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MISSING IN ACTION: ARE PRIMARY SCHOOL TEACHERS IN SUB-SAHARAN AFRICA REALY SO ABSENT?

PAUL BENNELL

KNOWLEDGE AND SKILLS FOR DEVELOPMENT

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**‘Missing in action’:**

**Are primary school teachers in Africa really so absent?**

1. **Introduction**

There is a growing consensus that high levels of ‘teacher absenteeism’ in low-income developing countries is a major issue that is seriously constraining the attainment of quality education for all. The negative impact of high absence rates among teachers, health workers and other key public servants on the provision of basic services was first highlighted in the 2004 World Development Report ‘Making Services Work for the Poor’. In response to mounting concerns about poor service delivery, the World Bank embarked on a number of initiatives from the mid-2000s onwards to collect quality information in this area. The most important of these have been education and health service delivery indicator (SDI) surveys which have been conducted throughout the developing world. In sub-Saharan Africa (SSA), nationwide SDI education surveys have been undertaken in nine countries since 2010. These countries are Kenya, Madagascar, Mozambique, Tanzania and Uganda in Eastern Africa and Niger, Nigeria, Senegal and Togo in West Africa. In addition, national researchers closely replicated the SDI education survey methodology in Ethiopia so this country can also be included (Zike and Ayele, 2015).

These sophisticated, data-rich primary school surveys collect information on teacher absence, student competence, and teacher subject-knowledge and teaching practice. With regard to teacher absence, three types of information are collected: teachers absent from school and teachers who are at school but not-in-class and ‘orphan classrooms’ where students are present but there is no teacher.

The findings of the SDI education surveys have powerfully substantiated pervasive concerns about teacher absence in SSA. In 2017, the leading group of World Bank staff and associate researchers who have been most closely involved in the design and implementation of these surveys reviewed the main findings of the first seven country surveys. With respect to teacher absence, they conclude that ‘averaging across countries, 44 percent of teachers were absent from class, either because they were absent from school or in the school, but not in the classroom’ (Bold et al. 2017:188). The mean school absence rate (SAR) for all 10 SDI countries is 23% and the class absence rate (CAR) is 18% which means that the total teacher absence rate is 41%. The ‘orphan classroom’ rate is 24%. In the most extreme countries, such as Uganda, ‘more than half of the teachers were missing in action and not found in the classroom’ (Uganda SDI report, p.31).

The findings of the SDI education surveys have also been used to fuel already pervasive concerns about low ‘teacher effort’ and generally poor, unprofessional teacher behaviour. At least up until fairly recently[[1]](#footnote-1), the overall narrative about teacher behaviour in SSA has been quite negative. Reports and articles are full of military and other metaphors such as ‘missing in action’ and ‘roll calls’. Children are being ‘short changed’ by teachers who are regularly ‘cutting class’ and ‘decide each morning whether to call in sick that day’ (Rogers and Vegas, 2009). More generally, ‘teacher absenteeism is one of the most serious forms of corruption in education’ (Patrinos, 2013:2). As early as 2004, the World Development Report concluded that ‘cases of malfeasance by teachers are distressingly present in many settings: teachers show up drunk, are physically abusive, or simply do nothing. This is not “low quality” teaching – this is not teaching at all’ (World Bank, 2004:112). The focus has, therefore, been on finding ways of countering endemic opportunist behaviour and ‘getting teachers to come to school’ (Duflo et al., 2012).

*1.1 Reviewing the evidence*

As with other key areas of education policy and practice in the developing world[[2]](#footnote-2), the SDI education surveys and other related research by the World Bank on teacher absence has been highly influential. So much so, what has become the received wisdom of pervasively high teacher absence has never been subject to any serious external scrutiny.

The purpose of this article is, therefore, to review the SDI survey evidence on teacher absenteeism. Its main conclusion is that the high levels of teacher absenteeism reported in these surveys are, for a variety of reasons, over-estimated and, relatedly, the surveys do not adequately explain the underlying reasons for these high rates of teacher absence. The failure to properly contextualise teacher absence leads to shortcomings in the proposed interventions for addressing this problem.

*1.2 Paper structure*

The discussion is organised as follows. Section 2 outlines the review methodology. The design and implementation of the SDI education surveys is described in section 3. The following three sections (4-6) discuss the main SDI survey findings with respect to school and classroom absence and orphan classrooms. Section 7 presents adjusted estimates of teacher absence. The main conclusions of this review are presented in section 8.

1. **Review methodology**

Throughout the article a clear separation is made between, on the one hand, the analysis of the strengths and weaknesses of the SDI survey design and implementation and, on the other hand, the way in which these survey data have been reported and interpreted by others. The SDI reports themselves present the survey findings in a short, standardised and factual format with no attempt to interpret the data and draw policy and other conclusions. However, it is important to note that most of the SDI reports do fully conflate ‘absence from school’ with ‘teachers’ effort’ with the survey results on teacher absence reported under the section heading ‘teachers’ effort’. The opening sentence(s) of this section re-affirm this conflation. For example, the Togo report states that ‘the three indicators designed to capture the effort teachers put into their job are (a) school absence rate, (b) classroom absence rate, and (c) time spent teaching per day’ (p.10).

*The SDI education surveys*

The core review activity was to analyse carefully each SDI country report and to scrutinise the survey microdata for each country. This data is available on-line for six of the nine SDI education surveys as part of the World Bank data inventory. However, for two of the countries, Kenya and Togo, essential data is missing on teacher numbers and, for Kenya, teacher absence.[[3]](#footnote-3) The datasets for the remaining three countries (Madagascar, Niger and Senegal) were requested from the SDI Team at the World Bank but only the Madagascar data was released.

The review pays particular attention to those SDI countries where teacher absence is reported to be very high, especially Madagascar and Mozambique. Excluding these two countries (where school absence rates are well over 30%) lowers the overall SDI school absence rate from 22% to 14%.

The SDI education surveys include private schools in seven of the ten countries. However, only publically-funded primary schools are covered in this review since they account for the bulk of primary school provision in most countries.

*2.2 Other survey evidence*

Other relevant school surveys that have been conducted in the ten SDI education survey countries as well as other countries in SSA were tracked down and reviewed. In particular, this includes other World Bank national ‘service delivery’ surveys in Madagascar, Malawi, Ghana, and Zambia. However, in order to ensure survey comparability, information on teacher absence collected as part of sub-national school surveys including randomised control trials is excluded[[4]](#footnote-4).

Teacher absence and other relevant data from the most recent national school surveys conducted by the Southern and Eastern African Consortium for Monitoring Education Quality (SACMEQ) and La Programme d’Analyse des Systemes Educatifs de la COMFEMEN (PASEC) which, between them, cover seven of the SDI education survey countries in SSA, was also requested.[[5]](#footnote-5) The PASEC microdata set for 2014 was made available.

Very little information exists on teacher absence in secondary schools in SSA. It is not possible, therefore, to draw any robust conclusions about teacher absence for this schooling cycling.

* 1. Other literature on teacher absenteeism

Since the prime focus of this article is to review only the SDI and other national survey data on teacher absence in SSA, more qualitative research on this topic is not included. It is worth noting, however, that, in spite of the importance of teacher absenteeism in SSA and in other developing countries, very little detailed and systematic ethnographic/sociological research has been undertaken on the extent and the underlying reasons for teacher absence and, more generally, on teacher behaviour and identity[[6]](#footnote-6).

3. **The SDI education surveys**

* 1. *Background to the surveys*

It was not until the late 1990s that teacher absenteeism began to be identified as a major issue by the World Bank. Prior to this, its periodic education policy reviews and other major reports on primary education in SSA were virtually silent on this topic[[7]](#footnote-7). In part, this may have been because Bank education staff had other policy priorities, in particular, making the case for a major reorientation of government and donor support in favour of primary education and away from technical and vocational training and higher education (see author, 1996 and author, 1998, author 2020).

A series of national surveys of health worker and teacher absence in six countries[[8]](#footnote-8) that were undertaken by World Bank staff and research associates in 2002-2003 marked a major turning point. The main findings of these surveys were synthesised in an article published by Chaudhury et al. in 2006. They concluded that unacceptably high proportions of teachers and health workers in most of these countries were ‘missing in action’[[9]](#footnote-9). What is striking is that, even though these surveys were conducted nearly two decades ago, the findings and conclusions of this synthesis article continue to be referred to in almost any discussion of teacher absence in SSA[[10]](#footnote-10). This is despite the fact that only one of the six absence survey countries is in SSA, namely Uganda, which had the highest school absence rate of 27%. Until the advent of the SDI education surveys in the 2010s, virtually the only other study on teacher absence in SSA that was referred to in academic and policy reports, is by Das et al. on the impact of ‘teacher shocks’ on absenteeism in Zambia. A school absence rate of 18% is always reported for this study when, in fact, the rate is only half this at 8.8%[[11]](#footnote-11).

Despite this very limited evidence base, especially for SSA, a consensus quickly emerged that teacher absenteeism was one of the main constraints preventing the attainment of quality education for all. In particular, high teacher absenteeism was almost always automatically linked with low ‘teacher effort’. Further reports and articles published during the 2000s, mainly authored by Bank staff, further reinforced this new received wisdom. The narrative on teacher’s behaviour turned increasingly negative.

Almost ten years after the original six health centre and school absence country surveys, the World Bank formally launched the SDI education survey programme in SSA in 2012 mainly with funding from the William and Flora Hewlett Foundation and, a few years later, from the U.K. Department for International Development (DFID).

*3.2 Survey coverage, design and implementation*

The ten SDI education survey countries are broadly representative of the 50 countries in SSA in terms of size and geographical coverage[[12]](#footnote-12). Between them, they account for slightly more than half the population of SSA. The same SDI education survey design has been followed very closely in all 10 countries. With regard to teacher absence, the survey design is largely based on the original school absence surveys in the early 2000s. The SDI survey instruments were pre-tested with pilot surveys conducted in Senegal and Tanzania in 2010.

In each country, relatively large stratified samples of primary schools are selected using rigorous, well-accepted statistical procedures. The school survey sample size ranges from 200 schools in Mozambique and Togo to 750 in Nigeria.

*Survey design*

The school surveys are very comprehensive (and, as such, are data intensive and complex) covering as they do not just teacher absence but also the rigorous testing of students as well as teacher subject-content competence and teaching practice based on classroom observations. A wealth of other school data is also collected especially with regard to teaching and other resources and school governance. While the sheer quantity of information collected is impressive, no rigorous checks have ever been conducted on the quality of this data.

*Survey implementation*

The implementation of each survey is contracted out to local research organisations, consultancies and NGOs. Teams of researchers are trained to administer the school survey module questionnaires and the student and teacher tests and conduct classroom observations.

Data is collected during two visits to each sampled school, the first announced and the second, at least two days later, an unannounced visit in order to collect good quality data on teacher absence which has not been contaminated by any ‘warning effects’.

The size and complexity of the SDI surveys means that they are costly. The Hewlett Foundation awarded two grants one of US$4 million in 2012 and another of US1 million in 2017. DFID also contributed to the costs of surveys between 2014 and 2018[[13]](#footnote-13).

*3.3 Survey issues*

The detailed scrutiny of the SDI survey design and implementation will be left to separate discussions of school and classroom teacher absence and ‘orphan classrooms’. However, there are six general issues (three design and three implementation) that first need to be addressed.

Firstly, the surveys are exclusively quantitative and rely on simple binary questions relating to teacher absence. Thus, with regard to teacher attendance, teachers are either present in school or they are not, they are either teaching in class or they are not, and classrooms with students either have teachers present or not. The main consequence of this is that it is difficult to contextualise adequately the school environment, staffing arrangements and teacher absence itself. In particular, there is no in-depth questioning about why a teacher is absent from school or the classroom and for how long they have been away from school or the classroom. The SDI survey enumerators are trained only to fill out the school survey questionnaire modules and make spot check observations on teacher attendance. Given the very large amount of detailed information that has to be collected in such a short period of time, it is hardly surprising, therefore, that observations have to be simplified and hence be taken at face value.

Secondly, the SDI surveys are stand-alone products. This is fully in line with the overall objective of the surveys. However, some key reports and other publications which discuss teacher absence and other related issues (teacher behaviour, motivation etc.) in SSA rely heavily on the findings of the SDI surveys and make little or no attempt to refer to other relevant data and research in each survey country. In particular, the above mentioned article by Bold et al. on teacher absenteeism in SSA only synthesises the findings of the SDI surveys.

Thirdly, no information is collected on the time spent by teachers on other essential professional activities most notably lesson preparation, marking, and extra-curriculum activities. Implicitly, therefore, the assumption is that teachers are only working when they are actually in class (see section 5 below).

Fourthly, there is very little reflection in the SDI country reports on the key implementation issues in conducting such an elaborate survey. Some minor problems are mentioned in some reports but, generally speaking, the overall impression that is given is that survey implementation is quite straightforward. As will be discussed below, this is not always the case. Even something as seemingly trivial as the timing of the second school visit by the survey team can affect the survey results. Table 1 shows that either the school or NIC absence rates for afternoon visits are non-trivially different from the morning visit absence rates in two out of the four survey countries where the full microdata set is available.

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| **Table 1: Morning and afternoon teacher absence rates for the second visit at SDI survey schools** |  |  |  |
| **Countries** | **Timing of visit** | **School absence rate** | **NIC absence rate** |  |  |
|  | **Morning** | **Afternoon** | **Morning** | **Afternoon** | **Morning** | **Afternoon** |  |  |
| **Mozambique** | 52 | 48 | 46 | 37 | 5 | 5 |  |  |
| **Nigeria** | 82 | 18 | 14 | 10 | 6 | 5 |  |  |
| **Tanzania** | 37 | 63 | 13 | 16 | 27 | 38 |  |  |
| **Uganda** | 38 | 62 | 18 | 18 | 35 | 36 |  |  |
| **Source: SDI education survey microdata** |  |  |  |  |  |

Fifthly, very little up-to-date time series data on teacher absence has been collected. In fact, the SDI education surveys are becoming increasingly dated. Only one has been carried out since 2016 and only two countries, Mozambique and Tanzania, have been surveyed more than once. Without regular surveys, the overall credibility of the programme is compromised.

And sixthly, the 10-teacher absence sample in each survey school is not completely random. During the first announced visit by the SDI survey team, up to 10 teachers are randomly selected from the teacher ‘roster’ at each survey school. During both the first and the second unannounced visit, the attendance status of these teachers is established and the reasons for absence ascertained. All teachers who are in grade 4 or who taught grade 3 in the previous year are selected[[14]](#footnote-14). The sample is then topped up with teachers from the other upper primary grades. Class teaching is the norm in the lower primary grades while subject-teaching with teachers specialising in the main subject areas is commonplace in the upper primary cycle in many countries. Specialist subject teachers have considerably lower teaching loads than class teachers (typically 25-35 periods out of a 40-period teaching week) and thus are more likely to be not-in-class. The teacher absence sample could, therefore, be quite biased especially with regard to class absence rates.

1. **School absence**

*4.1 Country estimates*

The mean school absence rate for public primary school teachers in the 10 SDI survey countries is 22%. The SAR ranges from highs of 45% in Mozambique and 36% in Madagascar to lows of 12% in Ethiopia, 14% in Tanzania and 15% in Kenya (see table 2). The median country SAR is 17% (in Niger and Nigeria).

It is in many ways surprising just how readily these school absence estimates have been accepted, almost at face value. This is not just because the SAR is so high in some survey countries (in particular Mozambique and Mozambique) but there appears to be no consistent pattern in teacher school absence rates among these countries. Similarly, no attempt has been made to explain the wide range of teacher class absence rates (see below).

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| **Table 2: School and class absence rates for teachers at public primary schools in the 10 SDI education survey countries, 2011-2016 (rounded %)** |
|  | **Survey** | **Total** | **School** | **Class** | **Orphan** |
| **Country** | **Years** | **absence** | **absence** | **Absence** | **classroom** |
| **Ethiopia** | 2014 | 40 | 12 | 28 | Na |
| **Kenya** | 2012 | 47 | 15 | 31 | 30 |
| **Madagascar** | 2016 | 42 | 36 | 6 | 19 |
| **Mozambique** | 2014 | 56 | 45 | 11 | 12 |
| **Niger** | 2015 | 28 | 17 | 10 | 9 |
| **Nigeria** | 2013 | 23 | 17 | 6 | 23 |
| **Senegal** | 2010 | 29 | 18 | 11 | Na |
| **Tanzania** | 2014 | 46 | 14 | 32 | 39 |
| **T****ogo** | 2013 | 39 | 23 | 17 | 19 |
| **Uganda** | 2013 | 57 | 27 | 30 | 24 |
| **Average** |   | 41 | 22 | 18 | 24 |
| **Source: SDI education country reports** |

*4.2 Survey design and implementation*

*Defining school absence*

The SDI education survey adopts a simple definition of school absence, namely any teacher who is ‘not present’ at school during spot checks by the survey team during the second unannounced visit is recorded as being absent. All absence is, therefore, regarded as absenteeism which, in turn, is treated as a broad indicator of overall ‘teacher effort’.

*Teacher absence sampling*

The teacher absence sample comprises of two groups. In schools with 10 or fewer teachers, all teachers on the staff roster are included whereas only a random sample of 10 teachers is taken for schools with more than 10 teachers. Table 3 shows that SARs are considerably higher among smaller schools. It is important to establish, therefore, the extent to which this is a genuine difference or is due (at least in part) to sampling issues.

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| **Table 3: School absence rates for teachers by size of school (teachers) at**  |
| **public primary schools in four of the SDI education survey countries (rounded %).**  |
| **Total teachers** | **<6** | **6 to 10** | **11to 15** | **16-20** | **21-30** | **31-40** | **40>** |
| **School absence** |   |   |   |   |   |   |   |
| **Mozambique** | 51 | 47 | 40 | 34 | 28 | 38 | .. |
| **Nigeria** | 19 | 11 | 11 | 8 | 10 | 8 | 8 |
| **Tanzania** | 18 | 16 | 14 | 20 | 19 | 14 | 16 |
| **Uganda** | .. | 20 | 17 | 16 | 14 | 15 | 8 |
| **NIC absence** |   |   |   |   |   |   |   |
| **Mozambique** | 9 | 9 | 5 | 4 | 0 | 1 | .. |
| **Nigeria** | 11 | 7 | 5 | 3 | 2 | 2 | 3 |
| **Tanzania** | 52 | 33 | 33 | 33 | 35 | 34 | 23 |
| **Uganda** | .. | 26 | 34 | 36 | 39 | 34 | 20 |
| **Source: SDI education survey microdata** |  |
| What is clear, though, is that, for whatever reasons, the laid-down sampling procedure for the teacher absence survey has not always been fully adhered to by all the SDI survey teams. In Mozambique, the teacher absence sample was not correctly selected at half (103) out of a total of 200 survey schools. A typical example is where a school has eight teachers all of whom should be included in the sample, but only four are sampled. For these 103 under-sampled schools, a total of 1,343 teachers should have been selected but only 1,115 (85%) actually were. This could bias the teacher absence results. If only half of the 228 teachers who should have been sampled were present in school, this would reduce the overall school absence rate in Mozambique from 56% to 44%. |
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Another key issue is that the total number of teachers recorded as ‘absent’ in the section of the questionnaire on teacher attendance must tally with the total number of teacher absences recorded in the section of the questionnaire that requests information on reasons for absence. With one exception, these numbers are roughly the same in all SDI survey countries. The exception is Uganda where the latter total is over 50% higher than the former (931 to 609) which suggests that there is a major problem with the absence survey. If the national school absence rate is calculated using the higher teacher absence reason totals, the weighted SAR is 34.8% for public primary schools. By contrast, the corresponding weighted SAR based on the teacher attendance absence total is 18.5%. Since it is this estimate that is used in all the SDI education reports to calculate the national SAR[[15]](#footnote-15), it is difficult to see how the SAR figure of 29.9% which is presented in the Uganda report has been derived.

*Warning effects*

It has been reasonably postulated that, if school managers and teachers are forewarned about the arrival of a high-profile school survey team, then teacher and even student absence rates may be appreciably lower than if no prior notification had been given. It is for this reason that the SDI school survey team makes a second unannounced visit at least two days after the first. However, for the six survey countries for which complete microdata sets are available, school absence rates during the second visit are only appreciably higher in Madagascar, Togo and Uganda (see table 4). Even here, a doubling of the SAR in such a short period of time needs to be more thoroughly scrutinised. In the case of Madagascar, part of this increase is probably due to the much higher numbers of not-in-shift teachers being recorded as absent during the second visit (see below) and, in Togo, many teachers were on strike.

In the remaining three countries, second survey visit SARs are roughly the same or lower (appreciably so in Mozambique) than those recoded during the first visit. It would appear, therefore, that the anticipated ‘warning effects’ of the first announced visit did not have any predictable/consistent impact on recorded school absence rates. This is precisely what one would expect if most teacher absence is authorised and legitimate (see below).

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| **Table 4: School absence rates for public primary school teachers**  |  |  |
| **during first and second SDI education survey visits (%).** |  |
| **Countries** | **School absence rate** |  |
|  | **1st visit** | **2nd visit** |  |
| **Madagascar** | 19.6 | 39.6 |  |
| **Mozambique** | 57.8 | 44.0 |  |
| **Nigeria** | 19.8 | 16.0 |  |
| **Tanzania** | 15.4 | 14.0 |  |
| **Togo** | 11.0 | 22.6 |  |
| **Uganda** | 16.6 | 29.9 |  |
| **Note: All weighted except Madagascar.** |
| **Source: World Bank SDI education microdata** |

For the six countries with data, the incidence of unauthorised absence was only appreciably higher in one country (Madagascar) during the second survey visit. Again, one would expect significantly higher levels of unauthorised absence during the unannounced second visit if the levels of teacher effort are low.

*Absence reasons*

The SDI surveys collect comprehensive information on the reasons for teacher absence. The following 11 categories are used in every survey: sick, maternity, funeral, training, meetings/mission, salary collection, other authorised, on strike, non-authorised, not on shift, and not known.

*Authorised and non-authorised teacher absence*: The key breakdown is between authorised and non-authorised teacher absence. As Table 5 shows, only a small proportion of teacher absence is reported as being non-authorised. Clearly, it is only these non-authorised absence rates which should be used as the key indicator of teacher effort. However, in most studies, this is invariably not the case, and total school absence rates are presented without making it clear that the bulk of teacher absence is authorised.

The SDI teacher absence survey shows that the overall mean unauthorised teacher absence rate is 12.7% for the first visit and 7.5% for the second visit (see tables 5 and 6). In other words, according to the SDI’s own survey data and data analysis procedures[[16]](#footnote-16), only around one in 13 teacher absences were unauthorised. However, a detailed examination of the microdata again raises concerns about the accuracy of the non-authorised absence data. In particular, in three countries, Kenya, Nigeria and Uganda, no non-authorised absences whatsoever are recorded for the second visit, which again is highly improbable (especially because in Nigeria and Uganda relatively large numbers of teachers were recorded as unauthorised absent during the first visit).

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| **Table 4: Number and percentage of total absence for unauthorised teacher** |
| **absence in SDI education survey countries**  |  |
| **Countries** | **Number absences** | **% total absence**  |  |  |
|  | **1st visit** | **2nd visit** | **1st visit** | **2nd visit** |  |  |
| **Kenya** | Na | 0 | Na | 0 |  |  |
| **Madagascar** | 13 | 66 | 5 | 11 |  |  |
| **Mozambique** | 30 | 76 | 17 | 16 |  |  |
| **Niger**  | Na | Na | Na | 8 |  |  |
| **Nigeria** | 56 | 0 | 12 | 0 |  |  |
| **Tanzania** | 29 | 28 | 5 | 5 |  |  |
| **Togo** | 25 | 48 | 19 | 19 |  |  |
| **Uganda** | 113 | 0 | 18 | 0 |  |  |
| **Note. No 'reason for absence' data is presented in the Senegal report.** |
| **Source: SDI education country reports (Kenya and Niger) and**  |  |
| **microdata sets for the remaining countries.** |  |  |

Accurately estimating the numbers of teachers who are actually ‘skiving’ or ‘moonlighting’ is critically important since, it is only these absent teachers who are openly exhibiting poor work commitment and low ‘teacher effort’. Merely assuming that unauthorised absence is the residual of easier-to-identify authorised absence is incorrect. Without rigorous investigation, misreported absence, most notably by teachers reporting sick, is difficult to identify accurately.

*Long-term official leave*: Strictly speaking, teachers who are on leave or where they are absent due to exceptional, one-off events (see below) should not be enumerated as being absent. Teachers who are on approved maternity, sick and study leave are not considered to be ‘absent’ either by their schools or according to Ministry of Education regulations. However, the SDI surveys include teachers on maternity leave as being absent from school and the other two leave categories are subsumed into the two broadly defined absence categories of ‘sick’ and ‘training’ which means that teachers who are on long-term sick leave or study leave cannot be separately identified. In the context of high fertility rates among teachers (especially in countries with a young teaching force), high levels of long-term illness among teachers especially in countries with high rates of HIV infection (Kenya, Mozambique, Tanzania and Uganda) and large numbers of teachers who are granted study leave to acquire or upgrade their teaching qualifications, it is quite likely that, in most countries in SSA, at least 5-10% teachers are, at any one time, on long-term leave of absence of one sort or another.

Normally, the posts of teachers who are on long-term leave are considered to be ‘vacant’ and schools can recruit temporary teachers to replace them during their leave period. In practice, however, schools often face considerable challenges in finding replacement teachers with the result that the affected classes are without a full-time teacher. From a student learning perspective, the key issue is the extent to which the vacant posts of teachers who are on long-term leave are filled with temporary teachers.

*One-off events*: The SDI education surveys also include teacher absence due to one-off/exceptional events, mostly notably strike activity. However, since these are so clearly one-off, they should be separated out from regular absences. In Niger and Togo, teachers who were on strike accounted for around one-quarter of all reported (second visit) school absence (see table 5).

*Work-related absences*: A sizeable share of teacher absence is directly work-related especially attendance at in-service training workshops and managing school field trips (see table 3). Invariably, teachers are instructed by their school managements to attend these events or they are a normal part of a teacher’s duties. Many INSET workshops are funded by aid donors (including the World Bank) and other overseas organisations who are eager that the education reforms they are financially supporting, especially new learner-centred curricula and teaching methodologies, are properly implemented. In some countries, teachers who are enrolled on qualification upgrading programmes at teach training colleges and universities are obliged to attend formal classes and other activities during term time.

Teachers who are engaged in ‘field work’[[17]](#footnote-17) account for 29% of second visit total absence in Uganda, 22% in Nigeria and 6% in Madagascar. Although these teachers are absent from school, they have not absented themselves from their teaching and other professional responsibilities.

*Personal-related reasons*: Short-term illness and attendance at funerals are important and quite legitimate reasons for teacher absence from school in SSA. Social and cultural obligations mean that it is difficult for teachers not to attend the funerals of family and community members and other friends. These two personal-related reasons account for by far the largest share of teacher school absence in all the SDI countries for which there is data (see table 3).[[18]](#footnote-18) Other school surveys also consistently report that illness is the most common reason for teacher absence in SSA (see author, 2002; SACMEQ country reports).

Despite the importance of illness, very little research has been undertaken on health issues among teachers in SSA. The exception is South Africa where surveys have consistently found a very high incidence of stress-related illnesses (see Peltzer, et. al. 2008)).

In some countries, teachers have to collect their salaries from government offices or banks which are often located some distance from their schools, especially in rural areas. In extreme cases, this can be very time-consuming and disruptive. For example, in Madagascar, the PASEC 2014 schools survey reports that, on average, nearly two-thirds of primary school teachers spent more than three days a month having to collect, at their own expense, their salaries (PASEC, 2014).

*Late coming and early departure*. Teachers who arrive late or leave early are incorrectly recorded as being absent in some SDI surveys. Teachers in both rural and urban locations are often obliged to live a long way from their schools so arriving at school on time can be a major challenge especially during the rainy season. Clearly distinguishing between teachers who are partially absent due to late-coming and early leaving and teachers who are fully absent for the whole day is essential but difficult to record accurately in school surveys of this kind. For example, background research for the World Bank review on primary education in Malawi found that partial teacher absence rates were four-five times higher than full-day absence rates (World Bank, 2015).

Considerable attention continues to be given to the negative impact of teacher involvement in secondary employment activities (most notably, vending, taxi driving, and growing food crops) on teacher timekeeping and school attendance (see Author, 2007; Mulkeen, 2009). However, it should be pointed out that most primary school teachers in SSA (certainly in the lower grades) finish teaching by 2pm so they have considerable time to undertake these activities. The same is true for shift teachers where scheduled teaching time is usually no more than three-four hours per shift.

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| **Table 4 : Reasons for school absence for teachers at public primary schools in eight SDI education survey countries during second survey visit, 2010-2016** **(rounded % breakdown)** |
|
| **Country** | **Sick** | **Maternity** | **Funeral** | **Training** | **Meetings/** | **Salary** | **Other** | **On strike** | **Non-** | **Not**  |
|  |  |  |  |  | **Mission** |  | **Authorised** |  | **authorised** | **known** |
| **Kenya** | 2 | 0 | 0 | 1 | 0 | 0 | 16 | 0 | 0 | 79 |
| **Madagascar** | 8 | 3 | 2 | 1 | 4 | 8 | 28 | 0 | 12 | 30 |
| **Mozambique** | 7 | 2 | 1 | 4 | 3 | 2 | 12 | 0 | 20 | 45 |
| **Niger** | 11 | 11 | 4 | 8 | 0 | 23 | 11 | 24 | 8 | 0 |
| **Nigeria** | 20 | 9 | 7 | 16 | 26 | 10 | 7 | 0 | na | 6 |
| **Tanzania** | 27 | 12 | 4 | 18 | 0 | 2 | 22 | 0 | 5 | 0 |
| **Togo** | 12 | 1 | 4 | 1 | 3 | 1 | 26 | 24 | 11 | 10 |
| **Source: SDI education survey country reports** |

*Unexplained absence:* A robust teacher absence survey must not only accurately record the overall level of absence but also the precise reasons for this absence. However, for three of the seven SDI countries (Kenya, Madagascar and Mozambique) for which reasons for absence data is available, over one-quarter of absences are unaccounted for (see table 3). The SDI country reports do not explain why this is the case. In the large majority of one-class per stream rural schools which usually employ fewer than six or seven teachers, it should relatively easy to establish the reasons for all teacher absences. But, in larger schools, this is more challenging.

*Multiple shifts*

Without careful investigation, teacher absence at multi-shift primary schools in SSA can be easily over-estimated. In two of the survey countries, Mozambique and Togo, nearly all government primary schools operate two and, exceptionally, three shifts. Around 45% of the public primary schools surveyed in Madagascar also operate more than one shift. [[19]](#footnote-19)

The SDI teacher absence survey selects up to 10 teachers from the school roster regardless of the teacher’s and school’s shift status. One would expect, therefore, that these absence samples comprise representative numbers of teachers who are working in each shift. Given the size and complexity of the SDI survey, wherever possible, the SDI survey team tries to arrive at schools first thing in the morning. Consequently, at multi-shift schools, the second shift teachers will not yet be scheduled to teach. If they are present in school, this does not present a problem since they will all be recorded as such. However, they are registered as ‘absent’ if they are not physically present.

While all SDI education surveys have a separate teacher absence reason category for not-in-shift teachers, very few are recorded (typically less than 20). In the two countries, Mozambique and Togo, where nearly all schools multi-shift, not one teacher in either the first or second school survey visits is reported as being absent because it is ‘not his/her shift’. This seems highly improbable. In Madagascar, on the other hand, 21% of all school absences are reported as being due to teachers not being required to be in class. It is also interesting to note that, in Madagascar, the number of these out-of-shift teachers increased from 37 during the survey team’s first visit to 123 during the second visit a few days later. This is quite possibly because all teachers were told to be at school for the first, announced survey visit by the survey team but then, by the time of the second unannounced visit, had reverted to their normal practice of only being at school during their designated shift.

Where absent teachers can be largely accounted for, the low numbers of shift teachers who are being recorded as being absent, does not present a problem. But, it is potentially an issue in those countries where a relatively high percentage of absent teachers are absent for unknown reasons. This could be because a sizeable number of these teachers are not required to teach either because they have already completed their shift or, more likely, they are waiting to teach.

Ministries of Education normally stipulate that all teachers, even if they are only teaching for a single shift, are expected to be at school at all times during the official working day. However, it is accepted practice in most countries that shift teachers need only be present in order to teach their shift[[20]](#footnote-20). The constant coming and going of teachers in this type of school is, therefore, the norm.

Mozambique is another good example of the complexities of recording teacher absence in the multi-shift school context. Almost all primary schools double or triple shift in Mozambique. The 200 SDI education survey schools have a total of 1,900 teachers and 920 classrooms. Assuming that all these classrooms are used for teaching during the first shift, 980 teachers will be required to teach in the second and third shifts. However, the SDI survey records only 70 teachers being ‘in school but not-in-class’. Thus, at least 910 shift teachers are unaccounted for. Total school absence is reported to be 760 teachers, half of which is unexplained. Assuming that 20% of this unaccounted absence is due to illness and unauthorised reasons[[21]](#footnote-21), around 300 teacher ‘absences’ could be second and third shift teachers who have not yet arrived at school. If so, the true sample school absence rate would be 24% which is almost half the rate reported in the SDI survey report.

One possible way of establishing the extent to which school absence is being correctly reported at multiple shift schools would be to compare teacher absence rates at these schools with those in single shift schools. However, it is only possible to do this for Madagascar and Tanzania which have sizeable enough proportions of both single and multi-shift schools. The remaining four countries (for which the necessary microdata is available) are either all (or almost all) single-shift or multiple-shift. In Madagascar, the mean (unweighted) school absence rate for multiple-shift schools is 47% compared to 33% in single shift public primary schools. In Tanzania, the corresponding (weighted) rates are 19% and 14%.[[22]](#footnote-22) The other comparison that can be made is between countries which are predominantly single shift (Kenya, Tanzania, Uganda and Nigeria) and the three countries which have sizeable (over 45%) of multi-shift schools. The unweighted mean school absence rate for the first group is 16.2% and for the second group is 35.4%. Thus, on the basis of this limited evidence, it appears that a significant proportion of total teacher school ‘absence’ is accounted for by second shift teachers who are not in school.

*4.3 Other survey evidence*

The paucity of robust evidence on teacher absenteeism in SSA provides a strong justification for the SDI education surveys[[23]](#footnote-23). However, there are other teacher absence estimates which should still be scrutinised for comparison purposes with the SDI surveys. The following discussion only includes national school surveys and excludes, smaller sub-national surveys and other studies including a number of randomised control trials in Kenya and Niger.

*National surveys in SDI countries*

There are only four SDI education survey countries where other well designed and implemented school surveys have been conducted whose teacher absence estimates can be validly compared with those generated by the SDI surveys. Three of these countries, Kenya, Tanzania and Uganda are covered by the UWEZO[[24]](#footnote-24) school surveys which have been conducted since 2010. These are much larger than the SDI surveys[[25]](#footnote-25) but only request information (from head teachers) on the total numbers of teachers absent on the day of the survey. The reasons for teacher absence are, therefore, not known.[[26]](#footnote-26)

The UWEZO teacher school absence rates of 12.3% in Kenya (2015) and 17.6% and 16.6% in Uganda (for 2014 and 2018 respectively) are much lower than the SDI school surveys while the SAR is slightly higher at 18.0% in Tanzania (2014). In Uganda, the 2015 National Service Delivery Survey, again with a very large weighted stratified sample of schools and professionally administered by the National Statistics Office, reported a teacher SAR of 11.8% which is only slightly less than the SAR reported in the 2014 UWEZO survey. A third credible source of information on teacher absence in Uganda comes from a large DFID-funded education support project in the north-west and south-east of the country which started to collect teacher absence data on a monthly basis from all primary schools located in 14 programme districts in mid-2019. Head teachers are required to submit this information to district and national programme managers by text message which is closely scrutinised and montitored. For the five months between June and October 2019, the mean school absence rates among teachers remained consistently the same at around 8% with the same breakdown of authorised and unauthorised absence (approximately 5% and 3% respectively)[[27]](#footnote-27).

The fourth country is Madagascar where two high-quality school surveys were conducted in 2006/07 by Lassabille et al. and by World Bank staff in 2008. These report primary school teacher school absence rates of 9.0% and 13.0% respectively. Although undertaken somewhat earlier than the SDI school survey, the consistent results of these two surveys raises concerns about the accuracy of the very high SDI survey teacher SAR of 36%.

*Non-SDI survey countries*

Interestingly, very little reference is ever made to teacher absence data from other World Bank surveys in other countries in SSA. For example, the 2015 World Bank review of primary education in Malawi reported a school absence rate of 10% (World Bank, 2015). Similarly, the 2014 World Bank education sector public expenditure tracking and service delivery survey in Zambia reports an SAR for primary school teachers of around 18.0%. Another survey conducted by the World Bank in Sierra Leone reports an SAR of 22% (see Glennester et. al, 2006). In Ghana, a survey conducted by the Centre for Democratic Development for the World Bank, found that school absence rates among primary school teachers were as high as 27% (see World Bank, 2010).

*Other quantitative national school surveys*

The absence of similar, reasonably recent national survey data for the remaining six SDI countries makes it that more difficult to assess the SDI education survey findings.

The SACMEQ and PASEC national education surveys which are conducted every five years provide a wealth of information on teacher behaviour including teacher absence. The former covers 16 countries in Eastern and Southern Africa (including Kenya, Mozambique, Tanzania and Uganda) and the latter covers 20 francophone countries mainly in West and Central Africa (including Madagascar, Niger, Senegal and Togo). As with the UWEZO surveys, these surveys include all teachers at each survey school and ask the head teacher and other teachers to report the number of teachers who are absent and the reasons for this. Done well, this should provide more accurate estimates of teacher absence than the SDI surveys. It is noticeable that both the PASEC and SACMEQ school absence rates are much lower than those reported in the SDI education surveys (see figure 1). A key reason for these lower estimates is that, unlike the SDI education surveys, they do not include teachers who are on long-term maternity, sickness and study leave and teachers who on field studies with their students away from the school. However, given the very long time it takes to publish the results of the SACMEQ surveys, this information is now quite dated.

* 1. Teacher absence over time

In their recent article synthesising the findings of the SDI surveys, Bold et al. state that teacher absence rates in SSA have been ‘remarkably stable’ (ibid. p.188) since the first school absence surveys were undertaken nearly 20 years ago. However, this assertion is based on information from just one (non-SDI) survey country, Uganda. In the two countries in SSA where more than one SDI education survey has been conducted, school absence rates fell significantly during short time periods - in Mozambique from 45.0% in 2014 to 28.4% in 2018 and in Tanzania from 23% in 2010 to 14.4% in 2014. The NIC absence rate also fell appreciably in Mozambique - from 11% to just 1.3% while in Tanzania it increased very slightly from 30% to 32%[[28]](#footnote-28).

Just why the reported absence rates in these two countries changed so dramatically in such short time periods is not clear. Two possible explanations need to be explored namely inconsistencies and other shortcomings in the SDI surveys themselves and the impact of government policy interventions and other factors. For example, the level of illness among teachers is likely to have declined appreciably in countries with high HIV prevalence rates (such as Tanzania and Mozambique) during the last 10-15 years as a result of the mass availability of life-prolonging, highly effective anti-retroviral medication.

1. **Class absence**

*5.1 Overview*

During the last decade or so, increasing attention has focused on teachers who are in school but are not in class teaching. In overall terms, in-school but not-in-class (NIC) teacher absence accounts for almost as much absenteeism as school absence (see table 1). Over one-quarter of teachers are reported to be not-in-class in four countries - Ethiopia (28%), Kenya (31%), Tanzania (32%) and Uganda (30%)[[29]](#footnote-29). The World Bank’s most recent (2018) education sector policy report for Africa states that ‘teachers not reporting for work is a problem, but more troublesome is the prevalence of teachers not turning up to class to teach even when they are present in school, and the consequent loss of instructional time’ (Lockheed et al., 2018:267).

Unlike with school absence, the SDI surveys do not ask why an in-school teacher is not in class teaching. The only exception in some surveys is the inclusion of a separate ‘in head teacher’s office’ response category. The negative inference of not asking why teachers are not-in-class is that NIC teachers do not have legitimate reasons for their absence from the classroom. This implied lack of legitimacy of out-of-class absence is reflected in the wider literature on teacher absenteeism and time in-class. For example, Abadzi, in her highly cited 2009 article on instructional time loss in developing countries, states that ‘even when teachers are present, they may be engaged in other activities or let students play outside until visitors come’ (2008: 268).

It is important to note that teacher school absence rates in most of the SDI countries during the 2010s have been considerably lower than the much cited rate of 27% in Uganda in the early 2000s. As noted earlier, this single statistic was heavily relied upon during the 2000s in order to support the (unsubstantiated) assertion that teacher absent rates were of a similar order of magnitude in the rest of Africa. Importantly, therefore, the inclusion of class absence rates has meant that reported total teacher absence rates remain very high in some countries. For example, in supporting their assertion of relatively stable teacher absence rates, Bold et al. comment that ‘while absence from school fell by one-third in Tanzania between 2010 and 2014, this was largely offset by an increase in absence from the classroom while being in school’ (op. cit.: 188). As noted earlier (see footnote 16), even this conclusion is incorrect. In Mozambique, on the other hand, the reported NIC absence rates actually fell from 11% to 1% but, since reported school absence rates increased markedly from 28% to 45%, the need for any kind of NIC teacher absence (positive) ‘offset’ is obviated.

*5.2 Teacher-stream ratios*

*SDI survey staffing assumptions*

The SDI survey country reports all make the crucial assumption that teachers are expected to be in class for the whole of the ‘scheduled school day’. This follows on from the key observation in the earlier six-country school absence survey synthesis by Chaudhury et al. that ‘according to official schedules, teachers should be teaching most of the time when school is in session’ (op. cit.: 96). It is noticeable that none of the SDI country reports report and discuss in detail staffing issues and related statistics, in particular the teacher-stream ratio. These can only, therefore, be calculated from the microdata sets[[30]](#footnote-30).

If a school has the same number of teachers as streams (i.e. the teacher-stream ratio is 1) then it is reasonable to infer that all teachers are fully occupied during the entire school day. This is generally the case in primary schools where class teaching is the norm and teachers are required to teach all subjects in the curriculum to their assigned class. In these situations, any out-of-class teacher absence is not authorised without good reason. However, in all but three of the SDI education survey countries, Madagascar, Mozambique and Togo, the teacher-stream ratios are well above one (see figure 2)[[31]](#footnote-31). In the extreme case of Uganda where the TSR is 1.5, this implies that, since there are 50% more teachers than streams, at any one time, 50% of teachers will not be required to be teaching in class. It cannot be assumed, therefore, that these teachers are ‘absent’. The three countries where the TSR is less than one are also predominantly multi-shift primary school systems where chronic teacher shortages lead to high levels of multi-grade teaching, which is particularly demanding in large class, acutely resource constrained situations.

*Overstaffing and subject teaching*

There are two main reasons why there are more teachers than streams in the majority of the SDI survey public primary schools. First, primary and secondary schools are frequently over-staffed in SSA especially in urban schools where most teachers have a strong preference to be located. The extent of over-staffing in urban schools is indicated by the usually much higher TSRs in urban schools than in rural schools (see table 7). And secondly, subject teaching is the norm in many primary schools especially in the upper cycle of primary schooling in East African countries.[[32]](#footnote-32) Subject teaching normally requires considerably more teachers to deliver the curriculum than class teaching and, for this reason, weekly teaching load norms have been established in most countries for specialist subject teachers in primary schools. Typically, these range from 25-35 periods out of a weekly total of around 38-40[[33]](#footnote-33).

Figure 3 presents the scatter plots of the teacher-stream ratios and NIC class absence rates for the 10 SDI countries as well as Zambia (where this data is also available). This shows that, at the country level, there is a fairly close relationship (R-square is 0.38) between the TSRs and the NIC teacher absence rates. In

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| **Table 7: Rural and urban teacher-stream ratios at public** |
| **primary schools in seven SDI education survey countries** |
| **Country** | **Rural**  | **Urban** |  |  |
| **Kenya** | 1.27 | 1.44 |  |  |
| **Madagascar** | 0.8 | 0.89 |  |  |
| **Mozambique** | 0.83 | 0.89 |  |  |
| **Nigeria** | 0.96 | 1.23 |  |  |
| **Tanzania** | 1.03 | 1.75 |  |  |
| **Togo** | 0.84 | 0.85 |  |  |
| **Uganda** | 1.44 | 1.78 |  |  |
| **Note: All TSRs are weighted except for Madagascar** |
| **where no school weights are available in the microdata.** |

Ethiopia, for example, there is an almost perfect match with 28% more teachers than streams and where 28% of teachers are reported to be in-school but not-in-class. Strikingly, in nearly every one of these countries, the percentage excess of teachers over streams is higher than the NIC teacher absence rate and thus, potentially, all not-in-class teacher absence can be accounted for by the teacher-stream ratio. While this is not to suggest that there is no unauthorised out-of-class absence, it is quite likely that a significant proportion of these absences are not absences at all but rather they are teachers who are not timetabled to teach at the time of the survey team’s spot check.

**6. Orphan classrooms**

*6.1 Overview*

The SDI education surveys also record the number of ‘orphan classrooms’ where students are present but where there is no teacher. In many ways, this is the most salient indicator of teacher absence because it measures the extent to which students are not being directly taught. For the eight countries where this information was collected, on average, almost one-quarter of classrooms (with students) in the survey schools had no teacher. This ranges from lows of 9% In Niger and 12% in Mozambique to highs of 39% in Tanzania and 30% in Kenya (see table 1). The median value is 17%.

However, the way in which the incidence of orphan classrooms is calculated considerably overstates the percentage of these classrooms. This is because the number of orphan classrooms is divided by the number of classrooms with teachers when the denominator should be the total number of required classrooms i.e. orphan classrooms + classrooms with teachers. These orphan classroom rates should, therefore, be adjusted downward (see section 7).

The term ‘orphan classroom’ is itself quite problematic because it implies that these classes are permanently without teachers which is unlikely to be the case. Moreover, as with NIC teachers, no attempt is made to find out why exactly these classes have no teacher. Is the regular teacher absent and, if so, for what reason and for how long has she been away? How, if at all, are other teachers covering for the class?[[34]](#footnote-34)

The surveys do not collect information on why classes have no teachers present at the time of the (first) survey visit. Given that it is absence of teachers in front of classes that has potentially the most negative impact on learning outcomes, it is essential that detailed information is collected.

*6.2 Teacher absence and orphan classrooms*

One would expect a fairly close relationship between total teacher absence and orphan classroom rates. If, for example, 20% of teachers are either absent from school or not-in-class, with a single shift and single grade teaching, then 20% of streams/classes will have no teacher. However, in only two countries, Nigeria and Tanzania, is there any degree of convergence between these rates. Among the remainder, total school absence rates are between two-four times higher than orphan classroom rates. The most extreme divergence is in Mozambique which has the second lowest orphan classroom rate of 12% but by far the highest teacher school absence rate of 45%. The Mozambique SDI survey report makes no attempt to account for this seeming paradox. Given acute teacher and classroom shortages and near universal double shifting, with an orphan classroom rate of 12%, one would expect that the overall teacher absent rate in Mozambique should be nearer to 24% which, while still high, is well under half the reported rate of 45%.

For the reasons discussed earlier, the most obvious explanation for these large divergences is that teacher school absence is over-estimated. Another possible reason (again not considered in the SDI survey reports) is that classrooms with students have no teachers, not as a result of teacher absenteeism, but rather because of the combined impact of teacher and classroom shortages i.e. there are more streams than teachers and more streams than classrooms. However, among single shift schools with no multi-grade teaching (which constitute the majority of schools in most survey countries), these teacher-shortage orphan classrooms account for 1% to 5% of total classrooms[[35]](#footnote-35).

1. **Up-dated and adjusted teacher absence rates**

*7.1 School absence rates*

*Estimate update*. As discussed earlier, more recent and equally robust school absence estimates are available from the UWEZO school surveys in Kenya in 2015 (12.3%) and Uganda in 2018 (16.6%)[[36]](#footnote-36). In addition, a second SDI education survey for Mozambique was undertaken in 2018 so the SAR (of 29.8%) for this survey can also be included in the update.

*Other adjustments*. For the set of reasons discussed in section 4, (incorrect categorisation of absence reasons, teacher sampling issues, multiple shifts, unexplained absence and other survey evidence), the SARs for all or most of the SDI countries are likely to be over-estimated. However, without further investigation, it is not possible to determine just how serious this over-estimation is and, accordingly, what adjustments should be made.

The only exception is where other robust school survey evidence is already available. As discussed earlier, in Madagascar, two earlier school surveys both report SARs that are three-four times less than the SDI survey. The SAR of 13% from the World Bank’s own 2008 school survey has, therefore, been included in the revised SAR data set.

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| **Table 8: School absence rates adjusted for absences due to not-in-shift,** |
| **maternity leave, field work and strikes for teachers at public primary schools.** |
| **Countries** | **Visit 1** | **Visit 2** |  |  |
|  | **SDI** | **Adjusted** | **SDI** | **Adjusted** |  |  |
| **Kenya** | na | Na | 14 | 12 |  |  |
| **Madagascar** | 20 | 16 | 40 | 28 |  |  |
| **Mozambique** | 58 | 57 | 45 | 41 |  |  |
| **Niger**  | na | Na | 17 | 11 |  |  |
| **Nigeria** | 20 | 18 | 17 | 10 |  |  |
| **Tanzania** | 15 | 13 | 14 | 12 |  |  |
| **Togo** | 11 | 5 | 23 | 14 |  |  |
| **Uganda** | 17 | Na | 30 | 22 |  |  |

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| **Table 9: Original SDI and adjusted/revised school absence rates for public primary** |
| **school teachers in the SDI education survey countries in SSA** |
| **Country** | **Original** | **Up-dated/** | **Reason for**  |  |
|  | **SDI** | **adjusted** | **Adjustment** |  |
| **Kenya** | 15.2 | 12.3 | Up-dated-UWEZO 2015 |  |
| **Madagascar** | 35.9 | 13.0 | WB SDI survey 2008 |  |
| **Mozambique** | 44.8 | 29.8 | Up-dated second SDI survey 2016 |  |
| **Niger** | 17.2 | 11.1 | four invalid absence reasons |  |
| **Nigeria** | 16.9 | 10.4 | four invalid absence reasons |  |
| **Senegal** | 18.0 | 18.0 | no data |  |
| **Tanzania** | 14.4 | 12.2 | four invalid absence reasons |  |
| **Togo** | 22.6 | 13.8 | four invalid absence reasons |  |
| **Uganda** | 29.9 | 16.6 | Up-dated-UWEZO 2018 |  |
| **Average** | 21.5 | 13.7 |   |  |
| **Ethiopia** | 12.0 | 12.0 | no data |  |

*7.2. Not-in-class absence rates*

Making the extreme assumption that all excess teachers (over and above the number of streams) at the SDI survey schools who are recorded as being in school but absent from class are, in fact, subject teachers who are not scheduled to teach, reduces the SDI country mean NIC absence rate from 18% to just 6.1% (see table 10)[[37]](#footnote-37). Based on this assumption, in the four SDI survey countries where the TSR\*100 is greater than the percentage NIC absence rate, not-in-class absence is adjusted to zero. Only in three countries is the adjusted NIC absence rate higher than 10%, namely Mozambique (11.4%), Tanzania (19.6%) and Togo (16.7%).

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| **Table 10 : Original SDI and adjusted not-in-class teacher absence rates** |
| **at public primary schools in SDI survey countries in SSA** |
| **Country** | **Original SDI** | **TSR** | **Adjusted**  |  |  |
| **Kenya** | 30.9 | 1.32 | 0 |  |  |
| **Madagascar** | 6.3 | 0.82 | 6.3 |  |  |
| **Mozambique** | 11.4 | 0.82 | 11.4 |  |  |
| **Niger** | 10.4 | 1.19 | 0 |  |  |
| **Nigeria** | 5.9 | 1.05 | 0.9 |  |  |
| **Senegal** | 11 | 1.19 | 0 |  |  |
| **Tanzania** | 31.6 | 1.12 | 19.6 |  |  |
| **Togo** | 16.7 | 0.84 | 16.7 |  |  |
| **Uganda** | 29.9 | 1.51 | 0 |  |  |
| **Average** | 17.1 | 1.25 | 6.1 |  |  |
| **Ethiopia** | 27.7 | 1.28 | 0 |  |  |
| **Zambia** | 18.2 | 1.35 | 0 |  |  |

*7.3 Total teacher absence rates*

Adding together the school and in-school but out-of-class teacher absence rates gives the total, not-in-class teacher absence rate. The mean up-dated and adjusted total absence rate is 19.8% which is under half the corresponding SDI survey figure. It is also noteworthy that, apart from three countries where the total adjusted absence rate is still over 30% (Mozambique, Tanzania and Togo) the adjusted TARs for the remaining six countries are all between 10-20% (see figure 5).

*7.4 Orphan classrooms*

The mean adjusted orphan classroom rate (i.e. with the correct numerator) for the six SDI survey countries with microdata sets is 18.4% which is appreciably lower than the unadjusted rate of 24.4% for these same countries. Figure 6 shows that the adjusted rates for Kenya and Tanzania are over 10 percentage points lower. Further research could also provide national estimates of the number of classrooms with students which have no teacher because of an overall shortage of teachers at the school. Again, the SDI surveys should collect information on key staffing parameters such as total teacher establishment and number of vacancies which would enable a more nuanced and accurate analysis of the ‘orphan classroom’ phenomenon.

1. **Conclusion**

*8.1 Teacher absence over-estimation*

This review has identified and analysed the possible impacts of various factors on the estimation of teacher absence rates in SSA. These include invalid teacher absence categories (long-term leave, field visits, one-off events etc.) and key staffing parameters, most notably multiple shifts and teacher-stream ratios well in excess of one. Given the paucity of the necessary data to substantiate them fully, some (but not all) of the conclusions about the potential impact of these factors in reducing teacher absence estimates are inevitably tentative and will require detailed research to establish more precisely what their actual impacts are.

This said, the main conclusion of this paper is that the SDI education surveys in SSA are likely to have considerably over-estimated the levels of school and class absence among primary school teachers as well as orphan classrooms. Further detailed research would probably lead to a further lowering of the revised teacher absence estimates presented in this paper. The review also questions the pervasive conflation (both explicit and implicit) both in the SDI country reports themselves and other publications of high levels of teacher absence with low teacher effort.

The fully adjusted/corrected total teacher absence rate is likely to be in the range of 10-20% for most of the SDI education survey countries. This is still high, especially by international standards[[38]](#footnote-38), and calls for well-designed policies to reduce teacher absence.

*8.2 Understanding school staffing*

The reasons why the SDI education surveys over-estimate teacher absence are conceptual, methodological and empirical in nature. In particular, in designing any future surveys, a much deeper understanding of how primary schools are staffed in SSA is required. Proper contextualisation would help to ensure that the right kind of information on teacher absenteeism is sought and that it is then properly collected and analysed/interpreted. Because the SDI education surveys are too narrowly quantitative and economistic, they are unable to get to grips with the complex reality of teacher staffing in primary schools in SSA.

8.3 How to tackle teacher absenteeism[[39]](#footnote-39)

Policy interventions to reduce teacher absence must be thoroughly grounded in an in-depth understanding of the enormous challenges faced by the majority of primary school teachers in SSA on a daily basis. Most notable among these are very low pay, postings to rural schools often in remote locations with no or seriously inadequate teaching housing and other basic amenities, large classes with few learning and teaching resources, and long commuting distances.

Interestingly, tackling teacher absenteeism has not been a top policy priority in most countries in SSA. There are likely to be numerous reasons for this some of which relate to the local and national political economy (for example, poor school and teacher accountability, strong trade union resistance, patron-client relations of various kinds). It could be that teacher absence is not seen to be a major problem by politicians and education bureaucrats.

As noted earlier, the overriding tendency in the more academic, policy-related literature is to take the high reported rates of teacher absenteeism and conflate these with low levels of teacher effort. From this starting point, the preferred policy interventions focus on a combination of two sets of policies. Firstly, closer monitoring/policing of teachers both directly (closer management surveillance and the use of modern technologies such as digital cameras) and, more indirectly through improved teacher and school accountability and governance. And secondly, improved teacher incentives including attendance-related pay supplements/bonuses. Where teacher effort is low (as in South Asia), these interventions have been shown to be effective, at least in the short term (see Duflo et al. 2012). However, there is little robust evidence to show that this is the case in SSA.

If, on the other hand, it is accepted that the bulk of teacher absence in SSA is authorised/legitimate, then it follows that policy interventions should focus more on tackling the causes of high rates of authorised absence among teachers. As discussed earlier, the main personal-related reasons for short-term absence are illness, attending funerals, participating in training activities, attending meetings/undertaking missions outside the school, and collecting pay. Improving the health of teachers and their families is a major challenge which, in most countries, requires significant pay increases, increased availability of reasonable quality teacher accommodation (especially in the rural areas) and better access to good quality medical care. Increasing teacher time on task when at school could be achieved by restricting the number of in-service training activities or re-scheduling them especially during the school holidays and by focusing more on school-based training. Given modern banking and mobile phone technology, there is no reason why teacher salaries cannot be paid electronically directly into bank accounts.

Longer-term absence (maternity, study, illness leave) can only be effectively addressed by ensuring that schools are able to recruit competent replacement teachers as soon as permanent teachers go on leave.

 *8.4 Quantitative data*

Numerous improvements could be made to the SDI surveys in order to ensure that better quality information is collected on teacher absence. In particular, detailed information on staffing and teacher work load norms and other regulations and actual practices is essential. Key questions include how much time are teachers expected to be in class and how much time do they actually spend teaching? In addition, more in-depth probing is required of the underlying reasons for school and classroom absence by teachers and why some classes have no teacher. This should be based on a more refined classification of the reasons why teachers are absent.

*8.5 Qualitative data*

Quantitative surveys should be combined with qualitative/ethnographic research in order to understand properly the complex underlying factors which collectively explain the levels and reasons for teacher absence and, in particular, unauthorised absence. However, as noted earlier, to date, very little of this kind of research has been undertaken in SSA. A less economistic, more multi-disciplinary approach which is strongly guided by educationalists and education management experts who possess in-depth knowledge of the complexities of teacher utilisation and behaviour is needed.

*8.6 Independent scrutiny and research*

As with other major areas of education policy-related research in SSA, World Bank research findings tend to be too readily accepted by other researchers, policymakers/politicians and donor officials. Certainly, the research methods employed are often state of the art and the surveys and other data collection is very well resourced. However, as this review has demonstrated, this does not mean there are no major issues with regard to both survey design and data collection and analysis. More independent scrutiny and research is, therefore, important.

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1. The World Bank’s 2018 World Development Report along with the 2015 publication entitled Successful Teachers, Successful Students display more positive and respectful attitudes towards teachers (see Beteille and Evans, 2015). [↑](#footnote-ref-1)
2. These include economic rates of return to education, higher education, vocational and technical education and training, school governance and school fees. [↑](#footnote-ref-2)
3. The SDI Team did not respond to queries about this missing data stating that it is beyond their organisational ‘bandwidth’ to do so. [↑](#footnote-ref-3)
4. Numerous teacher absence surveys of usually relatively small samples of schools and teachers have been undertaken in SSA, especially dissertations by post-graduate students. Most use a standard typology of teacher absence reasons. None explore the key underlying issues discussed in this article, in particular, teacher-stream ratios and teacher shifting. [↑](#footnote-ref-4)
5. Both their coordinators stated that recent information on teacher absence was still to be published or not available. [↑](#footnote-ref-5)
6. See Barrett, 2002; Watkins and Ashcroft, 2019, and Carnoy et al. 2009. [↑](#footnote-ref-6)
7. For example, see Lockheed and Verspoor, 1990 and the World Bank, 1996. [↑](#footnote-ref-7)
8. Bangladesh, India and Indonesia in South and South East Asia, Ecuador and Peru in South America, and Uganda in SSA. [↑](#footnote-ref-8)
9. The average (unweighted) absence rate for health workers was 35% and for teachers 19%. [↑](#footnote-ref-9)
10. According to Google Scholar, this article has been cited over 1,300 times which is one of the highest citations in the area of education policy and practice in developing countries. On a regular basis, UNESCO’s high profile annual Global Education Monitoring Report still only refers to the Chaudhury et al. article in reviewing the evidence on teacher absence. [↑](#footnote-ref-10)
11. Surveyed teachers were, on average, absent for 2.5 days/month which, with an average of 22.67 school days per calendar month, translates in to an overall school absence rate of 8.8% per day. The lead author was requested to confirm this but did not reply. [↑](#footnote-ref-11)
12. There is a slight under-representation of small-medium size countries with populations of less than 20 million. [↑](#footnote-ref-12)
13. A UK Freedom of Information Act request for the amount of this funding was submitted to DFID but no information was forthcoming. [↑](#footnote-ref-13)
14. The reason for this is because the surveys concentrate on assessing student and teacher competence at the grade four level. [↑](#footnote-ref-14)
15. The author’s calculations of national weighted SARs for the six countries for which the microdata is available are, with the exception of Uganda, all nearly identical to those reported in their SDI country reports. [↑](#footnote-ref-15)
16. In particular, only relying on data collected during the second visit. [↑](#footnote-ref-16)
17. A precise definition of ‘fieldwork’ is not given in the survey reports but it is probably reasonable to assume that most of this activity involves teaching and supervising students. [↑](#footnote-ref-17)
18. Interestingly, Chaudhury et.al specifically discount the importance of teacher illness. They state ’taking director’s responses at face value, it seems clear that the two categories of authorised absence – illness and official duties – do not account for the bulk of absence’ (op. cit. pp. 101) [↑](#footnote-ref-18)
19. ‘Not in his/her shift’ is a separate absence reason category. However, even for countries such as Madagascar and Togo which are likely to have sizeable numbers of teachers who are absent for this reason, they are the only category that is not reported separately in the reasons for absence table in the SDI country reports. They must, therefore, be subsumed in the ‘other approved’ or ‘other’ categories. It is not clear why this is done, but it does raise suspicions that the numbers of absent not-in-shift teachers are being recorded. [↑](#footnote-ref-19)
20. Comprehensive statistics are not available, but teachers rarely teach more than one shift. [↑](#footnote-ref-20)
21. Absence due to work-related reasons such attending INSET workshops and teachers on long-term maternity, sickness and study leave is likely to be more accurately reported. [↑](#footnote-ref-21)
22. In Senegal, around 30% of schools (according to the latest PASEC country report) were multi-shifting in 2014. However, the SDI survey microdata is not available for this country. There is very little multi-shifting in Madagascar. [↑](#footnote-ref-22)
23. A plethora of studies have been undertaken on teacher absenteeism in India where, unlike in SSA, it is clearly the case that a high proportion of teacher absence is due to unacceptably low levels of teacher accountability and ineffectual management control. Consequently, care must be taken in drawing on these research findings in India and elsewhere in South Asia in discussing and drawing conclusions about teacher absence in SSA. This has generally not been the case to date. [↑](#footnote-ref-23)
24. UWEZO is a well-established NGO in East Africa whose school surveys are highly respected. It relies on large numbers of volunteers to conduct its periodic country surveys. [↑](#footnote-ref-24)
25. The sample sizes of the most recent UWEZO school surveys are Kenya 4,500 schools, Tanzania 1,681 schools , and Uganda . [↑](#footnote-ref-25)
26. Interestingly, the World Bank co-funds the UWEZO surveys so, since no SDI education surveys have been conducted in these three countries since 2014, it would appear that the UWEZO surveys have effectively replaced the SDI survey programme in East Africa. [↑](#footnote-ref-26)
27. Email correspondence with the programme manager. [↑](#footnote-ref-27)
28. The 2010 SDI report actually reports a NIC rate of 53% and concludes that ‘even when in school, the teacher is absent from the classroom more than half the time’ (no page numbering). However, this figure is probably the combined school and not-in-class absence rates (as it is in all the SDI country reports) in which case the NIC absence rate is 30%. If 53% is correct then, the NIC fell significantly during this period. [↑](#footnote-ref-28)
29. In most SDI country surveys, the definition of class absence includes both teachers who are absent from school and absent from class. However, for expositional clarity, these two absence rates are reported separately in this paper. [↑](#footnote-ref-29)
30. It is also the case that the UNESCO’s Institute of Statistics does not collect information from each country that would allow teacher-stream ratios to be calculated. This should be rectified especially since TSRs are a far more accurate indicator of teacher workload than student-teacher ratios. More generally, the importance of the TSR has been almost completely ignored by educational policy research in developing countries. This includes education randomised control trials. For example, Duflo et al. report that newly employed contract teachers in a sample of treatment schools in Western Kenya were 11.7 percentage points more likely to be found in a classroom and teaching during a random visit than government teachers in comparison schools. However, to conclude as they do, that ‘teacher effort’ among these contract teachers is higher is incorrect because government teachers are subject-teachers and are only expected to work around 80% of the scheduled teaching day. By contrast, the contract teacher is a class teacher and has, therefore, an actual work load of 100%. [↑](#footnote-ref-30)
31. Primary school TSRs are also well above one in other countries in SSA. Zambia (2014) 1:35, Malawi (2007) 1.15, Lesotho (2007), Botswana (2015) 1.17, and Namibia (2016) 1.15. They are much higher in secondary schools where all teaching is subject-based. For example, Tanzania 2.4, Namibia 1.51, Zambia 1.51. [↑](#footnote-ref-31)
32. At the time of the original school absence survey in Uganda in the early 2000s, primary education was entirely subject based. Class teaching was only introduced in 2007/08 with the new ‘thematic’ curriculum for the lower primary school grades (see Altinyelken, 2010). [↑](#footnote-ref-32)
33. No recent information is readily available on primary teacher period workloads over time. SACMEQ survey data for the period 2000 to 2007 shows that in four out of the five countries with data, workloads for primary school mathematics teachers fell during this period. In only one country (Malawi) did the mean workload increase. Declining workloads would suggest that this would lead to increasing proportions of out-of-class teachers and vice versa. [↑](#footnote-ref-33)
34. In some schools, students in classes without teachers are dispersed to other classes which could lead to an under-estimation of the orphan classroom rate. [↑](#footnote-ref-34)
35. It is not possible without further in-depth investigation to calculate the number of teacher shortage orphan classrooms in schools with multiple shifts and/or multi-grade teaching. [↑](#footnote-ref-35)
36. As noted earlier, the correct SAR for public primary schools in Uganda is 18.0% and not 29.9% as reported in the SDI country report. Adjusting the corrected SAR for the four invalid absence reasons yields an SAR of 13.4%. However, the UWEZO SAR estimates have been used since the survey is so recent (2018). The most recent UWEZO survey in Tanzania was in 2014 so it has not been included in these revised SAR estimates. [↑](#footnote-ref-36)
37. If it is assumed that half of the NIC teachers were absent from class for no legitimate reason, this would mean that the true NIC rate is 9%. [↑](#footnote-ref-37)
38. Data on teacher absence rates in advanced industrial and other countries are not readily available. The latest OECD TALIS survey only reports head teacher ratings on the extent to which teacher absence affects student learning. In only 10 out of 39 reporting countries do more than 20% of head teachers indicate that teacher absence affects student learning rate ‘to some extent or ‘a lot’. Official statistics show that primary teacher absence in Australia, Canada and the UK is well under 5%. [↑](#footnote-ref-38)
39. In the light of this review, a forthcoming paper will examine in greater detail the appropriate policy interventions required to redress high levels of teacher absence in SSA. [↑](#footnote-ref-39)