Teacher Absenteeism and Accountability in Southern Rural Gujarat

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November 27, 2013

Acknowledgements

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Acronyms and Abbreviations

AICMEU   All India Council on Muslim Economic Upliftment

BACALS   Biometric Attendance and Computer Aided Learning System

EDI   Education for All Development Index

EFA   Education for All

EMRS   Eklavya Model Residential Schools

GDP   Gross Domestic Product

LIB   Log-In Book

NGO   Non-Governmental Organization

OBC   Other Backwards Class

RTE   Right of Children to Free and Compulsory Education Act

SC   Scheduled Caste

SMC   School Management Committee

SSA   Sarva Shiksha Abhiyan

ST   Scheduled Tribe

UNESCO   United Nations Educational Scientific and Cultural Organization

1. Executive Summary

In July and August 2013, I undertook a research study in two districts in the Indian state of Gujarat, analyzing trends and perceptions of teacher absenteeism and teacher accountability. This was in the face of government measures in the state to increase teacher attendance, primarily through biometric attendance and computer aided learning systems (BACALS) – thumb-printing devices that captured teachers', as well as students' and administrators' arrival and departure times electronically. The purpose of my research was to determine whether these devices serve the purpose of increasing teacher attendance, and further, whether the BACALS improve teacher accountability. As part of the study, a written survey was given to teachers at nine schools in Gujarati. I conducted spoken interviews with the principals of eight of the schools. The schools represented the variety of school options available to students in the region. I also conducted an interview with the provost of a private university, though I did not survey teachers at that institution.

India is situated in the South Asian subcontinent, with the Arabian Sea on the west, and the Bay of Bengal on the east. India is bordered by Pakistan in the northwest, and shares borders in the north with China and Nepal. In the northeast, India borders Bhutan, Bangladesh, and Myanmar. India is the second most populous country in the world, with a population of 1.236 billion (World Bank, 2012). Noted as the largest democracy in the world (Kohli, 2001), India's form of government is parliamentary. India's population is becoming slightly more urbanized. The rural proportion of the population was measured at 68.84% in 2011 by the Indian census, a representative decrease from the measure of 72.19% in 2001 (Ministry of Home Affairs, 2011).

The state of Gujarat is located in western India on the Arabian Sea, with the largest shoreline of any state. Gujarat's population is approximately 60 million, making it the tenth most populated Indian state with 5% of the country's population. 57.4% of Gujarat's population lives in rural areas. Surat District is located in southeastern Gujarat, on the coast of the Gulf of Khambhat. The district is discerned both by substantial wealth in the city of Surat – primarily from the diamond industry – as well as poorer, though not impoverished, rural areas surrounding the city, many of which rely on income from the manufacturing of sugar and other crops. Surat District has the highest density population in Gujarat, with a population of 6,081,322 and 1,337 people per square kilometer. The district's population is 20.3% rural. The Dangs District is directly southeast of Surat District. The district is marked largely by its reliance on cash crops and agriculture as the primary source of income for residents. The area is predominantly tribal, with many people identified as Scheduled Tribes (ST). The Dangs District has a population of 228,291 and a population density of 129 people per square kilometer, a stark contrast with Surat District.

The provision of education in accordance with Education for All (EFA) and the Right of Children to Free and Compulsory Education Act (RTE) has shaped many of India's education policies over the past decade. While the issue of school access has largely been addressed in India, providing access has been problematic in rural areas, taking into account long distances from cities, difficult terrain, and communities small in size and far-removed from the larger population by distance, language, and culture. Many rural schools have trouble attracting enough qualified, motivated teachers, lending to issues of school quality.

Teacher absenteeism has been cited as a major problem, particularly in rural areas of India. The causes for this issue are numerous; among them are: the necessity of obtaining a second job, inability to travel to school due to lack of paved roads, and long distances from the teacher's home. Schools in remote areas can be nearly impossible to access in times of inclement weather. During monsoon season, for example, roads may be completely flooded due to heavy rains. Other noted causes of teacher absenteeism are a lack of repercussions for absence, and a fragmented accountability system that does not hold teachers responsible for student achievement outcomes. A lack of punishments for absences and poor management of the educational system contribute to a dearth in teacher accountability. Additionally the disconnect between RTE requirements and the teaching of necessary skills to students maintains a system where teachers are discouraged from improving individual student outcomes, but rather must stick to a strict syllabus and curriculum to comply with mandated standards.

Ornstein (1986) writes about the development of concepts of accountability in education and the shift from student-centered accountability frameworks to more onuses on teachers. According to Ornstein's model, that teachers should not be held responsible for outcomes they have little impact on. To counter policies that punish teachers, Ornstein suggests a system of joint accountability to improve the "overall educational delivery system" (p. 227). His framework converges with notions of education as a product of society, with education systems reflecting cultural norms and conventions, notions which find credence in the work of Basu. Basu, an economist, applies cultural explanations to the issue of teacher truancy in India. Teacher absenteeism is associated with social tendencies; the higher the number of absentee teachers, the more acceptable it becomes in society (Basu, 2006). He writes that government must take responsibility for providing a solid infrastructure and institutional structure and to

meet the needs of the poor and underprivileged; at the same time, however, government is a function of the economy and society, and corruption within government reflects corrupt practices throughout society as a whole.

The cultural arguments of Basu find resonance with notions that communities may hold teachers accountable to their jobs. Pandey, Goyal, and Sundararaman (2008) posit that ensuring that communities are knowledgeable about their roles in holding teachers accountable could increase teacher attendance and accountability. The authors suggest that one reason teachers may not be accountable or motivated to teach is that the committees instituted to hold them accountable lack the capacity to do so. Pandey et al also suggest that teacher effectiveness, which is a major indicator of student achievement outcomes, may be lower in some areas as a result of lacking opportunities for professional development. Patrinos and Kagia (2007) write that educational investments can improve a nation's development only if the investments are properly allocated. Chronic teacher absenteeism is a reflection of corruption in the system, as theorized by Basu (2006). Teachers play a crucial role in establishing and maintaining the quality of an education system and the share of their salaries in education budgets of developing countries are typically high; this is a reason to focus on teacher absenteeism when examining issues of corruption and accountability. Other studies cite poverty as a determining factor in absentee rates, as it reduces the power of communities to hold teachers accountable. In a report on teacher absenteeism in Peruvian primary schools, Alcazar et al (2006) find that poverty may make work conditions for teachers worse, and thus lower their motivation.

In my examination of attitudes and perceptions of teacher accountability and absenteeism, my study falls under the umbrella of interpretive/constructivist perspectives; more

specifically it is a phenomenological study in that I attempt to construct the structures of teacher

policy and attendance mechanisms and feelings toward accountability in certain localities. I build

on the responses to my surveys and my interview questions in an attempt to construct a common

experience in relation to my participants. Based on my analysis of the data, I also employ

grounded theory to explain my findings.

I have divided the findings into the areas of demographics, quality, teacher commitment,

teacher absences, perceptions of BACALS and LIB, and accountability. The mean age of survey

respondents was approximately 38 years. 62 of the teachers were female while 54 were male.

The greatest percentage of teachers – 38.8% - were Scheduled Tribe (ST), followed by 33.6%

identifying as Other Backwards Class (OBC). Of the teachers surveyed, 22 teach at schools with

thumb-printing and 94 of the teachers work at schools that use a log-in book.

Professional development is an indicator of a school's quality. A slight majority of

teachers responded that they had received special training or attended teacher workshops, with

78.3% of those teachers saying that the training improved their teaching. LIB schools showed a

much higher percentage of teachers that received special training, but only 76.8 % of those

teachers reported that their teaching improved. Overall, 79.3% of teachers are satisfied with the

quality of education students receive at their school; at BACALS schools this jumps to 95.5%

and at LIB schools it drops to 75.5%. Overall, 86.2% of teachers are satisfied with the quality of

teaching at their school, 95.5% of teachers are satisfied at BACALS schools, and 84.0% of

teachers at LIB schools are satisfied. Nearly all of the teachers agree that students are learning

what they need to know. In regards to whether students clearly understand what they are

expected to learn at school, 94% of teachers overall agree they are. Answers to whether students

find their school work challenging convey a much less positive association. In classroom

observations, it is apparent that teachers must follow rigid curricula to prepare students for their

exams, which are streamlined with their course books. There is little room for creativity in the

classroom. At the same time, as I learned in my interviews, teachers are required to pass all of

their students to the following grade each year, regardless of how well they do, and whether or

not they demonstrate that they have learned the necessary knowledge to succeed in a higher

grade. With regard to principal perceptions of indicators of quality, seven out of eight principals

interviewed said they were satisfied both with the quality of education students receive at their

schools and with the quality of teachers.

Teacher perceptions of their professional role and duty as a teacher are indicators of

teacher commitment. The teachers were asked "what do you think your most important duty is as

a teacher"? 41.8% of answers relate to giving knowledge and teaching and 12.9% of teachers

said regularity was their most important duty. Unsurprisingly, a vast majority of teachers agree

that a good teacher will help students be successful. There was less agreement, however, when

teachers were asked to respond to the statement: "If a student is clever, he/she will do well

regardless of the teacher". In response, 56% of teachers agreed.

Overall, the mean number of teacher absences is 9.6 days. Teachers at BACALS schools

exhibited more days of absence than at LIB schools, but I do not find this difference to be

significant. The greatest number of absences at both school types were for social or celebratory

reasons, followed by health reasons.

Teachers at both types of schools display a similar propensity toward the attendance

tracking method at their school. In terms of whether a tracking method had improved the

individual teacher's attendance, at BACALS schools, 86.4% reported that it did, compared with

66.0% at LIB schools, a number significantly lower. Regarding overall teacher attendance at

their school, 50% of teachers at BACALS schools agreed the method improved their attendance

compared with 67% of LIB school teachers. At the BACALS schools, 68.2% said thumb-

printing was necessary, while 92.6% of teachers at LIB schools said the books were necessary.

Much of the information gathered from this research lends to a question of accountability.

As mentioned, although teachers may be marked present at school, this does not answer the

question of whether they are in the classroom teaching, and whether they are being held

accountable for student outcomes.

2. Introduction

In July and August 2013, I undertook a research study in two districts in the Indian state of

Gujarat, analyzing trends and perceptions of teacher absenteeism and teacher accountability.

This was in the face of government measures in the state to increase teacher attendance,

primarily through biometric attendance and computer aided learning systems (BACALS) –

thumb-printing devices that captured teachers', as well as students' and administrators' arrival

and departure times electronically. These devices have been implemented in all fully-government

funded primary and upper-primary schools, and all schools which fall under the jurisdiction of

the Tribal Department – schools intended to ensure access to education for the state's large

population of Scheduled Tribe (ST) students – a group that has historically been marginalized in

India. Some other schools, such as semi-private and fully-private primary and secondary schools,

and private universities opt to use the devices as well at their own cost. The purpose of my

research was to determine whether these devices serve the purpose of increasing teacher attendance, and further, whether the BACALS improve teacher accountability.

In the following section, I provide background information on India, Gujarat, and on the Dangs and Surat Districts – the two districts where I conducted my research. I also write about the structure of India's education system, key education policies, and some of the major issues that the system has faced in recent years, with emphasis on the issues of teacher absenteeism and teacher accountability. I then discuss my theoretical framework, which is followed by a discussion of my case study in Gujarat, including my methodology and an elaboration and analysis of my data collected – which included teacher surveys, interviews with principals, and classroom observations. I then discuss areas for future research and conclude with my view on the BACALS policy.

3.   Background

3.1 India

India is situated in the South Asian subcontinent, with the Arabian Sea on the west, and the Bay of Bengal on the east. India is bordered by Pakistan in the northwest, and shares borders in the north with China and Nepal. In the northeast, India borders Bhutan, Bangladesh, and Myanmar. India is the second most populous country in the world, with a population of 1.236 billion (World Bank, 2012), which represents 17% of the world's population (Ministry of Home Affairs, 2011) living on 2.4% of the world's land (Patel, 1996). The population is growing at a rate of 1.37% as measured in 2011, a rate that has been declining steadily in recent years (Trading Economics, 2012).

A former colony, India gained independence from Great Britain in 1947 after 300 years under British rule. Independence brought about the partition of India and Pakistan in the same year. India adopted its first constitution in 1950. Noted as the largest democracy in the world (Kohli, 2001), India's form of government is parliamentary. The Parliament is bi-cameral, with a House of the People (Lok Sabha) and Council of States (Rajya Sabha). India is comprised of 26 states and 6 Union territories; state governments operate in essentially the same manner as the national government. The current government is led by Prime Minister Dr. Manmohan Singh of the Indian National Congress (INC) Party, who has been in power since May 2004 and won reelection in 2009. The next elections for the Lok Sabha will be in 2014.

Rural India

India's population is becoming slightly more urbanized. The rural proportion of the population was measured at 68.84% in 2011 by the Indian census. This was a representative decrease from the measure of 72.19% in 2001. The rural literacy rate is 68.9%, while the urban literacy rate is 85.0%.When separated by gender, the male rural literacy rate is 78.6% compared with a female rural literacy rate of 58.8%. The census notes a decline in the child population of India of 5 million, or 3%, due largely to decline of child populations in rural India of 8.9 million – 7% (Ministry of Home Affairs, 2011).

3.2 Gujarat

The state of Gujarat is located in western India on the Arabian Sea, with the largest shoreline of any state. Its domestic borders are Maharashtra to the southeast, Madhiya Pradesh to the east, and Rajasthan to the northeast. To the northwest, Gujarat shares an international border

with Pakistan. Gujarat is composed of 26 districts (Census Organization of India, 2011). Gujarat is noted as a middle-income state (World Bank, 2008); its Gross Domestic Product (GDP) is US $63.3 billion (Gujarat Infrastructure Development Board, 2013). The GDP for India as a whole is US $1.8 trillion (World Bank, 2012).

Gujarat's population is approximately 60 million, making it the tenth most populated Indian state with 5% of the country's population. Gujarat ranks seventh in Indian states for land area, with 190,000 square kilometers. The population density is 300 per square kilometer, which is less than the national average. The population is growing at a rate of 19.28 %, slightly higher than the national rate (Census Organization of India, 2011a).

The sex ratio is 919 females per 1000 males, which is below the national average of 940. The child sex ratio is lower at 890 (Census Organization of India, 2011). 57.42% of Gujarat's population lives in rural areas, while 42.58% live in urban areas (Ministry of Home Affairs, 2011). Rural populations are growing at a rate of 9.31 %, while urban populations are growing at a rate of 36 % (Census Organization of India, 2011a).

The overall literacy rate in Gujarat is 78.03 %; the rate for males is 85.75 % and the rate for females is 63.31 %. This is a significant improvement upon rates measured in 2001, which were 69.14 % overall. The literacy rate in urban areas – 86.3% – is slightly higher than the overall rate and the rural literacy rate is 71.7%, significantly below the state average (Census Organization of India, 2011a). The percent of schools in Gujarat meeting Right to Education (RTE) norms for student teacher ratios has declined. In 2010 the amount was 84.2%; in 2012 it declined to 74.7 % (Pratham, 2011).

Surat District

Surat District is located in southeastern Gujarat, on the coast of the Gulf of Khambhat. The district is discerned both by substantial wealth in the city of Surat – primarily from the diamond industry – as well as poorer, though not impoverished, rural areas surrounding the city, many of which rely on income from the manufacturing of sugar and other crops.

Surat District has the highest density population in Gujarat, with a population of 6,081,322 and 1,337 people per square kilometer. The population increased by 42.24 % from 2001 to 2011. The district's population is 20.3 % rural and 79.7% urban. The sex ratio is 787 females per 1000 males (Census Organization of India, 2011b).   The overall literacy rate in Surat District is 85.5%; for males the rate is 89.6%, and for females it is 80.4%. The average literacy in rural areas is 76.9%, compared with an urban literacy rate of 87.7% (Census Organization of India, 2011b).

Dangs District

The Dangs District is directly southeast of Surat District. The Dangs borders the state of Maharashtra to the South and East. The district is marked largely by its reliance on cash crops and agriculture as the primary source of income for residents. The area is predominantly tribal, with many people identified as Scheduled Tribes (ST).

The Dangs District has a population of 228,291, a 22.3 % increase from 2001.The population density is 129 people per square kilometer, a stark contrast with Surat District's high population density. The sex ratio is 1006 females per 1000 males. The Dangs is primarily rural, with 10.8% of the population in urban areas. The overall literacy rate in Dangs District is 75.2%; for males the rate is 83.1% and for females the rate is 67.4%. The literacy rate in rural areas is 73.42 % (Census Organization of India, 2011c).

3.3 India's Education System

Structure

India's education system has a 10+2+3 structure, meaning that there are 10 years of basic education which consists of 5 years of primary school, 3 years of upper primary school, and 2 years of lower secondary school; 2 years of upper secondary school; and 3 years of higher education (National Council on Educational Research and Training, 1992). Children enter primary school at the age of 5 or 6. Schooling is compulsory and free for students until age 14, which is typically the completion of upper primary school (Clark, 2006).

Educational decision-making, including organization and structure, is devolved to the local level, within the framework of the national policy on education. In this decentralized system, the central government provides directions and policy guidelines, while states determine how much power is devolved to local governments, called *gram panchayats* (UNESCO, 2011). The *panchayats* are expected to increase the accountability and transparency of the education system and to address issues of access and quality of facilities (Participatory Research in Asia, 2002).

Policies and Issues of Interest

India

UNESCO's Global Monitoring Report (2012), which ranks countries in accordance to their progress at achieving Education for All (EFA), places India at 102 out of 120 countries, with an EFA Development Index (EDI) score of 0.79 out of 1.0. A full score indicates a country has met all EFA goals, including universal primary education, adult literacy improvement by 50%,

quality of education as measured by the survival rate to Grade 5, gender parity in primary and secondary education and adult literacy (UNESCO, 2012). India's score is an average of its scores on these four goal areas. The primary adjusted net enrolment ratio is 0.98, the adult literacy rate is 0.63, the gender-specific EFA index is 0.87, and the survival rate to grade 5 is 0.69. India's overall EDI score places it in the Low EDI category, as are all countries with scores lower than 0.80 (UNESCO, 2012).

The provision of education in accordance with EFA and Right of Children to Free and Compulsory Education Act (RTE) has shaped many of India's education policies over the past decade. The RTE defines elementary education – which is compulsory under the Act – as including Standards One through Eight, for children ages six to 14. Providing universal access at the primary level has been a key strategy of the government (Rajya Sabha, 2008). Sarva Shiksha Abhiyan (SSA) is a policy implemented by the Government of India in 2001 to universalize primary education throughout the country. SSA addressed the issue of access, however quality of education, and indicators such as drop-out rates, literacy rates, retention rates, and equity have not been adequately tackled.

RTE mandates School Management Committees (SMC), of which at least three-fourths of members are parents, with responsibilities to: "monitor the working of the school; prepare and recommend school development plan; monitor the utilization of the grants received from the appropriate Government or local authority or any other source; and perform such other functions as may be prescribed" (Rajya Sabha, 2008, p. 9). Part of the vision of SSA was to increase "accountability of schools to the community through greater involvement of village education committees and parent-teacher associations", yet teacher absence rates remain high indicating "low levels of accountability and motivation" (Pandey, Goyal, & Sundararaman, 2008, p. 2).

With regard to teachers, RTE specifies that if a State does not have adequate institutions to train teachers or enough teachers with minimum qualifications as specified by the Central Government, then these qualifications can be "relaxed" for a period up to five years, in which time teachers are to acquire the appropriate qualifications. Among the duties ascribed to teachers are: "maintain regularity and punctuality in attending school"; complete the curriculum; "assess the learning ability of each child and accordingly supplement additional instructions"; and "hold regular meetings with parents and guardians and apprise them about the regularity in attendance, ability to learn, progress made in learning and any other relevant information about the child" (Rajya Sabha, 2008, p. 10). If teachers are found to be in noncompliance with any of the stated duties, opportunities are to be provided for the teacher to defend his or herself, after which disciplinary action may be applied. RTE sanctions the deployment of teachers for the non-educational purposes of collecting census data, performing disaster relief duties, and election duties. Under RTE, teachers are forbidden from private tutoring. This aspect of the bill underscores the prevalence of and reliance upon tutors in India, with more than 40% of rural students receiving private education either through schools or tutors (Mukerji & Walton, 2012), a reflection of potential corruption and lacking teacher accountability.

As mentioned above, while the issue of school access has largely been addressed in India, providing access has been problematic in rural areas, taking into account long distances from cities, difficult terrain, and communities small in size and far-removed from the larger population by distance, language, and culture. Many rural schools have trouble attracting enough qualified, motivated teachers, lending to issues of school quality. Teacher policies and recruitment of teachers in rural areas are important areas of consideration for future policy reforms.

The issue of teacher absenteeism and accountability

Teacher absenteeism has been cited as a major problem, particularly in rural areas of India. The causes for this issue are numerous; among them are: the necessity of obtaining a second job, inability to travel to school due to lack of paved roads, and long distances from the teacher's home. Schools in remote areas can be nearly impossible to access in times of inclement weather. During monsoon season, for example, roads may be completely flooded due to heavy rains.

Other noted causes of teacher absenteeism are a lack of repercussions for absence, and a fragmented accountability system that does not hold teachers responsible for student achievement outcomes. As Ramachandran et al (2005) write of school administrators in India, there is a view that "teachers have no security of tenure and are constantly haunted by the fear of being transferred. They have to acquire godfathers for protection. Once they develop these contacts and linkages, there is no need for them to do their job seriously" (p. 32). Ramachandran et al find that one of the main issues of teacher motivation relates to this structuring of teacher assignments and the politicization of the profession, which has been noted both by parties that blame teachers for the poor quality of education and by teachers themselves:

> "Laypersons and the media squarely blame the teachers – citing absenteeism, bad behaviour, politicisation of teachers' unions and, most importantly, lack of professional ethics. Teachers, on the other hand, argue that the system has pushed them to a point where they have to cultivate politicians to avoid frequent transfers or pay huge bribes to get a job" (Ramachandran et al, 2005, p. 34).

This is confirmed by Bennell and Akyeampong (2007), who write that in India

"transfers are usually instigated by district level management rather than by teachers. Teachers often have to lobby local politicians if they wish to stay in their school. The India school survey found that only about 24 percent of teachers had been in their current school for between five to ten years, and those who managed to stay longer had to pay bribes" (p.50).

Teacher absenteeism becomes a particular problem in schools with only a few hired teachers, as is often the case in rural areas, as well as when teachers are deployed to teach in rural communities where they do not live. Chaudhury et al (2006) surveyed primary schools and health clinics in Bangladesh, Ecuador, India, Indonesia, Peru, and Uganda to measure absentee workers. They found that close to 12% of schools visited in India were closed due to absentee teachers (Chaudhury et al, 2006). The presence of a teacher is closely linked to student outcomes. One randomized intervention of placing a camera monitoring system in classrooms reduced teacher absences from 36% to 18% and led to a 0.17 standard deviation improvement in test scores for students, though this improvement was not found to be significant at 95% (Duflo & Hanna, 2005).

Chaudhury et al (2006), found that absence rates in nonformal schools are highest, followed by unaided private schools, as displayed in Table 1 below. Private aided schools have lowest rates of teacher absence. There is a large contrast between government and private schools' performance in every state. This is not due to private schools necessarily being of higher quality, but rather that parents' socio-economic status and background contribute more to better learning outcomes, which is reflective of the general effect of socio-economic status on school quality (Pratham, 2013, p. 12). The study found that teachers feel they must wait for instruction from the highest authorities to determine what must be done. The report recommends state

policies encouraging stage-wise achievement of basic learning goals, rather than completing the

syllabus, as is required by RTE (Pratham, 2013).

Table 1: Absence Rates by School Type in India

School Type	Teacher Absence	Number of Observations
Government-run schools	24.5%	34,525
Nonformal schools	28.0%	393
Private aided schools	19.1%	3,371
Private schools	25.2%	9,098

Source: Chaudhury et al, 2006

Although India has an average teacher absence rate of 25%, Chaudhury et al (2006)

found that only 1 head teacher in a sample of 3,000 government schools reported an instance of

firing a teacher for repeated absence. Additionally, 18 head teachers reported transferring

teachers to a less desirable location, which is the main form of punishment for absenteeism. This

represents less than 1% of head teachers (Chaudhary, 2006). This can be tied to the notions of

low teacher motivation for high performance as well as a regime of poor teacher management. In

a study conducted by Bennell and Akyeampong (2007), they found that only 41 % of rural

teachers in India agreed that teachers at their schools were well-managed (2007, p. 43). This is a

reflection of the convergence of many issues within the education system that relate to teacher

absenteeism. A lack of punishments for absences and poor management of the educational

system contribute to a dearth in teacher accountability. Additionally the disconnect between RTE

requirements and the teaching of necessary skills to students maintains a system where teachers

are discouraged from improving individual student outcomes, but rather must stick to a strict

syllabus and curriculum to comply with mandated standards.

Table 2: Factors related to Absenteeism

Factor	Mean Differences in Absence Rate
Male	5.2
Received training	-12.6

Union member	-5.6
Born locally	-4.2
Received recent training	-3.0
Longer-term employee	-3.7
Older than median	6.1
Married	-12.0
Contract teacher	-0.5
Has degree in education	-13.4
Head teacher	7.1
School inspected recently	-4.5
School in near Ministry of Education office	-1.3
School had recent PTA meeting	-4.8
Students' parents have high literacy rate	-4.8
School has good infrastructure	-8.2
School is near paved road	-6.9
School has high pupil-teacher ratio	-0.7
School is in urban area	-2.3
School is large	-3.2
School has teacher recognition program	-3.6

Source: Chaudhury et al, 2006

Table 2 above conveys the association of certain characteristics with teacher absenteeism in India. It shows the difference in mean absence rate with each characteristic's complement, so for example if a school has a teacher recognition program, their absence rate is 3.6 percentage points lower than a school with no teacher recognition program. There are several indicators that are of key interest to the issue of teacher absenteeism in rural areas. The absence rate for urban schools is 2.3 percentage points lower than that of rural schools, as displayed in Table 2. If a school is near a paved road, its absence rate is 6.9 points lower than a school that is not. Typically rural areas are less likely to have paved roads than urban areas. This association is true of school infrastructure as well, with rural schools typically having worse infrastructure. Schools with good infrastructure - including the presence of a toilet for teachers - have absence rates 8.2 points lower than those without. The likelihood of school inspections decreases absence rates as well. Often urban schools and schools near Ministry of Education offices are inspected more

often because it is easier for officials to reach those schools (Chaudhury et al, 2006). Though

increased monitoring and inspection positively impacts absenteeism, better-educated teachers are

sometimes absent more, suggesting they may be less subject to monitoring. Teachers with more

power have higher absence rates – head teachers are absent more than regular teachers. This ties

into the issue of corruption, as mentioned briefly.

This study found a weak correlation between contract teachers and absenteeism, with

these teachers only 0.5 points less likely to be absent (see Table 2). However, typically contract

teachers are not trained and do not possess a degree in education. Teachers with education

degrees were found to have absence rates 13.4 points lower than those without. Additionally,

contract teachers tend to receive their training on the job; teachers who are trained are 12.6

percentage points less likely to be absent than those who are not trained (Chaudhury et al, 2006).

Other sources, however, claim that in response to high rates of teacher absenteeism and

difficulties in filling teaching posts in rural areas, contract teachers are a viable alternative

(Muralidharan & Sundararaman, 2010), and that their absence rates are in fact lower (Pratham,

2011). Additionally, local teachers have lower absence rates than those not from the local

community, suggesting an area of concern for teacher deployment policies. (Chaudhury et al,

2006).

There are many issues related to teacher absenteeism and accountability, some of which I

have enumerated above. For the purposes of this study, I will limit my examination to corruption,

teacher policy, and school location, as I will elaborate on these thematic elements in the

following theoretical framework.

4.   Theoretical Framework / Literature Review

In the preceding section, I utilized past studies of teacher accountability and teacher absenteeism as they relate to teacher policies in various countries to inform my study of teachers in rural schools in Surat and Dangs Districts in Gujarat. I examine the status and utility of the teaching profession in India compared with other nations to further my understanding of the variables that contribute to the present condition of teacher absenteeism and accountability structures and how these may or may not be effective. Notions that policies to curb teacher absence rates are intended to increase teacher accountability will form the basis of my theoretical framework, and I will examine the introduction of enhanced absence monitors in Gujarat with regard to this.

Ornstein (1986) writes about the development of concepts of accountability in education and the shift from student-centered accountability frameworks to more onuses on teachers. He offers a critical perspective of systems of teacher accountability, claiming they can be used to excuse poor student performance or lack of parental involvement. He writes of the danger of using accountability as an "umbrella" for educational reform – without clear definitions of accountability, teachers are victims in a complicated system of which they are just one input for a child's educational success (Ornstein, 1986, p. 222). Ornstein's premises on teacher accountability are written in the context of evolving accountability systems in the United States in the 1980s. He stresses that the role of the teacher is more limited than policy-makers at the time implied, that families and peer groups have the greatest impact on children's education and that "the most important growing period for intellectual development and academic achievement takes place before the child enters school" (Ornstein, 1986, p. 227). This finds resonance in the studies elaborated upon in the previous section. It follows, according to Ornstein's model, that teachers should not be held responsible for outcomes they have little impact on. To counter

policies that punish teachers, Ornstein suggests a system of joint accountability to improve the

"overall educational delivery system" (p. 227). His framework converges with notions of

education as a product of society, with education systems reflecting cultural norms and

conventions, notions which find credence in the work of Basu.

Basu, an economist, applies cultural explanations to the issue of teacher truancy in India.

Teacher absenteeism is associated with social tendencies; the higher the number of absentee

teachers, the more acceptable it becomes in society (Basu, 2006). If there is little disgrace

associated with the behavior, individuals will be more likely to exhibit high levels of

absenteeism. He writes about the confluence of cultural norms and economic development,

stating that "harmful" aspects of a culture can be modified or eliminated in favor of traits that

"aid efficiency and progress" (Basu, 2006, p. 3). This is in the context of India's rapid economic

development, which has occurred despite rampant corruption. He writes that government must

take responsibility for providing a solid infrastructure and institutional organization and to meet

the needs of the poor and underprivileged; at the same time, however, government is a function

of the economy and society, and corruption within government reflects corrupt practices

throughout society as a whole.

The cultural arguments of Basu find resonance with notions that communities may hold

teachers accountable to their jobs. Pandey, Goyal, and Sundararaman (2008), in a baseline study

in three Indian states for the World Bank, posit that ensuring that communities are

knowledgeable about their roles in holding teachers accountable could increase teacher

attendance and accountability. School Management Committees (SMCs) are an example of this

type of policy. Pandey et al write that SSA was intended to increase accountability through

"village education committees and parent-teacher associations", yet these have not curbed

absence rates because communities are "largely uninformed about the controls that have been devolved to them" (2008, p. 2). In the three states they surveyed – Karnataka, Madhya Pradesh, and Uttar Pradesh – they found that most parent members of local governing committees had not received any training as to their roles and responsibilities. Many parents within the communities are not aware that these local committees exist. The authors suggest that one reason teachers may not be accountable or motivated to teach is that the committees instituted to hold them accountable lack the capacity to do so. Pandey et al also suggest that teacher effectiveness, which is a major indicator of student achievement outcomes, may be lower in some areas as a result of lacking opportunities for professional development.

Patrinos and Kagia (2007) write that educational investments can improve a nation's development only if the investments are properly allocated. Chronic teacher absenteeism is a reflection of corruption in the system, as theorized by Basu (2006). This links to reduced instruction time, which diminishes student learning. "Access, quality, and equity of education" are all impacted by corruption (2007, p. 65). Patrinos and Kagia write that public education is often a monopoly, which contributes to a lack of accountability; monopolies can be balanced by high levels of accountability, thus decreasing forces of corruption. However, it should be noted that private schools are not necessarily more accountable to students, particularly in the context of India. Teachers play a crucial role in establishing and maintaining the quality of an education system and the share of their salaries in education budgets of developing countries are typically high; this is a reason to focus on teacher absenteeism when examining issues of corruption and accountability.

Other studies cite poverty as a determining factor in absentee rates, as it reduces the power of communities to hold teachers accountable. In a report on teacher absenteeism in

Peruvian primary schools, Alcazar et al (2006) find that poverty may make work conditions for teachers worse, and thus lower their motivation. The report was part of the same six-country study which I cited by Chaudhury et al earlier. Alcazar et al note that it is important to consider contextual factors for teacher absenteeism. In the example of Peru, regular teachers enjoy a high level of job security and receive an assortment of pecuniary benefits associated with their positions. Contract teachers are usually hired for one year at a time and do not enjoy the same level of benefits. The authors found that regular teachers "face virtually no risk of being dismissed for excessive absenteeism" and that "there is very little incentive to perform well and few penalties for performing badly" (Alcazar et al, 2006, p. 5). This relates back to the afore-mentioned issue of head teacher complacency that corrupts the system. Once teachers secure a regular position, the system is not set up to ensure they maintain regular attendance, nor are they held accountable to their students. Despite this, they find that contract teachers have higher absence rates than regular teachers, which they explain by a low expectation of staying at the same job, or of better-performing teachers being offered regular positions, leaving mainly underperforming contract teachers for which to measure absence rates. Corruption plays a role in the hiring practices of school districts. In their survey of teacher absences in Peru, teacher absence rates fall between 8.7 % and 12.6 %, a low rate when compared with other developing countries, India in particular. They note, however, that this does not reflect the absentee issues rampant in certain parts of the country, particularly poor, rural areas.

In the contexts of the studies and concepts related to teacher absenteeism and accountability as discussed above, as well as the background provided on these issues in the preceding section, I now turn my discussion to the particular context of rural schools in Surat and Dangs Districts in Gujarat.

5. Overview of Study

In July and August, 2013, I conducted a research study in Surat District and Dangs District in the state of Gujarat in India. The study examined teacher accountability and attendance in nine schools in light of a government directive to monitor teacher attendance through biometric thumb-printing. As part of the study, a written survey was given to teachers at each of the schools in Gujarati. I also conducted spoken interviews with the principals of eight of the schools. The schools represented the variety of school options available to students in the region: one government primary school, one government secondary school, two semi-private schools, one government tribal residential school, one semi-private tribal residential school, two fully private schools, and one school with a private primary school and government secondary school. From the nine schools, I conducted a total of 116 surveys. I also conducted an interview with the provost of a private university, though I did not survey teachers at that institution.

Figure 1 on the following page provides an overview of the research that I performed at each school in Surat District. This included seven schools where I conducted teacher surveys and principal interviews, and the interview of the university provost. Overall, in Surat District I conducted 95 teacher surveys and seven interviews with principals.

Figure 1: Overview of Methodology in Surat District
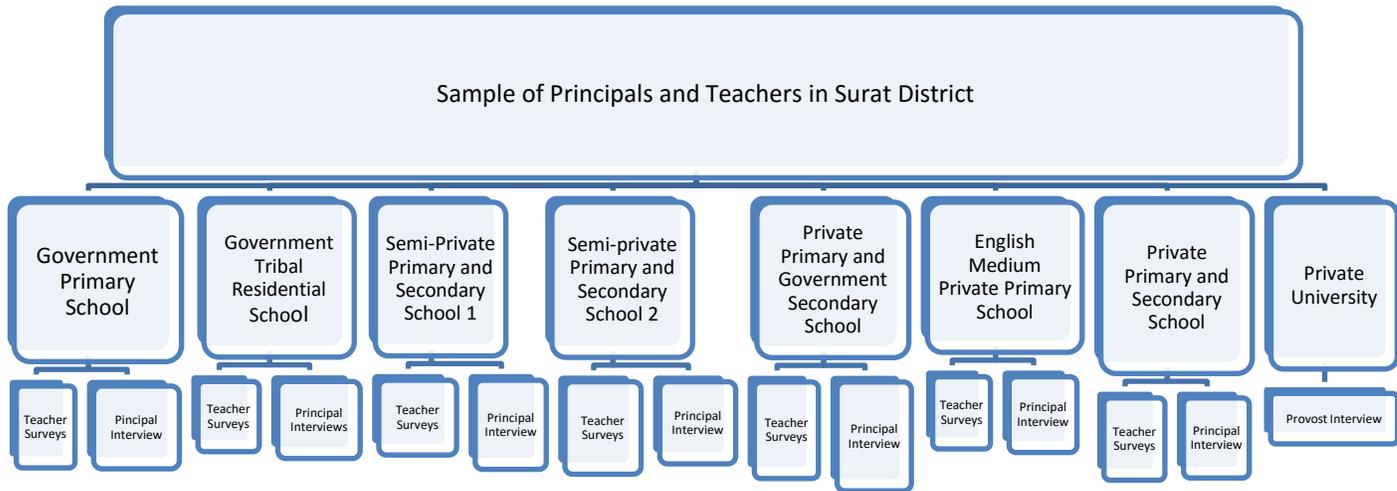
Source: Cooper (2013)

Figure 2 displays the research conducted in Dangs District. This consisted of 21 teacher

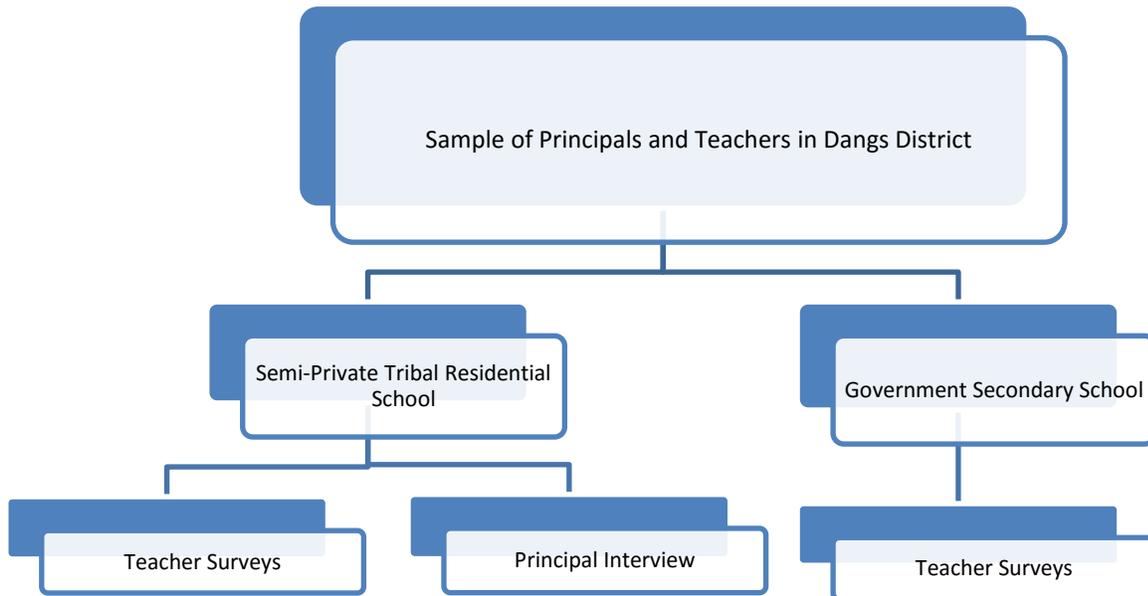surveys and one interview with a principal. The research took place at two schools.

Figure 2: Overview of Methodology in Dangs District

Source: Cooper (2013)

The semi-private schools in my study received part of their funding from the state government, and part of their funding from student tuitions. Since these schools were not fully government-funded, they were not required to install the biometric devices. The tribal residential schools, known as Eklavya Model Residential Schools (EMRS), when fully government-funded, must have the biometric devices. EMRS occupy a unique position in the field of Indian schools. They are either fully government funded, or semi-private. Students must apply to attend these schools, and the process can be competitive. As all of the students are tribal, they represent a historically marginalized segment of the population. Many of their parents are farm workers or migrant laborers, and they come from remote villages, where access to schools is limited. As such, EMRS are part of a government scheme to improve educational opportunities for these groups.

The two fully private schools displayed disparate teaching methodologies and school leadership. One was residential, appeared to have a much greater level of funding, and was situated on a well-maintained campus, with classrooms stocked with smart boards and arranged in a child-centered manner to enhance learning. The second private school seemed to operate on a much smaller budget. It was not residential, and the desks and chairs in the classrooms could not be easily maneuvered. Neither of these schools opted to use biometric devices to monitor teacher attendance.

One school, which had a private primary section and a government secondary section, exhibited similar characteristics to the residential private school. It appeared to have a higher level of funding and resources at its disposal. Many of the students boarded, and vacation time was minimized in order to maximize learning time. This school also did not use the biometric devices.

The third tier of schools I visited were fully-government funded. I visited one such school in Surat District, and one in Dangs District. Per the government directive, only primary schools are as of yet required to install the biometric devices; as such the primary school in Surat District used this method, while the Dangs District secondary school did not. Conditions at these schools are much more stark than at the others I observed. There is an apparent lack of resources and staff available.

6.   Methodology

In my examination of attitudes and perceptions of teacher accountability and absenteeism, my study falls under the umbrella of interpretive/constructivist perspectives; more specifically it is a phenomenological study in that I attempt to construct the structures of teacher policy and attendance mechanisms and feelings toward accountability in certain localities. I build on the responses to my surveys and my interview questions in an attempt to construct a common experience in relation to my participants. Based on my analysis of the data, I also employ grounded theory to explain my findings. This is an especially useful framework as it allows for concurrent analysis of the quantitative and qualitative findings to identify patterns. I have paired my findings from teacher surveys and principal interviews with my experiences during classroom observations at several of the schools. During these observations, I took the role of complete observer, and minimized my interactions with the teachers and students as much as possible.

I have also relied on information obtained through anecdotal interactions, including both facilitated and informal discussions with teachers. My teacher surveys were comprised primarily of closed-ended questions, though there were some short answers in the survey which were

intended to solicit teachers' opinions. I found it necessary to include closed-ended questions as many of the respondents left the open questions blank. The criterion for respondents was that they be employed as a teacher in the schools I visited. I sought to have the respondents represent the variety of teachers employed at the schools; however this was difficult to monitor as I was unable to personally select the teachers to fill out the surveys. In two of the schools I visited, I was able to request that certain teachers complete the surveys; however this was due to a previously developed relationship with those schools. At other schools, a peon or a teacher selected by the principal handed out the surveys.

My interviews with principals were conducted in a conversational manner. I had predetermined questions that I asked each principal, which I used as a guide for the interviews. Each interview provided me with information that informed future interviews; and each provided varying information which I found useful for pairing with the school's characteristics. Typically each interview was between myself and the school's principal. There was always at least one other person in the room; in some cases it was another teacher, and in other cases it was a translator. Several of the principals spoke English, though their skill levels varied. A couple of the principals did not possess strong enough English to conduct the interview without a translator. A few principals asked to see the questions ahead of time and preferred to write their answers. I found this uninformative and returned to those schools to conduct the interviews in person.

Given the far distances that I needed to travel to get to some schools and the difficulty of and time required to travel in rural Gujarat, I conducted interviews with principals while teachers completed the surveys. For the schools that required greater travel, I also combined class

observations with the other elements of my study. Because of time constraints, there were several schools where I unfortunately could not observe classes. For example, travel to the Dangs District from my station in Surat District was four hours each way. With infrequent buses and two schools to visit in the District, my time was limited to less than an hour at each school.

7. Case Study- Biometric thumb-printing in rural southern Gujarat

The ASER 2011 survey of rural schools found that on average in Gujarat, 94.4% of teachers for standards 1 through 7 or 8 are present and 71.3% of schools had all teachers present (Pratham, 2011, 2). The Government of Gujarat has begun to employ new mechanisms to measure teacher attendance. Historically, as well as presently, many schools track attendance with record books, which teachers sign each day with their arrival and departure time. Since 2009, the state has mandated usage of biometric attendance and computer aided learning systems (BACALS), which are computerized and take a scan of the teachers' thumbprints. These are employed at all government primary schools and tribal schools (Secuwatch, 2006).

The BACALS policy was enacted following two Government of Gujarat programs: "Shala Praveshotsav (Enrolment Drive) and "Kanya Kelevani Rath" (Girl Child Education Campaign) in 2003. These programs were intended to increase enrolment numbers in primary education and reduce drop-out rates at this level. Seen largely as successful at meeting the aim of increased access, student retention remained a challenge, which was linked to, among issues of socio-economic factors, high rates of teacher absenteeism, particularly in remote and tribal areas. The Government of Gujarat implemented a pilot project in Narmada District in 2006 to track teacher and student attendance through a fingerprint biometric school attendance system in all primary schools, covering approximating 2,500 teachers and 76,000 students. Stand-alone fingerprint biometric machines, which have external un-interrupted power supply of up to 12

hours were installed in schools, whereby teachers and students would scan their thumbs as they

arrived and departed from school. At the end of each month, attendance data saved in a portable

memory device was transported to taluka (Block) headquarters and processed by a software

application linked to teacher pay rolls.

https://secuwatch.wordpress.com/biometric-in-40000-schools/

In August 2008, the Government of Gujarat opened a Request for Proposals (RFP) for

BACALS for Ashramshalas[1], Adarsh Niwasi[2], Eklavya[3], Primary & Upper Primary Schools.

According to the RFP, the aims of the BACALS are to "improve the learning process" and

"ensure transparency and accountability in processes" to make the school systems more efficient

and effective (Government of Gujarat, 2008, p. 11). The Government of Gujarat entered into an

agreement with HCL Infosystems (HCL Infosystems, 2009) and Access Computech Private

Limited (Government of Gujarat, 2009) in December 2009 to implement BACALS in schools in

11 districts to include: 486 Ashramshalas, 31 Adharsh Niwasi Schools, ten Eklavya schools – all

under the direction of the Tribal Department; and 8,136 primary and upper primary schools

under the Education Department. Among the districts, Surat and Dangs District are included.

The contract was for 1.1 billion rupees. BACALS were implemented to monitor the attendance

of teachers, students, and administrators.

This method was intended to replace manual records, such as log-in books (LIB), yet in

each school I visited manual records were used to complement the BACALS, indicating that this

method may not be as efficient or accurate as initially presumed. It is also an indicator of the

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[1] Residential schools for students of Scheduled Tribe backgrounds
[2] Residential schools for students of Scheduled Tribe and Scheduled Caste backgrounds
[3] Residential schools for students of Scheduled Tribe backgrounds

context of the areas in which BACALS are implemented – areas that often suffer from electricity

outages as well as excessive moisture and water damage during monsoon months.

8.   Data – Findings and Analysis

The data presented and analyzed below represents findings from teacher surveys, interviews with

principals and classroom observations. I have divided the findings into the areas of

demographics, quality, teacher commitment, teacher absences, perceptions of BACALS and LIB,

and accountability in order to contribute to my purpose in conducting the study – to determine

the efficiency of BACALS in improving teacher attendance, and whether that leads to increased

teacher accountability in turn.

Demographic Characteristics of Respondents

The mean age of survey respondents was approximately 38 years, with a mode of 31 at

seven occurrences. Out of 116 participants, 25 did not provide their age. The ages of participants

ranged from 22 to 58. Table 3 below conveys the other demographic information I collected

from respondents. In terms of gender, 62 of the teachers were female while 54 were male. The

survey respondents were forthcoming with caste information; only 3 did not answer – the same

number of respondents who identified as Muslim – a religion not included in the caste system.

The greatest percentage of teachers – 38.8% - were Scheduled Tribe (ST), followed by 33.6%

identifying as Other Backwards Class (OBC). Only 24.1% of teachers were in the General/Open

caste category, which may indicate a low status of the teaching profession. Alternatively, this

may simply be a symptom of the general demographics of the region. The Dangs District is a

predominantly tribal area, with ST comprising 96.6% of the population (Ministry of Tribal

Affairs, 2011). Surat District has a large ST population as well – 28.2%, though this is significantly lower than in the Dangs District (Ministry of Home Affairs, 2001). Three of the teachers identified as Muslim, 106 identified as Hindu, 1 chose "Other", and the rest did not answer the question. While outside the scope of this study, it is interesting to note the overwhelming predominance of Hindu teachers in a region that has a sizable Muslim population. The 2001 Census of India measured the Muslim population of Surat District at 8.97% (AICMEU, 2001), though I was told in some villages I visited the percentage of Muslims was as high as 40%. I suspect that Muslims comprise a greater percentage of the population than is conveyed in the census, possibly a result of under-reporting of Muslim identity in the face of marginalization and a history of violence against Muslims in Gujarat (Jaffrelot, 2003). In several of the places where I conducted research, there was a noticeably sizeable Muslim population that was not reflected in the staffing of the schools.

In Table 3, it is also shown that 22 of the teachers surveyed teach at schools with thumb-printing and 94 of the teachers work at schools that use a log-in book.

Table 3 – Teacher Survey Responses

VARIABLE	% OF TEACHERS	# OF TEACHERS
SEX		
Male	46.6	54
Female	53.4	62
RELIGION		
Hindu	91.4	106
Muslim	2.6	3
Other	.9	1
No Answer	5.2	6
CASTE		
Scheduled Caste	.9	1

Scheduled Tribe	38.8	45
Other Backwards Class	33.6	39
General/Open	24.1	28
No Answer/Not Applicable	2.6	3
ATTENDANCE MECHANISM		
Log In Books (LIB)	81.0	94
BACALS	19.0	22

Source: Cooper (2013)

As shown in Table 4, 45.7 % of teachers surveyed were contract teachers, and 52.6% were government teachers. This distinction is significant. As mentioned in section 2.3, contract teachers are often hired at a salary lower than that of government teachers, and typically have not received as much training or certification as government teachers. While various sources debate the efficacy of contract teachers, some sources cite the value in hiring contract teachers because job uncertainty might lead to decreased absence rates and increased accountability (see section 2.3). While I do not argue this, one benefit that does appear in hiring contract teachers is that they apply to work in a specific schools, whereas government teachers are placed by the government and do not have a choice in where they teach.

Often contract teachers are paid salaries that are a fraction of the salaries paid to government teachers, as was the case at the two semi-government schools I visited in Surat District. Contract teachers at these schools were hired independently by a non-governmental organization (NGO), which provided training and offered salaries lower than those offered to government teachers.

In some fully-private schools, though, this is not the case. At the fully private school that I visited, teachers received pay equal to that of government teachers. The results from this school

convey that the teachers are held accountable for their students' education. Most of these

teachers – 77.8% - receive special training or attend teacher workshops, and say that these

workshops improve their teaching (See Table 6).

At both of the EMRS that I visited, all of the teachers were contracted. Though their pay

is lower than that of government teachers, many of the teachers at the EMRS are tribal

themselves and are often chosen for their experience with these groups, contributing another

dimension to motivation and accountability levels for these teachers. At the EMRS in Surat

District, I was able to conduct a focus group. Through the information gleaned from this group, I

found that the teachers at this school were highly invested in their students and enjoyed teaching

at this school, yet if they were given an opportunity to take a position as a government teacher

elsewhere they would because of the higher pay and status. This desire to become a government

teacher is reflected in the survey results as well: 77.4 % of contract teachers said they wish to

become a government teacher.

Table 4: Identification of teachers as Contract and Government

VARIABLE	% OF TEACHERS	# OF TEACHERS
TYPE OF TEACHER		
Contract Teacher	45.7	53
Government Teacher	52.6	61
No Answer		
CONTRACT TEACHER DESIRE TO BE GOVERNMENT TEACHER		
Yes	77.4	41
No	9.4	5
No Answer/Not applicable	13.2	7

Source: Cooper (2013)

Quality of Education

As mentioned, professional development is an indicator of a school's quality. A slight

majority of teachers – 51.7% - responded that they had received special training or attended

teacher workshops, with 78.3% of those teachers saying that the training improved their

teaching, as shown in Table 5. When separated by school type, we see that in BACALS schools

only 18.2% reported receiving special training, though 100% of those teachers said the training

improved their teaching. LIB schools showed a much higher percentage of teachers that received

special training – 59.6%, but only 76.8 % of those teachers reported that their teaching improved.

It is interesting that a greater percentage of teachers from LIB schools received training. While

investment in professional development for teachers indicates a school's commitment to its

teachers and their impact on their students, given the differences in sample size for the two types

of schools, this does not necessarily indicate that LIB schools invest more in professional

development opportunities than BACALS schools.

Table 5: Teachers Receiving Special Training by Attendance Mechanism

VARIABLE	% OF TEACHERS	# OF TEACHERS
RECEIVE SPECIAL TRAINING/ATTEND TEACHER WORKSHOPS		
Yes Overall	51.7	60
Yes BACALS	*18.2*	*4*
Yes LIB	*59.6*	*56*
No Overall	40.5	47
No BACALS	*63.6*	*14*
No LIB	*35.1*	*33*
No Answer	7.8	9
No Answer BACALS	*18.2*	*4*
No Answer LIB	*5.3*	*5*
SPECIAL TRAINING IMPROVED TEACHING		
Yes	78.3	47
No	3.3	2

No Answer				18.3	11

Source: Cooper (2013)

Table 6: Teachers Receiving Special Training By School

VARIABLE	% OF TEACHERS	# OF TEACHERS	VARIABLE	% OF TEACHERS	# OF TEACHERS
RECEIVE SPECIAL TRAINING/ATTEND TEACHER WORKSHOPS			*SPECIAL TRAINING IMPROVED TEACHING*		
Semi-Private Surat 1	60.9	14	Semi-Private Surat 1	85.7	12
Semi-Private Surat 2	50.0	8	Semi-Private Surat 2	100.0	8
Government Primary Surat	0.0	0	Government Primary Surat	NA	NA
EMRS Surat	40.0	4	EMRS Surat	100.0	4
EMRS Dangs	44.4	4	EMRS Dangs	50.0	2
Government Secondary Dangs	83.3	10	Government Secondary Dangs	90.0	9
Private Primary, Government Secondary Surat	71.4	5	Private Primary, Government Secondary Surat	100.0	5
Private English Medium Primary Surat	22.2	2	Private English Medium Primary Surat	50.0	1
Private Primary and Secondary Surat	77.8	14	Private Primary and Secondary Surat	64.3	9

Source: Cooper (2013)

In one town in rural Surat District, I visited an English Medium, fully private primary school for children in nursery through fifth standard. This school uses a master roll for attendance. The principal said he is satisfied with the quality of education at his school, but that more changes are needed, especially with regard to how teaching should work with these changes. Despite this, he is satisfied with the quality of teaching, since teachers give proper guidance to the students and utilize an audio/visual system. One of the principal's remarks shed

some light on the quality of the education system, as he said that after fifth standard, all students

must be promoted to sixth standard. Per government regulations, the school is not permitted to

hold back any student.

While the principal of the government primary school is satisfied with the quality of

teaching at the school, and said he was satisfied with the quality of education students receive, he

cited the difficulties that teachers face. The school has no additional staff, so teachers must do

clerical work. There are 13 teachers for 521 students, and teachers have 14 classes per week.

Sometimes they are unable to finish the classes because of other duties, such as opening

government accounts for scholarship schemes.

With regard to principal perceptions of indicators of quality, as shown in Table 7 below,

seven out of eight principals interviewed said they were satisfied both with the quality of

education students receive at their schools and with the quality of teachers.

Table 7: Principal Satisfaction with Quality of Education and Teachers

School	Satisfaction with Quality of Education Students Receive	Satisfied with Quality of Teachers
Semi-Private Surat 1	Neutral	Neutral
Semi-Private Surat 2	Satisfied	Satisfied
Government Primary Surat	Satisfied	Satisfied
EMRS Surat	Satisfied	Satisfied
EMRS Dangs	Satisfied	Satisfied
Private Primary, Government Secondary Surat	Satisfied	Satisfied
Private English Medium Primary Surat	Satisfied	Satisfied
Private Primary and Secondary Surat	Satisfied	Satisfied

Source: Cooper (2013)

While many principals remarked that they are satisfied both with the quality of education

students receive and the quality of teaching at their school, at the first semi-private school in

Surat, the principal was neutral on both points. He said that education does not depend only on the school, but on society, family, and parents. With regard to the quality of teaching, he said that it is not perfect and that all teachers are different, so he could not feel satisfied. This response was unique among my interviews with principals. Every other principal elicited a much more positive view of the quality of education and teaching at their school, though rarely did a principal explain why they felt the quality was so high.

To determine how teachers perceive the quality of education and of teaching at the schools, I asked a number of questions, including their satisfaction with the quality of education students receive at school, their satisfaction with the quality of teaching at their school, whether students are learning what they need to know and clearly understand what they are expected to learn, whether students find school work challenging and/or interesting, and if students are able to approach teachers when they do not understand something. As shown in Table 8, I found that overall, 79.3% of teachers are satisfied with the quality of education students receive at their school; at BACALS schools this jumps to 95.5% and at LIB schools it drops to 75.5%. Overall, 86.2% of teachers are satisfied with the quality of teaching at their school, 95.5% of teachers are satisfied at BACALS schools, and 84.0% of teachers at LIB schools are satisfied. Nearly all of the teachers – 98.3% overall – agree that students are learning what they need to know; 100% at BACALS schools agree, and 97.9% at LIB schools agree. In regards to whether students clearly understand what they are expected to learn at school, 94% of teachers overall agree they are, 100% at BACALS schools agree, and 92.3% of teachers at LIB schools agree.

Table 8: Teacher Perceptions of School Quality

VARIABLE	% OF TEACHERS	# OF TEACHERS
SATISFACTION WITH QUALITY OF EDUCATION STUDENTS RECEIVE AT THEIR SCHOOL		
Satisfied	79.3	92
Not Satisfied	4.3	5
Neutral	16.4	19
SATISFACTION WITH QUALITY OF TEACHING AT THEIR SCHOOL		
Satisfied	86.2	100
Not Satisfied	2.6	3
Neutral	10.3	12
No Answer	.9	1
AGREE THAT STUDENTS AT THEIR SCHOOL ARE LEARNING WHAT THEY NEED TO KNOW		
Yes	98.3	114
No	1.7	2
AGREE THAT STUDENTS AT THEIR SCHOOL CLEARLY UNDERSTAND WHAT THEY ARE EXPECTED TO LEARN AT SCHOOL		
Yes	94.0	109
No	4.3	5
No Answer	1.7	2
AGREE THAT STUDENTS AT THEIR SCHOOL FIND SCHOOL WORK CHALLENGING		
Yes	46.6	54
No	47.4	55
No Answer	6.0	7
AGREE THAT STUDENTS AT THEIR SCHOOL FIND SCHOOLWORK INTERESTING		
Yes	96.6	112
No	2.6	3
No Answer	.9	1
AGREE THAT STUDENTS ARE ABLE TO APPROACH TEACHERS WHEN THEY DO NOT UNDERSTAND SOMETHING		
Agree	87.1	101
Disagree	3.4	4
Neutral	6.0	7
No Answer	3.4	4

Source: Cooper (2013)

Teacher responses to the preceding questions in Table 8 paint an overwhelmingly positive picture of the perceived quality of education at their schools. Answers to whether

students find coursework interesting were also very positive, with 96.6% of teachers responding

"yes", and little differentiation between the two types of schools. However, answers to whether

students find their school work challenging convey a much less positive association. Only 46.6%

of teachers overall responded that students do find their work challenging; 68.2% at BACALS

schools; and 41.5% at LIB schools (Table 8). This reflects the purpose of education and

schooling in the communities I visited. While teachers elsewhere may view it as important that

students are challenged at school, in the districts I visited it appeared to be of greatest importance

that children learned enough to pass their exams.

In classroom observations, it is apparent that teachers must follow rigid curricula to

prepare students for their exams, which are streamlined with their course books. There is little

room for creativity in the classroom. At the same time, as I learned in my interviews, teachers are

required to pass all of their students to the following grade each year, regardless of how well they

do, and whether or not they demonstrate that they have learned the necessary knowledge to

succeed in a higher grade. Many of the principals alluded to this level of responsibility when

asked how they ensure that teachers go to their classes and perform their duties, per Table 9

below. The principals often review lesson plans, have the teachers inform them of what chapters

they are covering, and observe the classes. Some principals said they read teachers' planning

books, but did not mention observing classes on a regular basis. This type of oversight holds the

teachers accountable only to cover the materials mandated by the state, and does not necessarily

encourage improved teaching methods.

Table 9: Principal Methods of Monitoring Teachers

School	Proxy Period	Observe classes	Peer System	Maintain log book for educational inspectors	Check teacher plans	Hold monthly meeting	Place trust in teachers	Section-wise supervisors
Semi-Private Surat 1	√	√						
Semi-Private Surat 2		√						
Government Primary Surat		√	√	√				
EMRS Surat		√			√	√		
EMRS Dangs							√	
Private Primary, Government Secondary Surat								√
Private English Medium Primary Surat					√			
Private Primary and Secondary Surat					√			

Source: Cooper (2013)

At one semi-private school in Surat, the principal observes the classes and gives instructions to the teachers. He thinks that this method works well, and that there are no problems. When teachers are absent, a proxy period is held. At the other semi-private school in that district, the principal said that he goes to the classes when he has time to observe the teachers and is satisfied with how the methods have worked. The principal of the private primary and government secondary school employs section-wise supervisors for the primary, secondary, and higher-secondary schools who monitor the teachers. At the private English Medium school in Surat District, teachers share their school and personal planning books with the principal, who said this method works "fantastically", as the teachers must plan before going to the classroom. The principal of the government primary school I visited instituted a peer system to make sure teachers perform their duties. In addition, the principal visits each teachers' classes twice per

month and fills a log book. Once per year, government education inspectors come to the school

and check the book. The principal thinks these methods work well. At the EMRS in Surat

District, the principal visits all of the classes, checks the test register, and holds monthly

meetings with the teachers to make sure they are performing their duties. Each morning, he

checks all of the teachers' plans for what they will teach that day, and he monitors how many

complete their lessons. He thinks this method is successful. To ensure that teachers fulfill their

duties at the fully private school, the principal checks the content of the education that teachers

are providing, such as the chapters they are teaching. He said that the teachers use various

methods, but give him their course materials to sign off on. This indicates one aspect in which at

the private school, teachers have more freedom and opportunity to employ creative measures into

the classroom and are not as bound to use government mandated materials. The principal at this

private school calls students to his office to ensure they are performing at the standard level. The

principal of the Dangs EMRS gave a unique answer to this question. She puts trust in the

teachers that they will do their duties, and makes sure they understand their sense of

responsibility. She says this method is 100 % successful.

Only half of the principals interviewed make sure that teachers are in their classrooms

and teaching. This is partially due to teachers having to perform duties outside of teaching, often

during classroom time. Many teachers and some principals indicated that when they are absent, a

proxy teacher covers their class. This is often not a teacher with the same subject content

knowledge, and the period is often spent as a study hall period might be. Only a couple of

teachers indicated that another teacher with the same content knowledge covers their class when

they are absent.

This relates to the varying levels of resources available at each school. The purely government schools are often resource-deprived. They lack any administrative staff to fulfill necessary duties such as paperwork and other office tasks. Fully private schools have more resources available because they collect fees from the students' families. They are able to offer small class sizes, provide more individualized attention, and utilize technology such as smart boards in the classroom. As one might assume, the semi-private schools often fall somewhere between these extremes, and the variances between these schools depend largely on the demographics of the student population. In areas where marginalized groups such as Scheduled Caste (SC) and Scheduled Tribe (ST) make up a larger percentage of the student population, often the schools' resources are more constrained.

While I found that each school displayed characteristic differences, certain aspects were resonant amongst the schools, providing an opportunity to observe issues of quality prevalent throughout the area of my study. Five of the nine schools experienced electricity outages during my visits, a common occurrence in the region. On hot days, a non-working fan could cause considerable discomfort in the classrooms. I visited two schools within one month of the school year starting. The English classes that I visited in both schools had yet to receive their textbooks. In the context of a school system where teachers are required to complete strict curricula, this can be quite problematic.

Many of the schools depended upon rote teaching methods, though there were a couple of exceptions that used this to a lesser degree. One tribal residential school in Surat District which boasts smaller class sizes, involvement of the faculty in student activities, and exceptional opportunities for professional development, displayed a greater propensity toward encouraging critical and creative thinking. In addition, one government secondary school attached to a private

primary school exhibited the utilization of classroom technologies in the form of smart boards that seemed to engage the students with the materials more. The curriculum at this school was especially rigorous, with minimal vacation time, and high expectations of the students.

Schools with greater levels of funding had classrooms that provided better spaces for learning. A fully private primary and secondary school in Surat District had desks and chairs that could be moved around the room, cubbies for backpacks, and personalized spaces for each student on bookshelves. Posters lined the walls. This was unique, and I did not observe these elements at any other school I visited. At schools that were not as well-funded, benches were attached to desks. There was no individual student space, although students remain in the same classroom for the entirety of the school day. There were rarely posters on the walls. The classroom could not be manipulated, other than the chalkboard, which was often difficult to read due to the board's low quality.

Overall I found that often classroom time was generally not adequately used. For example, in one semi-private primary and secondary school in Surat District, the teachers used nearly five minutes of the class time to set up the chalkboard and activities for the class, which was only 35 minutes total. In another semi-private school in Surat District, a teacher spent the first ten minutes of a class in the teachers' lounge preparing forms for the principal. At a government primary school in Surat District, a teacher bemoaned the fact that resources were so limited that she had to fulfill administrative duties in lieu of a peon, often during class times. At the private school in Surat District, however, class periods were over one hour, allowing more time for learning in the classroom, especially when compared with the 35 minutes typical of most schools in the region. Teacher presence and time teaching is closely related to the broad issue of teacher absenteeism. Though teachers may be marked as present at school, they may

spend time outside of the classroom during times meant for teaching. This indicates low levels of accountability.

Teacher Commitment

Teacher perceptions of their professional role and duty as a teacher are indicators of teacher commitment. The teachers were asked "what do you think your most important duty is as a teacher"? The question was open-ended, but several aspects repeated amongst participants. As shown in Table 10, the most common answers were: regularity with 12 occurrences, to educate/teach/provide good education with 23, honesty with 15, teach well with 12, the duty to teach/responsibility of teaching with 7, give good ideas/knowledge with 9. If one combines the four highlighted responses in Table 10, it is found that a total of 48 teachers', or 41.8%, answers relate to giving knowledge and teaching. Combining "work in timely manner" with regularity, the total in this category is 15 teachers, or 12.9%. It is significant that a sizable percentage indicated the importance of timeliness as their most important duty, alluding to the emphasis placed on this within schools. As explained in the background of India's education system, one of the duties ascribed to teachers by the RTE is to "maintain regularity and punctuality in attending school" (Rajya Sabha, 2008, p.10).

Table 10: Teacher perceptions on their roles and duties

VARIABLE	% OF TEACHERS	# OF TEACHERS
AGREE THAT A GOOD TEACHER WILL HELP STUDENTS BE SUCCESSFUL		
Agree	96.6	112
Disagree	0.0	0
No Opinion	0.0	0
No Answer	3.4	4

AGREE THAT IF A STUDENT IS CLEVER, HE OR SHE WILL DO WELL REGARDLESS OF THE TEACHER		
Agree	56.0	65
Disagree	13.8	16
No Opinion	19.8	23
No Answer	10.3	12
MOST IMPORTANT DUTY AS TEACHER		
Give/improve knowledge	3.4	4
To educate/to teach/provide good education	19.8	23
Teach well	10.3	12
Give good ideas/ knowledge	7.8	9
Educational commitment	.9	1
Duty to teach / responsibility of teaching	6.0	7
Help become good citizens	1.7	2
Nation building	.9	1
Make students center of education	.9	1
Satisfaction of students	1.7	2
Regularity	10.3	12
Work in timely manner	2.6	3
Give education with games and activities	1.7	2
Improve students' skills	.9	1
Teach good morals/discipline/manners	3.4	4
Good human being	.9	1
Provide justice	.9	1
Provide better guidance	3.4	4
Development of students	3.4	4
Provide life learning lessons	2.6	3
Provide necessary information	.9	1
Honesty	12.9	15
Benefit the class	.9	1
Improve functionality of classroom	2.6	3
Career growth	1.7	2
Teach rules of the school	3.4	4
Give students interest in particular subject	.9	1
Motivate students	1.7	2
Inspire students	.9	1

Source: Cooper (2013)

Unsurprisingly, a vast majority of teachers – 96.6% – agree that a good teacher will help

students be successful. The rest did not answer. There was less agreement, however, when

teachers were asked to respond to the statement: "If a student is clever, he/she will do well

regardless of the teacher". In response, 56% of teachers agreed, and 13.8% disagreed (Table 10). A slight majority thinks that if a student is smart enough, they will be able to learn the coursework on their own. This suggests, perhaps, how teachers view their role, and makes a larger statement about the role of schooling in India and what is expected of students and teachers in the classroom.

Teacher Absences

Overall, the mean number of teacher absences is 9.6 days, as shown in Table 11, with a median annual teacher absence of 10 days. The mode is 12 absences per year, with 35 teachers at this number. At BACALS schools, the average number of days each teacher is absent is 11.2, with a median and mode of 12 days. The number of teachers reporting 12 absences was 18, or 81.8%. At LIB schools, the mean days of teacher absences is 9.2, with a median and mode of 10 days – 18 teachers, or 18.9% were absent at this number. This was followed by 17 teachers – 17.9% - absent for 12 days per year. Teachers at BACALS schools exhibited more days of absence than at LIB schools, but I do not find this difference to be significant.

Table 11: Number of teacher absences and reported reasons

VARIABLE	% of BACAL TEACHERS	# of BACAL TEACHERS	% OF LIB TEACHERS	# OF LIB TEACHERS	% OF TEACHERS OVERALL	# OF TEACHERS OVERALL
NUMBER OF ABSENCES FROM SCHOOL IN ONE YEAR						
0	0.0	0	1.1	1	.9	1
1	4.5	1	5.3	5	5.2	6
2	0.0	0	1.1	1	.9	1
3	0.0	0	2.1	2	1.7	2
4	0.0	0	1.1	1	.9	1
5	0.0	0	7.4	7	6.0	7
6	0.0	0	2.1	2	1.7	2
7	0.0	0	7.4	7	6.0	7
8	4.5	1	9.6	9	8.6	10

9	0.0	0	4.3	4	3.4	4
10	4.5	1	19.1	18	16.4	19
11	0.0	0	4.3	4	3.4	4
12	81.8	18	18.1	17	30.2	35
13	0.0	0	1.1	1	.9	1
14	0.0	0	4.3	4	3.4	4
15	0.0	0	8.5	8	6.9	8
No Answer	4.5	1	3.2	3	3.4	4
REASONS FOR ABSENCE					
Private	0.0	0	1.1	1	.9	1
Family	4.5	1	5.3	5	5.2	6
Accidental	9.1	2	9.5	9	9.5	11
Celebration	0.0	0	1.1	1	.9	1
Social	72.7	16	46.3	44	51.7	60
Important Work	4.5	1	7.4	7	6.9	8
Personal	4.5	1	16.8	16	14.7	17
Health	45.5	10	44.2	42	44.8	52
Other	4.5	1	9.5	9	8.6	10

Source: Cooper (2013)

The teachers were asked the reasons for their absences. They could enter more than one option, and as the question was open, no choices were given. Figure 3 below displays the teacher-reported reasons for their absences. It appears that teachers at both BACALS and LIB schools exhibit similar trends. The greatest number of absences at both school types were for social or celebratory reasons, followed by health reasons. At BACALS schools, these two reasons represented 81.3% of responses given. The rest of the reasons had only one or two people who listed them. At LIB schools, however, 17 people (18%) indicated private and personal reasons for absences, and 9 people (9.6%) each listed "accidental" and other reasons. I have included in the category "other", responses such as: "any reason", "not particular reasons", "other reasons", and "special reasons", as I did not think these fit into other categories of answers.

Figure 3: Teacher-reported reasons for absence by school type
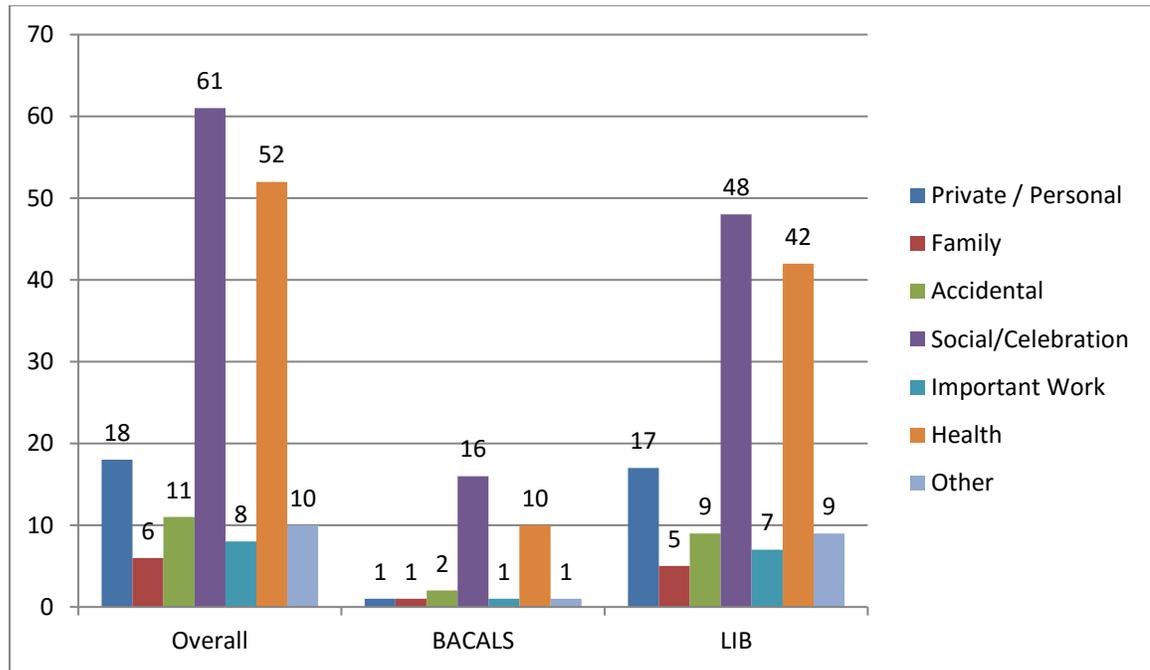
Source: Cooper (2013)

At the Dangs EMRS, I spoke with the principal, who had been appointed to her position two months prior. At this school, a log-in book was used to take attendance. When asked if teachers are absent a lot from her school, the principal said that during monsoon season, there are sometimes problems because teachers cannot easily get to school during heavy rains. Some teachers live far from the school, and travel is difficult during this season; the commute is sometimes impossible. Also, when a teacher is married, sometimes it is more difficult for them to have regular attendance. Otherwise, absenteeism is low. When asked whether she was satisfied with the quality of education students receive, the principal answered that she is very happy with what the government is supporting in terms of technology and new systems. She is satisfied with the quality of teaching as well.

The teachers were asked which sentence they agreed with most: A) teacher absenteeism is a problem everywhere in India; B) teacher absenteeism is a problem in Gujarat, but not other areas in India; C) teacher absenteeism is not a problem in Gujarat. Overall, as Table 12 shows, 22.4% of teachers chose A; 6.0% of teachers chose B; and 57.8% of teachers chose C. These results show that a majority of teachers surveyed do not find teacher absenteeism to be a problem in their region. Nearly a quarter of teachers think that teacher absenteeism is a general issue in India. Compared with the studies mentioned in previous sections that find teacher absenteeism in India to be especially large, it is interesting that more teachers do not agree.

Table 12: Teacher opinions on absenteeism and perceptions of principal responses

VARIABLE	% OF TEACHERS	# OF TEACHERS
OPINIONS OF TEACHER ABSENTEEISM IN GUJARAT AND INDIA		
Agree that teacher absenteeism is a problem everywhere in India	22.4	26
Agree that teacher absenteeism is a problem in Gujarat but not other areas in India	6.0	7
Agree that teacher absenteeism is not a problem in Gujarat	57.8	67
No Answer	13.8	16
WHEN TEACHER IS ABSENT, WHO TEACHES THE CLASS		
Other Teachers	55.2	64
Proxy Teacher	24.1	28
Free Teacher	1.7	2
Principal	.9	1
Co-Teacher	1.7	2
No Answer	16.4	19
WHAT PRINCIPAL SAYS WHEN TEACHER IS ABSENT		
Asks the reason of absence	11.2	13
Nothing	8.6	10
Agrees on leave	.9	1
Provides guidance	1.7	2
Tells to be regular	5.2	6
Tells teacher must come every day	.9	1
Only says something if the teacher takes absence during important work	.9	1
Says it's ok	.9	1
No Answer	.9	1
MISSING	68.1	79

Source: Cooper (2013)

Perceptions of BACALS and LIB

Table 13 displays teacher opinions of the various attendance mechanisms. The teachers at LIB schools were asked their opinion of the LIB, and the teachers at BACALS schools were asked their opinion on BACALS. At the BACALS schools, 86.4% of teachers liked the method, 4.5% did not, and the rest did not answer. At the schools that use LIB, 86.2% of the teachers said they like the attendance tracking method, 7.4% do not, and the rest did not answer. Overall teachers at both types of schools display a similar propensity toward the attendance tracking method at their school. In terms of whether a tracking method had improved the individual teacher's attendance, at BACALS schools, 86.4% reported that it did, compared with 66.0% at LIB schools, a number significantly lower. This difference is likely due to the different natures of the two tracking mechanisms. BACALS were implemented in 2009 and are still viewed as a new method, while LIB have been the historic method used in schools. Regarding overall teacher attendance at their school, 50% of teachers at BACALS schools agreed the method improved attendance compared with 67% of LIB school teachers. This result seems to run counter to what one might expect, and does not follow the same logic as the responses to individual attendance improvement.

When asked whether or not they agree with the statement "thumb-printing/sign-in book has improved my performance as a teacher", 50% of BACALS teachers agreed, while 60.6% of LIB teachers agreed with the statement. The teachers were also asked whether the attendance mechanisms improved overall teacher performance. Again, 50% of teachers from the BACALS

schools said yes. At LIB schools, 56.4% of teachers said yes. From these results, it is not possible to make a judgment on the link between a particular attendance mechanisms and its effect on teacher quality.

The survey included a question on whether the teachers thought thumb-printing or sign-in books were necessary. At the BACALS schools, 68.2% said they were, while 92.6% of teachers at LIB schools said the books were necessary. This difference is quite striking, and it is interesting that a greater number of teachers think BACALS improve their attendance than think it is necessary. This may be due to a gap in understanding of the questions, but it also reflects that LIB may be viewed as sufficient for at least one-third of the teachers. From the data at LIB schools, it is clear that an overwhelming majority view an attendance mechanism as necessary, while the same information cannot be gleaned from the BACALS school data.

Table 13: Teacher opinions of attendance mechanisms by school type

VARIABLE	% OF TEACHERS	# OF TEACHERS
OPINIONS OF ATTENDANCE MECHANISM - LOG-IN BOOK SCHOOLS		
Like log-in books	86.2	81
Dislike log-in books	7.4	7
No Opinion on log-in books		
No Answer on Opinion of log-in books	6.4	6
Log-in books improve my attendance	66.0	62
Log-in books do not improve my attendance	6.4	6
No Opinion on whether log-in books improve my attendance	9.6	9
No Answer on whether log-in books improve my attendance	18.1	17
Log-in books have improved overall teacher attendance at school	67.0	63
Log-in books have not improved overall teacher attendance at school	3.2	3
No Opinion on whether log-in books improve overall teacher attendance at school	14.9	14
No Answer on whether log-in books improve overall teacher attendance at school	14.9	14
Log-in books have improved my performance as a teacher	60.6	57
Log-in books have not improved my performance as a teacher	6.4	6

No Opinion on whether log-in books improve my performance as a teacher	20.2	19
No Answer on whether log-in books improve my performance as a teacher	12.8	12
Log-in books have improved overall teacher performance	56.4	53
Log-in books have not improved overall teacher performance	9.6	9
No Opinion on whether log-in books have improved overall teacher performance	18.1	17
Log-in books are necessary	92.6	87
Log-in books are not necessary	1.1	1
No Opinion on whether log-in books are necessary	4.3	4
OPINIONS OF ATTENDANCE MECHANISM - BACALS		
Like BACALS	86.4	19
Dislike BACALS	4.5	1
No Opinion on BACALS	0.0	0
No Answer on opinion of BACALS	9.1	2
BACALS improve my attendance	86.4	19
BACALS do not improve my attendance	0.0	0
No Opinion on whether BACALS improve my attendance	4.5	1
No Answer on whether BACALS improve my attendance	9.1	2
BACALS have improved overall teacher attendance at school	50.0	11
BACALS have not improved overall teacher attendance at school	0.0	0
No Opinion on whether BACALS improve overall teacher attendance at school	13.6	3
No Answer on whether BACALS improve overall teacher attendance at school	36.4	8
BACALS have improved my performance as a teacher	50.0	11
BACALS have not improved my performance as a teacher	4.5	1
No Opinion on whether BACALS improve my performance as a teacher	13.6	3
No Answer on whether BACALS improve my performance as a teacher	31.8	7
BACALS have improved overall teacher performance	50.0	11
BACALS have not improved overall teacher performance	4.5	1
No Opinion on whether BACALS have improved overall teacher performance	13.6	3
BACALS are necessary	68.2	15
BACALS are not necessary	4.5	1
No Opinion on whether BACALS are necessary	0.0	0
No Answer on whether BACALS are necessary	27.3	6

Source: Cooper (2013)

Tables 14 and 15, below, show the information gathered from principals regarding their opinions of BACALS, the number of permissible teacher absences, and whether they indicated

providing reimbursement to teachers if they did not take their full allotment of absences. While

only two principals indicated providing reimbursements, it is important to clarify that I did not

specifically ask this question in my interviews and that other schools may have had these

provisions as well. This does indicate a potential area for policy interventions to have a positive

impact on curbing teacher absences. If teachers are rewarded for limiting their absences, schools

may find that attendance rates improve. My data, however, cannot confirm this, as I could not

analyze individual teacher attendance records by year. This is an area of potential future

research.

Table 14: Principal reported permitted absences

School	# of permitted teacher absences	Reimbursement to teachers for days not taken
Semi-Private Surat 1	15 CL + 10 EL*	
Semi-Private Surat 2	15 CL**	
Government Primary Surat	12 CL + 20 ML***	√
EMRS Surat	No Answer	
EMRS Dangs	12 CL	
Private Primary, Government Secondary Surat	15 CL	
Private English Medium Primary Surat	15 CL	
Private Primary and Secondary Surat	15 CL	√

Notes: *Early Leave, ** Casual Leave, *** Medical Leave

Source: Cooper (2013)

Table 15: Principal reported opinions of BACALS

School	Method of Attendance	Want/like BACALS	Ensure staff are punctual	Good method	Some problems	Should not be used / unnecessary
Semi-Private Surat 1	LIB	√	√	√		
Semi-Private Surat 2	LIB	√		√		

Government Primary Surat	BACALS	√		√	√	
EMRS Surat	BACALS	√				
EMRS Dangs	LIB					√
Private Primary, Government Secondary Surat	LIB				√	√
Private English Medium Primary Surat	LIB	√	√	√		
Private Primary and Secondary Surat	LIB					√

Source: Cooper (2013)

Table 15, above, lists principal opinions of BACALS and whether they would like to implement it in their schools if they currently rely on LIB. One semi-private primary and secondary school in Surat District does not use BACALS for teacher attendance, as the principal indicated that the school is grantable, and there is no provision to fund this. The principal said that he would like to use biometrics to ensure the regularity of teachers and to make sure that all staff are always on time. The principal of a private primary and government secondary school in Surat said that the biometric method was not necessary at his school because all the teachers come willingly. Teachers are given 15 days for casual leave, but it is not possible for the teachers to take all these days. The principal did not elaborate on why this is the case; however he did remark that the students are given no holidays or vacations and have school seven days a week in the science stream for 10th-12th standards and they only receive a few days off per year, during the Diwali holiday. At the English medium private school I visited, the principal said they do not yet have the biometric method, but he plans to use it in the future because he thinks it is a better system of management. He said it will allow for greater teacher regularity and punctuality and will be more of a proper record than the master roll. The principal said that teachers are not

absent a lot, only if they have urgent work or a problem. Teachers are allowed 15 absences per year.

The principal of a government primary school in a rural town in Surat District that uses the biometric method of attendance said that this method has been beneficial for the teachers, but not students. It is problematic because he said students' "skin changes", presumably in terms of finger size. He indicated that out of 521 students at the school, it is difficult to measure the attendance of 300 by using the biometric system. Teacher attendance, however, has improved a lot. The teachers come on time, and if they are absent they must provide a written excuse. Teachers at this school are given 12 casual leave days, of which it is compulsory to take. They are also given 20 medical leave days per year. If days are not used, they carry over to the next year, and teachers can choose to use all the days or get paid for the days they did not take.

At a semi-private primary and secondary school in the same town, a log-in book is used to monitor attendance. This school does not use the biometric method because it is costly, and the principal thinks the book works well, though he would like to use biometrics and thinks it is a good method. Regardless, he said that teachers are not absent a lot from school. Teachers are allowed 15 absences with pay during the year. Maternal leave is as long as the teacher wishes, and paternal leave is 15 days.

I visited a fully private residential school in Surat district, where approximately 80 % of the students are from general caste backgrounds. At this school, the principal said that there is not a problem with teacher absenteeism. Teachers are generally allowed 15 days with pay, though older teachers may have six extra days if needed. The principal did not specify the conditions or minimum age for this exception. If a teacher does not take the full 15 days, they are

paid a reimbursement for that time. When asked his opinions on the biometric attendance monitors, he responded that it is not a big issue if teachers are a little bit late as long as they provide a good education to the students. He thinks that the biometric machines might stress the teachers out. In any case, he said that the teachers are usually early, and if there is a problem they can speak with the principal.

At the EMRS in the Dangs District, teachers are allowed 12 absences per year. In terms of the biometric system, the principal said that the government has begun to implement it in the tribal residential schools, and it will soon be implemented at her school as well; however, she is not in favor of using this method and does not think the school should have it.

In addition to my interviews with primary and secondary school principals, I spoke with the provost at a university in Surat District which uses BACALS. This university has been using the method for five years for all post-graduate students and faculty. The provost said that biometrics are useful for the "fear factor", and that it is not necessary. In the past, teachers could manipulate the system of LIB, so the university uses the thumb-printing to double check the books and to "make them honest". He said that teacher attendance has improved. They monitor student attendance as well because the university pays them stipends of Rs. 8000 per month, so they want to ensure students are coming to complete their studies. If there is an issue with a student or teacher's attendance, the administration will speak with them each month and try to find the cause of why they are not attending.

Accountability

The data derived from the preceding sections on teacher commitment, absences, quality and perceptions of attendance mechanisms serve to paint an overall picture of the education systems in rural Surat and Dangs Districts. Much of the information gathered from this research lends to a question of accountability. As mentioned, although teachers may be marked present at school, this does not answer the question of whether they are in the classroom teaching, and whether they are being held accountable for student outcomes.

When asked if there is a problem with teachers not coming to class, at the BACALS schools, no teachers indicated that this was the case, as shown in Table 15. At the LIB schools, eight teachers – 8.5% - said this is a problem. The survey prompted teachers to indicate if they felt more should be done to make sure teachers go to their classes. At BACALS schools, 50.0% said there should, while 68.1% at LIB schools agreed. It is interesting to note that for both questions, there are indicators that accountability may be a greater issue at LIB schools; however due to the differing sample size, it is difficult to draw a conclusion from this data.

Table 16: Teacher perceptions on accountability

VARIABLE	% OF TEACHERS	# OF TEACHERS
AGREE THAT THERE IS A PROBLEM WITH TEACHERS NOT COMING TO CLASS AT THEIR SCHOOL		
Agree (LIB Schools – 94 total)	8.5	8
Disagree (LIB Schools)	76.6	72
No Opinion (LIB Schools)	11.7	11
No Answer (LIB Schools)		
Agree (BACALS Schools – 22 total)	0.0	0
Disagree (BACALS Schools)	81.8	18
No Opinion (BACALS Schools)	9.1	2
No Answer (BACALS Schools)	9.1	2
FEEL THERE SHOULD BE MORE WAYS TO MAKE SURE TEACHERS COME TO THEIR PERIODS		
Yes (LIB)	68.1	64

No (LIB)	6.4	6
No Opinion (LIB)	18.1	17
No Answer (LIB)	7.4	7
Yes (BACALS)	50.0	11
No (BACALS)	18.2	4
No Opinion (BACALS)	9.1	2
No Answer (BACALS)	22.7	5

Source: Cooper (2013)

In my school visits, I observed a few places that struck me as having a greater propensity toward accountability. The government primary school in Surat District was one such school. The principal at this school indicated a new state government program – Gunostab – in which senior level officers at the state and district levels visit the school and give marks on various criteria, including infrastructure, teacher attendance, how students enjoy learning, and cleanliness. This school received a very good mark. The school also has a school management committee (SMC), a government committee at the school level comprised of parents, community members, and a *gram panchayat*. The SMC is responsible for observing the school, and is intended to keep both teachers and the school accountable.

9.   Areas for Future Research

9.1 Research limitations

Conducting research in rural regions of India posed certain difficulties, especially relating to language barriers, miscommunications, methodology, trust, and scope. A further limitation was the necessity to conduct convenience sampling since my budget and time were limited. I also had

limited accessibility to school. I could not survey every school in Surat and Dangs Districts, and limited my scope to schools with which my host organization had a relationship or connection.

Language Barrier

As I am not a speaker of any local or native languages in India, a language barrier was present. I had to rely on translators for nearly every aspect of my research. I wrote my survey questions in English, and had them translated into Gujarati. As I cannot read the script, there were some issues with the survey design once it was translated that I could not decipher. These issues became apparent once a second translator interpreted the results. As such, I changed the survey design after the first round to correct these issues. In my interviews with principals, I used a translator. Though some of the principals spoke English, often our cultural communication styles made comprehension difficult. Some principals relayed their answers to my questions directly to me in English. This was preferred as I could understand each part of their answer, without a mediator. Other principals answered in Gujarati or Hindi to my translator. As I could not understand their answers, I can not be certain that every aspect of their answer was reflected in the translation. Also, as my translator was a fluent speaker of Hindi, Gujarati, and English, but was not a trained translator, I can not be certain that his own experiences and opinions were not included in his translations.

Group Think

I was not able to monitor the teachers as they filled out my surveys as I wanted my research to be as undisruptive as possible to the regular school day and to the teachers' duties. As such, a peon (administrative assistant) or assigned teacher at each school distributed my surveys to the teachers. I could not inhibit teachers from filling out the surveys together or talking about their

answers. Ideally, each teacher would have filled out the survey in isolation, with no discussion with other teachers. It was apparent that many of the teachers did fill out the survey as a group as several answers to short answer questions were identical.

Honesty

It was difficult to gauge if participants gave honest and factual answers. It seemed as though some principals exaggerated their school data as each gave answers that were far more positive than what reality would suggest, especially in terms of drop out and school completion rates. These suspicions were confirmed by anecdotal conversations with several teachers who indicated a far less positive scenario for students than those given by the principals.

Scope

Given the resources at hand, I distributed my surveys to as many schools as I had access to. Ideally, I would have given my surveys at all area schools to obtain a better understanding of teacher accountability in rural Gujarat. If I had greater resources at my disposal, I would have interviewed teachers as well to solicit their opinions on drop-out rates and school completion rates.

9.2 Future Research

In my research on teacher absenteeism and teacher accountability, I found that privatization in education was a significant issue for schools and families. In informal discussions with parents in the villages and towns that I visited, I learned that families save to be able to afford to send their children to semi-private and private schools instead of government schools, with the perception that because these schools charge fees, the quality is better. I discovered that at the schools I

visited, some of the fee-paying institutions did appear to be of higher quality, though this was questionable in other cases.

In addition to paying fees for their children to attend non-government schools, I found that the region exhibited a ubiquitous propensity toward private tutoring, and in fact an entire tutoring culture was palpable everywhere I visited, with the exception of the residential schools. I ponder what the impact is of this tendency toward privatization and tutoring on teacher accountability. It is a valid concern that the perceived necessity of tutoring may reduce the accountability of individual teachers in the schools, while also diminishing the status of the profession through a widespread insistence that teachers cannot fulfill the educational needs of the students. While outside the scope of this study, this represents a viable area of further research.

10. Conclusion

Teacher absenteeism is a systemic issue throughout India's education system. Biometric measures have been implemented by the Government of Gujarat at a high cost. While the government recognizes there is a problem with getting teachers to school, policies have yet to acknowledge the multiple dimensions to low teacher attendance rates. Many of the teachers in my study cited social reasons for not coming to school. I would argue this is a reflection of the culture, as many festivals lead to school vacations, and special occasions such as weddings require several days of celebration. This resonates with Basu's cultural explanations for teacher truancy. While it would be unfounded and inappropriate to suggest that these cultural aspects are in any way "harmful", as Basu's argument reasons, they certainly do contribute to a system of

accepted absenteeism. However, teachers certainly are not solely to blame for a system that does not adequately address certain educational concerns.

Government policies fail to recognize all that is required of teachers, particularly in government schools. Though many principals say they would like to have the BACALS at their schools, not a single principal indicated that teacher absenteeism is a problem at their school. Why, then, would they find the BACALS necessary? Does ensuring that teachers are not late justify the high cost of these machines? Funding is allotted for the implementation of biometric devices at government primary and tribal schools. Schools not yet required to implement these devices cite prohibitively high costs as reasons not to stray from log-in books. Yet, at under-resourced government schools that cannot even afford to hire administrative staff to fulfill duties assigned to teachers that take away from classroom teaching time, money is used instead to implement an expensive system of monitoring teacher attendance. This narrow focus of tracking precisely what time teachers arrive and depart from school ignores what occurs during the school day, and why teachers may not be coming to school. The principal of the EMRS in Dangs District provided a particularly honest insight into teacher attendance issues, citing the issues presented by the impact of monsoons on school accessibility, as well as reduced attendance when teachers marry. These context-specific reasons are not reflected in government policies. The principal of the government primary school in Surat District also alluded to the many responsibilities required of teachers which take them from their classes. The government mandates teachers arrive on time, yet has no qualms reducing teacher accountability by requiring teachers to open bank accounts and prepare paperwork during class periods. These issues reflect inadequacies in the system and a lack of governmental commitment to student achievement, not inadequacies of the individual teachers.

The implementation of BACALS only at government primary and tribal schools may be a factor of where it is easiest to track the devices, however one must also wonder the extent to which class constructs play a role. Scheduled Tribe communities have historically been marginalized, and often only the poorest segments of society send their children to government schools. These schools are typically comprised primarily of Scheduled Tribe and Scheduled Caste students, again marginalized components of society. The difference between government schools and semi-private and private schools is stark. The poor conditions of government schools lead any parent with resources to send their children elsewhere. Observing the children who attend fully government schools, there is a clear distinction of class. Many children at the government schools visibly lack proper nutrition. They are thinner than students at the private and semi-private schools, and many participate in mid-day meal schemes[4]. Though I cannot confirm this, I suspect that for many of these children, this is the only balanced meal they receive all day. I find it hard not to compare the socio-economic statuses of the students at the various types of schools, and observe that only the schools serving the most marginalized populations require biometric monitoring. Are teachers at private, semi-private, and non-exclusively tribal schools to be trusted more? These teachers are not any more likely to show up to school than other teachers. In terms of accountability, the teachers at tribal schools were shown to have high levels of commitment to their students' learning outcomes.

I do not argue that biometric methods of monitoring attendance are ineffective. It is clear from my interviews and surveys that teachers and principals overall find that this is a good method and that it encourages attendance. I do think, however, that these methods do not tackle the root causes of low teacher attendance and low accountability regimes. If the government of

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[4] Mid-day meal schemes are a government initiative to provide lunch to low-income students

Gujarat is truly committed to improving the quality of its education system, it will not be facilitated through mechanisms such as BACALS, but rather through a comprehensive overhaul of its teacher policies and funding structures that to date have maintained an inadequate regime of low teacher motivation and low accountability. Showing up may be half the battle, but policy-makers need to address aspects of the system that maintain low accountability. These lessons can prove useful not only for other state governments in India, but for other countries struggling with issues of high rates of teacher absence and low levels of accountability.

Appendices

Appendix A – Teacher Surveys – English

The purpose of this survey is to find out the impressions and experiences of teachers in Gujarat. This survey is designed as an independent research study. The names of individual teachers and of schools will not be used. All information will remain anonymous. If you have any questions please contact Rachel Cooper at racheldcooper@gmail.com.

Please answer each question below to the best of your ability. For any questions with a choice, please circle the one that represents your answer (such as Yes or No, Satisfied or Dissatisfied, Agree or Disagree).

Date_____ Age_____ Sex_____

Religion: ___Hindu ___Muslim ___Other

Caste: ___SC ___ST ___OBC ___General

1. What standard do you teach?

2. What subject do you teach?

3. How many years have you been teaching?

4. What are your qualifications?

5. How many years of education did you receive?

6. Do you receive any special training or go to any teacher workshops (such as seminars) (circle one)? Yes   No

a. If yes, who runs these workshops?

b. If yes, does this improve your teaching (circle one)? Yes   No

c. How does your teaching improve?

7. Are you satisfied with the quality of education students are receiving at your school (circle one)?

Satisfied   Neutral   Not satisfied

8. Are you satisfied with the quality of teaching at your school (circle one)?

Satisfied   Neutral   Not satisfied

9. Students at your school are learning what they need to know (circle one): Yes   No

10. Students at your school clearly understand what they are expected to learn at school (circle one):

Yes   No

11. Students at your school find school work challenging: Yes   No

12. Students at your school find school work interesting: Yes   No

13. Students are able to approach teachers when they do not understand something (circle one):

Agree   Neutral   Disagree

14. Circle the number of times you are absent from school in one year:

 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

15. What does your sir or principal say when you are absent?

16. If you are absent, who teaches your class?

17. Do you like the [ATTENDANCE MECHANISM] (circle one)?

Yes   No Opinion   No

18. [ATTENDANCE MECHANISM] has improved my attendance at school (circle one)

Agree   No opinion   Disagree

19. [ATTENDANCE MECHANISM] has improved overall teacher attendance at school (circle one)

Agree   No Opinion   Disagree

20. [ATTENDANCE MECHANISM] has improved my performance as a teacher (circle one)

Agree   No Opinion   Disagree

21. [ATTENDANCE MECHANISM] has improved overall teacher performance (circle one)

Agree   No Opinion   Disagree

22. Do you think [ATTENDANCE MECHANISM] is necessary?

Yes   No Opinion   No

23. There is a problem with teachers not coming to class at my school (Circle one)

Agree   No Opinion   Disagree

24. Choose which sentence you most agree with (circle one):

a. Teacher absenteeism is a problem everywhere in India

b. Teacher absenteeism is a problem in Gujarat but not other areas in India

c. Teacher absenteeism is not a problem in Gujarat

25. When you are absent, what is the reason?

26. Do you feel there should be more ways to make sure teachers come to their periods?

Yes   No Opinion   No

27. Are you a contract teacher or a government teacher?

Contract Teacher   Government Teacher

28. If you are a contract teacher, do you wish to be a government teacher?

Yes   No   Not applicable

29. What do you think your most important duty is as a teacher?

30. A good teacher will help students be successful

Agree   No Opinion   Disagree

31. If a student is clever, he or she will do well regardless of the teacher

Agree   No Opinion   Disagree

Appendix B – Teacher Surveys – Gujarati

આ મોજણીનો હેતુ ગુજરાતના શિક્ષકો અને આચાર્યોની છાપ અને અનુભવો જાણવા માટે છે. આ મોજણી સ્વતંત્ર સંશોધન અભ્યાસ તરીકે સ્થાપેલ છે. વ્યક્તિગત શિક્ષકો, આચાર્યો, શાળાઓ અને અન્ય કોઈ સહભાગીઓ નામો માટે ઉપયોગમાં આવશે નહીં. બધી માહિતી અનામિક (ખાનગી) રહેશે. જો તમને કોઈ પ્રશ્નો હોય, તો રેચલ કૂપરનો સંપર્ક racheldcooper@gmail.com ઈમેલ આઈડી પર કરી શકો છો.

તમારી ક્ષમતા મુજબ નીચેના છેક પ્રશ્નનો જવાબ આપો. પસંદગી સાથે કોઈ પ્રશ્નો માટે (જેમ કે હા અથવા ના તરીકે, સંતોષ કે અસંતુષ્ટ, સંમતિ, નાસંમત) તમારા જવાબ વર્તુળ કરી રજૂ કરો.

નીચેના સવાલોના જવાબ ગોળ રાઉન્ડ અથવા ટીક કરીને આપો.

તારીખ: ઉંમર: સ્ત્રી કે પુરુષ _____

ધર્મ: હિન્દુ મુસ્લિમ અન્ય

જાતિ: SC ST OBC સામાન્ય _____

1. તમે કયું ધોરણ ભણાવો છો?

2. તમે કયો વિષય શીખવો છો?

3. તમે કેટલા વર્ષોથી ભણાવો છો?

4. તમારી લાયકાત શું છે?

5. તમે કેટલા વર્ષો શિક્ષણ પ્રાપ્ત કર્યું?

6. જો તમે કોઈ ખાસ તાલીમ લીધી છે, અથવા કોઈ તાલીમ વર્કશોપ કર્યો છે? (જેમ કે પરિસંવાદો/ સેમિનાર) (તમારો જવાબ ટીક કરો) હા કે ના

એ. જો હા, તો કોનો વર્કશોપ ?
બી. હા, તો એનાથી તમારી શિખવવાની પધ્ધતીમાં સુધારો થયો છે ? હા ના
સી. કેવી રીતે તમારા શિક્ષણ સુધારો થયો છે?

7. તમે તમારી શાળાના વિદ્યાર્થીઓ શિક્ષણ ગુણવત્તા પ્રાપ્ત છે તેની સાથે સંતુષ્ટ છો? (ટીક કરો)
તટસ્થ   સંતુષ્ટ નથી   સંતોષ છે
8. તમે તમારા શાળાની શિક્ષણની ગુણવત્તા સાથે સંતુષ્ટ છો ?
તટસ્થ   સંતુષ્ટ નથી   સંતોષ છે

9. તમારી શાળામાં વિદ્યાર્થીઓને શું શીખવા જાણવાની જરૂર છે તે જાણો છો : હા   ના

10. તમારી શાળામાં વિદ્યાર્થીઓ સ્પષ્ટ છે કે તેઓ શાળામાં શુ શિખવવામાં આવે છે (એમની ક્ષમતા મુજબ) :
     હા   ના

11. તમારી શાળામાં વિદ્યાર્થીઓ શાળાનુ કામ (શિક્ષણ) પડકારરૂપ માને છે : હા ના

12. તમારી શાળામાં વિદ્યાર્થીઓ શાળા વર્ક (ભણવાનું) રસપ્રદ માને છે : હા ના

13. વિદ્યાર્થીઓને કંઈક સમજ ન પડે તો તેઓ શિક્ષકો સંપર્ક કરવા માટે સમર્થ છે:
        સંમતિ   નાસંમત   તટસ્થ

14. તમે એક વર્ષમાં શાળા કેટલી વાર ગેરહાજર રહ્યો છો? (નીચેની સંખ્યા પર ટીક કરો)
  0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

15. તમે ગેરહાજર હોવ ત્યારે તમારા સર અથવા આચાર્ય શું કહે છે?

16. તમે ગેરહાજર હોય તો, ત્યારે તમારા વર્ગ કોણ શીખવે છે?

17. તમને હાજરી પત્રકમાં હાજરી પુરવી ગમે છે?
            સંમત   હા કે ના

18. હાજરી પત્રકથી શાળામાં હાજરીનો સુધારો થયો છે
સંમત   નાસંમત   કોઈ વિચાર નથી

19. હાજરી પત્રકથી શાળા ખાતે સમગ્ર શિક્ષક હાજરી સુધારો થયો છે?
    સંમત   નાસંમત   કોઈ વિચાર નથી

20. હાજરી પત્રકથી એક શિક્ષક તરીકે મારા પ્રભાવ સુધારો થયો છે

કોઈ અભિપ્રાય નથી   નાસંમત   સંમતિ

21. હાજરી પત્રક થી સમગ્ર શિક્ષક પ્રદર્શન સુધારો થયો છે

કોઈ અભિપ્રાય નથી   નાસંમત   સંમતિ
22. તમારા મતે હાજરી પત્રક હોવુ જરૂરી છે?

કોઈ અભિપ્રાય નથી   હા   ના
23. મારી શાળામાં શિક્ષકો વર્ગમાં નથી આવતા એ સમસ્યા છે

કોઈ અભિપ્રાય નથી   નાસંમત   સંમતિ
24. તમને સૌથી વધુ સાથે સંમત છો કે એ પસંદ કરો:

એ. શિક્ષકોની ગેરહાજરી ભારતમાં બધે જ એક સમસ્યા છે
બી. શિક્ષકોની ગેરહાજરી ગુજરાત માં સમસ્યા છે પણ ભારતમાં અન્ય વિસ્તારોમાં નથી
સી. શિક્ષક ગેરહાજરી ગુજરાત એક સમસ્યા નથી

25. તમે ગેરહાજર રહ્યો છો ક્યા કારણો સર?

26. શું તમને લાગે છે શિક્ષકો તેમના પિરિયડમાં નિયમિત આવવા માટે ઘણા રસ્તાઓ છે ?
            કોઈ અભિપ્રાય નથી   હા   ના
27. જો તમે ક્રાર આધારિત શિક્ષક અથવા એક સરકારી શિક્ષક છો?
        ક્રાર આધારિત શિક્ષક   સરકારી શિક્ષક

28. જો તમે કરાર આધારિત શિક્ષક છો, તો તમે સરકારી શિક્ષક થવા માંગો છો?
     વાગુ નથી   હા   નહી

29. એક શિક્ષક તરીકે સૌથી મહત્વપૂર્ણ ફરજ શું છે?

30. એક સારો શિક્ષક વિદ્યાર્થીઓને સફળ થવામાં મદદ કરશે

     કોઈ અભિપ્રાય નથી   નાસંમત   સંમતિ

31. એક વિદ્યાર્થી હોંશિયાર છે, તે અથવા તેણી શિક્ષક અનુત્રણીને તેમજ કરશે
     કોઈ અભિપ્રાય નથી   નાસંમત   સંમતિ

Appendix C – Principal Interview Guide – English

The purpose of this survey is to find out the impressions and experiences of teachers and principals in Gujarat. This survey is designed as an independent research study. The names of individual teachers, principals, schools, and any other participants will not be used. All information will remain anonymous. If you have any questions please contact Rachel Cooper at racheldcooper@gmail.com.

1. Are teachers absent a lot from your school?

2. What do you do to make sure teachers go to their classes and perform their duties?

3. How well have these methods worked?

4. Is it possible to see the attendance records?

5. Is it possible to see test score results? In-class exams and/or board exams

6. What is the drop out rate at each standard? Or, what is the class size of different standards from last year and this year (or data from a few years)?

7. What is the retention rate?

8. What is the school completion rate?

9. How many/ what percent pass board exams in 12th? By each stream, what percent pass?

10. How many/ what percent pass board exams in 10th?

11. What percentage of students go on to 11th?

12. What percentage of students attend university?

13. Are you satisfied with the quality of education students are receiving at your school?

Satisfied   Neutral   Not satisfied

14. Are you satisfied with the quality of teaching at your school?

Satisfied   Neutral   Not satisfied

15. How many absences are teachers allowed to have in a year?

Appendix D – Principal Interview Guide – Gujarati

આ મોજણીનો હેતુ ગુજરાતના શિક્ષકો અને આચાર્યોની છાપ અને અનુભવો જાણવા માટે છે. આ મોજણી સ્વતંત્ર સંશોધન અભ્યાસ તરીકે સ્થાયેલ છે. વ્યક્તિગત શિક્ષકો, આચાર્યો, શાળાઓ અને અન્ય કોઈ સહભાગીઓ નામો માટે ઉપયોગમાં આવશે નહીં. બધી માહિતી અનામિક (ખાનગી) રહેશે. જો તમને કોઈ પ્રશ્નો હોય, તો રેચલ કૂપરનો સંપર્ક racheldcooper@gmail.com ઈમેલ આઈડી પર કરી શકો છો.

1. તમારા શાળામાં શિક્ષકોની ગેરહાજરી ચાલુ હોય છે?

2. શિક્ષકો તેમના વર્ગોમાં નિયમીત જાય છે અને તેમની ફરજો પુરી કરે છે તે ખાતરી કરવા માટે શું કરો છો?

3. આ પદ્ધતિઓ કેવી રીતે કામ કરે છે?

4. હાજરી પત્રક જોવી શક્ય છે?

5. તમારી શાળા શિક્ષકોની હાજરી કેવી રીતે ટ્રેક (ચકાસે) કરે છે?

6. છેક વર્ગદીઠ ડ્રોપ આઉટ રેટ શું છે? અથવા, ગયા વર્ષની વર્ગ સંખ્યા અને આ વર્ષની તફાવત (અથવા થોડા વર્ષો માહિતી) શું છે?

7. ધારણા દર (રીટેનશન) શું છે?

8. શાળા સમાપ્તિ દર શું છે? (શાળા પૂર્ણ કરે છે)

9. બોર્ડ પરીક્ષામાં ધોરણ 12 માં કેટલા ટકા પાસ થાય છી ?કઇ સ્ટ્રીમમાં કેટલા? , કેટલા ટકા?

10. ધોરણ 10 બોર્ડ પરીક્ષામાં કેટલા ટકા રિઝલ્ટ?

11. ધોરણ 11 માં જવાવાળા વિદ્યાર્થીઓને ક્ષમવારી કેટલી હોઇ છે ?

12. કેટલા ટકા વિદ્યાર્થીઓ યુનિવર્સિટીમાં (કોલેજ) ભણતર માટે જાય છે ?

13. શું તમે તમારી શાળામાં વિદ્યાર્થીઓ મેળવી રહેલા શિક્ષણની ગુણવત્તા સાથે સંતુષ્ટ છો ?

તટસ્થ   સંતુષ્ટ નથી   સંતુષ્ટ છે

14. તમે તમારી શાળામાં શિક્ષણની ગુણવત્તા સાથે સંતુષ્ટ છો ?

તટસ્થ   સંતુષ્ટ નથી   સંતુષ્ટછે

15. શિક્ષકોને એક વર્ષમાં કેટલા દિવસ ગેરહાજર રહેવાની મંજુરી હોય છે?

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