

# The Public Education System and What the Costs Imply

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There are basic methodological and conceptual problems with recent research that ends up arguing that private school education is more effective than public education. Such findings have obvious policy implications but it is critical that research that informs policy is based on a correct reading of facts, keeping the larger vision of education in mind.

Recent research into the cost effectiveness of public education vis-à-vis private education concludes that (a) per student expenditure in a government school is higher than per student expenditure in a private school; (b) government schoolteachers are usually paid more than private schoolteachers; and (c) public sector intervention in education has not delivered desired levels of learning outcome (Pritchett and Aiyar 2014a; Dongre, Kapur and Tiwary 2014; Gandhi-Kingdon 2011; and French and Gandhi-Kingdon 2010. See also Milligan and Dhume 2012).

However, in a large country like India, there is great variation within both the public and private schools and therefore these observations, though generally valid, need more nuanced interpretation. Instead in the policy debates on education, these findings are often treated as universal truths with inferences made on their basis leading to quite drastic policy implications.

Major inferences include: (a) if government teachers are paid less, it would result in net cost “savings” to the government, releasing resources for other expenditures with no efficiency loss; (b) the difference between the wage bill of public and private teachers is, conceptually, a “subsidy” and should be removed; and (c) linking teachers’ salaries to student “outcomes” will enforce accountability in the government school system.

## Methodological Problems

We do not think that these inferences are justified for the following methodological reasons:

(1) Per student expenditure in government schools is shown to be much higher than that in private schools, though the method of estimation used for each is different and may not be comparable. For

instance, per student expenditure in government schools is estimated by dividing total government (centre and state) expenditure on elementary schools by the number of children enrolled in elementary grades while expenditure per child in private schools is estimated from household expenditure data (usually the latest education round of National Sample Survey Office (NSSO)), assuming that the expenditure on sending a child to a private school is the maximum a private school will spend on a child.

(2) Total government expenditure includes, in addition to expenditures on different types of government schools, grants given to non-government schools in the form of teachers’ salaries in private aided schools and other overheads. It also includes expenditure on teacher training, incentives, administration and management. In fact, according to the Ministry of Human Resource Development’s (2014) analysis, government expenditure accruing to non-government schools is as high as 17% of the total expenditure by state governments on elementary education, and for a few states it is as high as 50% or more (Uttar Pradesh, Kerala, Tamil Nadu). Including these transfers in estimating per child government school expenditures and not per child private school expenditure introduces an upward bias in government school expenditure and a downward bias in private school expenditure. Other expenditures like that on the examination system or curriculum development, which go into supporting the entire schooling system and are not spent exclusively on government school students, also similarly inflate the estimates of the per capita government spending per student.

(3) It is argued that the salary of a regular teacher in government schools in most states is much higher than the usual salary paid to private schoolteachers. However, this generalisation hides more than it reveals. This is because the distribution of salary scales within the government cadre is not uniform. There are at least four–five different salary scales in every state of the country, with only one scale coinciding with the Sixth Pay Commission level of salary. The rest of the

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teachers, who are not hired as permanent teachers, but as “contract,” “voluntary,” or “assistant” teachers, receive much lower pay. Thus teachers’ salaries could range from Rs 2,700 a month to Rs 50,000 a month, for the same post and quantum of work in the same school, but with a different nomenclature—Prabodhak, Shiksha Karmi, Zilla-Parishad Teacher (ZPT), Primary Assistant Teacher (PAT), and so on.<sup>1</sup> Further, there is unlikely to be more than one or two teachers in a multi-teacher school that gets the higher salary.

Therefore, the important question that needs to be asked is: If the cadre of government schoolteachers receiving “top” salaries is removed, or they were paid the average of the remaining scales, would the “median” salary in government schools be closer to the “median” private school salaries, or could it even be lower? For either of the above, how would the arguments change?

(4) It is argued that learning outcomes of children in government schools are very low—much lower than those in private schools. The Annual State of Education Report (ASER) data is usually used as evidence for arriving at this conclusion. Two points that need to be borne in mind about ASER data: (i) It is not nationally representative as it uses primarily a rural database, where private school participation is much lower than in urban areas; and (ii) it is based on easy-to-use testing methods to estimate the proportion of children who have acquired minimum competencies in literacy and numeracy. Many would contest if these by themselves constitute “learning.” However, setting aside these issues, if we examine the evidence, it is found that in 2011–12, only 46% of children enrolled in Class 5 in government schools could read a simple story, while the proportion was 65% for students in private schools. This means, equally, that 35% of students in private schools have not achieved the minimum competencies. Could these students be from poor and illiterate families—a family background common to perhaps 80% of government school students, with similar learning levels?

Data from recent research has also shown that learning levels of children in private schools are highly differentiated

by social categories. Thus, children from Dalit and tribal backgrounds perform worse than those from more privileged families (Karopady 2014). Private schools are unable, or unwilling, to address the human capital endowments children carry from their home and family environments and ensure uniformity in learning. That being the case, if we ask whether private schools ensure better learning outcomes, the answer would, at best, be a qualified yes, since it is not necessarily true for children from disadvantaged backgrounds. Even the cost effectiveness of public versus private schooling from the viewpoint of disadvantaged children will be low for the private schools, as the learning outcomes are likely to be low in both types of schools, while the household expenditure is higher in private schools.

Further, household expenditure on children’s schooling varies according to the parents’ ability to pay, and as research evidence suggests, parents of children in private schools come from more privileged economic backgrounds. On the other hand government school students come primarily from poor families. According to NSSO data (64th round), 56% of the students in government schools are from the two lowest expenditure quintiles in rural

areas and 77% in urban areas. One cannot but question the validity of condensing the per child household expenditures into a single statistic (mean or median) and comparing them with per child public expenditure in government schools. It is like comparing apples with oranges.

### Analytical Problems

In addition to these important methodological issues, we also highlight three analytical problems, with this type of research that compares the costs and benefits of publicly and privately provided school education in India.

#### (1) Government Schoolteachers Are Paid for Doing the Same Job as Private Teachers:

With learning levels about the same, if not better in private schools, the inference is that if teachers were paid less, it would amount to a “saving” for the government. We have already pointed out that all government teachers are not paid equally; only a minority earn salaries that are a multiple of what private teachers are paid. But there is another important conceptual misunderstanding in this context. Permanently recruited government schoolteachers—the ones that are paid the salaries deemed

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The Scopus database journal ranks country-wise and journal-wise. It provides three broad sets of rankings: (i) Number of Citations, (ii) H-Index and (iii) SJImago Journal and Country Rank. Presented below are EPW’s ranks in 2014 in India, Asia and globally, according to the total cites (3 years) indicator.

- Highest among 36 Indian social science journals and highest among 159 social science journals ranked in Asia.
- Highest among 36 journals in the category, “Economics, Econometrics and Finance” in the Asia region, and 36th among 835 journals globally.
- Highest among 23 journals in the category, “Sociology and Political Science” in the Asia region, and 15th among 928 journals globally.
- Between 2008 and 2014, EPW’s citations in three categories (“Economics, Econometrics, and Finance”; “Political Science and International Relations”; and “Sociology and Political Science”) were always in the second quartile of all citations recorded globally in the Scopus database.

For a summary of statistics on EPW on Scopus, including of the other journal rank indicators, please see <http://tinyurl.com/qe949dj>

EPW consults referees from a database of 200+ academicians in different fields of the social sciences on papers that are published in the Special Article and Notes sections.

“excessive”—are hired on the same contractual basis as tenured government servants. They are required to have specific qualifications and compete in a selection process that involves a competitive public examination. Once selected, the employment contract is a generic government service contract. For this reason, public teachers perform a range of administrative duties, in addition to teaching, by order: election monitoring, participation in the delivery of numerous public services at the grass-roots level, census enumeration, compliance of government directives to maintain audit norms, putting together education statistics, responding to right to information (RTI) applications, managing the mid-day meal, etc. Their pay, tenure and service conditions are specified in generic civil service rules, and by their rank in the overall government pay hierarchy. Private schoolteachers have none of these responsibilities.

The efficiency wage of government teachers is, therefore, that of the overall government service. Whether the subset of teachers performs better or worse than other civil servants receiving the same pay is a valid question to ask. But comparing private teacher pay with that of teachers paid according to civil service rules is erroneous for the same reason as it would be erroneous to compare the pay and efficiency of an army guard with that of a private bodyguard.

It follows then that there is little policy value in quantifying the savings to the education system should these civil servants be paid less than they are. The “savings” inferred are, therefore, purely notional unless one is advocating a massive reform of the civil service. However, if the intention in identifying these “savings” is to argue the normative case for (a) recruiting teachers from outside the civil service framework or (b) to privatise education, then this should be made explicit.

**(2) The Difference in Pay Levels between Civil Service Teachers and Other Teachers Is a “Subsidy”:** Subsidies are the public expenditures accruing due to the difference between the market price of a good or service and the price actually paid by some or all consumers,

as is the case with food, fuel and fertiliser subsidies. It makes no analytical sense to compare these subsidies with “excess” pay to teachers however misguided or excessive these are perceived to be (Pritchett and Aiyar 2014b). As discussed, the government schoolteachers, particularly the regular ones, are recruited through a formal process, and salaries are fixed taking into account their qualifications and training. The private schoolteachers who are paid low are either less qualified or teach in the school as a stopgap arrangement only. In fact because the salaries paid to private schoolteachers are below “cost,” most low-fee private schools have difficulty in retaining teachers and have a rapid turnover—hardly an attraction for any school.

**(3) Linking Learning Outcomes to Wages Will Automatically Improve Performance:** The third inference—increasing accountability by linking teachers’ salaries to outcomes is also not justified. For one, it places the entire burden for “outcomes” on the lowest rung of the supply chain—the teacher. It is obvious that the capacity of the teacher to deliver in the classroom is a function of a range of factors, not all in control of the teacher. While accountabilities must be fixed, they must also extend to those in the system above the teacher who are responsible for failures that have a bearing on the level at which she functions. For instance, the multigrade situations in which the teacher has to perform due to a shortage of teachers, or the multiple non-teaching duties that she must attend to or the poor quality of training received that ill-equip her to deal with first generation learners, or the quality of textbooks prescribed, etc. Would “saving” money by deducting salaries all the way up the supply chain be an effective means of ensuring outcomes? If not, then the notion of achieving “outcomes” by addressing only one part of the system is clearly misplaced.

An accountability problem no doubt exists in the education system, as it does in most or all other sectors. However, the critical issue is whether punitive accountabilities result in better learning outcomes. There is no evidence to suggest that by reducing salaries of teachers, we can ensure that learning levels will increase—in

public schools or in private. Further, accountabilities need to address other goals of education as well—such as ensuring diversity and providing a level-playing field for all children. Or is the objective, merely “fiscal”—of saving money, since we cannot improve learning?

No doubt there is a fiscal dimension to this complementarity: Public spending on education in India, measured as a share of GDP, is among the lowest in the world. If the system is inadequately funded, then the ability to deliver outcomes is effectively rationed. Focusing on the productivity of just one input in this process relative to its price entirely misses this point. Thus, more spending on pedagogy and teacher training can allow better technologies to become available at a scale which could improve systemic productivity. In Brazil, for instance, it is standard practice to employ child psychologists at the school level to gauge and shape school-specific bottlenecks that arise from family-specific disabilities, and this has been shown to improve outcomes. But when budget envelopes are low then the bulk of money goes to providing basic inputs—teacher salaries, basic supplies, etc—that are constrained to achieve outcomes without complementary inputs that are considered unaffordable luxuries. It is fallacious to then claim that the unit cost of salaries is crowding out other expenditures when the real problem is that the overall resource envelope is so low that salaries and expenditures on basic consumables are the only things that can be financed and are, therefore, tautologically the largest items in the education budget.

## Conclusions

Thus, there are three important points that need to be considered when comparing the costs and benefits of publicly and privately provided education in the Indian context.

The first is that government schools are part of an institutional arrangement that constitutes a public education system for the country, whereas private schools operate as individual units within this system. There are obvious “costs” of operating the “system” that are borne by the government alone, but the “benefits” of which accrue to all schools. Total government

education expenditures are therefore bound to be much higher. Not only is it methodologically incorrect therefore to estimate per child expenditure in government schools, by including all these costs, it is conceptually flawed as well.

Second, the equity dimension is consistently missed or ignored when examining private schools, even though it is crucial in a country like India, where vast differences exist between social and economic groups. The question of cost effectiveness, therefore, acquires another dimension: “whose” cost effectiveness? For children in private schools who belong to the lower end of the economic hierarchy, these schools may not be cost effective, as learning is low, while costs are high. In government schools if learning is low, costs are low too. On purely “efficiency” terms, then, government schools would score higher!

Third, the focus on learning outcomes does not explain much. There are other policy objectives that a public education system is mandated to address. Equity is one. Government schools cannot choose children that study in them; nor can they turn out children that do not perform well in tests. Private schools can, and probably do, exercise both choices. Access is another.

All children, irrespective of where they reside (deserts, mountains, forests, islands, conflict zones, densely populated areas or sparsely populated areas), is also a goal of the public education system, as the state endeavours to enforce education as a fundamental right of every child. Private schools may never, reach these “difficult-to-reach-children,” nor are they under any obligation to do so either. Delivering a “public good” or enforcing education as a fundamental right is the motive of public education, whereas profit may be the motive of many or most private schools. These fundamental differences in the *raison d'être* of public and private provision make it extremely difficult to make simplistic comparisons of the kind being increasingly made, based on a undifferentiated reading of budgets and learning outcomes.

Both the research community as well as the policymakers would do well to take not just a more nuanced but a more appropriate look at the issues involved, in order to arrive at credible analysis and policy prescriptions. This is particularly important at this juncture in India, as a New Education Policy is on the anvil and it is critical that research that informs policy is based on a correct reading of

facts keeping the larger vision of education in mind.

#### NOTE

- 1 In Gujarat, these non-permanent teachers filed a PIL in the high court asking for a revision of their pay and got an order stating, that they cannot be paid less than minimum wages! The Gujarat government however filed a review petition and now the matter (SLP 14124/2012 and SLP 14125/2012) is in the Supreme Court, awaiting orders.

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