicization of teachers, the paper discusses teachers' constitutionally guaranteed right to be represented in the Indian state legislature via an electoral college consisting exclusively of teachers. It also presents statistics showing

¹ The Annual Status of Education Report 2007 found that in a nationwide test, only 58.3% children of Grade 5 could read a Grade 2 level text and only 42% could divide three digits by one digit (Pratham, 2008).

the percentage of UP legislature's Upper and Lower House membership that has been made up of teachers in successive governments over the past 55 years. We assess the influence of teachers' presence in the legislature on the school governance environment and on teacher accountability.

Secondly, we examine the role of teacher unions. A high proportion of teachers are fee-paying union members in state funded schools, i.e. in government and aided schools in UP. This section the paper asks: what have been the activities of teacher unions, the issues they have lobbied on, the methods they have used and their successes and failures. We also assess the extent to which unions have supported or resisted decentralizing reforms and how they have sought to influence the milieu and governance of school education.

There is very little data in India to study these issues. We have conducted our own unique survey of 570 teachers in rural primary and secondary schools of 5 districts of Uttar Pradesh. This survey yields data on teachers' union membership, participation in elections, political connections, private-tuition behavior, role in examinations and participation in education related litigation. We have also accessed other types of data from different sources. Data on legislators' occupations was obtained directly from the UP state government secretariat library which keeps a register of records on all members of the Upper and Lower Houses of the legislature. Data on teacher unions' strikes and achievements is obtained from a variety of sources, including newspaper reports and teacher unions' magazines. In addition we have also used published official documents such as the report of the National Commission on Teachers (NCT, 1986) and the report of the Central Advisory Board on Education (CABE, 1992).

The paper is organized as follows: Section 2 examines teachers' participation in politics in UP and Section 3 discusses the role of teacher unions. In section 4, we examine the stances that teacher organizations have taken over time on decentralization reforms. Section 5 investigates the relationship between teachers' union membership and political connections on the one hand and various measures of teacher effort and student achievement on the other. Section 6 concludes.

2. Teachers' participation in politics

Teachers of the secondary level of education enjoy a privileged political position in India in that they have guaranteed representation in the Upper House of the state legislatures, granted by the Constitution of India in 1947. As a result, teachers have substantial political penetration in UP. Indeed, for reasons explained below, teachers have representation both in the Upper and Lower Houses of the UP state legislature. UP is

a bicameral state, i.e. its legislature has an Upper House (called the Legislative Council²) and a Lower House (called the Legislative Assembly).

The representation of (non-government) secondary school teachers in the Upper House of a state government is ensured by Article 171 (3c) of the Constitution of India which provides that "... as nearly as 1/12 of the members of the Legislative Council shall be elected by electorates consisting of persons who have been at least three years engaged in teaching in such educational institutions not lower in standard than that a secondary school". Teachers can also be elected to the Upper House from the Graduate Constituency or be appointed by the state Governor as they may be regarded as 'having special knowledge or practical experience in respect of matters like literature, science, art, the cooperative movement and social service.' The only other groups empowered to elect members to the Upper House are the Members of the Legislative Assembly (MLA) and members of Local Bodies.

No other section of government employees has been given this special status enjoyed by the teachers. Public sector employees who are paid a salary by the government are supposed to hold an *office of profit* under the government, and a person is disqualified from being elected as a member of the Lower or Upper House if he/she holds such an office of profit (Article 191 (a) of the Constitution of India). There is a similar provision for disqualification of government paid servants from contesting election for the Parliament of India (Article 102) and identical provisions are also given in the Representation of People Act 1951.

In addition to government schools, there are two types of private schools in India – Private Aided and Private Unaided. While the former – the aided schools – are almost fully funded by the state government and have relatively little autonomy (in matters related to teacher appointments, salaries, fees, curriculum etc.), the latter – the private schools – are autonomous fee charging schools. In 2002, 44% of all secondary and higher secondary schools in Uttar Pradesh were aided, 47% were private and 9% were government schools (NCERT, 2008). From 1971 onwards, following the passage of the Salary Distribution Act in Uttar Pradesh (and similar Acts in other states, such as the Direct Payment Agreement in Kerala in 1972), Aided school teachers are paid salaries directly from the state treasury and are de facto government paid servants who enjoy the same financial benefits as government school teachers but by law they are not deemed to be government servants. Thus, unlike government school teachers, aided school teachers can contest election to the Lower House.

² Whereas at Independence, 8 of the largest states of India had a LC, in several states, the LC was subsequently abolished by Acts of Parliament. The states with a Legislative Council today are UP, Bihar, Maharashtra, Andhra Pradesh, Karnataka and Jammu & Kashmir. Andhra's LC was revived in 2007.

Other publicly paid employees resent this ‘privileged’ treatment of publicly paid teachers. There have been many court cases in UP against aided school teachers not being deemed to hold an office of profit under the government (Kingdon and Muzammil, 2003, Chapter 5). However, successive judgments of the state High Court and of the Supreme Court of India have always upheld that aided school teachers are employees of their private managements and thus do not hold an office of profit under the government, despite being paid by the state government. Courts have thus maintained that it is not illegal for such teachers to contest elections to the state legislature and seek political office.

There have also been several attempts to abolish the guaranteed representation of teachers in the Upper House. The Chief Election Commissioner of India in a letter to the Law Minister in 1965 had suggested the abolition of teacher constituencies for election to the Upper Houses of state legislatures on the grounds that ‘apart from there being no justification for singling out the teaching profession for special treatment, it seems to me undesirable that teachers should be dragged into party politics in this manner.’ The matter was also considered by the Central Government on seven occasions between 1957 and 1979 but no change in the status quo was favoured. Finally in early 1990s, the Central Advisory Board on Education (CABE) also sought states’ views about the desirability of the continuation of guaranteed teacher representation in state legislatures. Based on these, the CABE committee report stated: “the nature and extent of politicisation of teachers through involvement in elections in the context of the constitutional provision for their representation in Legislative Councils came up for discussion in various aspects. An apprehension was expressed that extending voting rights to elementary (school) teachers would further aggravate the situation. The sufferers would be the children in particular and the elementary education system in general. Such a situation would not be in accordance with the spirit of the provisions of the Constitution.....The Committee, therefore, is of the opinion that there is no need to retain the present provision of separate constituency for teachers in Legislative Councils” (CABE, 1992). While it expressed universally negative views about teacher representation in state legislative councils, its recommendations have never been carried out. Thus, the special status provided by the Constitution to teachers continues as is.

Table 1 shows the total number of Members of the Legislative Council (MLCs) as well as the number of *teacher* MLCs in successive UP state governments in the post-independence period. Teacher members as a proportion of total members has varied from 12 to 23 percent. The reason why the proportion is greater than one-twelfth (8.3%) of the total (which was stipulated by the Constitution) is because many teachers are also *appointed* by the Governor of UP. On average, about 17% of the

membership of the Upper House is made of teachers (last row of Table 1), which constitutes a high degree of representation of teachers in political office, given that teachers constitute about 0.6% of the adult population in UP. It is a large enough proportion to exert substantial influence in legislative matters, including matters pertaining to the education sector and affecting teachers' pay and working conditions. Many members seek re-election term after term and some are successful in achieving that. For instance, Mr. Om Prakash Sharma, long-serving leader of the Aided secondary school teachers' union (Madhyamik Shikshak Sangh), has been a teacher MLC continuously for 38 years.

Table 2 shows teachers' proportionate share in the UP Legislative Assembly or lower house. The tenure of the Legislative Assembly is for five years. Table 2 shows a generally increasing trend in the representation of teachers in the lower house, except for an apparent downturn in the latest assembly. On average 6.6% of the lower house was made up of teachers over the post-independence period. In the 30 years upto 1980, around 5% of Members of the Legislative Assembly (MLAs) were teachers. In the 27 year period from 1980 to 2007, on average 8% of MLAs have been teachers. MLAs collectively make the laws that regulate and govern, *inter alia*, the system of education in the state.

Unfortunately, we do not know the occupations of the *contestants* for membership of the lower and upper houses, we only know the occupations of those successfully elected. However, our bespoke teacher survey of 570 teachers across 5 districts of UP provides another way of examining the extent of teacher participation in politics/elections.

Table 3 shows teachers' participation in politics and their connections with teacher politicians/teacher legislators. It shows that these vary greatly between primary and secondary level teachers. In particular, primary level teachers are much less likely to personally know or to even have met teacher MLAs and MLCs or to report that a teacher in their area contested the last MLA or MLC election. Their lower connectedness with teacher politicians is consistent with the fact that primary school teachers are not part of the electoral college that elects teachers to the Upper House of the state legislature, i.e. they are unlikely to be wooed by teacher politicians.

Among secondary school teachers in Table 3, participation in political elections and connectedness with teacher politicians/teacher legislators vary much by type of school. In general, private and government secondary school teachers are roughly equally likely to personally know or have met teacher MLAs and MLCs but among *aided* secondary school teachers, there are remarkably high levels of connectedness with teacher politicians. Nearly half (48%) of all teachers have either met or personally

know a teacher MLC and 32% personally know a teacher MLC. It is patently clear that teacher MLCs maintain close links with the teacher community that forms the electoral college to elect teacher MLCs. While teachers' acquaintanceship with teacher *MLAs* (members of the lower house) is smaller – 35% of teachers have either met or personally know a teacher MLA compared with 48% who have met or know a teacher MLC – this is still nevertheless a very high proportion, given that MLAs are elected from a general constituency, rather than from a teacher constituency. This suggests that teacher MLAs represent not only a general constituency but that they also cultivate a teacher vote bank too, and this is not surprising because teachers are influential at the local level at election times, and because elementary school teachers man the polling booths at election time (Kingdon and Muzammil, 2003; Chapter 5 in Beteille, 2009).

But why may teachers wish to maintain such high levels of contact with teacher members of the upper and lower houses? The reason appears to be that teacher MLAs and MLCs are effective in helping teachers. Much business related to teacher appointments, transfers, and dispute-resolutions etc. in India (and in UP) occurs via supplicants approaching government ministers directly for help. It is usually very difficult to see a minister but teachers can more easily gain an appointment with a minister through the direct link of the district (or even block or tehsil) level teacher union functionaries who in turn approach teacher MLAs or teacher MLCs for backing in obtaining ministerial appointments and assistance. This is the logic why teacher candidates for the Legislative Assembly election are supported in their electoral campaign by other teachers and, once in office, the teacher MLAs are particularly sympathetic to the teaching profession, even though they are elected from a general rather than a teacher constituency. However, it is still likely to be true that teacher MLCs are of greater help to the teachers' cause than are teacher MLAs and this is reflected in (particularly secondary school) teachers' greater acquaintanceship with teacher MLCs than with teacher MLAs in Table 3.

3. Role of teacher unions

Teacher unions, as representatives of teachers in government negotiations, are key stakeholders shaping the school governance environment. In the first two decades after Independence in 1948, teachers generally viewed the union as the agency to fight against their exploitation at the hands of unjust school managers who dismissed them at will (Shrimali, 1951). Union's job was primarily to ensure job security to teachers and fight for improvements in teacher salaries and working conditions (Chaudhary, 1983). Teacher strikes and sometimes even violent struggles during the decades of 1960s and 1970s forced the

UP government to enact centralising laws (Basic Education Act, 1972; Salary Disbursement Act, 1971) that greatly reduced the powers of aided and government school managers – See section 4.2. While these Acts ended the era of virtual hire and fire in aided/government schools, managers asserted their right to discipline inefficient or unfit teachers, and the number of teacher related court cases increased. Teacher unions now help teachers in their *legal fight* to protect their service conditions and by making it possible for teachers to have their routine bureaucratic work (related to transfers, promotion etc.) done in government offices, by procuring ministerial/political help on behalf of teachers (more on this later).

There are different teacher unions working for different groups of teachers. For instance, at the secondary school level, the Madhyamik Shikshak Sangh (MSS) represents aided school teachers, the Rajkiya Shikshak Sangh (RSS) represents the government school teachers and the Vitt Viheen Shikshak Sangh (VVSS) represents the private school teachers, though many of the latter also feel that the MSS represents their interests. At the primary school level, the Prathmik Shikshak Sangh (PSS) serves government regular teachers and the para teacher Shikshak Sangh serves the contract teachers³.

The influence of unions can be gauged partly by the support they receive from teachers, as measured by the proportion of teachers that are paid-up members of the teacher union and take part in its activities. It can also be investigated by examining the issues on which unions have lobbied when seeking to influence decisions and legislations concerning teacher pay, working conditions and level of accountability (local versus centralised level).

Table 4 shows teacher union membership rates and the extent to which teachers turn to their union for assistance. We collected information on union membership in two different ways: firstly by asking “what percentage of teachers in your school are member of a teacher union?” and secondly by asking “are you a member of a teacher union?” While government school teachers’ response to these two questions is very consistent (both approximately 85%), among aided school teachers there appears to be some under-reporting of union membership when the question is asked about own membership status (compared with ‘the percentage of teachers in your school who are union members’). However, among private school teachers, there is a much larger discrepancy between the information from the two questions, especially at the secondary level, suggesting that many private school teachers are reluctant to admit being union

³ Para teachers are teachers appointed on an annually renewable contract in government primary schools in UP. They differ from regular teachers in that they are locally recruited, have lower educational qualifications requirements, have annually renewable jobs and are paid about one quarter of the regular teacher pay.

members. This may be because private school teachers' services are not as secure and those identified as 'trouble makers' can be more easily fired there than in aided or government schools.

Taking teachers' report of whether they are union members as the conservative estimate, Table 4 shows that overall 62% of primary school and 69% of secondary school teachers in UP are union members. However, this masks large differences in unionization rates by school type. While about 85% of all government and aided school teachers (at both the primary and secondary levels) are union members, only 5.1% among primary teachers and 37% among secondary teachers are unionized in private schools.

Table 4 also shows that teachers seek help from their unions in large numbers. For instance, 44% of aided school teachers sought help from the teacher union at least once and (not shown) nearly 30% have sought help twice or more. Government school teachers are about 14 points less likely to seek help from the teacher union than aided school teachers, and private school teachers are the least likely to turn to the union for assistance, though in their case, there may be under-reporting about contact with the union.

What are some of the problems teachers face, which require union help? In the RECOUP survey, teachers could circle upto three issues they wanted union to take up with government, so the reported percentages here do not add up to 100. About 62% of UP primary school teachers said they want their union to lobby for higher salaries; 43% of teachers wanted union to lobby for timely payment of salary, 30% for help in getting extra teachers, 16% for help in transfers- and promotion-related problems, 10% for better facilities for pupils and 4% for availability of teaching learning materials.

The above evidence helps to understand why teachers turn to their union – and even to teacher politicians – for help. The fact that teachers want union help in the timely payment of salaries, and in transfer- and promotion-related matters suggests they have genuine grievances against education department officials who try to extort bribes from teachers at the time of teacher recruitment, promotions or transfers. Secondary school teachers in general complain that corruption prevailing in government education offices forces them to seek the help of teacher union leaders. This is evident from the fact that senior education officers in UP government issue circulars from time to time that cases of corruption in the education offices are on the rise and give instruction to lower level officers to check these. For instance, the Director for Secondary Education issued an order (No. Gen. Camp. 13498-588/2008-09 dated 21 November 2008) "Order related with corruption in Offices" (*Karyalayan mein Bhrashtachar Sambandhi Adesh*) which identifies that corruption prevails in matters such as appointment of a dependent of a deceased teacher; family pension of a deceased teacher; release of pension of retiring teachers; release

of pension fund of teachers who died while in service; taking charge of teachers newly appointed by the Secondary Education Selection Board, Allahabad; promotion of teachers; transfer of teachers and service related matters; issues related with the recognition of schools/colleges by government; payment of arrears to teachers; and advances from their pension fund being taken by the teachers. The high salary and job security of a teacher in government and aided schools leads to abuses, such as the sale of teaching posts. A recent study on financing of secondary education suggested that applicants for teacher positions commonly pay between Rupees 100,000 - 200,000 in order to be selected to work in aided schools (Tilak, 2008). In such a situation the system as a whole and education officials in particular are in a weak position to insist on greater teacher accountability; i.e. the educational administrator (poacher) who takes bribes from teachers would be abashed to turn into game keeper.

Table 4 shows that a high proportion of all teachers (more than 50% overall, and 77% among aided secondary school teachers) have participated in any meetings, protests or strikes organised by a teacher union. Although we do not present the data for this, most of these participations have been in the past year, suggesting that this level of participation is a regular annual occurrence. A remarkable 46% of all teachers (and 72.5% of aided secondary school teachers) say they discuss among themselves to reach agreement on who they will vote for in an election and then vote for that candidate *en bloc*. Finally, the last row of Table 4 shows that among those who say they vote en bloc, 53% of all teachers (and 68% of aided secondary school teachers) say their union motivates them to vote en bloc. Thus, many teachers' political/voting behaviour seems to be dictated by their identity as teachers rather than being based on other diverse individual-level considerations such as political beliefs and values, how the party manifestos affect their families, or indeed caste based considerations, etc. These results are suggestive that teachers, particularly in the aided and government school sectors, concertedly vote to elect candidates they believe will support teacher interests.

How do the characteristics of unionized and non-unionized teachers differ? and what are the financial benefits of joining a teacher union? Table 5 explores these issues in UP. It shows that within each school-type at both the primary and secondary school levels, union teachers are mostly substantially and statistically significantly older and more likely to have pre-service teacher training than their non-union colleagues. Within the private school sector, at the secondary level, union teachers are more likely to be male, and at the primary level, union teachers are more likely to be low caste (schedule caste, schedule tribe or 'other backward caste') than non-union teachers. Unionized teachers are apparently paid a great deal more than non-unionized teachers in all three school-types (government, aided and private)

but particularly in the aided school sector; however this is because they are older and more likely to possess pre-service training. In government primary schools, there are two types of teachers – regular and para teachers. While Table 5 does not provide the breakdown by regular and para status, the mean salary of the former in our data was about Rs. 11850 per month while that of para teachers is about a quarter of that, at about Rs. 3000 per month, and private primary school teachers' 940 Rs. per month. Within the regular teachers' group in govt. primary schools, union teachers' mean pay is Rs. 12139 and non-union teachers' pay is much lower at Rs. 8302. The aided sector's vast discrepancy in teacher pay between unionized and non-unionized teachers is explained by the fact that aided schools fill teacher vacancies with part-time teachers on low honoraria while waiting for the government to make teacher appointments against vacant posts. These temporary teachers generally tend not to be union members.

A priori, controlling for characteristics, we would not expect any union pay premiums in either the government or the aided school sector since teacher salaries in these sectors are bureaucratically fixed (tied to seniority and education) and are not linked to individual teachers' union membership status. So, to what extent do the raw pay premia for unionized teachers persist when we control for other characteristics that are correlated with union status, such as age, experience and pre-service training. Simple Mincerian earnings functions of teacher pay, by school type (not reported here but included in Kingdon and Muzammil, 2010) confirm that the union pay premium does disappear after controlling for characteristics in the government school sector. In the government and aided school sectors, pay is not responsive to teachers' résumé characteristics (pay scales and determinants of pay are the same in the government and aided school sectors). In the private school sector however, pay is responsive to variations in teachers' tenure, training and first division marks (in higher secondary exams, a proxy for the teacher's own cognitive skills). This responsiveness to various productive characteristics is presumably because of the greater use of discretion and lack of rigid civil service rules in pay-setting in the private schooling sector. Thus, just as teachers' connections with teacher politicians do not yield them any financial benefits, in the same way, teacher union membership is not associated with higher pay for individual teachers. Teachers' high level of participation in their unions then is explained more by the fact that strength of collective bargaining raises teacher pay across the board, rather than at the level of individual teachers.

How successful have teachers been in lobbying for better pay? We present four ways of assessing this success. Firstly, Kingdon and Muzammil (2010, Table 7) show that pay as a proportion of total recurrent education expenditure increased secularly over time in India, progressively squeezing out expenditure on non-salary expenditure. Secondly, Table 8 in the same paper shows that between 1973 and

1996, regular teachers' real salaries grew at 5% per annum. Figures from the Penn World Tables show that over the same period, per capita GDP of India grew by 3% per annum (UP's is likely to be lower), i.e. teachers gained 2 percent per annum more than the average person, in real terms every year continuously for this 23 year period. Over the longer 33 year period 1973 to 2006, teacher salaries also increased by 5.1% in real terms. Thirdly, in 2005, government regular teachers' pay as a multiple of UP state per capita GDP was 7.8 (after the Sixth Pay Commission, the ratio is likely to be about 17.0, see Kingdon 2010), which compares with a ratio of 2.9 for Asian countries taken together (UNESCO, 2006), suggesting that Indian teachers are much better paid – as a multiple of per capita income – than in other countries. Lastly, government primary school teachers' pay as a multiple of private primary school teachers pay has increased dramatically over time. Kingdon and Muzammil (Appendix Table 2) shows, in UP, government regular teachers' mean pay was 2.5 times private teachers' mean pay in the early 1990s ; it was 5 times in the early 2000s and it rose to 12 times in 2008 (current survey). Now that UP has applied Sixth Pay Commission's salary recommendations, regular teachers' salary in January 2009 (applied retrospectively from January 2006) has nearly doubled, meaning that it is likely now to be, on average, more than 20 times mean private school teachers' pay in the same villages, since private school teachers' salaries are unlikely to be too affected by Pay Commission recommendations. Clearly public sector teachers have been very successful in lobbying for higher pay.

Nor is it the case that the Central Pay Commission's recommendations are always applied in the state, without reference to teacher demands. For example, after the Fifth Pay Commission in 1997, the UP government wished to apply a lower than centrally recommended pay increase for teachers in view of the state's tattered fiscal situation. The MSS lobbied tenaciously for four years to get the central government pay scales, and got them just before the next general election, despite the fiscal pressure on the state and despite the state being on average only half as wealthy as (and growing much slower than) India as a whole: state per capita income in UP in 2004-05 was only 52.7% of mean per capita income of the country as a whole, and mean annual growth of per capita GDP in current prices between 1994 and 2005 was 7.6% in UP and a higher 10.6% in India⁴.

Apart from longer term across-the-board financial benefits, union membership also enables teachers to access help in matters such as averting disciplinary actions and resisting accountability pressures. There is evidence that unions help teachers with these issues, as shown in the next section.

⁴See <http://planning.up.nic.in/annualplan0607/vol1/Annex-chap-28.pdf>. For details of teacher union strikes to get the Fifth Pay Commission's central increases, see Chapter 10 in Kingdon and Muzammil (2003).

4. Teacher power and school governance

This section examines the influence of teachers on school governance in Uttar Pradesh by investigating the extent to which teacher unions and teacher politicians have upheld or subverted educational rules, disciplinary measures and governance arrangements that are in place in the state. Another way to examine teachers' influence on school governance would be to examine the stances of teacher unions on various educational decentralisation reform proposals in UP. For space reasons we do not do this here but Kingdon and Muzammil (2010) shows that teachers through their organisations have been very successful in consistently opposing various decentralising reforms in education in UP over the past 40 years.

A number of teacher accountability measures exist in UP, such as school inspections by the District Inspector of Schools; Principal's annual entry into every teacher's character book/ register; system of teacher transfers as a disciplining device; and provision for suspension or withholding the salary increment of erring teachers. etc. Teacher unions in UP have consistently been opposed to the use of positive incentives such as performance related pay/promotion. There are also rules for re-deployment of teachers from one school to another within the district, to harmonize pupil-teacher ratios and avoid excess teachers in some schools and scarcity of teachers in others. Finally, there are rules against corruption in the examination system.

However, evidence suggests that these accountability sanctions and probity procedures have not been effectively implemented because teachers resist them by pressurising the District Inspectors of Schools, both through their unions and via political pressure from teacher politicians. All politicians woo teachers – who are both a big voter bloc and who also 'man' the polling booths at election time – but *teacher* politicians specially woo teachers as they are elected from a teacher constituency. Teacher and non-teacher politicians use their considerable influence and ministerial connections etc. to shelter erring teachers or otherwise help teachers, in order to be seen as friends by the influential teacher voter bloc. Pandey's (1993) study of District Sultanpur in UP gives concrete examples of pressure by politicians on district education officers for a variety of tasks, such as : recommending appointment of certain individuals to teaching positions; asking that certain teachers be exempt from teaching duties; interfering in cases of rule-based teacher transfers; demanding that more schools be opened in a given area or more teachers be appointed in a school. She cites other sources furnishing similar evidence, suggesting that 62.5% of district education officers report suffering from political interference, and believes that the tendency for political interference in educational matters for expanding influence is on the increase.

A recent example of 2007 pertains to the District Inspector of Schools of Kanpur district deciding to rationalise staff strength at DAV Inter College, Kanpur, where there was a situation of ‘excess’ teachers due to falling student enrolment. In this school, pupil teacher ratio had greatly fallen and, as a result, 37 teachers were surplus to requirement. As per the rules of the UP government, teachers were required to move and were given the option to continue in other aided colleges but the teachers became adamant not to comply with the rules and the request to move. The aided school teachers’ union (MSS) came to support DAV College teachers by organising a sit-in (*dharna*, on 16 July 2007) at the college premises. All prominent leaders of MSS including the President and the Secretary (both also teacher MLCs) raised slogans against the management and the district education authorities. They succeeded in stalling the implementation of the order (*Santusht*, August 2007).

The DAV College episode is one example from the general scenario of ‘excess’ teachers in government and aided secondary schools in UP which, according to the District Inspector of Schools for Lucknow district, is due to the poor quality of schooling in these institutions which causes disenchanted parents to increasingly move their children to private schools. The newspaper *Hindustan* (dated 7.8.2007, Lucknow Edition) surveyed 10 aided secondary schools in Lucknow city (state capital of UP) and found an average pupil teacher ratio of 9.7:1, against a mandated maximum of 40:1.

Another recent example of unions protecting teachers from accountability pressures is from the Ballia district of UP where the District Inspector of Schools, Mr Umesh Tripathi, received death threats for wishing to take action against 81 teachers who he said were engaged in exam related corruption. There is evidence that such corruption is widespread in UP and that it involves teachers (Appendix Table 1 in Kingdon and Muzammil, 2010).

Teacher MLCs (who form the so-called ‘Teachers group’ in the Upper House of the State legislature) alleged in the House that Mr. Tripathi had sent a list of the accused teachers to the district police chief to initiate action against them under the UP Control of Organised Crime Act (UPCOCA). The teacher leader in the House (who was until recently also the Pro Tem Chairman of the Upper House) said that this Act had not come into force yet so the DIOS had no right to threaten teachers with it. The matter became the subject of so much political pressure that UP Legislative Assembly witnessed uproarious scenes (on 24th February, 2008). Teacher leaders (Mr R P Mishra and Mr Narendra Kumar Verma) also criticised the secondary education Minister for allegedly shielding the DIOS who in turn had to clarify that he did not order for any severe penal action against the concerned teachers (“Confrontation between TU and GOUP Rises”, *Hindustan*, Lucknow 25th February, 2008). At first the Education Minister was defiant

and said that he had not hurled abuse at teachers, nor slapped them but had only reminded them of their duty “it is hurting them because they are guilty. Only those interested in politics are not keen to teach,” he added. However, in the face of calls for the Minister’s removal by the 92,000 secondary school teachers who went on a protest march in every district of the state, the burning of his effigy in places like Lucknow and Azamgarh, and their threatening examination boycott if he was not removed, the Minister performed a *volte face*: far from defending the district inspector of schools’ right to bring cheating teachers to book, he stated that he would protect the dignity and prestige of teachers by not implementing the proposed policy of frisking invigilating teachers when they enter examination halls. He said “we are fully conscious of the dignity of a teacher which is bound to suffer if any such thing is allowed” (*Times of India*, 26th February 2008). And it was only then that the MSS withdrew its examination boycott call. (*Santusht*, March 2008).

In 2005-06, UP state government decided to introduce familiarity with HIV as part of health education in secondary schools. The idea was to add AIDS awareness among students, as one of many areas of health concern. When the MSS decided to organise sit-ins (*dharnas*) to oppose this move, the State Government gave in the day before the threatened sit-in and declared that it would withdraw the objectionable portions from the books. Even despite a government order on 17 July asking school principals and teachers not to refer to the HIV material, and despite the government’s promise to remove the concerned material from the concerned book (*Kishor Awastha*), teachers around the state burnt books on 21st July, as per their prior decision of 8th July. One news coverage at the time reported that “nowhere in the material that the children study have the words ‘sex education’ been used. Still, these words are repeatedly being used by teachers associations to create misconceptions and mislead the media”⁵. Usually the MSS becomes active at the time of Board examinations (in late February and March) but this instance came in July, the beginning of the school year.

In March 2007, the UP government passed an Act in the lower house (Legislative Assembly) regarding the reconstitution of the Intermediate Education Board which the government had to withdraw after the sit-in of the MSS leaders (present in the House) in the Well of the House itself. The Newspapers next morning reported the event in banner headlines. For example: “Govt. Withdraws Bill Passed by Houses”, *Hindustan Times*, Lucknow 13 March 2007. *Rashtriya Sahara* (Hindi Daily) reported: “Vaapas Lena Para Sadan mein Parit Vedheyak” (Lucknow, March 13, 2007) which translated means the same as the above *Hindustan Times* headline. The MSS opposed the Amendment in the Intermediate Education Board Act because it wanted elected members out of the teacher leaders, as was the practice earlier. This

⁵ <http://infochangeindia.org/200710026670/Health/Features/Storm-over-sexuality-education-in-UP.html>

appears to be a clear case of political pressurization of the UP Government by the MSS to the extent that the government had to withdraw an Act duly passed by both the Houses. *Times of India* (13.3 2007) reported: “Shiksha Sanshodhan Bill in for Reconsideration”. The secondary teachers’ union (MSS) described this success of teacher unions in the State Assembly as an “Unprecedented Event in the Legislative History of the State of UP” (for details of the Bill and the stance of the union, see *Santusht*, March, 2007).

In 2002, the then Education Minister Om Prakash Singh advocated a set of rules governing the conduct of teachers in the schools and outside as well, which he believed would improve the quality of secondary education and would make teachers a guiding force for society. According to the *Times of India* (15th July 2002), the minister stated that there was already a code of conduct in place for university and degree college teachers and that it would be good to extend the notion to teachers in secondary education too. The idea was to streamline the quality of education, making teachers realise that they must *take regular classes, keep away from activities which bring a bad name to the teaching community and above all, act as role models for their students.* (emphasis added). The minister said “a mere 40 per cent pass rate in the UP Board High School examinations is a matter of grave concern for us”. However, teachers outright rejected the proposal saying “conduct can be improved through ‘self evaluation’ and not by imposition of rules”. “Besides” they pointed out, “politicians should first have a code of conduct for themselves, before designing one for teachers”. Although the minister had given assurance that the code of conduct would be implemented only after a consensus was reached, teachers presented a united front in opposing the implementation of a code which they described as yet another instrument in the hands of the government and college managements to harass them. Devi Dayal Shastri, leader of MSS (Sharma group) and MLC from Lucknow, said that “the code of conduct would not be appropriate for teachers as it projects the picture that the teachers are at fault and the government is out to rein them in. Instead, the teachers should themselves conduct a self evaluation”, he suggested. The President of MSS (Pandey group) also decried the move to implement such a code on the teachers, saying that ‘a code of conduct already exists in the community and that the government should keep away from ‘teaching’ teachers about what they should do. “Things like good conduct, inspiration and motivation come from within and cannot be imposed by the government,” he pointed out. (“Govt, teachers clash over conduct code”, *Times of India*, Lucknow 15 July 2002).

What are the implications of such power and influence, for teacher accountability in UP? When teacher unions can pressurize even the government to withdraw a duly passed Act, they are unlikely to

respect district level accountability measures that are in place. Similarly when teacher unions can force the state Education Minister to retract legitimate enquiries about teachers' conduct during examination time, it is hard to see how teachers can remain accountable towards the less powerful district education officers or towards school principals and parents.

The report of the National Commission on Teachers (NCT, 1986) supports the notion that the school governance environment created by teachers' unions and their political connections serves to avert the proper use of teacher accountability measures. The Commission rued that union-backed teachers did not fear adverse repercussions if they were lax in their work. It noted that some of the Principals deposing before it "lamented that they had no powers over teachers and were not in a position to enforce order and discipline. Nor did the District Inspectors of Schools and other officials exercise any authority over them as the erring teachers were often supported by powerful teachers' associations. We were told that that there was no assessment of a teacher's academic and other work and that teachers were virtually unaccountable to anybody" (NCT, 1986, p68).

5. Implications of the governance environment for student achievement and for teacher effort

Relation between teachers' union membership / political connections, and pupils' learning outcomes

The RECOUP teacher survey of primary and secondary schools that we have used so far, was carried out in tandem with the SchoolTELLS survey of primary schools by one of the authors, i.e. the sample of primary schools was the same in both surveys. The SchoolTELLS survey tested students of grades 2 and 4 so we have information on student learning achievement levels in language and maths. When merged with (the primary school portion of) RECOUP teacher data, we can link pupils' achievement with the characteristics of the primary school teachers that taught them. This permits us to see the relationship between teachers' union membership and their political connectedness on the one hand, and student learning outcomes on the other. The SchoolTELLS survey did not collect any data from secondary schools. Our dataset is small (62 schools and <300 teachers), and it is generally difficult to establish causal relationships without randomized trial studies, but our findings will at least be suggestive.

Table 6 shows an achievement production function fitted for the sample of students in government primary schools in Uttar Pradesh. Student achievement score has been converted into z-scores, i.e. number of standard deviations from the mean score (the average score of all students of classes 2 and 4, in language and maths tests, and in both wave 1 and wave 2). We have included dummy variables for class, subject and wave. We have extensive student level controls (age, gender, health, maternal education and

family's asset ownership) and teacher level controls (age, gender, education, and teacher type). The variables of particular interest are the union membership variable and the political connection variable. 'Political connection' equals 1 if the teacher has met or personally knows a teacher MLC, otherwise it is 0. The first three columns show OLS estimation and the last three columns show school fixed effects estimates, i.e. within school estimation. The latter considerably reduces the problem of endogeneity bias in parameter estimates because one is comparing achievement only across students who have chosen the same school.

In Table 6, teacher variables mostly have 'rightly' signed associations with student achievement, with one surprise being that contract (or 'para') teachers produce higher pupil achievement: the achievement of a student taught by a para teacher is about 0.22 SD higher than that of a student taught by a regular teacher. However, the finding is consistent with that in other applied studies: Goyal and Pandey (2009) and Kingdon and Sipahimalani-Rao (2010) find para teachers have higher effort than regular teachers, and Muralidharan and Sundararaman (2008) and Atherton and Kingdon (2010) find that students taught by para teachers do better than those taught by regular teachers.

Focus initially on the OLS (first three) columns of Table 6. Students taught by a unionized teacher have achievement score about 0.06 SD lower than those taught by a non-unionized teacher, after extensive controls. Pupils taught by a politically connected teacher have achievement scores about 0.24 SD lower than those taught by non politically-connected teachers. When both variables are included together in column 3, the coefficients do not change much.

To what extent may these negative coefficients be the result of endogeneity bias? There are two potential sources of endogeneity bias. First, is reverse causation, i.e. the possibility that causation runs from low student achievement to a teacher's decision to become union member or acquire political connections in order to avoid being disciplined. Even in government schools where the threat of dismissal is low, it is possible that bad teachers – whose students score poorly – become union members or politically connected in order to increase their chances of warding off possible future disciplinary proceedings.

Second consider omitted variable bias as the source of endogeneity. If the less able or less motivated students systematically sort into schools with unionized and politically connected teachers, then the negative coefficients on these two variables could be due to low ability students being taught by unionized and politically connected teachers.

To address endogeneity bias, we estimate school fixed effects equations in the last three columns of Table 6. Here, the identification comes entirely from *within school* variation in both student achievement and in teacher union membership and political connections. While these within-school results change from the across-school (OLS) results, they are qualitatively the same. The achievement of a student is 0.10 SD lower if taught by a unionized teacher and 0.14 SD lower if taught by a politically connected teacher, and both coefficients are statistically significant. When both variables are entered together in column 3, the political connections coefficient becomes statistically insignificant, though its size remains substantial.

But might it be the case that even *within a school* there is systematic matching of less well performing (i.e. less able) students to the unionized and politically connected teachers? i.e. might the problem of endogeneity exist even in the school fixed effects equations in Table 6? This is unlikely for two reasons. Firstly, there is only one class of any given grade in these rural primary schools, so it is not as if a teacher has a choice of teaching a smarter or weaker class. Secondly, even if teachers could somehow choose to match to particular classes (and therefore to particular students) within the school, in fact, if anything, unionized/ politically-connected teachers would be likely to use their power to choose classes of the *better* performing students. Thus, if there is within-school non-random matching of students to particular teachers, then the true negative effect of these variables would be even bigger than what we see. Even so, teacher unobservables *are* in the error term of the achievement equation and in theory they may be correlated both with union and political connection status of teachers on the one hand, *and* with student achievement on the other. To address this endogeneity issue, we use the procedures outlined in Altonji, Elder and Taber (2005) to assess the potential size of any bias due to the unobservables in the equation. The Altonji et al procedure assesses how important these unobservables would need to be to explain away the entire effect from the treatment variable (i.e. union variable or political connection variable, in our case).

The bottom part of Table 6 shows the results from the Altonji procedure. When we look at the preferred school fixed effects results, we find that while the sign on the union effect is negative, the estimate of the potential bias induced by a correlation between the unobservables and the union variable (reported in the penultimate row of Table 6) is positive. A positive correlation between the unobservables in the achievement equation and the union variable (and also a positive correlation of the unobservables with the political connections variable) implies that the negative effects of unionization and of political connections on achievement are both underestimated. Thus the evidence points to the estimates of the

union membership effect and the political connections effect as being *underestimates* of their true negative impact on achievement⁶. The result for the union membership variable is similar to that found in Kingdon and Teal (2010) who use a sample of private secondary school teachers from 16 Indian states, where the methodology was pupil fixed effects estimation.

Relation between teachers' union membership / political connections, and teacher effort

Here we consider why the relationship between student achievement, on the one hand, and both teacher union membership and teacher's political connectedness, might be negative. In particular, we examine whether unionized and politically connected teachers apply less effort.

What are the theoretical models that drive the relationship between an individual teacher's union membership and her/his effort within a school? Suppose unions support only teachers who are paid up members. One reason why teachers may join a union is because they wish to maximise child welfare, believe they know the best teaching methods, and being a union member gives them greater power to implement their approaches and innovations in their classes (due to the backing of their union which represents the collective strength of teachers, in case of any disputes about pedagogy between the teacher and the school authorities). Under this model, unionized teachers will be motivated to apply greater effort because of perception of greater empowerment. Another potential reason why teachers may join a union is that they maximise a different objective function, one in which their own interests receive greater weight than students' interests (Hoxby, 1996). Here they join a union because it shelters them from penalties/sanctions from the school authorities when they are lax in their work, since unions protect their members, e.g. by intervening on behalf of teachers. Under this theoretical model, union membership will lower teacher effort. Therefore, *a priori*, we cannot sign the relationship between union membership and teacher effort. It is an empirical issue. Similarly, teachers may cultivate political connections to increase their autonomy to implement their (superior) teaching methods within their school, or because such connections help them to avert disciplinary action by school authorities when they err. The former is likely to lead to a positive relation, and the latter to a negative relation, between political connections and teacher effort.

⁶ If the sign of the effect and the bias were the same (as they are in the OLS equation in column 2), this would be open to the interpretation from Altonji, Elder and Taber (2005) that it measures the size of the shift in the distribution of the unobservables necessary to explain away the implied union effect. Thus in column 2, the effect of any remaining unobservables that affect achievement (after our extensive controls) would have to be 1.85 times the effect of the included observable variables for the whole of the political connections effect to be due to unobservables (i.e. due to endogeneity), which seems unlikely especially given that many of the factors affecting a child's achievement that are typically unobserved in most datasets are in fact observed, available and included in our data/model. In any case, we would prefer the more stringent School Fixed Effects estimates.

We have several measures of teacher effort, including teacher's absence rate⁷; teacher's self-report of the proportion of the typical school day that s/he spends in teaching (time on task, when present in school), in organising prayer assembly and games or the mid-day meal or in office/register work; whether teacher gives private home tuition; has an occupation other than teaching; number of days of non-teaching duties in the past year; and contesting any elections, or fighting an education-related court case etc. These are all activities that potentially distract teachers from teaching and reduce their time on task. We regressed each of these effort measures on both teacher's union membership status and on teacher's political connectedness (Table 7). The regressions are fitted for the same sample of government primary schools in Uttar Pradesh as that used in Table 6. Using a school fixed effects method allows us to control for everything unobserved about the school, and abstract from the problem of the endogenous matching of teachers to particular schools.

The results in Table 7 show that after controlling for a range of teacher characteristics and for everything about the school in which the teacher teaches, union membership of a teacher is not negatively and statistically significantly related to most of the teacher effort measures, differing from the finding in Halsey Rogers et al (2004). Thus, there is no evidence here to support the hypothesis that union membership lowers child achievement via lower teacher effort. An alternative explanation for the negative association of union membership with pupil achievement in Table 6 (if union membership does not lower teacher effort), is that bad teachers reveal their type by joining unions, i.e. ineffective teachers (i.e. those whose students have lower achievement) are more likely to join a union, perhaps to increase their chances of warding off potential disciplinary procedures in case they are found to be incompetent.

However, teachers' political connections are significant predictors of several measures of teacher effort in Table 7. Two political connection variables have been used: 'teacher has met or personally knows a teacher MLA or teacher MLC', and 'teacher has met or personally knows a teacher MLC'. While the mean of the former is 8.6%, the mean of the latter is 4.6%, i.e. less than 10% of government primary school teachers have political connections.

Teacher absence rate is an important indicator of teacher effort. Teachers who are connected to a teacher MLC have an absence rate 16 percentage points higher than teachers not so connected, though this is much lower and not statistically significant for teachers who are connected to either a teacher MLA or MLC. This suggests that connection with teacher legislators who are elected from a *teacher* constituency

⁷ Teacher absence rates were calculated by making four unannounced visits to the sample schools within one school-year, and noting the presence of each appointed teacher. Thus, the teacher absence variable takes values such as 0, 0.25, 0.50, 0.75 and 1.

is more powerfully associated with reduced teacher effort than connection with teacher legislators elected from a *general* constituency. Teachers' self-reported time on teaching and in organising prayer-assembly and games etc. is significantly lower for politically connected teachers.

Neither giving private home tuition, nor days of non-teaching work outside school varies significantly with teacher's political connectedness, though in the latter case the coefficients of both political connection variables are very large (5 days of non-teaching work more than for non-politically connected teachers). About half of all teachers have occupations other than teaching, which has the potential to reduce teaching effort within school. Teachers who are connected to teacher MLA/MLC are significantly more likely to have occupations other than teaching. Both types of political connection strongly raise the chances that the teacher will cite that he/she does 'social service works' when asked a question about occupations other than teaching. However, again the size of the relationship is much larger (double) for connection with a teacher MLC.

Contesting elections and raising resources for elections takes time, and similarly fighting a court case takes time. Thus whether a teacher has contested any political or union-office election (at the local, district, state or national level) and whether teacher has filed a education related court case are likely to be at least crude proxies for teacher effort within the school. They are only crude because we do not have an idea of when the teacher fought an election or a court case. Both measures of political connection are associated with a significantly higher probability of the teacher contesting an election her/himself. However, they are both negatively related to the likelihood of filing a court case. This may suggest that being politically connected helps to solve teachers' grievances so they are less likely to have to seek legal remedies.

Finally, we asked to what extent the teacher agrees with the statement that 'frequently absentee teachers should be paid less'. Those who agreed with this view 'fully' are presumably less tolerant about frequent teacher absence and may have a more responsible attitude towards the importance of teacher effort. Connection with a teacher MLC is very negatively associated with this measure of teacher effort.

These results are not conclusive because, while school fixed effects estimation removes the biasing effect of school level unobservables, it is possible that teachers' union membership status and their political connections status are driven by their *own* unobservable characteristics (which remain in the error term) which also determine their effort. Moreover, we have a relatively small sample of less than 300 government primary school teachers. We can conclude that the results are suggestive that (i) teachers' political connections – particularly with teacher MLCs – are associated with significantly lower

teacher effort and that lower teacher effort is the mechanism by which children taught by politically connected teachers have lower achievement. (ii) teachers' union membership is negatively related to student achievement but not with teacher effort; this suggests that bad teachers are more likely to join the union, possibly as a protection against disciplinary actions. While further research is needed with a larger dataset to be more confident about these results, research by Beteille (2009) finds similar results to ours: she no relationship between union membership and teacher absence and a strong positive relationship between political party membership and teacher absence. She explains her union results (chapter 6) in terms of the fact that mere union membership may not predict teacher effort but that a teacher's position in a union's hierarchy likely gives him a greater feeling of power and ability to get away with errant behaviour.

6. Conclusions

This paper has mustered evidence from a variety of sources to shed light on teachers' participation in political elections, their connections with teacher politicians, their union activities and their stances towards the state government's accountability-related initiatives and decentralising reform proposals over a 40 year period. It has also explored the implications of teachers' union membership and political connections for teacher effort and for student achievement.

The aim has been to understand how teachers have sought to shape the school governance environment and to achieve what types of goals. Our analysis reveals that teachers are remarkably active in their unions and, particularly at the secondary level of education, are well connected to teacher legislators in both the lower and upper houses of the state legislature. While this does not lead to increased pay at the individual teacher level, it is beneficial as it provides assistance from teacher union leaders and teacher politicians to avert disciplinary actions and inconvenient transfers/postings, and to shelter teachers from certain accountability pressures. More benignly perhaps, union and political connections help to deliver teachers from the corruption they face in government education offices in matters such as transfers, promotions and timely payment of salaries and pensions etc. Since government officials take bribes from teachers, they are in a weak position to demand teacher accountability (the poacher would be abashed to turn into gamekeeper).

We saw that teachers lobbied hard for centralised salary distribution in the late 1960s/early 1970s and robustly opposed decentralising reforms at various subsequent junctures. They also fought hard for pay increases and achieved considerable success: the salary share of total recurrent education expenditure

secularly rose over time; absolute teacher salaries rose impressively in real terms over time; government-paid regular teachers' mean salary rose from 2.5 times private school teachers' mean salary in the early 1990s to 12 times in 2008; and government-paid regular teachers' salary as a multiple of per capita GDP in UP is several times the average for South Asia.

Given the strength of teachers (about 600,000 teachers in UP in 2007-08), their influence on the electorate in rural areas where they are often among the most educated people, their strategic voting behaviour, and the fact that government school teachers man polling booths at election times, no political party has the courage to ignore teachers. It is not surprising then that teacher unions have been very successful in pressing their demands for better pay and working conditions and for school governance systems that shelter them from local level accountability.

But what has been the impact of teachers' political connections, their union activities and of the centralised school governance system which they have favoured, on school education? It is generally difficult to gauge this because the data requirements for tracing any such impacts over time are simply not met in most countries, including India (though see Hoxby (1996) and Kingdon and Teal (2010) for examples of two cross-section studies). However, our access to unique data enabled us to examine the relationship between teacher's union membership and political connections on the one hand and student achievement levels and teacher effort on the other. Though further research with a bigger dataset is needed to be confident about these results, our findings suggest a substantial negative relationship between both teachers' union membership and political connections and student achievement. A student taught by a teacher who is both a union members and politically connected has about 0.20 SD lower achievement score than his/her counterpart in the same school who is taught by a teacher who is neither a union member nor politically connected. Low teacher effort is the channel through which teachers' political connections reduce student achievement; however, low effort could not be confirmed as the reason for the lower achievement of students taught by unionized teachers'.

This rather negative assessment of the influence of union membership and political connections is supported by the available qualitative information, such as that presented in Section 4 above. The National Commission on Teachers (1986) – in a report based on findings from interviews with a large number of educational stakeholders (teachers, school principals, educational administrators, teacher union representatives, etc.) over an extended period of two years – viewed the effects of teacher politics and of teacher unions on the functioning of the schooling system as being very negative. The Commission's report is written with much sympathy for the teaching profession. However, it did not shy away from a

frank assessment of the situation. It concluded that “the most important factor responsible for vitiating the atmosphere in schools, we were told, has been the role of teacher politicians and teachers’ organisations.” (NCT: 1986, p. 68). The report stated (as quoted in Section 4) that union-backed teachers did not fear adverse repercussions if they are lax in their work, noting that “some of the Principals deposing before it (i.e. before the Commission) lamented that they had no powers over teachers and were not in a position to enforce order and discipline. Nor did the District Inspectors of Schools and other officials exercise any authority over them as the erring teachers were often supported by powerful teachers’ associations. We were told that that there was no assessment of a teacher’s academic and other work and that teachers were virtually unaccountable to anybody” (NCT, 1986, p68). The Report levels the following three criticisms at teacher unions: firstly that there is too much *politicisation* in the teachers organisations; secondly that there has been too much *proliferation* of such organisations and it would be a good thing if their numbers could be reduced substantially; and thirdly that teachers’ organisations have not paid enough attention to the intellectual and *professional development* of their members. It made the impassioned appeal: “we must draw attention ... to the need to promote actively parents’ organisations all over the country. At present there are hardly any organisations interested in providing good education to their children. We feel that such organisations are desperately needed to promote and safeguard the educational interests of their wards and to counteract the negative and unhealthy political preoccupations of some of the teachers and their organisations”. (NCT, 1986, p71).

Political interference in the district level administration of education was documented extensively in the work of Pandey (1993) for UP. A more recent study by Khandelwal and Biswal (2004) is based on a survey of 225 teachers, 17 education administrators and 33 other respondents, also in UP. It concludes that one of the “visible factors affecting the development of education” is “a highly politicized teaching force and the resulting low level of accountability”. It cites “political and bureaucratic interventions” and “institutional barriers such as trade unions and teacher unions” as being among factors that are perceived by educational stakeholders to be the main causes of unethical practice in the education sector” in UP. Nor is political interference exclusively a UP based phenomenon: based on work in Rajasthan and Andhra Pradesh, Sharma and Ramachandran (2009) argue that a patronage based system means that well-connected teachers cannot not be taken to task, and Beteille (2009) finds similar evidence of political interference in her study of Karnataka, Madhya Pradesh and Rajasthan.

While the assessment of the National Commission on Teachers (NCT: 1986, p.73) that “the main preoccupation of teachers’ organisations particularly since independence has been with the improvement

of salary and service conditions of teachers” remains true today, teacher unions have on occasion made positive moves for quality in education. For example, the MSS Summer Conference of 2005 discussed the course curriculum in High School and Intermediate and made suggestions for improving upon the syllabus in various subjects, and the MSS has acted as a watchdog by drawing attention to government irregularities in the appointment of teachers. The MSS also raised its concern over malpractices in the examination system and in the evaluation of answer scripts of students (*Santusht*: 2005). For instance it gave the Director of Secondary Education a list of 25 schools and colleges where it claimed organized copying was going on in UP Board examinations and also named teachers who had been issued fake identity cards for invigilation and facilitating copying (*Times of India*, Lucknow, March 12, 2008).

How might the school governance environment be improved in India? Some policy prescriptions that arise from the evidence of this paper are as follows. Firstly, it would be good for the national government to bring a constitutional amendment to do away with the constitutional provision to provide guaranteed representation to teachers in the Upper Houses of state legislature. This provision has led to a culture of political activism amongst teachers and has heightened the scope of political interference in the management of schools and teachers. As shown in the paper, professional teacher politicians brow-beat education officials in order to shelter erring teachers and this interferes with the proper application of teacher accountability sanctions where needed. Secondly, it would be useful for the apex court and for the national government to recognize aided secondary school teachers as holding an office of profit under the government, since they are *de facto* government paid employees just like civil servants, even though nominally they are meant to be the employees of their private managements. This would prevent aided secondary school teachers – the most politicized group – from contesting elections to the Lower House of the state legislature. Thirdly, the fact that 50-67% of the ‘polling party’ that mans polling booths at general election time is comprised of government school teachers also gives teachers a perceived influence over politicians. It would be better for the Election Commission to reduce this proportion to 25-33%, the rest being made up of other diverse types of employees. Fourthly, in line with the recommendations of the 1986 National Commission on Teachers, it would be useful to encourage parents’ organizations that will represent the interests of students and provide a counterpoise to the dominant influence of unionized and politicized teachers on educational decision-making. Lastly, and importantly, it would be helpful to involve teachers in every aspect of education reform to benefit from their perspectives, once they are not in a position to unduly influence outcomes due to their privileged political position and power.

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Table 1
Teacher representation in UP Legislative Council, various years

Year	Total seats	Teacher Members	Ex-teacher members	Total Teachers	Teachers as % of total
1952	72	7	5	12	17
1954	72	7	4	11	15
1956	72	6	4	10	14
1958	108	10	4	14	13
1960	108	12	4	16	15
1962	108	16	2	18	17
1964	108	14	3	17	16
1966	108	10	4	14	13
1968	108	12	2	14	13
1970	108	14	2	16	15
1972	108	14	0	14	13
1974	108	18	1	19	18
1976	108	17	3	20	19
1978	108	14	1	15	14
1980	108	15	0	15	14
1982	108	16	2	18	17
1984	108	19	5	24	22
1986	108	13	0	13	12
1988	108	17	1	18	17
1990	108	15	1	16	15
1992	108	16	4	20	19
1994	108	15	3	18	17
1996	108	16	3	19	18
1998	108	14	0	14	13
2000	100*	17	6	23	23
2002	100	16	7	23	23
2004	100	17	5	22	22
2006	100	15	4	19	19
2008	100	14	4	18	18
Average	103	14	3.23	16.9	16.6

Note: *After the split of Uttarakhand (the hilly regions) from UP, the total membership of the Upper House was reduced to 100. There are 8 teacher constituencies in UP.

Source: Records available in the Assembly Library, Lucknow.

Table 2: Teacher MLAs in Legislative Assembly, various years

Legislative Assembly	Total MLAs	Teacher MLAs	Teacher MLAs as % of total
First Assembly (1952-57)	430	NA	NA
Second Assembly (1957-62)	430	11	2.6
Third Assembly (1962-67)	430	26	6.0
Fourth Assembly (1967-69)	425	21	4.9
Fifth Assembly (1969-74)	425	27	6.4
Sixth Assembly (1974-77)	425	22	5.2
Seventh Assembly (1977-80)	425	23	5.4
Eighth Assembly (1980-84)	425 (421)	39	9.2
Ninth Assembly (1984-89)	425 (422)	30	7.1
Tenth Assembly (1989-91)	425 (422)	27	6.4
Eleventh Assembly (1991-93)	425 (401)	36	8.5
Twelfth Assembly (1993-96)	425 (422)	46	10.8
Thirteenth Assembly (1996-2002)	425	37	8.7
Fourteenth Assembly (2002-07)	404	24	5.9
Average	424	28.4	6.6

Note: Figures in brackets show the actual strength of members.

Source: Records available in the Assembly Library, Lucknow.

Table 3
Teachers' participation in politics and connections with teacher politicians,
Uttar Pradesh 2008

	Primary	Secondary	Total
% who know a teacher MLA personally			
Govt. schools	3.0	7.9	4.4
Aided schools	--	17.6	17.6
Private schools	5.1	5.5	5.3
Total schools	3.6	10.8	7.2
% who know a teacher MLC personally			
Govt. schools	0.5	5.3	1.8
Aided schools	--	32.4	32.4
Private schools	5.0	11.1	8.2
Total schools	1.8	17.6	9.6
% who have met or know a teacher MLA			
Govt. schools	6.6	26.3	12.1
Aided schools	--	35.3	35.3
Private schools	6.3	19.8	13.5
Total schools	6.5	27.5	16.9
% who have met or know a teacher MLC			
Govt. schools	4.6	22.7	9.6
Aided schools	--	48.0	48.0
Private schools	6.3	23.3	15.3
Total schools	5.1	32.6	18.6
% saying a teacher contested the last MLA election in their area			
Govt. schools	3.1	6.6	4.0
Aided schools	--	9.8	9.8
Private schools	7.5	12.1	9.9
Total schools	4.3	9.7	7.0
% saying a teacher contested the last MLC election in their area			
Govt. schools	4.1	15.8	7.4
Aided schools	--	32.7	32.7
Private schools	7.6	13.2	10.6
Total schools	5.1	21.3	13.1
% of teachers who contested any local body (Zila parishad/panchayat) elections			
Govt. schools	1.4	1.3	1.4
Aided schools	--	5.8	5.8
Private schools	5.7	3.3	4.5
Total schools	2.7	3.7	3.2

Note: There are no aided schools at the primary level in UP in our sample. This reflects published data from the school census (Seventh All India Education Survey of 2002), which shows that a very small proportion of primary schools in UP are aided schools.

Source: Authors' calculations from the RECOUP teacher survey, 2008.

Table 4
Teacher union membership, by school level and school-type

	Primary schools	Secondary schools	Total
Self reported union membership status			
Govt. schools	84.7	84.0	84.5
Aided schools	--	85.3	85.3
Private schools	5.1	36.7	21.9
Weighted average	62.0	69.0	
% of teachers in your school who are members of the teacher union			
Govt. schools	83.3	86.7	84.2
Aided schools	--	90.8	90.8
Private schools	10.3	56.6	35.0
% teachers who have ever taken help From their teacher union *			
Govt. schools	30.8	25.0	29.2
Aided schools	--	43.7	43.7
Private schools	15.9	20.9	18.4
% teachers who say the teacher union helps to address the problems they have+			
Govt. schools	76.4	66.7	73.7
Aided schools	--	75.5	75.5
Private schools	5.0	38.5	26.2
% saying they believe that unions help teachers with problems related to transfers			
Govt. schools	62.4	36.5	55.1
Aided schools	--	53.0	53.0
Private schools	33.9	36.0	35.3
% teachers who ever participated in strike/meeting/protest by a teacher union			
Govt. schools	62.2	68.4	63.9
Aided schools	--	76.5	76.5
Private schools	3.2	20.0	13.7
% teachers who have fought election for teacher union office			
Govt. schools	0.5	9.2	2.8
Aided schools	--	10.7	10.4
Private schools	1.1	0.0	0.6
% teachers saying they discuss among themselves to reach agreement who they will vote for in an election and vote en bloc			
Govt. schools	47.2	50.0	48.0
Aided schools	--	72.5	72.5
Private schools	10.9	37.7	27.6
Of those saying they vote en bloc, % saying their teacher union motivates them to vote en bloc in elections			
Govt. schools	45.2	55.3	48.1
Aided schools	--	67.6	67.6
Private schools	0.0	52.5	44.7

Note: *This question was immediately after asking teachers whether they had had any difficulties /harassment from a variety of entities/officials in the past 2 years (education officials, school management, parents, etc.). Thus the question may have been interpreted as “have you taken from the teacher union when you have had such difficulties/ harassment from education officials, school management etc.

+ This question was asked immediately after a question asking teachers to list the problems which they want their union to take up as lobbying issues.

Source: RECOUP teacher survey, 2008.

Table 5
Teacher characteristics, by whether union member or not, UP

	<u>Primary schools</u>			<u>Secondary schools</u>		
	Non-union teachers	Union teachers	t-test of difference	Non-union teachers	Union teachers	t-test of difference
Govt. schools						
Age (years)	30.3	36.5	2.52	41.5	48.0	2.29
Male (%)	40.0	50.6	1.07	33.3	54.0	1.31
SC/ST/OBC (%)	50.0	51.2	0.12	25.0	34.9	0.66
Salary pm (Rs)	4237.2	7320.6	3.32	14518.1	14832.7	0.33
MA education (%)	13.3	22.3	1.11	83.3	82.5	0.07
Training (%)	46.7	65.1	1.92	100.0	93.7	0.89
Aided schools						
Age (years)	---	---		37.1	47.6	3.82
Male (%)	---	---		100.0	97.7	0.59
SC/ST/OBC (%)	---	---		33.3	44.8	0.82
Salary pm (Rs)	---	---		2801.9	14983.4	8.72
MA education (%)	---	---		93.3	90.8	0.31
Training (%)	---	---		80.0	96.6	2.57
Private schools						
Age (years)	29.1	32.8	0.73	33.5	39.3	3.01
Male (%)	68.3	100.0	1.34	62.5	90.9	3.10
SC/ST/OBC (%)	51.7	0.0	2.03	40.3	45.5	0.49
Salary pm (Rs)	965.0	1230.0	1.11	2686.2	4841.7	2.70
MA education (%)	30.0	0.0	1.29	62.5	60.6	0.18
Training (%)	10.0	50.0	2.41	47.2	78.8	3.15

Note: In government primary schools, mean salary of para teachers was Rupees 2,982 pm and of regular teachers was Rupees 11,851 pm.

Source: RECOUP teacher survey, 2008.

Table 6
Achievement equation, government primary schools only, UP
(Dependent variable: z-score of achievement mark)

	Ordinary Least Squares			School Fixed Effects		
	Union Member (1)	Political Connection (2)	Both (3)	Union Member (4)	Political Connection (5)	Both (6)
Class 4	0.240*** (16.55)	0.239*** (16.61)	0.235*** (16.20)	0.285*** (17.15)	0.278*** (16.91)	0.285*** (17.13)
Subject Maths	-0.0560*** (-2.92)	-0.0579*** (-3.01)	-0.0585*** (-3.05)	-0.0664*** (-3.66)	-0.0674*** (-3.71)	-0.0675*** (-3.71)
Wave 2	0.0983*** (14.59)	0.0981*** (14.57)	0.0981*** (14.57)	0.104*** (16.38)	0.103*** (16.31)	0.104*** (16.36)
Child characteristics						
Age	0.0171** (2.02)	0.0171** (2.02)	0.0182** (2.14)	0.0553*** (6.46)	0.0555*** (6.48)	0.0555*** (6.48)
Male	0.127*** (6.56)	0.122*** (6.29)	0.119*** (6.18)	0.147*** (7.75)	0.144*** (7.55)	0.146*** (7.66)
Log weight (kg)	0.654*** (7.32)	0.658*** (7.37)	0.659*** (7.38)	0.495*** (5.81)	0.502*** (5.88)	0.496*** (5.82)
Height (cm)	0.0072*** (4.04)	0.0070*** (3.96)	0.0071*** (3.98)	0.0058*** (3.32)	0.0057*** (3.28)	0.0057*** (3.29)
Recently ill§	-0.0793*** (-4.00)	-0.0765*** (-3.87)	-0.0776*** (-3.92)	-0.0938*** (-4.92)	-0.0926*** (-4.85)	-0.0936*** (-4.91)
Mother education	0.0423*** (10.11)	0.0430*** (10.32)	0.0427*** (10.21)	0.0427*** (10.65)	0.0427*** (10.66)	0.0426*** (10.64)
Ln assets	0.101*** (8.21)	0.103*** (8.32)	0.103*** (8.37)	0.0591*** (4.95)	0.0605*** (5.06)	0.0601*** (5.02)
Teacher characteristics						
Age	0.0095*** (6.08)	0.0094*** (6.05)	0.0084*** (5.30)	0.0118*** (5.73)	0.0108*** (5.58)	0.0117*** (5.67)
Male	-0.110*** (-5.27)	-0.112*** (-5.51)	-0.0913*** (-4.29)	-0.150*** (-4.79)	-0.136*** (-4.71)	-0.150*** (-4.77)
Qualification BA	-0.0057 (-0.24)	-0.0001 (-0.00)	-0.0095 (-0.39)	0.118*** (3.05)	0.0984*** (2.62)	0.120*** (3.08)
Qualification MA	-0.00016 (-0.01)	0.00383 (0.14)	-0.00654 (-0.24)	0.120*** (3.03)	0.115*** (2.98)	0.126*** (3.16)
First division	0.0279 (0.97)	0.0291 (1.02)	0.0229 (0.80)	0.151*** (3.78)	0.147*** (3.69)	0.153*** (3.84)
Para teacher	0.0968** (2.44)	0.0939** (2.38)	0.0614 (1.51)	0.233*** (4.53)	0.212*** (4.33)	0.231*** (4.47)
Governance variables						
Union member	-0.0589** (-2.21)		-0.0550** (-2.06)	-0.106** (-2.37)		-0.0904* (-1.95)
Politically connected		-0.238*** (-3.77)	-0.256*** (-4.03)		-0.142** (-1.99)	-0.101 (-1.36)
<i>N</i>	8185	8185	8185	8185	8185	8185
Adjusted R-square	0.25	0.25	0.25	0.27	0.27	0.27
Altonji's estimated bias	0.141	-0.128	---	0.988	0.198	---
Altonji's Ratio	---	1.85	---	---	---	---

t statistics in parentheses * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Notes: Constant included but not shown. § If child was ill enough in past 3 months to miss school consecutively for 4 or more days. 'Politically connected' = 1 if the teacher has met or personally knows a teacher MLC. Number of schools = 62. Estimations based on RECOUP and merged SchoolTELLS survey data, 2008. The Altonji estimate of bias is of the opposite sign to the estimated 'effect' in columns 1, 5 and 6, hence no Altonji ratio is calculated.

Table 7

The association of a teacher’s ‘union membership’, and of his/her ‘political connectedness’, with some teacher effort and other outcomes (Govt. Primary Schools, Uttar Pradesh) : School Fixed Effects Estimates

Dependent variable (Teacher effort indicator)	<u>Coeff on union member variable</u>	<u>Coeff on ‘met or personally knows teacher</u> <u>MLC/MLA</u>	<u>Coeff on ‘met or personally knows teacher</u> <u>MLC</u>
Teacher’s absence rate	-0.004 (-0.084)	0.075 (1.23)	0.161** (1.98)
Proportion of T’s school time given to teaching on a typical day	-0.207 (-1.42)	-0.498*** (-2.62)	-0.373 (-1.45)
Proportion of T’s school time given to organising prayers/games	0.258* (1.86)	-0.391** (-2.20)	-0.478* (-1.96)
Proportion of T’s school time to organising mid-day meal	-0.118 (-0.83)	0.186 (1.00)	-0.034 (-0.14)
Proportion of T’s school time to doing office/data/register work	0.185 (0.68)	0.107 (0.30)	-0.808* (-1.71)
Gives private tuition	0.065 (1.28)	0.052 (0.86)	-0.05 (-0.62)
Number of days of non-teaching duties outside school	-2.609 (-0.80)	5.127 (1.22)	5.467 (1.05)
Has occupation other than teaching	0.033 (0.27)	0.223* (1.66)	0.052 (0.27)
Cites ‘social work’ as an occupation	0.077 (0.81)	0.212** (2.01)	0.452*** (3.02)
Has contested any election^	0.057 (0.8)	0.312*** (3.07)	0.286** (2.53)
Has filed a education related court case	-0.068 (-1.28)	-0.114** (-2.01)	-0.139* (-1.65)
Fully agrees that ‘frequently absentee teachers should be paid less’	0.027 (0.21)	-0.139 (-0.92)	-0.591*** (-2.86)

Note: In each underlying equation, we controlled for a range of teacher characteristics, though we do not report the coefficients of these variables. These controls are for teacher’s age, gender, religion, education level, and para vs. regular teacher status. In this sample of government primary school teachers, 8.6% have met or personally know a teacher MLA or MLC, 4.6% have met or personally know a teacher MLC, and 84.6% are teacher union members. *, ** and *** represent statistical significance at the 10%, 5% and 1% levels respectively.

++ without being asked by enumerator to move to the class they were meant to be teaching (according to the time-table).

Source: Estimations based on RECOUP teacher survey, 2008.