ENGLISH IN EDUCATION:
BIHAR STATE PROFILE
INDIA

www.britishcouncil.org

ACKNOWLEDGEMENTS

CONTENTS

INDEX OF TABLES

INDEX OF FIGURES

INDEX OF ABBREVIATIONS AND ACRONYMS

AIR: Average Issue Readership
BCF: Bihar Curriculum Framework
BEP: Bihar Education Project
BLISS: Bihar Language Initiative for Secondary Schools
BMSP: Bihar Madhyamik Shiksha Parishad
BRC: Block Resource Centre
CCE: Continuous and Comprehensive Evaluation
CEFR: Council of Europe Framework
DEO: District Education Officer
DIET: District Institute of Education and Training
DISE: District Information System for Education
GER: Gross Enrolment Ratio
GPI: Gender Parity Index
GSDP: Gross State Domestic Product
GSNP: Gross State National Product
IAS: Indian Administrative Service
INR: Indian rupee
MDMS: Mid-Day Meal Scheme
MHRD: Ministry of Human Resource and Development
NCERT: National Council of Education, Research and Training
NCF: National Curriculum Framework
NET: National Education Test
PCDE: Per Capita Development Expenditure
PTR: Pupil-teacher ratio
RMSA: Rashtriya Madhyamik Shiksha Abhiyan
RTE: Right to Education Act
SCERT: State Council of Education, Research and Training
SSA: Sarva Shiksha Abhiyaan
ST: Scheduled Tribe
TET: Teacher Eligibility Test
UGC: University Grants Commission

INTRODUCTION

The use of English in Bihar has a past dating back hundreds of years. This relationship has often been complex, sometimes tangential but always deserving closer examination.

As far back as the seventeenth century, when Patna was a commercial port for international trade, English was used as a medium of communication: one of the first books ever published in English by an Indian writer, an account of travels in India and elsewhere, was produced in 1794 by Sake Dean Mahomed from Buxar. Recent decades have seen a brief flourishing in elite academies in the early post-independence period, through the 1990s, when English was deprioritised, to the last decade which has seen an increased focus on the school environment including the teaching and learning of English. Education in Bihar has an even longer history. Fifteen hundred years ago, Nalanda was the location of one of the oldest universities in the world and a distinguished centre of Buddhist learning; it is now the site of one of the newest institutes of higher education in the state.

This profile aims to investigate educational systems in Bihar and the place of English within them. Part One provides a description of these systems including school infrastructure and number, the qualifications and educational background of teachers and characteristics of learners in both private and state sectors and at primary, secondary and tertiary level. It then examines the status and role of English and English language teaching and learning within these systems. There has been considerable research on educational systems in Bihar over the last ten years and a second objective of Part One of the profile has been to present and briefly summarise salient findings from this research. The aim has been to be fairly exhaustive; inevitably, some sources will have been missed but

it is hoped that, for anyone interested in specific aspects of education in Bihar, there is sufficient indication of where to find further reading. This version of the profile has also made substantial use of original reporting and research conducted by the Pratham organisation in 2013 and commissioned by British Council India, including extensive interviews with key personnel.

While research on education has been relatively plentiful, one conclusion made by Part One relates to the dearth of specific evidence relating to English. Beyond the anecdotal or subjective, there is little or no data on teacher language proficiency levels, the current teaching practices of English language teachers or the possible impact of professional development. Part Two presents data collected and analysed by the Bihar Language Initiative for Secondary Schools (BLISS) from 2011 to 2015, including discussion of results of language proficiency assessment of teachers and teacher educators selected to deliver project input, analysis of class size and stakeholder attitudes. Current practice both before and after professional development as identified through observation is described. Part Two also presents the experience of teacher educators in using information technology, and provides insights, including some successes and many challenges, into encouraging teachers to use information technology for teaching and learning purposes in Bihar.

There are a number of limitations to the study. Research presented in Part Two is relatively small-scale and, as well as identifying teacher characteristics, also focuses on those teachers selected by

the project to become teacher educators and therefore, quite possibly, more skilled, motivated and language-proficient than their colleagues. The research is also a work in progress as the project has a further eighteen months to run: data is therefore baseline or midline rather than endline. Research to date on social attitudes to English in Bihar is limited to analysis of groups of parents and learners who took part in the 2011 Needs Analysis. An upcoming BLISS publication will examine these attitudes in depth and will complement this report. The project has not been designed to include systematic measurement of learner proficiency and this is an area in which further research is essential. Part Two has therefore aimed to suggest state-wide trends rather than categorically determining them.

The profile as a whole aims to present a snapshot of the state at a particular time, late 2015, based on the most up-to-date research and statistics available at the time of writing. Elections in Bihar were in progress during the production of this report and the extent to which election results will have an impact on education is unclear. Change, in whatever form it takes, is likely to continue, meaning that information provided will need to be reviewed carefully in the future.

As of 2015, Bihar is an intriguing and often perplexing microcosm of deeply conservative stasis and rapid change. It is within this context that this report will examine teaching and learning, and in particular the teaching and learning of English. It is hoped that the profile will be of interest to anyone, regardless of their specialism, interested in finding out more about education and English in the state.

PART ONE:
ENGLISH IN EDUCATION IN BIHAR

Figure 1: Map of Bihar

1.1 THE CONTEXT: BIHAR TODAY

Populous, rich in historical heritage and often economically challenged, the state of Bihar is located in East India, bordered by West Bengal to the east, Uttar Pradesh to the west, Jharkhand to the south and Nepal to the north and bisected by the river Ganges. It is the twelfth largest state of India by area (94,163 km[2])[1] and the third largest by population, which has increased from approximately 83 million in 2001 to 104 million in 2011, with the current population growth rate estimated at 35.43 per cent (urban areas) and 24.25 per cent (rural areas).[2] The state is densely populated: density per sq km rose from 881 in 2001 to 1106 in 2011[3]

as compared to a national average of 382,[4] making it the most densely populated state in India and more densely populated than Bangladesh, often regarded as the most densely populated country in the world. The state is predominately agricultural: almost 98 per cent of state area is classed as rural. A little less than 46 per cent of the state's population is less than eighteen years old. Nineteen million of the population are below the age of six, the second highest child population among all Indian states, forming 12 per cent of the total child population of India in this age group.[5]

According to the most recent available figures, from 2011, the literacy rate is 61.8 per cent for men and 51.5 per cent for women, the latter a significant increase compared to the 2001 figure of 33.12 per cent. Literacy rates are significantly higher for males than females, in rural areas by as much as 20 per cent.[6] Hindi is the official language with Urdu as a second official language for specified areas and purposes. A range of what are often referred to as Bihari languages are spoken, with Bhojpuri perhaps the most well known, though only Maithili is scheduled under the 2008 Eighth Schedule to the Indian Constitution. A number of these

A street in urban Patna. © Christopher Tribble

Rural Bihar. © Christopher Tribble

languages are also spoken across the border in Nepal. It is possible that up to 53 per cent of school children do not speak standard Hindi as a first language.[7] The state is predominately Hindu (82.69 per cent) with a significant Muslim minority of 16.87 per cent (2.7 per cent above the national average).[8]

Bihar is generally classed as the second poorest state in India, with 33.74 per cent of the population living below the poverty line, as compared to a national average of 21.92 per cent[9] with the level of rural poverty slightly above that of urban areas. Bihar's per capita income is only 39.2 per cent of the all-India average[10] and around a quarter of India's hundred poorest districts are located in the state.[11] The International Growth Centre (ICG) suggests that the prevalence of child malnutrition is 56.1 per cent.[12] Unemployment is around 8.3 per cent[13] compared to a national rate of 5.2 per cent. Traditionally, migration has been a significant feature of economic life in Bihar, with sizeable populations leaving for Mauritius,[14] Fiji and Trinidad during the nineteenth century. Migration patterns, often as a result of economic hardship, include movement from poorer to more prosperous agricultural districts, as well as to other rural locations to engage in occupations such as brick-making,[15] to urban centres within the state, from Bihar to other large urban centres such as Delhi and Mumbai and in West Bengal and Uttar Pradesh[16] and, in the case of rural Muslim communities in particular, to the Gulf.[17] Bihar has always

been a state in which the population has been heavily dependent on agriculture: 90 per cent of the population live in rural areas,[18] the sector employs 75 per cent of the workforce[19] and constitutes 19.2 per cent of the state's Gross Domestic Product.[20] Only 29 per cent of the population own land, typically of around one acre. Rice (followed by wheat) is by far the most common crop although productivity is lower than elsewhere in India.[21]

The formation of the state of Jharkhand in November 2000 from the southern districts rich in minerals, mining and heavy industry left Bihar with very few large-scale heavy industries and this has meant that this sector represents a tiny proportion of the Gross State National Product (GSNP) and has shown low growth rates over the last five years.[22] However, the overall contribution to Gross State Domestic Product (GSDP) is 18.4 per cent, not far behind the figure for agriculture, supported by comparative rapid growth in secondary and tertiary industries, in particular food processing (rice, wheat and maize milling). The sectors where there has been rapid growth have been service industries including banking and insurance (19.2 per cent growth), trade, hotels and restaurants (17.3 per cent) and communications (16.4 per cent),[23] precisely those areas in which in the future English skills may be a prerequisite or definite advantage. Construction (especially of new roads) has seen very considerable growth. The

result has been that the GSDP growth rate at constant prices for 2013–2014 was 9.92 per cent,[24] significantly higher than the national economy, and economic development in urban centres such as Patna is very visible.

Bihar has a small but growing tourist industry, based around a number of Buddhist (and Jain) sites including Bodhgaya and Nalanda, of which Bihar has a rich heritage.[25] These attract small numbers of Western tourists and larger numbers of tourists from countries such as Nepal and Japan. Bihar officially conferred industry status to tourism in 2010[26] and is keen to develop this sector further.

Per capita energy use in Bihar is 122.21 units – one seventh of the national per capita energy use. Current production stands at 1,000MW and demand at 2,500MW, indicating a huge shortfall and consequent widespread power shortages in the region.[27] Bihar has the lowest per capita electricity consumption at 144kW against a national average of 917kW, and peak deficit of power can approach 30 per cent, among the highest figures for India. Over two-thirds of the population do not have access to electricity.[28] While access to information technology remains low (less than 7 per cent of households across the state were found to have computers or laptops in the 2011 census), the increase in use of mobile phones in the state has been phenomenal, with the 2011 census identifying a 52.5 per cent increase in

rural areas and 58.8 per cent increase in urban areas.[29] In 2005, only 4.2 million of Bihar's 83 million citizens then had mobile phones, but that number had reached 26 million in 2009 and then more than doubled to 61 million (more than 50 per cent of the state population) in 2013.[30] State government initiatives in developing information technology for governance with the aim of making administrative practices more transparent, accountable and effective have been extensive and earned national and regional recognition.[31]

However, there are sharp contrasts between town and country in the state. With a population of over five and a half million and an annual population growth rate of 23.73 per cent, Patna district is by far the largest urban centre[32] and increasingly a very different world from rural Bihar. Muralidharan and Prakash[33] postulate a model of an average village in the state which, while likely to have a primary school, is far less likely to have a secondary school, a bank or a post office; on a probability basis, it is likely to be comparatively isolated, seven kilometres from the nearest bus station and 18 kilometres from the nearest railway station. Both at economic and educational levels, there are variations across the state, with Madhepura, Supaul and Sheohar as the poorest districts.[34] The percentage of urban population ranges from 43.84 per cent in Patna district to 3.46 per cent and 3.52 per cent in the two most rural districts, Samastipur and Banka.[35] Patna has a literacy rate 10 per cent above the state average; in a more developed district such as Bhojpur, at least one-third of children have literate parents while in Katihar, in the north-east which has always been regarded as more challenged than the south or central districts, only 12.8 per cent of children will be in this position.[36]

There are also contrasts within the social composition of urban and rural centres. Bihar's Scheduled Tribes (STs) make up less than one per cent of the population but are faced by a range of challenges. There are significant variations within caste, with disadvantaged lower castes representing more than half the population.[37] Although some advances have been made, there is also a large economic and social distance between the Muslim population in the state and other communities, as a result of employment (a majority of Muslims are employed in the unorganised sector), literacy (at 42 per cent in 2001), ownership of land, educational inclusion and living standards.[38] The poverty rate for the Muslim community is 56.6 per cent, above the national average.[39]

The Governor of Bihar is the constitutional head of the state, with executive powers lying with the Chief Minister and Cabinet Ministers of the state, who belong to the political party or coalition of political parties having a majority in the Legislative Assembly of Bihar.[40] Administration is headed by the Chief Secretary of the State who is an Indian Administrative Service (IAS) officer while the judiciary is headed by the Chief Justice of the High Court of Bihar. State administration is decentralised according to Divisions, Districts, Sub-divisions, Blocks and village level Panchayats. The results of the November 2015 elections, in progress during the course of production of this profile, also constitute potential political, social and educational change in the future. It is beyond the scope of this report to track political change in Bihar in detail but it is generally agreed that, over the last decade, there has been an increased priority given to education and the impact of this priority will be described in this profile.

This complex picture means that Bihar provides a fascinating context for the exploration of educational systems and practice and the sections of this profile which follow will investigate aspects of teaching and learning, and in particular, the teaching and learning of English, in detail.

BIHAR AT A GLANCE

Population	104 million
Age structure	46% of the population below eighteen
Sex ratio	Females per 1000 males: 916
Population growth rate	35.4% (urban), 24.25% (rural)
Literacy rate	61.8% (male), 51.5% (female)
National state domestic product (NSDP) per capita	INR 31,199 (2013–14), INR 36,143 (2014–15)[41]
Labour force	75% involved in agriculture
Unemployment rate	8.3%
Population below poverty line	33.74%[42]
Languages spoken	Official languages: Hindi, with Urdu as a second official language for specified areas and purposes under the 1980 Bihar Language Official Language (Amendment) Act

Significant numbers of speakers of 'Bihari languages' (including Angika, Bhojpuri, Magahi and Maithili) |
| Major religions followed | Principally Hindu, with significant Muslim population (16.87%) |

1.2 STATE EDUCATIONAL SYSTEMS AND STRUCTURE IN BIHAR: PRIMARY AND SECONDARY LEVELS

1.2.1 Organisational structure of education in Bihar

Before 1976, states had legislative authority over education, but following a constitutional amendment in that year, state and central governments have been jointly responsible for the promotion and management of education. Directorates are assigned for primary, secondary and higher education, mass education and research and training. The Directorates are accountable to the Principal Secretary and other Secretaries of the Department of Education who are in turn accountable to the Education Minister who heads the Education Department of Bihar.[43] The chief bodies governing school education in Bihar, as in most other states of India, are the Directorate of Primary Education and the Directorate of Secondary Education, both under the Department of Education, Ministry of Human Resource Development (MHRD). Since 1986, the central government has provided development inputs to elementary education through central and state-specific schemes. State governments function within broad policy guidelines provided by the central government, with autonomous bodies, headed by a State Project Director, implementing centrally funded schemes. In Bihar, the Bihar Education Project (BEP) Council and the Bihar Madhyamik Shiksha Parishad (BMSP)[44] are the state implementation societies for two major schemes in education, the Sarva Shiksha Abhiyaan (SSA)[45] which aims to bring about qualitative and quantitative improvements at elementary level and the Rashtriya Madhyamik Shiksha Abhiyan (RMSA)[46] which aims to expand and improve the standards of secondary education.

The central and state governments are assisted and advised on academic matters by the National Council of Education, Research and Training (NCERT),[47] established by the Government of India in 1961. Focus areas of the NCERT include periodic revision of the national curriculum; the development of textbooks; educational research (including the All India Survey of Education) and interventions in early childhood education, vocational education and teacher education. The State Council of Education, Research and Training (SCERT), based in Patna, is the main body to advise the Bihar Department of Education on matters relating to curriculum for learners and teachers, and to create and implement policy.

The state is divided into nine Divisions, which are in turn sub-divided into 38 districts and 533 blocks. Each district is officially equipped with a District Institute of Education and Training (DIET). School management is organised through districts, which are composed of blocks which are then in turn composed of clusters.[48] Many blocks have a Block Resource Centre (BRC) where teacher training activities can take place, although many are not functional.

According to the most recent District Information System for Education (DISE) figures there are 70,673 elementary (i.e. comprising primary and upper primary) schools in Bihar,[49] 5,686 secondary and 2,568 higher secondary schools.[50] The RMSA reports that not all of these secondary schools are fully functioning, however, and suggests a more realistic figure for secondary schools which are delivering English of around 4,000.[51] The ratio of elementary schools to secondary schools is 1:8.56, a slight reduction on 2012 figures.[52] The number of schools has increased dramatically over the last five years: in 2010, there were 2,286 secondary and 2,217 higher secondary schools and a total of 68,160 primary and upper primary schools.[53] School construction, often highlighted as the most significant achievement of the 2005–2015 administration, is discussed in Section 1.2.2.

Funds for education are allocated from the central fiscal budget and supplemented by a 3 per cent cess tax which the government levies on all central taxes such as income tax.[54] Estimated expenditure on education under the State and Non-State Plan for 2015–2016 is estimated at INR 220 billion,[55] 19.16 per cent of the total budget and the largest allocation, as compared to 13.9 per cent in 2001–2002. The budget for elementary education constitutes 50 per cent of total budgetary outlays for education, of which 65 per cent is allocated to the SSA.[56] In the past, the Per Capita Development Expenditure (PCDE) in Bihar has been low compared to the national average. However, over the five years up to 2014, the PCDE of Bihar grew at a rate of 15.2 per cent, which compared well to the all-India rate of 16.8 per cent.[57]

The Indian government has been committed to 'free and compulsory education to all children until the age of fourteen years'[58] since the 1950 Indian Constitution Article 45 was implemented, with similar commitments being made in 1986 (National Policy on Education),[59] 1992 (National Policy on Education)[60] and 2002 (86th Amendment to the Constitution).[61] In 2000, India signed a UN declaration, establishing the Millennium Development Goals (MDGs),[62] which included the achievement of universal primary education by 2015. The 2009 Right to Education Act (RTE)[63] made free and compulsory education for

all children between the ages of six and fourteen a legally enforceable right, requiring schools in every state to comply with specific standards in areas such as the number of schools, location, number of teachers per school and infrastructure issues such as classrooms, toilets, drinking water facilities and libraries. These aspects form a series of indicators which are assessed on an annual basis through statistics collected and collated through DISE and to which reference is made in this profile. The RTE also established minimum qualifications for teachers, a minimum teaching week, a minimum forty-week year and a prohibition on teachers engaging in private tuition.

```
                    Education Department
                    Government of Bihar
                            |
                    Education Minister
                            |
                    Principal Secretary
                            |
                Additional Commissioner
                    cum Secretary
                            |
                    Additional Secretary
                            |
                    Joint Secretary
                            |
    ┌───────────┬───────────┼───────────────┬───────────────┐
Deputy      Director,   Deputy Director,  Deputy Director  Directorate
Secretary    Admin.      (Planning)        Statistics
    |           |            |
Under       Deputy       Junior Planning
Secretary   Director,     Officer
            Admin.
    |           |
Section     Section
Officer     Officer
    |           |
Assistant   Assistant
```

Director, Primary Education → Deputy Director → Assistant Director → Section Officer → Assistant

Director, Secondary Education → Deputy Director → Assistant Director → Section Officer → Assistant

Director, Mass Education → Joint Director → Deputy Director → Assistant Director → Section Officer → Assistant

Director, Higher Education → Joint Director → Section Officer → Assistant and Support Personnel

Director, R & T → Deputy Director → Section Officer → Assistant

Figure 2: Educational organisation in Bihar

1.2.2 Educational environment in Bihar: primary and secondary schools

Bihar follows a 10+2 system, divided into elementary (primary: Standards[1] 1–4 and upper primary: Standards 6–8), secondary (Standards 9–10) and senior secondary/intermediate, often referred to as 'Inter' (Standards 11–12). The Intermediate Standard is often seen as a transitional point between school and university.

Learners

The most recent figures for the number of schoolchildren in Bihar[64] (September 2013) are given in Table 1.

These figures can be compared to those five years ago, presented in *Statistics of School Education 2010–2011*[65] and shown in Table 2. The figures show that more children were entering school five years ago than at present, although total numbers of children studying at primary, upper primary and secondary level in 2013 are all significantly higher. There has been a decrease in the number of children studying at Inter level over the period. Both trends require further investigation.

Statistics emphasise the challenges facing the Bihar educational system a decade ago when Bihar was the state with one of the highest numbers of out-of-school children in India. Enrolment in 2006 was around 88 per cent.[66] DISE enrolment figures[67] showed a low Gender Parity Index (GPI) and percentage of girls' enrolment in primary and upper primary classes (0.80 for 2005–2006) with girls' share in the total enrolment in Bihar of 45.89 per cent at primary level and 41.66 per cent at upper primary level, the lowest in the country. However, by 2011, 96.7 per cent of school-age children were enrolled in school and the GPI had improved to between 0.95 (primary) and 0.85 (higher secondary) in 2013,[68] better than the national average.[69] The number of girls out of school fell from 17.6 per cent in 2006 to 5.7 per cent in 2014.[70]

Number of schoolchildren in Bihar September 2013			
	Boys	**Girls**	**Total**
Standard 1	1599740	1529516	3129256
Standard 2	1510093	1461738	2971831
Standard 3	1545450	1511932	3057382
Standard 4	1499919	1496470	2996389
Standard 5	1434936	1430961	2865897
Totals: Standards 1 to 5	**7590138**	**7430617**	**15020755**
Standard 6	1141547	1166037	2307584
Standard 7	1055663	1086119	2141782
Standard 8	881258	887578	1768836
Total: Standards 6 to 8	**3078468**	**3139734**	**6218202**
Standard 9	721572	687268	1408840
Standard 10	660363	593343	1253706
Total: Standards 9 to 10	**1381935**	**1280611**	**2662546**
Standard 11	231075	196360	427435
Standard 12	201415	169502	370917
Total: Standards 11 to 12 (Inter)	**432490**	**365862**	**798352**

Table 1: *Number of schoolchildren in Bihar, as of September 2013*

Number of schoolchildren in Bihar September 2010			
	Boys	**Girls**	**Total**
Standard 1	2132497	1820637	3953134
Standard 2	1763384	1524300	3287684
Standard 3	1577319	1355791	2933110
Standard 4	1392237	1177486	2569723
Standard 5	1211338	979285	2190623
Total: Standards 1 to 5	**8076775**	**6857499**	**14934274**
Standard 6	1009540	828497	1838037
Standard 7	874604	741200	1615804
Standard 8	781632	644959	1426591
Total: Standards 6 to 8	**2665776**	**2214656**	**4880432**
Standard 9	635525	470794	1106319
Standard 10	545475	396296	941771
Total: Standards 9 to 10	**1181000**	**867090**	**2048090**
Standard 11	321358	219242	540600
Standard 12	289240	189948	479188
Total: Standards 11 to 12 (Inter)	**610598**	**409190**	**1019788**

Table 2: *Number of schoolchildren in Bihar, as of September 2010*

---

[1] The terms class and Standard are used interchangeably in India to refer to year groups: the term Standard has been used throughout this report.

Learners, Patna. © Christopher Tribble

However, Gross Enrolment figures for 2011 identify shortfalls in enrolment at specific levels: at Standards 6 to 8 (64.2 per cent) and Standards 9 to 10 (41.82 per cent), GER was the lowest in the country after Nagaland and a GER of 21.52 per cent put Bihar among the bottom five states in the country.[71] Enrolment figures may not be wholly accurate: the 2013 Comptroller and Auditor General (CAG) report on Bihar reported that the number of children enrolled in government-run schools was more than their population in the 6–14 age group in a number of districts.[72] This report also pointed to an enrolment fall of 2 per cent during 2012–2013. Dropout rates are also very high at 79.8 per cent over all classes from Standard 1 to Standard 10,[73] and 30.14 per cent at secondary level[74] and, as seen in GER rates, many students fail to progress through the school system. Rates of student absenteeism remain high and the 2014 ASER study found 60 per cent of children at primary level and 53.7 per cent at upper primary level actually present during attendance checks, among the highest figures for absenteeism for the country along with neighbouring Jharkhand.[75] Headmasters attribute this absenteeism to parental indifference and administrative shortcomings although child labour (affecting up to 95 per cent of adolescent girls across India[76]) and seasonal migration by poorer families[77] is likely to be a more significant factor.

Pupil-teacher ratio (PTR) tends to be high. While the Twelfth Year Plan (2012)[78] aims at a pupil-teacher ratio of 27:1, PTR in all schools has fallen steadily from 59:1 in 2011–2012, to 53:1 in 2012–2013 to around 51:1 for all schools at present; current PTR for government schools is 54:1.[79] Figures for 2009–2010 (the last

year for which department data is available) for breakdown by location in Bihar show PTRs across all schools ranging from an average of 44:1 in one district to over 100:1 in three districts, with an average of 53:1, the highest of all Indian states.[80] The student to classroom ratio for all schools in Bihar in 2014 was 57, a dramatic decrease from the figure of 89 in 2009, but still the highest figure for India and over double the national average for 2014. Research undertaken by the BLISS project on class size is presented in section 2.4.

As with teacher performance, learner achievement in Bihar is frequently denigrated in the national press, and a number of studies would appear to support a view that levels of learning are significantly below the national norm. One study describes the 'appalling depths of poor reading level of children' and that 'mathematics provides an equally sorry picture' in two sample districts, Gaya and Katihar.[81] The 2010 National Achievement Survey found that Bihar students at Standard 5 scored significantly lower than the national average in reading comprehension and all areas of mathematics.[82] A similar situation was identified by the 2014 version of the same survey at Standards 3 and 8[83] which placed Bihar at second from the bottom in the list of states in students' learning achievement both in languages and mathematics. The most recent edition of the ASER report (2014),[84] based on the ASER 2013 survey, found that 38 per cent of children in grades 3 to 5 in government schools could not read a Standard 1 text and only 30 per cent could do subtraction. Comparing the rate of learning in Bihar to that of Uttar Pradesh, Atherton and Kingdon suggest that learning in general in Bihar schools is stronger at lower

levels but slows as learners progress.[85] However, an Asia Development Research Institute (ADRI) study indicated 20 per cent of learners at Standards 1 and 2 as clearly failing, and half the class only achieving a 'moderate' level of learning.[86]

There has been only limited research into parental attitudes and involvement in Bihar, although the conclusions of small-scale studies which have taken place are interesting and may well have wider application. Clearly, student enrolment and progress will be influenced by parental background and attitudes. A study by Deshkal in Gaya and Katihar found that, depending on location, between 42 per cent and 51 per cent of fathers (mostly landless labourers employed as casual labour) did not complete their primary education and between 63 per cent and 73 per cent of mothers did not have any kind of schooling at all.[87] Parents are not well equipped to help their children. Research by Ghosh and Rana[88] showed children receiving help and support at home from fathers (16.1 per cent), mothers (5.1 per cent) and other family members (17.7 per cent) but 61.1 per cent of children did not receive help of any kind.

Ghosh and Rana identified three main reasons given by parents (both literate and illiterate) for educating their children: firstly, employment status, secondly, a growth in confidence and thirdly, gains in social status, in particular marriage prospects for daughters.[89] Only 16.7 per cent of parents surveyed thought the education their children were receiving was satisfactory, attributing the perceived poor quality of teaching to a lack of seriousness, regular attendance and effective skills on the part of teachers and the poor infrastructure of schools.[90]

Teacher, Patna

Number of teachers in Bihar 2013–2014	
Primary only	134,300
Primary with upper primary	256,857
Primary with upper primary and secondary and high secondary	6,973
Upper primary only	2,318
Upper primary with secondary and high secondary	1,214
Primary with upper primary and secondary	5,208
Upper primary with secondary	1,910
Secondary only	15,041
Secondary with higher secondary	20,395
Higher secondary	5,208
Total	**460,275**

Table 3: Number of teachers in Bihar 2013–2014[91]

Teacher numbers, qualifications and salaries

Teacher numbers are shown in Table 3.

There remains a significant shortage of teachers in the state. It has been estimated that one third of teachers' posts are vacant, with primary schools operating with only half the required strength and upper primary schools even less.[92] The number of single-teacher schools has increased slightly over the last three years to 7.6 per cent.

To qualify to teach at primary school, teachers are officially expected to have taken a two-year course in Elementary Education[93] and, to teach at secondary school, to hold a BEd or other equivalent degree from an NCTE approved institute.[94]

In reality, less than half of primary school teachers are graduates and even at secondary level almost 20 per cent do not hold graduate qualifications. Between approximately 10 per cent and 20 per cent of teachers in different categories have only a secondary education. At secondary level, more than 50 per cent of teachers do not have a postgraduate qualification.

During recruitment exercises in the past, 50 per cent of posts were reserved for women. The result is now that close to 40 per cent of teachers are female,[96] although they are over-represented at primary level and under-represented at secondary level.

Teacher qualifications in Bihar (by percentage) 2013–2014							
School type	Below secondary level	Secondary level	Higher secondary	Graduate	Post-graduate	M Phil	Other
Primary	2	13.9	**51**	25.3	6.6	0.67	0.2
Primary and upper primary	1.3	11.5	**38.7**	33.3	10	0.6	0.3
Primary, upper primary and secondary	4.1	15.3	24.7	**26.9**	**26.2**	1.2	1.3
Upper primary only	1.1	8.71	24.3	**42.7**	21.6	0.9	0.3
Upper primary, secondary and higher secondary	7.9	10.6	10.6	**40.5**	27.1	2.4	0.62
Contract teachers	1	12.5	52.6	**26.9**	5.57	0.87	0.4

Table 4: Teacher qualifications in Bihar (by school category and percentage)[95] 2013–2014

Teacher qualifications: secondary school teachers in Bihar (by percentage) 2013–2014				
Below graduate	**Graduate**	**Postgraduate**	**MPhil**	**PhD**
19.8	26.69	43.60	0.91	2.21

Table 5: *Teacher qualifications in Bihar, secondary school teachers (by percentage)[97] 2013–2014*

The Bihar State Teacher Eligibility Test (TET) was implemented in 2012 to be used in conjunction with recruitment to government schools. Candidates for primary school posts are required to qualify in the first paper of the TET Exam and candidates for secondary school posts are required to qualify in both papers.[98] Completion of senior secondary education is also stated as an essential requirement for acceptance as a primary school candidate and a degree for acceptance as an upper primary school teacher. The official curriculum includes child development, mathematics, language and environmental studies.[99]

Of the total number of teachers in higher secondary schools, 89.34 per cent are postgraduates and 10.65 per cent have PhD degrees.[100] In the past, teacher qualifications at Inter level would appear to have varied depending on whether the college was linked or delinked to a higher education institution. Where the Inter level was linked with a university, students were taught mostly by college readers and lecturers who hold postgraduate and PhD qualifications in English. The process of delinking was not welcomed by all. Staff at Patna College, interviewed for this profile report, expressed the view that it had been possible for teachers to help students prepare for a Bachelor's Degree in English when the Inter level was a part of Patna University,[101] but this was no longer the case, resulting in student discontent.

The Sixth Pay Commission stipulated a minimum monthly teacher salary of INR 20,000. Government teachers' pay as a multiple of India's per capita GDP compares well to the ratios of other Asian countries and it has been suggested that this creates a significant cultural gap between school teachers and their pupils in rural districts.[102] In Bihar, varied recruitment processes between 1994 and 2012 produced teachers under different pay structures within elementary and secondary levels and, as a result, there are significant differentials in teachers' pay.[103] Teachers recruited before 2000 are termed 'regular' pay teachers, and receive a government employee's salary (including variables such as house rent allowance and allowances) of up to INR 25,000 a month.[104] At the other end of the spectrum, are 'fixed-pay' teachers recruited after 2006,[105] who earn between INR 6,000 and 8,000, including an INR 500 increment if a Teachers' Skills Test is passed every three years. Numbers of 'regular' teachers are gradually decreasing: a policy to create promotional avenues for fixed-pay teachers if they upgrade their qualifications while in service is in course of implementation. A seventh pay commission is expected to be introduced from January 2016.

Teacher, Muzzafarpur

Typical school, Bihar: interior

Pre-service and in-service training (all subjects)

Forty-six per cent of teachers are described as professionally trained,[106] a figure which compares unfavourably to that of 83 per cent nationally. What is meant by professional training is not clear. Sixteen per cent of teachers receive in-service training each year,[107] although details of what this training may involve were not available for this report. In reality, the state has very limited capacity for the training and is capable of meeting the needs of up to five thousand teachers per year.[108] A 2015 World Bank report describes current professional development as unsystematic, poorly linked to incentives and lacking in effective monitoring.[109] In addition, the Directorate of Research and Training is understaffed. Atherton and Kingdon found that those para-teachers with pre-service training were no more effective than those without, calling into question the usefulness of such training.[110] The Report of the Joint Review Mission on Teacher Education Bihar 2013[111] identified achievements in revitalising training systems up to 2013 as including curriculum and coursebook design. A comprehensive roadmap for revitalising Teacher Education Institutes in the state was prepared in 2011, recruitment was taking place to fill vacant positions and individual DIETS had prepared plans of action, although lack of funding and human resources limited implementation. SCERT had been designated as the Academic Authority and provided with

resources and the Department of Research and Training had been strengthened.

The 2013 report also identified a wide range of challenges facing the state, including a lack of long-term vision and integrated capacity, inadequate budget and infrastructure and a shortage of trained personnel. There was no mechanism in place for preparing academic leadership, monitoring the progress of new entrants to the profession or interdepartmental coordination. The report concludes that:

2013–14 should be treated as the year to place and prepare teacher educators, resource materials, teacher-education culture and ethos along with collective visualizing of the kind of teacher education required[112]

and in addition that pre-service and in-service training should be developed, teachers' qualifications mapped and a system of open learning developed.

The BEP Council provides general and subject-specific in-service training to elementary school teachers, but interviews with government officials suggest that secondary teacher training has been underfunded so far.[113] Block and cluster level officers who nominally provide academic support are primarily engaged with administrative tasks.[114]

The state is committed to preparing ten thousand teacher educators and has formally approved a teacher educators'

cadre. The state aims to develop at least fifty outstanding teacher training campuses with effective teacher educators, as well as developing infrastructure and resources teams at Block Resource Centres to meet teacher development needs. Strong monitoring systems for assessing the progress of children, teachers, and schools are planned for implementation.[115]

School location, infrastructure and facilities

Despite urban growth, the number of schools in rural areas remains roughly the same as a decade ago, with a slight decrease from 95.1 per cent identified in a 2006 DISE study[116] to 94.07 per cent today.[117] Data from 2007 indicates that, while nearly 90 per cent of villages in Bihar had a primary school, less than 12 per cent of them had a secondary school and it was not uncommon for villages to be located six kilometres or more from the nearest secondary school[118] and that only 10 per cent of schools were within one kilometre of a village.[119] Ghosh and Rana calculate that there are now about three primary schools and one upper primary school for every village but distance from secondary schools remains a challenge:[120] countrywide RMSA initiatives seek to ensure that a financing norm based on a five kilometre distance from school is established.[121] An in-depth research study by Muralidharan and Prakash, designed to evaluate the impact of the Bihar bicycle distribution scheme, demonstrates the impact that a distance

from home to school of more or less than three kilometres and safety of travel to school can make on enrolment, especially for girls.[122]

In their examination of school conditions, Ranjan and Prakash[123] cite a 2011 PROBE report which found only around 60 per cent of schools were classed as in good condition. Substantial progress has been made in addressing issues related to the infrastructure of schools over the last decade and the most recent DISE[124] figures do show some considerable efforts, however, to bring Bihar schools up to standards that meet national averages. Almost all (92.31 per cent) elementary schools now have drinking water against a national average of 95.31 per cent; 81.29 per cent of elementary schools have a functional boys toilet (national average: 92.67 per cent) and 82.52 per cent have a functional girls toilet (national average: 91.62 per cent), figures which contrast strikingly with the situation in 2009 when only 37.70 per cent of elementary schools had separate toilets for boys and girls, with only 50.53 per cent of these functional,[125] and with the situation in general in Bihar in 2012 when only one in four people had access to a toilet.[126] Only 58.84 per cent of schools have a library, significantly below the national average of 76.13 per cent. Bihar schools are most challenged in

their power supply: 2013–2014 DISE figures show only 8.08 per cent of all elementary schools have a power supply compared to a national average of 51.74 per cent, which is by far the lowest figure for India although this rises to 59.26 per cent at secondary level.[127] The government site *Growth with Justice* estimates that the state requires more than 200,000 classrooms to achieve national standards and the construction of around 14,000 secondary schools to accommodate its students.[128]

Teachers, learning and technology

In Bihar, 4.51 per cent of elementary schools have computers, with a figure of 1.42 per cent for primary schools;[129] 22.81 per cent of secondary schools have computers, an increase from 4.35 per cent in 2012–2013.[130] These figures are particularly low: in some states in South India, for example, over 90 per cent of elementary schools have computers. SSA and RMSA schemes in Bihar have included the provision of computers to 619 secondary schools spread over 375 blocks in all districts of Bihar with an eventual goal of 1,000 as part of the ICT@School plan.[131] This has involved a public–private partnership with IL&FS Education and Technology Services Limited (IETS) and Pearson. Microsoft adopted five girls schools in Bihar in 2012 under a scheme which

included computer training.[132] However, lack of power, lack of training and provision of small numbers of computers to schools with very high PTRs can produce a range of new challenges: ASER studies in the past have shown lack of use of computers even when available (5.1 per cent of total schools visited had computers but these were not being used on the day of the visit as compared to 1.5 per cent of total schools with computers which were in use).[133] Data from a 2015 BLISS small-scale survey on the accessibility of IT to English teachers is presented in Section 2.6 of this profile.

Typical school, Bihar: exterior

Learner, Muzzafarpur

1.2.3 Educational reform

Published statistical data highlights the challenge of teaching and learning in Bihar. Reports from a decade ago such as the Report of the Common School System Commission painted, in its own words, 'a very depressing picture'[134] with literacy rates as indicated by the 2001 census the lowest in the country (at 31 per cent in some districts), a GER at the primary stage in 2006 of 70.9 per cent (as low as 51 per cent among some communities), high dropout rates and up to 75 per cent of enrolled students not present. School infrastructure was generally in poor condition and no new schools were built during the 1990s. A World Bank study[135] found teacher absenteeism rates of 37.8 per cent in Bihar, the second highest figure in the study of 19 Indian states. Average teacher student ratio was 96:1. Pre-service training, as a prerequisite for the recruitment of new teachers, had been abolished in 1994.[136]

Over the last decade, there have been some significant educational achievements including the increase in literacy, enrolment and PTR and development of school infrastructure described above. Many new schools have been constructed. Comparison of 2005 and 2011 DISE figures shows the construction of 16,000[137] new schools with 100,000 new classrooms.[138] The result has been an increase in the number of schools per 100,000 population from 60.2 in 2005–2006 to 114.3 in 2008–2009[139] and current provision of primary schools per 100,000 population of 67.1 (although considerably below the all-India average of 92).[140] State plans include the construction of one thousand secondary schools per year[141] from 2012.

Teacher recruitment has included the hiring of over fifteen thousand teachers for secondary schools.[142] The number of teachers at elementary school doubled between 2006 and 2013.[143] Over two hundred thousand[144] teachers have been recruited in total using strategies such as decentralised teacher recruitment and the recruitment of 'para-teachers' (contract fixed-pay teachers at lower salaries) to fill the large number of vacant posts. The use of para-teachers has generated significant controversy. A study by Atherton and Kingdon focusing on Uttar Pradesh and Bihar concluded that, in Bihar, the employment of para-teachers had an insignificant positive effect on learning and suggested that there may be benefits in such employment including a reduction in social distance between teacher and students, shared culture and social status and increased accountability. Para-teachers do not, however,[145] have a clear career path or, indeed, much job security which might have long-term implications on their effectiveness.

The government also proposes to fill 53,235 vacant posts for senior secondary school teachers by 2017 and has envisaged plans to hire untrained teachers and subsequently train them through distance education courses while in service.[146]

Other initiatives have included:
- Bihar's participation in the Mid-Day Meal Scheme (MDMS), introduced in 2005 to serve cooked food in the primary schools on a daily basis.

There are no studies to date of impact on school attendance or student performance in Bihar, but studies in other locations in India suggest very positive impact.[147] Quality and effectiveness of delivery may vary significantly from one location to the next[148]

- provision of textbooks free of charge, with a free uniform (and, in the case of girls, support for stationery and supplementary study materials) provided to all the students in Standards 3–5 (INR 500 per student per year) and to girl students in Standards 6–8 (INR 750 per girl student per year)
- a free bicycle distribution scheme ('The Chief Minister's Bicycle Programme') which specifically targets girls. Muralidharan and Prakash have shown that the programme has helped to increase age-appropriate enrolment of girls in secondary schools by 41 per cent and reduced the corresponding gender gap by 40 per cent, and conclude that the programme has been considerably more cost-effective than cash-transfer schemes elsewhere in South Asia[149]
- systems for financial awards, scholarships and other incentives
- strategies which target child labourers, street children, migrating children and the disabled; the establishment of hostels for disadvantaged girls at Grades 9 to 10.

State primary and secondary education in Bihar remains faced by a number of very significant challenges in order to meet the requirements of the RTE act.

There is still a shortage of both teachers and schools and an urgent need to open new secondary schools in large numbers within the state, in particular to provide a school within five kilometres of any locality. Calculations of the number of teachers required vary quite significantly but, if the aim is to reach a PTR of 27:1,[150] as stated in the Twelfth Plan, according to a 2011 estimate[151] this number may be as high as 750,000 across India, with 150,000 to 200,000 teachers[152] required in Bihar. There is an urgent need for new schools: one estimate is of 14,000 new schools at secondary level.[153] The 2015 World Bank report summarises the level of teaching at elementary schools as follows:

The recent expansion in the number of teachers, compounded by years of underinvestment since the 1990s in teacher programs, has led to a teaching workforce characterized by low academic content, ineffectual teaching practices, high levels of absenteeism, and outdated and weak monitoring and governance arrangements.[154]

The same report emphasises that able teachers are discouraged by entry level teacher pay and working conditions and estimates the rate of teacher absenteeism at 20 per cent. Infrastructure improvement and development have not reached all schools, there is a pressing need for a full teacher-training system at primary and secondary school levels, and provision of and access to information technology remains low by national standards. A large-scale World Bank project is in course of development to address these needs at elementary school level[155] from 2016.

Educational reform: the Chief Minister's Bicycle Programme

1.3 PRIVATE EDUCATION IN BIHAR: PRIMARY AND SECONDARY LEVELS

At the apex of Bihar's private education sector are schools established in colonial times, often by religious institutions, and including St Joseph's and St Xavier's in Patna. These institutions cater for the middle and upper-middle classes in urban centres. The picture is, however, complex and has not been well documented, although research in Patna described below presents an interesting perspective on how the private sector does not simply cater for the elite. There are a number of types of private school in Bihar (as elsewhere in India):

- private aided schools, which are privately managed and owned but are partially funded by the government. These types of schools also include religious schools such as Madrasas and Sanskrit Vidyalayas
- private unaided schools, which are funded, managed and owned privately. Private unaided schools can be either recognised or unrecognised:
  o private recognised schools are authorised to issue transfer certificates to students who move to government schools
  o private unrecognised schools have no official authority to do so.

All schools are registered under the Bihar Non-government Secondary School Management and Control Takeover Act (1981), although private school directors report the difficulty in obtaining recognition from the government for schools even after the school has been in operation for over a decade.[156] Private unaided schools also vary in cost, from low cost (a monthly fee per student of less than INR 300), to affordable (a monthly fee per student of between INR 300 and INR 499) and higher cost (a monthly fee per student of INR 500 or more).

The role and effectiveness of the private sector has been intensely debated. On the one hand, it has been argued that the sector plays a vital part in supporting learning. An extensive survey by Rangaraju, Tooley and Dixon of the private sector included an assessment of the number of private unrecognised schools, a survey of parental attitudes to the private sector and mapping of school locations, and produced some very interesting conclusions. DISE data recorded for 2008–2009 estimated 93 private schools for the whole state of Bihar, and provisional data for 2009–2010 suggested 14 but the study visited 1,224 private schools in Patna alone, 'one in every street', and estimates that 69.1 per cent of these schools are low-cost[157] although this figure may also include coaching and tuition centres. The majority of these schools were established after 1991. Since 2011, DISE statistics have aimed to record the number of unrecognised schools and current DISE figures now identify 3,066 unrecognised schools at elementary level across the state, with a share of total educational provision of around 2 per cent.[158] Overall, the study suggests that 78 per cent of school-age children are enrolled in private schools, many of whom may officially also be enrolled in the state system, enrolment in the latter being principally to enable children to obtain a 'transfer certificate' in order to move into higher levels of education.

When asked why poor parents pay more to send their children to private schools instead of taking advantage of free education and midday meals at government schools, government officials have suggested that parents are easily fooled by 'unscrupulous elements'. Rangaraju, Tooley and Dixon identify, however, lower rates of absenteeism in private schools, a PTR of around 22:1, much greater access to computers and a higher standard of facilities such as separate toilets for boys and girls. Graddol also identifies more personal attention and a shared background as leading to more effective learning in private schools, however inexperienced or less qualified the teacher may be.[159] Several studies across India have indicated that there is a widespread perception among both parents and teachers that private schools provide a better quality of education than government schools. Of parents interviewed in Patna in the Rangaraju, Tooley and Dixon study described above, 93 per cent chose to pay for their children's education because they felt private schools were higher quality and 85 per cent because private schools have better discipline. Many, but not all, private schools are English-medium: 85 per cent of parents were attracted by the fact that the medium of instruction is English. Lastly, parents who did not send their children to private schools stated this was for non-educational reasons, including 67 per cent who took this decision in order to receive free books and clothes, and 39 per cent in order that their children would receive a free meal. The study also found some parents prefer sending sons to private schools (for educational reasons) but send their daughters to government schools (since they charge no fees and provide a range of benefits) which is reflected in the fact that 53.80 per cent of students in government schools are girls but only 43.4 per cent in private schools.[160]

What may be striking differences between public and private education is reflected in the following short account, produced for the New York Times:

In the government school, only two of the three teachers assigned for 273 students were present on a recent day. Around 50 children sat on the floor in a gloomy classroom, while 40 more sat on the grass outside, as their classroom had been under repair since August. One teacher did paperwork, while the other floated between the two groups, not actually teaching either. At the private school next door, where the teacher-student ratio is 1 to 25, a group of smartly uniformed children stood outside counting loudly in English under their teacher's watchful eye. They then marched in orderly single file into a classroom with blackboard and benches.[161]

Parents' perceptions of higher quality in the private sector are confirmed through a small-scale study of education in Ward 90 in Patna by ASER[162] which indicated an ability of students to read Standard 1 texts and Standard 2 texts in Hindi of almost double those of government schools (an average of 92.5 per cent of students in private schools able to read texts as opposed to 43.4 per cent in government schools). Twenty-six per cent fewer students in government schools can recognise letters in English, 25 per cent fewer can read simple words at Standard 3 and 55 per cent fewer can read a simple sentence in English at Standard 5. Children also achieved better results in arithmetic than in government schools.

The RTE (Section 19) mandated that all unrecognised schools be shut down before March 2013 although this has not been the case in reality. The somewhat controversial conclusions of the Patna study[163] are that this would deprive poorer children of effective education and (as the study estimates a total of 238,767 children studying at private school) swell enrolment in government schools way beyond a level of capacity with which the system could cope. Reacting to such a mandate, Gurcharan Das argues that 'Our first priority must be to reform government schools, but until that happens, why penalise the poor by taking away the one choice they have found for giving their children some sort of future?'[164]

Considerable numbers of learners, including state school students, also undertake private lessons outside school hours and evidence from ASER suggests the level of private tuition in Bihar is the highest in the country.[165] In the sample of Bihar teachers analysed by Atherton and Kingdon, 40 per cent of teachers undertook private tuition[166] and these figures are corroborated by the Deshkal study, which shows an average of 41 per cent and 48 per cent of children receiving private tuition in Gaya and Katihar respectively;[167] however, percentages varied from 62 per cent in upper caste groups to 9 per cent Scheduled Caste. The proportion of boys

to girls receiving private tuition also varies considerably.[168] An upcoming ICGS study will investigate the extent of private tuition and affordability for parents in a sample district, Muzzafarpur,[169] but it seems likely that, even in rural districts, parents are prepared to pay for the education of their children when they can.[170] Atherton and Kingdon suggest provision of private tuition has a significant detrimental effect on the learning of those students who are not able to attend or afford it; their estimate is that private schooling has the equivalent benefit to two to three years' mainstream schooling.[171]

There are, however, a wide range of views on the potential of the private educational sector to meet the needs of the less wealthy: *'research on low fee private education has come a long way since the pioneering work of Tooley and Dixon'*.[172] While these researchers see the hope of Indian education as resting with the entrepreneurs, it is unlikely that the market can address needs on its own and to provide equity and access, a public role is essential (see Nilekani 2009). Studies in contexts outside Bihar have identified the potential negative impact of this phenomenal growth of the private sector on the quality of teaching in government schools and the challenge private education may present to parents. Singh and Bangay, in conjunction with the Young Lives programme in Andhra Pradesh, detail equity concerns on the accessibility of private education for the more disadvantaged. Private education is not affordable for the poorest sectors of society and typical households choosing private schools may be forced to spend two and a half times as much on education as those selecting the public sector, with a consequent high level of family debt.[173]

Moreover, although quality may be foremost in parents' minds when opting for the private sector, studies have shown that this quality is very variable and *'there is a huge variety in the size, nature and quality of provision within these low cost private schools'*.[174] In Hyderabad, research by Gray Matters

Capital concluded that no schools surveyed charging below INR 400 per month showed a good performance and, at the lower end of this cost bracket, all schools performed poorly.[175] In addition, private unrecognised schools are not subject to any regulatory quality assurance.[176]

Research by CfBT Education Trust in 2011 examined the Gyan Shala (GS) project set up by faculty members of the Institute of Indian Management (IIM) Ahmedabad and the Institute of Rural Management (IRMA), Anand which provides low-cost schooling in Gujarat and Bihar, primarily in Ahmedabad and Patna. The project offers low-cost schooling at INR 2,000–2,200 per annum (as opposed to INR 18,000 in a government school in a metro). The schools are located close to children's homes, teach according to a learner-centred methodology and recruit teachers from the informal sector at a fifth or a sixth of the salaries of teachers in the formal sector. However, the study concludes that while the project may represent a viable business model, challenges include ensuring financial sustainability, quality and scalability.[177]

The CfBT study poses a number of questions including whether private education can deliver quality education based only on fee collection from the poorest sectors of society. As the study emphasises:
while migration [to the private sector] is bringing marginal benefits to those with financial / geographic choice, it is increasing social inequality.[178]

Bangay and Latham respond to this challenge through describing how the model demonstrated by Gyan Shala both delivers high quality learner-centred and pedagogically sound teaching and learning and also addresses equity. They suggest that polarised distinctions between the private and public sector is counterproductive and a greater understanding of the dynamic between the two sectors is required (see Bangay and Latham 2012).

1.4 HIGHER EDUCATION IN BIHAR

India operates a complex and hierarchical[179] system of higher education, with at its apex 'Institutions of National Importance', a second tier of Central Universities and a lower level of State Universities. Twenty universities are in operation in Bihar, including fourteen state public universities, two institutes of national importance, one central university and one state open university.[180] Of these institutions, arguably the most prestigious and certainly the oldest is Patna University,[181] the seventh oldest in India, founded in 1917. Among the most recently founded institutions are the Chanakya National Law University,[182] founded in 2006, and Nalanda University. Numbers of students[183] are shown below:

Numbers of higher education students in Bihar (2012)						
Diploma	PG Diploma	Undergraduate	Postgraduate	MPhil	PhD	Total
38,783	2,402	1,221,177	98,833	0	2,362	1,363,557

Table 6: *Numbers of higher education students in Bihar (2012)*

The higher education system of India also includes 'affiliated colleges', both public and private. The public tertiary sector in Bihar includes four central government and seven state engineering colleges and ten medical colleges. The private sector includes one private university and seventeen private engineering colleges. There are, in total, 479 government colleges and 70 private colleges in the state.[184] Only 11 colleges have been assessed and accredited by the National Accreditation and Assessment Council.

Gross Enrolment Ratio is lower than the average for the country at 13.1 per cent compared to a national average of 20.4 per cent and an average of 34.8 per cent for Delhi. Of this enrolment, in the academic year 2011–2012, 89.5 per cent of students in the higher education system in Bihar were enrolled in undergraduate programmes, with 7.2 per cent in postgraduate programmes, with the latter showing a slight increase over 2009–2010; only 0.1 per cent were pursuing research. A small-scale series of interviews for this study indicated very few students wanted to pursue an MA or further research in Bihar, a major reason being that they preferred to find employment.[185] Bihar also has a higher than average enrolment rate in colleges:[186] the same survey as above indicated that this may be because colleges are more closely linked to employment opportunities. There is a lack of financial support for researchers (except Junior Research Fellows who are funded directly by the University Grants Commission).[187] As a result, students interested in research select institutions in other states and are in fact encouraged to do so by their tutors.

There is, however, massive demand for opportunities for study at Higher Education level which the state has not been able to meet, and this has led to significant migration for study purposes to institutions in other states. Higher education PTR is high, at 37:1 compared to a national average of 13:1,[188] the ratio of colleges per 100,000 population is 6, the poorest ratio in India except neighbouring Jharkhand.[189] The yearly growth of institutions of higher education in the state remains low, 0.67 per cent, as compared to the national Compounded Annual Growth Rate of 7 per cent.[190] Bihar is estimated to need more than 373 general colleges, 236 engineering colleges, 139 medical colleges, 253 education colleges and 163 polytechnic colleges to meet national policy.[191]

As across India, programmes with the highest enrolment are Arts, Science and Commerce (ASC) followed by Teacher

Education and Medicine,[192] with enrolment in ASC at 90.8 per cent of all enrolment in 2009–2010. Nevertheless, there seems to be a shift in higher education policy towards specialised streams at both the undergraduate and the postgraduate levels. Growth in the number of ASC colleges is 0.7 per cent as compared to 29.72 per cent for teacher education and 12.49 per cent for engineering institutes. As part of the Bihar 2022 Vision Document for Higher Education, the state aims to quadruple the capacity and infrastructure of the higher institution sector to accommodate a projected 300,000 students, increase the capacity of medical colleges and encourage the study of engineering.[193]

University authorities in Bihar state that institutions offer their own syllabuses and these may differ (as is the case with the universities of Magadh and Patna, for example) but all follow the guidelines set by the University Grants Commission (UGC).

For data on a representative institution of higher education in Bihar, the Babasaheb Bhimrao Ambedkar Bihar University, Muzaffarpur is one of the few to post its self-study reports online[194] and as such may be typical of a number of institutions in the state. Almost all staff are qualified to PhD level. The medium of instruction in the university is primarily English, but it is also possible to take examinations in Hindi or Urdu. The university sees its challenges as including limited funding and space for expansion, developing increased use of IT in academic and administrative areas and linking study to the world of work although there are some existing links with industry. There are a significant number of vacant teaching posts. Although regular workshops and conferences for academic staff are held, encouraging productive research is also seen as a challenge. The university states that the syllabus is regularly revised, by individual teachers or by committee.

Qualifications required to teach at higher education level are set by the UGC. An MPhil degree and a pass in the National Education Test (NET) enables application for the post of a lecturer; a PhD is required for professorship at university level.

Nationally, *'Indian universities barely register in world rankings of academic quality'* [195] with the Indian Institute of Science in Bangalore now at 147th[196] in the world's top two hundred universities, and in terms of research, with the world average at 10.81 citations per paper, India's average stands at 5.77 citations per paper.
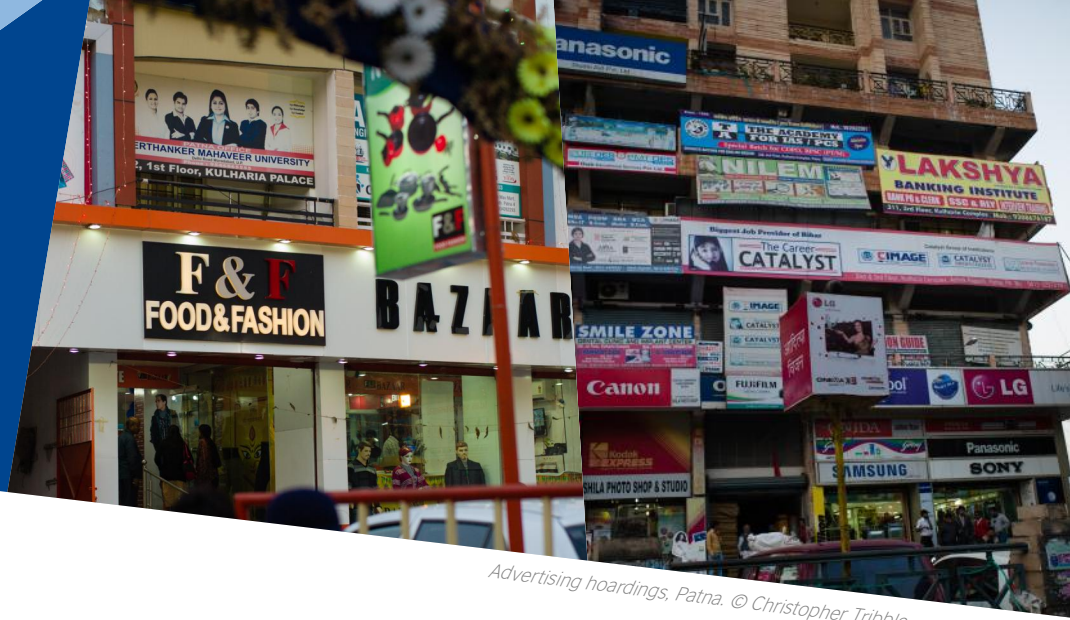
Advertising hoardings, Patna. © Christopher Tribble

1.5 THE STATUS OF ENGLISH IN BIHAR

Evidence would seem to suggest that there is a wide spectrum of views and perspectives on the status and potential status of English in Bihar. This evidence is, however, fragmentary and worthy of further investigation. A companion research study to this volume will present further findings on the views of key groups in Bihar.

Bihar is also rather unusual in that, unlike in other states of the same size and importance, traditionally almost all employment in the service sector has been with the government – state or central, civil or military/police and the railways. There is a common perception that to perform duties in this sector (at lower levels, at least) no English is required, one possible reason for lower priority given to English by both schools and learners.[197]

Any journey across Bihar will reveal striking contrasts in the presence and use of English: from urban centres such as Patna, where English is very evident in street hoardings and advertising and the extent it is used in service industries that are accustomed to dealing with English-speaking customers, to smaller towns and villages in the countryside where English script is seldom seen. Average Issue Readership (AIR) for 2011, the most recent figures available for this report, give some indication of the extent Hindi and English is used and understood: *Hindustan* and *Dainik Jagran* (which use Hindi) are the highest circulating news dailies with an AIR of 4,842,000 and 2,727,000 respectively.[198] The English language daily *Times of India* had an AIR of 162,000 with relatively static circulation growth and the *Hindustan Times* an AIR of 84,000.

The extent to which English leads to job opportunities within the state is unclear although, nationally, English has been identified by government reports as 'a key ingredient at all levels'.[199] A study in Bihar's neighbouring state, West Bengal, suggests that individuals who are more likely to have training in English earn significantly higher relative wages and experience better occupational outcomes even when overall educational level is similar.[200] Other studies show that being fluent in English increases hourly wages of males by 34 per cent and knowledge of basic/preliminary spoken English increases hourly wages by 13 per cent.[201] English may also play a role for those migrants in that it provides a lingua franca for communication in non-Hindi speaking states in India, particularly in South India. That there is a clear demand for English for employment purposes in urban centres is shown by the mushrooming of English-medium private schools and institutes teaching spoken English in Patna, briefly described in Section 1.8, although attitudes to the importance and educational value of English in rural areas deserve further investigation.

English teaching in a secondary school, Patna

1.6 ENGLISH IN PRIMARY AND SECONDARY SCHOOLS IN BIHAR

1.6.1 Overview

Historically, although English flourished at educational institutions for the elite in the immediate post-independence period, this was followed by decades during which it is generally agreed that English was seen as a low priority within the educational system, and during which the provision of English was a politically contentious issue and viewed negatively. Initiatives to promote English in the state in 1993, for example, were strongly resisted by some political groups locally. Over the last decade, increased priorities have been given to English. Before 2006, English had been taught only from Standard 5 but it was introduced incrementally as a subject in Standard 1 from 2006 to cohorts of students as they moved up through the system. Since 2006, it has been a compulsory subject at Standard 1 in all government schools. It is not, however, compulsory to pass the English examination at Standard 10 while it is an optional paper in Standard 12 board examinations, an often-voiced concern by many English teachers. When English was introduced in 2006, the curriculum, syllabus and related teaching and learning materials were established or revised in line with the National Curriculum Framework (2005) and later the Bihar Curriculum Framework (2008). Textbooks currently in use were launched in 2009.

1.6.2 English in Bihar: state curriculum

The National Curriculum Framework (NCF) 2005, the fourth revision of the curriculum made between 1986 and 2005, gave a higher priority to English. It states that:

The level of introduction of English is now a matter of political response to people's aspirations rather than an academic or feasibility issue, and people's choices about the level of its introduction in the curriculum will have to be respected, with the proviso that we do not extend downwards the very system that has failed to deliver.[202]

It also emphasises that this introduction should not be at the cost of other languages spoken in a specific location: *'English needs to find its place along with other Indian languages in different states, where children's other languages strengthen English teaching and learning'.*[203]

This approach has influenced the design and development of the Bihar Curriculum Framework (BCF). The basic structure of the BCF was first developed in 2006, elaborated through discussion at District Institute for Education and Training level and then published in 2008. Bihar is in this way one of the few states to have its own curriculum although it is based on NCF guidelines. The BCF stresses the importance of English to access information and knowledge and to provide economic and social mobility:

The very principle of equality entails that English should not remain associated only with the rich, elite or the upper middle class. Even a rural child of the underprivileged has an equal right to gain a sufficiently good level of proficiency in it so that he should not suffer discrimination for lack of it.[204]

It also stresses the special nature of Bihar, especially the rural background of 90 per cent of children at school and the need to adapt the NCF (seen as more appropriate for children from urban backgrounds) to state requirements. It emphasises, for example, oral drilling and vocabulary development because:

the children in the state are mostly of rural background and they lack the exposure to English language or English vocabulary at the initial stage. Hence, the NCERT syllabi for Class I and II can expect their children to develop ability to 'enact small plays / skits' and 'talk' about themselves, members of the family and the people in their surroundings' but this will be too ambitious an objective for the children with rural background and with little or no exposure to English language and its vocabulary.[205]

The curriculum stresses a need to include input from Bihar culture, including folk tales and texts on Bihar locations and by Bihar writers, and sees

Hindi and the Bihari languages as a resource which can support English language learning. The BCF also recommended a shift from teacher-centred to child-centred pedagogy, including pair work, group work, games and role play, stressing that English learning should occur in the same manner as first-language acquisition. It highlights speaking and listening at the first grades[206] and aims to motivate learners and reduce *'a bias against English … among the average students especially with rural background that "English is a tough subject".'* Strategies aimed at preparing learners for examinations that lead to rote-learning[207] and a focus on grammar in isolation are discouraged and the aims of developing communicative competence, the *'spontaneous and appropriate use of language in different situations',* reading for information and for pleasure, and creative use of language in writing are emphasised.

1.6.3 State syllabus and coursebooks

Between 2009 and 2012, the SCERT undertook a major project to redesign the syllabus and textbooks based on the 2008 BCF, the first textbook revision for thirteen years.[208] The working group for textbook creation included college teachers, NCERT and BCF personnel and external organisations such as the Eklavya Education Foundation. Between 2009 and 2012, a series of textbooks were introduced at all levels; the *'Blossom'* series for Standards 1–2, *'Let's Learn English'* for Standards 3–5, *'Learning Current English'* for Standards 6–8 and the *'Panorama'* series for Standards 9–10. Course content, learning objectives and expected outcomes are distributed over four levels:

- Level 1: Standard 1–2
- Level 2: Standard 3–5
- Level 3: Standard 6–8
- Level 4: Standard 9–10

A fortnightly newspaper, *Chal Padh, Kuchh Ban* ('Read to Succeed'),

developed under the Bihar Education Project (BEP) Council in association with Jagran Pehel (the social initiative wing of media conglomerate Jagran), was also developed to provide extra-curricular reading material including letters, stories and conversations.[209] At elementary level, textbooks aim to provide a combination of text, illustrations and exercises, expose learners to vocabulary in familiar contexts and increase steadily in complexity. The expressed intention is that grammatical rules and structures are not given in isolation, but contextualised through text, until Standard 8. The English language indicators shown in Table 7 illustrate the gradual increase in difficulty of competencies expected in various grades.[210] English textbooks for Standards 9 and 10 contain narrative texts, including stories by British, American and Indian authors and informative texts on famous Indians followed by standard comprehension questions and grammar practice.[211] Indicators for Standard 10 are shown in Table 8.

	Listening	Speaking	Reading	Writing
Standard 1	Can understand sounds of letters Can understand monosyllabic words Can follow very simple instructions and 'Wh' questions	Can give sounds of letters Can give monosyllabic words Can answer simple queries (yes/no) or respond to greetings Can recite 2–3 short, popular rhymes	Can read letters Can read simple words (minimal pairs) and rhyming pairs	Can write letters Can write words – minimal pairs (like cat, bat) Can write numerals
Standard 3	Can understand polysyllabic words Can understand simple passages (2–6 sentences)	Can use polysyllabic words and consonant clusters Can use correct sentence structure (order of words – subject, verb, noun) Can respond to queries (which, how)	Can read short passages (2–6 sentences) Can read consonant clusters and contrasting minimal pairs	Can spell polysyllabic words Can write short passages of 2–6 sentences Can write simple descriptive compositions
Standard 5	Understands vowels, diphthongs and monophthongs Understands new passages/stories/compositions	Can give/pronounce new words Can use new words in correct context in sentences Can speak English outside controlled environment Can recite poems	Can read new words (diphthongs and monophthongs) Can read and understand poems, stories and unseen passages	Can construct grammatically correct, punctuated sentences Can write simple, free compositions on given topics

***Table 7:** Examples of indicators for English language, Standards 1–5*

Learners, Patna

Listening	Speaking	Reading	Writing
Can listen to and understand grammatical structures like tenses, reported speech, non-finites, passive voice, prepositions and punctuations in spoken language Can listen to and respond in group discussions	Can speak using right accent and intonation Can recite poems for enjoyment and understanding Can express opinion on contemporary issues in group discussions and debates Can use grammatical structures like tenses, reported speech, non-finites, passive voice, prepositions and punctuations in speaking and writing	Can read tales/short stories/short plays Can read informative texts/essays Can read for understanding and expression Can read and comprehend narrative and factual unseen passages Can read and interpret graphs, charts/tables, etc.	Can do exercises after reading a text Can do controlled guided and free writing exercises Can translate from mother tongue into English and from English into mother tongue Can write formal and informal letters Can write a paragraph on given verbal and non-verbal clues Can write notices and messages on given verbal and non-verbal clues Can write informative passages of universal or contemporary significance

Table 8: *Examples of indicators for English Language, Standard 10*

1.6.4 Assessment

Based on the recommendations of NCERT 2005, assessment systems have been developed including the adoption of a system of Continuous and Comprehensive Evaluation (CCE) for primary standards, with the stated aim of giving priority to observation-based components, with written, formal assessments such as class tests and assignments introduced only gradually. CCE report cards have been created for individual learners and a 'star-grading' system devised.

Assessment at secondary school is based on a (non-compulsory) examination, conducted annually state-wide by the Bihar State Examination Board, and includes:

- a reading section with unseen passages or excerpts from texts in the textbook, which are followed by fact-retrieval-type and opinion-based questions
- grammar exercises including transformation exercises from active voice to passive voice and from direct speech to indirect speech, gap-fill exercises to test understanding of prepositions and verbs and a translation exercise
- a writing section with exercises in guided and free composition – letter writing, short essays on assigned topics and interpretive passages, with the help of visual clues such as pie charts.

Both private and government schools are affiliated to various boards of examinations under the central and state governments. The former include the Central Board of Secondary Education (CBSE) and the Council for the Indian School Certificate Examinations (CISCE). The state boards in Bihar are the Bihar School Examination Board (BSEB) and Bihar Intermediate Education Council (BIEC). Any school which requires its students to appear for recognised board examinations in Standards 10 and 11 has to be affiliated to any one of these boards.

1.6.5 Teacher performance

The national (and occasionally international) media are frequently scathing of standards of teaching and language proficiency in Bihar.[212] A national TV clip of a young, presumably very inexperienced and clearly very scared, primary school teacher presenting days of the week and months to her class and making spelling errors in each of them went viral in 2013.[213] A rather more academic, but still very negative, view is that provided by Pratihba Gupta, describing delivery of English in Darbhanga, Bihar:

> The greatest problem regarding ESL is the non-availability of secondary school teachers possessing any English worth speaking of … the learning of some sound English is more preferable than the learning of a great deal of language that can hardly be called English: our learners never usually manage to unlearn all these and it is an alarming fact.[214]

Objective evidence and systematic study of classroom practice and language use are far harder to come by. A representative study[215] looked at classroom practice in Maharashtra, Odisha, Jammu and Kashmir, Gujarat, Nagaland and Uttar Pradesh. Teachers are described as very textbook-dependent and focused on the memorisation of grammatical rules. There were no examples observed of English being used in context and apparently no evidence of teacher understanding of the need to contextualise. Oral use of English by learners in the classrooms was 'hardly noticeable'.[216] Examples of students reading the textbook aloud were prevalent. Except in Nagaland, teachers greatly overused the mother tongue and regularly translated. Incidences of students asking questions were rare. Findings of the study are likely to be relevant for Bihar, but there appear to have been no previous systematic investigations of the performance or language proficiency of primary or secondary school teachers in terms of delivery of English.

Learners, Patna

1.6.6 Students' performance

Learner achievement in general has been discussed in Section 1.2.2; there has been far less research on learner achievement in English. ASER reports do also investigate use of English in some detail, although their aim is to examine only some aspects of use of English. The most recent edition of the ASER report (2014[217]), based on the ASER 2013 survey, measures competence in English through assessing the ability to read in English from identifying letters to reading easy sentences. The percentage of children who could read easy sentences is shown in Table 9. Interestingly, these figures are slightly higher than the average for rural India below Standard 5 as learners progress. This may reflect the suggestion by Atherton and Kingdon in Section 1.2.2 that educational gains made by learners at the lowest levels are lost as they progress through the system.

Percentage per class of students able to read easy sentences in English at standards:							
1	2	3	4	5	6	7	8
4.6	7.5	9.3	13.5	18.7	24.4	33.9	43.4

Table 9: *Percentage students in Standards 1 to 8 able to read easy sentences in English (ASER 2014)*

Learners, Patna

At Standard 5, 19 per cent of students were unable to recognise capital letters (6 per cent higher than the average for rural India), and at Standard 8, 23 per cent of students were able to recognise letters but not simple words. Comprehension of English is measured by the ability to give the meaning of words and sentences they can read which an average of 56.3 per cent of students were able to do.

At higher levels, learners in Standards 9 to 12 have only three to five lessons of approximately forty minutes in English a week, so each student is exposed to approximately one hundred hours of English annually (based on one hundred and eighty days of school a year), assuming he or she attends all classes.[218] Given a generally held view that it takes a minimum of two hundred hours of language instruction for a learner to move up one band on the Council of Europe Framework (CEFR), it seems

unlikely that the majority of students will have a level much above A2 at the end of their secondary schooling.[219]

Results in English in examinations for Grade 10 students delivered by the Bihar Examination Board are shown in Table 10[220] (figures for 2013–2015 were not available for the report). While there has been a clear steady increase in the number of students participating in the English examination each year, the pass rate shows an erratic pattern and a range from less than 50 per cent to almost 80 per cent within five years. The pattern does not appear to have been investigated, and could be attributed to any number of factors (not least, the relative ease or difficulty of the examination in a given year) and it remains enigmatic.

Although parental attitudes to education in general have been described in Section 1.2.2, this report has not been

able to identify any research on specific attitudes of parents to English language learning or indeed the status of English in general. The phenomenal increase in the number of private English-medium schools in Bihar (a 4,700 per cent growth rate[221] if all figures are correct and not significantly affected by under-reporting in the past) may be a massive indication that parents wish their children to be educated in English. It may, however, be a more complex product of the fact that English-medium schools offer, or are perceived to offer, better-quality teaching and learning and a higher level of student discipline. Identification of the attitudes of parents (and of other relevant groups) to teaching and English will be examined in an upcoming British Council report on social attitudes to English in Bihar, to be produced in 2016.

Grade 10 examination board results 2005–2012 (Bihar Examination Board)

	Total candidates	Total passes	Total passes (%)
2012	1,262,004	328,913	73.94
2011	931,267	189,648	79.64
2010	974,358	451,770	53.63
2009	901,965	296,176	67.17
2008	769,244	412,156	46.42
2007	688,508	361,507	47.49
2006	599,103	194,992	67.45
2005	560,376	178,245	68.19

Table 10: Grade 10 examination board results 2005–2012 (Bihar Examination Board)

1.6.7 In-service training for English

The Department of Languages, SCERT, states that it organises training events sponsored by EFLU, Hyderabad, for primary and secondary level English teachers every year. District personnel such as the District Education Officer (DEO) identify two teachers per district every year who attend residential training

modules for five to ten days. The duration and frequency of training depend on funding or feasibility.[222] Interviews and data suggest that they are infrequent,[223] targeting approximately 8 per cent of elementary teachers in Bihar. Trainers, usually college or university level teachers, are hired on contract, as personnel from the SCERT and state/district level bodies are

unavailable.[224] State officials have emphasised that the BLISS project (see Section 2.1), funded by DFID and the British Council with RMSA financial support, is the first full teacher training programme for secondary school teachers of English to be delivered in Bihar since the withdrawal of mandatory pre-service training in 1994 and the dismantling of previous training systems.

1.7 ENGLISH IN HIGHER EDUCATION

The Inter level at Standards 11 and 12, often seen as a transition between school and university, was considered until recently a component of higher education in Bihar. While this system is in the process of change, with Patna University having removed Standards 11 and 12 from its purview, this is not the case with all universities. At Inter level, it is compulsory to study English language and literature.[225] In 2012, 91.22 per cent of students were classified as having passed the English Inter examination (compared to 74.36 per cent in 2008[226]), a similar percentage to those passing in Hindi and Urdu, as shown in Table 11 below. Of those students undertaking the Inter English examination, 76.5 per cent were enrolled in the Science stream, with 12.99 per cent enrolled in the Commerce stream and 10.49 per cent in Arts. Of Science stream students, 44.33 per cent received a grade of first division in English as compared to 3.5 per cent and 3.76 per cent of students enrolled in the Arts and Commerce streams respectively. Entry to an English Literature honours course at undergraduate level may require sitting an entrance examination or attending an oral interview, or (as at

Magadh University) may be based on the results of the Inter examination.

Anecdotally, student aspirations include future careers in Bihar in banking, the Bihar Public Service Commission or other government employment. Students often opt for English if they fail to qualify for courses such as Economics or Commerce which are seen as directly leading to employment opportunities. There are also misconceptions about the nature of English honours courses.[227] Many students, it would appear, think they will learn basic English skills on the course, rather than understanding that they need to have acquired these skills already in order to study literature.[228]

No research data was available for this profile on the level of English language proficiency of university students. Nationally, academics have identified a skills gap between the actual level of students and that expected by employers.[229] College and university teachers interviewed for this profile uniformly reported that a majority of learners, from urban as well as rural backgrounds, in undergraduate or

postgraduate English courses (honours in English Literature or subsidiary English courses), do not possess the language competencies expected at that level.

A number of university teachers interviewed state that the curriculum for English courses at both undergraduate and postgraduate levels has not undergone any radical change since the 1960s.[230] Patna University staff stated that significant modifications were made to the curriculum by foreign-trained teachers from Bihar in the 1950s and 1960s. After a period of stagnation till the 1990s, limited changes were made in the curriculum in accordance with contemporary developments in educational theory such as the inclusion of Indian English, American, post-colonial, Dalit literature, and linguistics. At the subsidiary level, courses on Functional, Communicative English and Phonetics have been introduced. Nevertheless, some lecturers are of the opinion that the curriculum of English courses in Bihar is outdated when compared to that of Delhi University.

Inter examination results in languages (Inter Council, Bihar)						
	Total appeared (English)	Total passed (English)	Percentage passed (English)	Total appeared (Hindi and Urdu)	Total passed (Hindi and Urdu)	Percentage passed (Hindi and Urdu)
2008	338,648	251,815	74.36	169,290	151,511	89.50
2012	395,304	360,608	91.22	382, 693	350,834	91.68

Table 11: Inter examination results in languages (Inter Council, Bihar)

Advertising, private institutions, Patna. © Christopher Tribble

1.8 THE COMMERCIAL SECTOR: POST-SCHOOL-AGE LEARNERS AND ADULTS

Again very under-researched, but quite visible in urban centres such as Patna or even online,[231] is a small-scale but apparently quite buoyant commercial sector for the delivery of English to post-school-age learners and young adults. One estimate is of one hundred and fifty such establishments in Patna alone.[232] Researchers in the course of preparation of the original edition of this profile visited a number of Patna commercial language schools, interviewing three teachers, one manager and one manager/teacher and two from private spoken English and vocational education institutes in Patna (British Lingua, Shri Shyam Infotech and Mahindra Pride School). These are just three of the large number of private spoken English teaching institutions in the city which aim to meet job-related demand for learning communicative and business English.

Each focuses to a greater or lesser extent on speaking skills with an additional focus on Business English, personality development and public speaking (British Lingua); IT skills (Shri Shyam Infotech); and hospitality management, sales and customer care, and IT (MPS). In each case, courses are developed in-house. British Lingua and MPS have branches elsewhere in the country, although the former was originally founded in Patna. British Lingua charges INR 2,000 to 3,000 for a course of four to six months' duration. It also has a policy of educating ten students per centre free of cost, and recruits teachers who work in a voluntary capacity to provide this training. MPS offer three months' training and a work placement. Student numbers range from ten to fifteen (Shri Shyam) to one thousand five hundred (British Lingua).

Staff interviewed all emphasised the need for English for vocational purposes and the fact that English acted as support for an exit route from Bihar to more lucrative employment elsewhere. Representatives from MPS cited employers in Patna who target English speakers as including banks, IT firms and fast food/chain café outlets.

The BLISS English for All in Bihar film which can be viewed online shows a typical commercial language school operation, and captures comments from language school owners and teachers, including the identification that the success of the commercial sector is dependent on the lack of effective learning at school: *'if schools had made students linguistically skillful, our business would collapse.'*[233] Further research is required on the attitudes and opinions of sources of English language learning and will be investigated through research commissioned by the BLISS project in early 2016.

Advertising, private institutions, Patna. © Christopher Tribble

PART TWO:
THE VIEW FROM THE FIELD
BLISS PROJECT RESEARCH FINDINGS 2011–2015

2.1 INTRODUCTION: THE BLISS PROJECT

2.1.1 BLISS project research

Part One of this profile has aimed to provide an overview of educational systems in Bihar and the place of English within them. One conclusion has been that data on teacher language proficiency and current practices, the impact of training, learner language proficiency and responsiveness, and the views of parents is either non-existent or very limited. Part Two aims to provide findings from research undertaken through the BLISS (Bihar Language Initiative for Secondary Schools) project from 2011 to the present on these issues and the use of information technology in Bihar. The limitations of this research have been stressed in the introduction. However, to the best of our knowledge, much of this research constitutes the only reliable and objective data on these issues and it is hoped that it will provide further information to support or expand upon conclusions drawn in Part One.

2.1.2 BLISS project aims

Following agreement with RMSA Bihar, an initial project step was a thorough needs analysis conducted in 2011 which included discussion with teachers, learners, head teachers and parents. Findings are outlined in Section 2.3. The needs analysis established pressing needs for language proficiency improvement and development of teaching skills and suggested that the selection of a cohort of teachers with the potential to be trained as teacher educators would be the most effective way to meet these needs. Co-operation was initiated with the United Kingdom Department for International Development (DFID) who have been the principal funder of the project to date. The project aims to address the needs of the teachers, learners and the wider community by providing access to high-quality teaching and learning materials as well as increased awareness of the value of English for employability. The ultimate goals of the project include:

- the Bihar State Government will have a system in place for delivering, monitoring and evaluating English language teacher training, teaching and learning across the state
- English language teachers and teacher educators will have the necessary language and practical teaching skills to achieve Bihar Curriculum Framework (2008) goals, working within a supportive and systematised professional development framework
- every secondary school in the state will have an English teacher and all teachers (Standards 9–12) of English will use English in their English lessons and provide opportunities for their students to use English in a variety of interactive and meaningful ways that are relevant to their needs and context
- all secondary teachers are supported by their Heads of Schools who will have a good understanding of the approach, methodology and techniques the teachers are implementing
- teachers will feel valued and supported and know where to access help and advice
- learners will improve their language skills and develop sub-skills such as autonomous learning, critical thinking and self-confidence gained through communicative, skills-based methodologies
- parents will feel more confident in supporting their children with their learning and will better understand the need to do so.

Cohorts of teacher educators who are themselves teachers form the core means of implementation of the project. Initially, in 2012, 162 teacher educators were selected. Some attrition was inevitable, as a consequence of retirement, migration or promotion, and a further 59 teacher educators were selected in 2015. A further project aim is that teacher educators, led by a core group of mentors and supported by head teachers, will have the capacity to plan and implement a continuing professional development (CPD) system for teachers beyond the lifetime of the project, thus making the project sustainable.

2.1.3 Project delivery

Following selection, teacher educators undertake language proficiency training with the target of raising their language level by one band on the CEFR scale and increasing their confidence in using English, using the British Council *English for Teaching 2* course. Teacher educators then participate in a series of *Train the Trainer* workshops to develop pedagogic and training skills. Three blocks of training materials have been developed by teams of Indian national training consultants led by an international consultant. Block 1 provides an introduction to the teaching and learning of English. Block 2 enables teachers to develop learners' reading skills and Block 3 to develop learners' speaking skills. Each block consists of ten modules, with a total of sixty hours' training. Teacher educators first participate in orientation courses to these blocks, which include exposure to the entire block with microteaching, and then deliver the courses to teachers in their own districts.

The project also includes extensive support for continuing professional development. This has included familiarisation of teacher educators with British Council online and paper resources, the development of a series of teacher development films set in local classrooms, and competitions to support design of lesson plans and posters for classroom use. The project has supported teacher educators in establishing clubs for students (and other English teachers and teachers of other subjects). Teacher educators have also attended conferences and other national and international events in India, Nepal and the United Kingdom.

The project also aims to install software in schools which already have computer rooms and to provide support for teachers in using this software (described in more detail in Section 2.6). From inception, an aim has been that the project will be sustainable and, as part of this transition, workshops have been conducted for District Programme Officers (DPOs), District Education Officers (DEOs) and Assistant Resource Persons (ARPs).

2.1.4 Data collection

Data presented in Part Two of this profile was originally collected for monitoring and evaluation purposes, to assess the effectiveness of the project and to share with partners. This profile aims to bring the data to a wider audience. Data collection included:

- the language proficiency assessment of baseline teachers, teacher educators at selection and teacher educators following training
- identification of stakeholder views at the needs analysis stage
- observations followed by feedback and reflection sessions at baseline and of teacher educators in their own classrooms following training
- observations of small samples of teachers using information technology.

Findings from these initiatives will be discussed in the following sections.

Aptis testing in progress

2.2 LANGUAGE PROFICIENCY LEVELS OF TEACHERS IN BIHAR

Key questions:
- What is the language proficiency of a typical English secondary school teacher in Bihar?
- Are there variations in this language proficiency across the state?
- To what extent is this language level static or developing?
- To what extent can language proficiency of teachers be developed through training?

2.2.1 Levels of language proficiency

Part One of this profile has outlined that, while perceptions held nationally and by the media in particular are that the current language level of state school teachers is woeful, there is little or no objective evidence as to what this language level might be. The BLISS project has regularly undertaken assessments of samples of teacher and teacher educator language proficiency in terms of the Council of Europe Framework (CEFR)[234]. Initiatives 1 and 2 involved the assessment of untrained teachers to establish a baseline and initiatives 3 and 4 identified the language level of teachers with potential to be

selected as teacher educators. The latter samples are therefore smaller and the general language level higher as these were, to put it simply, those with the highest language levels around who could be selected.

Assessment has comprised establishing oral proficiency through a short interview with a trained assessor and assessing proficiency in grammar, reading and vocabulary through use of the British Council Aptis test, although not all candidates were asked to complete both tests. The oral component involves a series of basic questions on home, family and professional life which gradually increase in complexity.

Testing has been reasonably statewide although samples have been relatively small, with between around 250 and 400 teachers being tested in each initiative. Nevertheless, especially in view of the paucity of concrete data on teacher language proficiency, it is felt that the data presented in this section and the conclusions drawn will contribute to a fuller picture of professional language levels in the state.

Oral language proficiency testing in progress

Initiative 1: Baseline: 2014

As shown in Table 12, in both reading and grammar and vocabulary tests and in speaking proficiency, more than half the teachers tested had a proficiency of less than B1, with a substantial proportion at A1 in terms of speaking skills. Data confirms intuitions that teachers' reading skills and awareness of grammar and vocabulary tend to be stronger than spoken proficiency and no teacher had a spoken proficiency above B2. A small percentage of teachers did not have any oral skills in English at all.

Sample size	330 teachers (Aptis: grammar, vocabulary and reading) 245 teachers (oral proficiency testing)					
Dates	November–December 2014					
Districts	Darbhanga, Muzaffarpur, Patna, Rohtas, Samastipur, Siwan					
	A0	**A1**	**A2**	**B1**	**B2**	**C1**
Reading, grammar and vocabulary (Aptis): %	0	21	41	31	7	0
Oral proficiency: %	2	33	38	22	5	0

Table 12: Results: language proficiency: 2014 baseline 1

Initiative 2: Baseline 2: 2015

Distribution of language proficiency in these districts, shown in Table 13, was fairly similar to the 2014 assessment, with in each case more than half of the teachers tested having a level below B1, and a small percentage having no English at all. There is a slight but significant increase in the proportion of teachers at B1 level and above.

Sample size	388 teachers (Aptis: grammar, vocabulary and reading, oral proficiency testing)					
Dates	August 2015					
Districts	Araria, Arwal, Bhojpur, Buxar, Jahanabad, Jamui, Katihar, Kishanganj, Nalanda, Purnia, Saharsa, Sheikpura, Supaul, Vaishali					
	A0	**A1**	**A2**	**B1**	**B2**	**C1**
Reading, grammar and vocabulary (Aptis): %	0	36.34	29.12	28.87	5.67	0
Oral proficiency: %	4.92	25.39	30.83	28.50	9.07	1.30

Table 13: Results: language proficiency: 2015 baseline 2

Initiative 3: Teacher educators' language level (original cadre, 3 batches)

Of the original group of teachers selected for their potential to train as teacher educators, shown in Table 14, 42 per cent had a language level in terms of reading, grammar and vocabulary less than B1 and only 10 per cent had a level of B2 in this area. Interestingly, teachers who have an overall language proficiency of below B1 tend to score slightly higher at reading, grammar and vocabulary than in their oral performance and, for teachers with a language proficiency above B1, oral proficiency scores are slightly higher than reading, grammar and vocabulary.

Sample size	161 teacher educators
Dates	Batch 1: January 2012 Batch 2: May 2012 Batch 3: October 2013
Districts	Araria, Arwal, Aurangabad, Banka, Begusarai, Bhagalpur, Bhojpur, Buxar, Darbhanga, East Champaran, Gaya, Gopalganj, Jahanabad, Jamui, Kaimur (Bhabhua), Katihar, Khagaria, Kishanganj, Lakhisarai, Madhepura, Madhubani, Munger, Muzaffarpur, Nalanda, Nawada, Patna, Purnia, Rohtas, Saharsa, Samastipur, Saran, Seohar, Sheikhpura, Sitamarhi, Siwan, Supaul, Vaishali, West Champaran

	A0	A1	A2	B1	B2	Not tested	Total
Reading, grammar and vocabulary (Aptis): total number	0	2	29	35	8	87	**161**
Reading, grammar and vocabulary (Aptis): total %	0	1.3	18	21.7	5	54	
Reading, grammar and vocabulary (Aptis): % candidates tested		2.7	39.3	47.2	10.8		
Oral proficiency: total number	0	3	39	78	23	18	**161**
Oral proficiency: total %	0	1.8	24.2	48.5	14.3	11.2	
Reading, grammar and vocabulary (Aptis): % candidates tested		2.2	27.3	54.5	16		

Table 14: Results: language proficiency: 2012–2013, Teacher Educator Cohort 1 baseline

Initiative 4: Teacher educators' language level:

Scores for these more recently selected teacher educators at project inception show significant differences, with no scores below B1 and proportionally higher numbers of teacher educators at B2 and above.

There be may a number of reasons for this improvement:

a) simply that, because a smaller sample of teacher educators was selected from this group of candidates, it was more feasible to select those of a higher language level

b) the overall language level of teachers in Bihar is in fact steadily improving: the average age of the most recent batch is lower than the original group which may indicate that newer entrants to the profession have stronger language skills than their older colleagues

c) administrative procedures on the part of RMSA have systematically developed in terms of efficiency and, as a result, RMSA are more able to bring more appropriate candidates to the attention of the British Council

d) the project has become better known to candidates volunteering to become teacher educators and the prospect of being involved with the project has become increasingly attractive to more-able candidates. Responses from a sample of newly educated teacher educators indicated that almost all had heard of the project before attending selection.

Sample size	60 teacher educators					
Dates	August 2015					
Districts	Araria, Arwal, Bhojpur, Buxar, Jahanabad, Jamui, Katihar, Kishanganj, Nalanda, Purnia, Saharsa, Sheikpura, Supaul, Vaishali					
	A0	**A1**	**A2**	**B1**	**B2**	**C1**
Reading, grammar and vocabulary (Aptis): %	0	0	0	71.6	28.4	0
Oral proficiency: %	0	0	0	58.4	33.3	8.3

Table 15: Results: language proficiency: 2015, Teacher Educator Cohort 2 baseline

2.2.2 Levels of language proficiency across districts

There are some trends in this data which, to some extent, reinforce widespread perceptions that northern and eastern districts tend to be of an academically lower level than the centre, south or west. Three of the five districts which have significant numbers of teachers at A0/A1 level and nine of those with 50 per cent or more teachers below B1 level are located in this region. The general picture, however, is a good deal more complex: districts across the state employ significant numbers of teachers whose language proficiency is below B1 but also significant numbers of teachers whose level is above B1 – a very mixed picture. Arwal and Nalanda, both located in the south, have more than 40 per cent of their teachers at A0 or A1 level, while the sample of teachers tested in Kishanganj appear particularly strong (Muzzafarpur, too, has a number of proficient teachers). The sample size of teachers tested is relatively small and there may be a range of factors involved in which teachers were allotted by RMSA to be tested; however, it seems likely that a typical district may have teachers with a wide range of language proficiency wherever it is located.

Initiative 1: Baseline 1 – 2014

District	Level				
	A0/A1	A2	B1	B2	C1
Darbhanga	20	45.7	28.5	5.8	0
Kaimur (Bhabhua)	23.5	50	26.5	0	0
Muzaffarpur	12.5	42.5	35	10	0
Patna	13.9	38.9	30.4	16.6	0
Rohtas	30.7	40.3	23.3	5.7	0
Samastipur	22.8	44.2	27.2	5.8	0
Siwan	22.8	22.8	51.5	2.9	0

Analysis by district: summary

Districts in which 40 per cent or more teachers tested in this sample have a language level of A0/A1	None
Districts in which 50 per cent or more teachers tested in this sample have a language level below B1	Darbanga, Kaimur (Bhabhua), Muzzafarpur, Patna, Rohtas, Samastipur
Districts in which at least 50 per cent of teachers tested have a level of B1 or above	Siwan
Districts in which more than 10 per cent of teachers are at least B1 level	Muzzafarpur, Patna
Districts in which any teacher assessed at C1	None

Table 16: *Results: Baseline 1: Analysis by district: percentages*

Initiative 2: Baseline 2 – 2015

District	Level				
	A0/A1	A2	B1	B2	C1
Araria	30.7	19.3	42.3	7.7	0
Arwal	43	14.3	28.7	14.3	0
Bhojpur	20	32.5	27.5	12.5	7.5
Buxar	26	26	34.8	13.2	0
Jahanabad	16.6	50	27.7	5.5	0
Jamui	28.2	46.15	17.95	7.7	0
Katihar	22.22	37	25.9	14.81	0
Kishanganj	20	25	35	20	0
Nalanda	52	30	18	0	0
Purnia	40.7	37	22.3	0	0
Saharsa	32.1	14.29	50	3.57	0
Sheikpura	44.4	33.3	22.2	0	0
Supaul	37.5	25	33.3	4.1	0
Vaishali	11.76	29.41	26.47	26.47	5.8

Analysis by district: summary

Districts in which 40 per cent or more teachers tested in this sample have a language level of A0 / A1	Arwal, Nalanda, Purnia, Sheikpura, Supual
Districts in which 50 per cent or more teachers tested in this sample have a language level below B1	Araria, Arwal, Bhojpur, Buxar, Jahanabad, Jamui, Katihar, Nalanda, Purnia, Sheikpura, Supaul
Districts in which at least 50 per cent of teachers tested have a level of B1 or above	Araira, Kishnanganj, Saharsa, Vaishali
Districts in which more than 10 per cent of teachers are at least B2 level	Arwal, Bhojpur, Buxar, Katihar, Kishanganj, Vaishali
Districts in which any teacher assessed at C1	Bhojpur, Vaishali

Table 17: *Results: Baseline 2: Analysis by district: percentages*

2.2.3 Language proficiency following language improvement training: teacher educators

Following selection, teacher educators undergo language proficiency training, and further, less direct, language improvement training is provided through subsequent pedagogic and teacher-training skills training. Following training, teacher educators are retested, through procedures described above, with the aim of comparing baseline, midline and eventually endline results. This section aims to present midline results which may demonstrate the potential (or otherwise) for language improvement initiatives to tackle the challenge of low teacher language proficiency in the state.

Proficiency in reading, grammar and vocabulary

A random sample group of 74 teacher educators from 32 districts were retested using the British Council Aptis Test in September 2014. Of the sample, 57 per cent had developed their skills in language proficiency by moving up at least one CEFR band and 1 per cent by more than one band. Total results are illustrated below:

Overall Language test performance: 74 Teacher Educators, 2014

- 1%
- 3%
- 3%
- 36%
- 57%

- Negative change
- No change
- 1 grade change
- 2 grade change
- NA
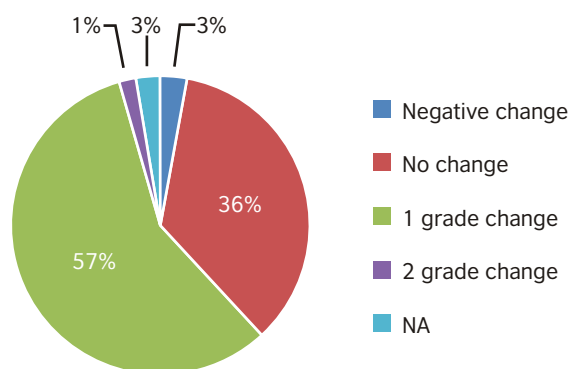
Figure 3: Results: Teacher Educator Cohort 1: retesting: overall performance: RGV

Of the 58 per cent of candidates who increased their score by one or more band, changes are shown in the table below.

Progress in language proficiency: movement by band		
Progress	**Number**	**Percentage of total test takers**
From A1 to B1	1	1.5
From A2 to B1	23	29.4
From A2 to B2	1	1.5
From B1 to B2	14	25.6

Table 18: Progress in language proficiency: movement by band

Proficiency in speaking

A random sample of 61 teacher educators undertook language proficiency testing in oral skills (July 2015). Results are presented below:

	Number	% of total tested initially (51)
Change: level to level+	6	11.8
Change 1 level	14	27.4
Change 2 levels	6	11.8
No change	26	50
Total 52		
Not tested at initial selection	9	
Total 61		

Table 19: Results: Teacher Educator Cohort 1: retesting: overall performance: oral

Forty-eight per cent of teacher educators developed skills to the extent that their proficiency increased by at least one CEFR band and, in 11.8 per cent of cases, by two bands. A further 11.8 per cent of teacher educators did not increase their score by a full band but made very significant progress within that band, to a band+ level. There is therefore very demonstrable progress by 50 per cent of all teacher educators tested. Of the sample, 82 per cent of teacher educators have a language level sufficient to teach and train effectively and 31 per cent have now achieved a level of B2, with thorough language skills to teach and train.

A priority for the project was that teacher educators with an initial language level below B1 would be enabled to develop their skills to at least B1 level, and, as can be seen below, this has been the case.
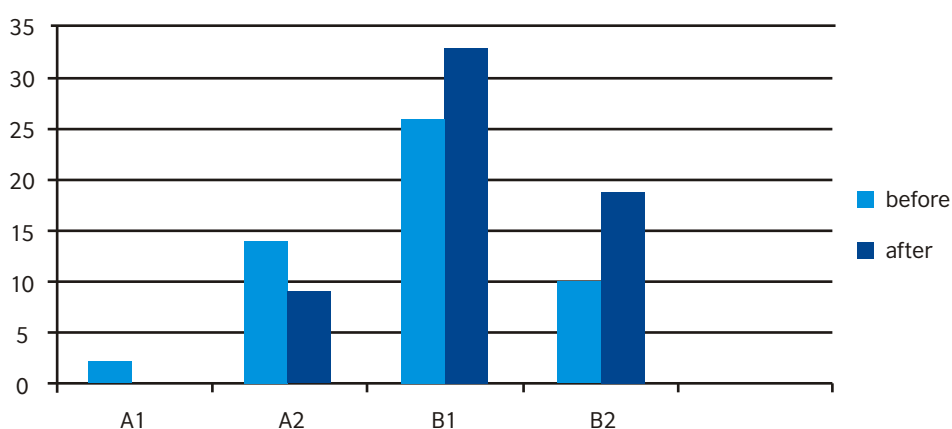
Figure 4: Results: Teacher Educator Cohort 1: language level change, n=61

As a result of language proficiency training, the language level composition of the total cadre of teacher educators has changed in the following ways:

Baseline: language proficiency: (RGV) sample: 74 teacher educators 2012–2013			
A1	**A2**	**B1**	**B2**
2.3	39.3	47.5	10.9
Midline: language proficiency: 74 teacher educators: 2015			
A1	**A2**	**B1**	**B2**
0	11.8	58.8	29.4

20a: Proficiency in reading, grammar and vocabulary

Baseline: language proficiency: 61 teacher educators 2012–2013				
A1	**A2**	**B1**	**B2**	**Not Tested**
3.2	22.9	42.6	16.3	14.7
Midline: language proficiency: 61 teacher educators: 2015				
A1	**A2**	**B1**	**B2**	**Not Tested**
0	14.75	54	31.25	0

20b: Oral proficiency

Table 20: *Cohort 1: levels pre and post language proficiency training*

2.2.4 Summary and discussion

If it is assumed that the minimum language level for a secondary school English teacher is B1, it is clear that, based on project assessments, the current language level of professionals across the state falls very significantly below this target. In a number of samples taken for studies recorded in this report, proficiency level of at least 50 per cent of teachers fell below this level in the majority of districts. Less than 30 per cent were B1 level and 10 per cent or less B2 and above in a significant number of districts. Some districts have no B2 level teachers at all. If it is assumed that, after ten years of schooling, it is actually the students who should be aspiring to a level of B1 (and therefore implying a minimum English level of teachers of B2), even more significant needs are emphasised, with only three districts (Patna, Vaishali and, perhaps a little surprisingly, Kishanganj)

having more than 20 per cent of teachers with a language level of B2.

The results of sample testing do reveal some differences across the state. To some extent, they confirm higher language levels in urban centres such as Patna and Vaishali and lower language levels in some northern and eastern districts. The picture cannot be oversimplified, however. Sixty-seven per cent of teachers assessed are below B1 level in Samastipur (the most rural district), but the figure for Patna (the most urban) is 52 per cent. There do not appear to have been any significant trends in general language level of untrained teachers, although considerably more comparative language testing and larger samples are required to verify this. It is worth bearing in mind that the second batch of teacher educators selected by the British Council had a higher average language level than

the first but this could be the result of a number of interrelated factors.

A more positive note is that it would seem accurate to say that when teachers, or at least those teachers selected through the programme to become teacher educators, are provided with the opportunity of developing their language proficiency, they respond actively. It is likely that the teachers selected were more motivated, more naturally disposed to learning and more willing to invest effort in learning than the average (factors affecting their selection); however, the fact that demonstrable progress was made in terms of CEFR bands by over 50 per cent of the sample does indicate the ability of teachers in Bihar to develop their language skills if effective support is available.

2.3 VIEWS OF TEACHERS, HEAD TEACHERS, LEARNERS AND PARENTS

Key questions:
- What beliefs do teachers hold about effective teaching and learning?
- How do teachers assess student language proficiency?
- What perceptions do head teachers have about the teaching and learning of English?
- How do learners assess the importance of learning English?
- How do learners assess their own language proficiency?
- What views do learners have about effective teaching and learning?
- How do parents see the importance of English, and how it is learnt and taught?

In July 2011, an initial needs analysis was conducted in five districts of Bihar: Patna, Saran, East Champaran (Motihari), Kishanganj and Madhepura, which accessed the views of teachers, head teachers, students and parents in order to determine attitudes to and beliefs about the learning and teaching of English. While comparatively small-scale, this study is, in the understanding of this report, the first attempt to identify views of these groups of stakeholders specifically about the teaching and learning of English.

2.3.1 Views of teachers

Thirty-five teachers were asked to complete a questionnaire which involved rating and discussing a series of statements designed to identify beliefs about teaching and learning and also participated in a focus group led by a British Council Training Consultant. Results are presented in Table 21.

The vast majority of teachers prioritise the use of English, interaction and learner enjoyment in class, learner collaboration and lively and interesting lessons. Teachers state that they are aware of the need for lesson planning, the use of visual aids and the teaching of language for purposes other than simply passing the examination. They are conservative on issues including teacher talking time, use of the coursebook and the need for teachers to correct all student errors. Nevertheless, views stated would lead one to assume that English language classes in Bihar are relatively planned, communicative and involve students working together in interesting and focused activities. The fact that the reality may be generally just the opposite, and teachers' beliefs may contradict practice observed in the classroom in almost every case, is discussed in Section 2.4.

In focus groups, teachers expressed the challenge they feel they face in that English is not a 'compulsory' subject (i.e. examinations for English are optional). Teachers felt the result was a downgrading of the importance of English, a perception that English teachers are not as important as other subject teachers and student demotivation in the English classroom. Additionally, teachers described instances of English periods being reallocated to other subjects prior to examinations, or of English teachers being asked to perform other administrative tasks rather than teach.

1 = strongly agree   2 = agree   3 = undecided   4 = disagree   5 = totally disagree

	Statements	1	2	3	4	5
1	If you are a strict teacher, you will get the students' respect.	**11**	9	0	9	6
2	An excellent teacher has perfect pronunciation and never makes a mistake.	9	**19**	2	5	0
3	The teacher should try to use as much English as s/he can in a lesson.	13	**18**	1	2	0
4	Teachers should follow the coursebook at all times.	12	**18**	1	2	0
5	Group work and pair work waste a lot of time in class.	2	8	1	**14**	9
6	A teacher is there to correct all the students' errors.	**12**	11	4	3	0
7	A good teacher makes sure that the students have fun in lessons.	**19**	12	0	2	0
8	The teacher should talk the most in lessons.	3	**18**	2	7	1
9	It is important to concentrate only on the language that the students need for the exams.	2	10	2	**19**	0
10	Experienced teachers do not need to plan their lessons any more.	0	3	1	**20**	10
11	Students respect teachers who make their lessons lively and interesting.	**23**	10	1	1	0
12	It is a good idea to let the students teach each other.	8	**21**	2	2	0
13	A good teacher asks students for their opinions in class.	13	**20**	1	1	0
14	It is a good idea to let students correct their own work or each other's work.	6	**21**	1	6	0
15	Visuals like flashcards, real objects and mime can help understanding.	16	**16**	2	0	0
16	A good teacher writes everything on the board.	7	**17**	1	8	2
17	A good teacher should dictate notes.	4	**17**	2	7	3

Table 21: Teachers' beliefs (by total number of responses), needs analysis 2011

Teachers participating in focus groups did not seem aware of the Bihar Curriculum Framework and had not seen or read the framework themselves. Their assessment of students' proficiency was generally negative, but their ability to diagnose factors affecting this proficiency was very limited. Secondary school coursebooks were felt to be too difficult for students in terms of language level and, regardless of level, not available to all students in the class.

2.3.2 Views of head teachers

In all schools visited, head teachers were asked to complete a simple questionnaire in which they were asked to respond to the following two questions:

- In your view, how can the learning of English be improved in your state? What changes would you recommend?
- In your view, how can the teaching of English be improved in your state? What changes would you recommend?

Responses are shown in Table 22. Out of the total number of responses, making English compulsory was mentioned in 50 per cent of cases. In their responses below, and also in focus groups, heads highlighted the need for longer and further training, both in methodology and language improvement, to produce a cadre of dedicated, specialist English teachers with an appropriate language level.

Observers reported that head teachers found it difficult to comment on the teaching and learning of English and were unfamiliar with any aspects of methodology, how English is taught or assessed and in some cases were unable to specify the number of English teachers in the school.

One impact of the BLISS project has been that teacher educators trained through the project have been recruited as head teachers of secondary schools. Interviews with seven of these head teachers (from Bhojpur, Madhepura, Muzzafarpur and Bhagalpur) in early 2016 reveal significant differences in views, opinions and awareness of English language teaching when compared to the 2011 group. The group stressed their own very positive experiences of being trained through the BLISS project (although only one head teacher had had any experience of being trained prior to

In your view, how can the teaching and learning of English be improved in your state? What changes would you recommend? N = 14, 5 districts	
Topic	Number of responses
Institution of English as a compulsory subject	13
Teacher training/enhancement of teacher skills	9
New techniques/activities	3
Coursebook review	2
Enhancement of students' ability	2
Awareness-raising as to the importance of English	2

Table 22: Views of head teachers, needs analysis 2011

the project) and described their application in the classroom of warmers, pair and group work activities and techniques to help learners develop reading strategies.

Their emphasis on the need for all teachers of the type of professional development which they had both experienced and delivered themselves was unanimous. The group identified needs for language proficiency improvement and support for teachers in developing learners' grammar, vocabulary and skills and in exploiting the coursebook more creatively. The fact that continuing professional development is also the responsibility of teachers themselves and that teachers need support in trying out new ideas for the first time was also stressed, as was the need for professional development for District Education Officers and more systematic classroom monitoring.

2.3.3 Views of learners

The needs analysis also accessed the views of 263 learners on future aspirations, language proficiency and preferred learning styles. When asked about their ambitions, all learners mentioned higher education and professional occupations including engineers and doctors and stated that English would be essential for them to achieve these aspirations; none mentioned vocational jobs. In focus groups, some learners also expressed concerns that English was not a compulsory subject. Similarly, learners interviewed for the BLISS 'English for All' film, which can be viewed online, stressed the importance of English, stressing that *'jobs go to those who know English'* and the fact that non-English speakers are commonly viewed as illiterate.[235]

What do you want to do after school?

Legend:
- Government jobs
- Officer
- Banking jobs
- Engineer
- Doctor
- Police officer
- District Magistrate
- Armed forces
- Higher Studies
- Chartered Accountant
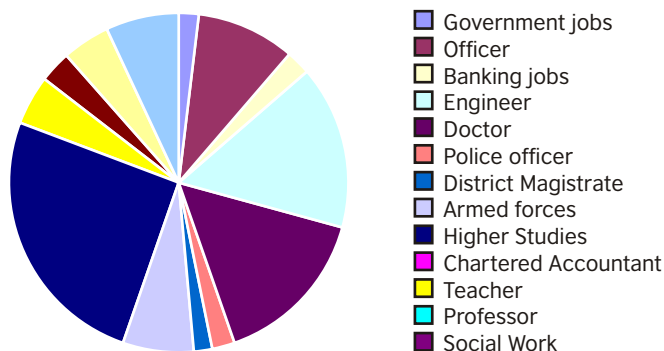- Teacher
- Professor
- Social Work

Figure 5: Learner aspirations, needs analysis 2011 (n=263)

No formal assessment of learners' language levels was conducted as part of the needs analysis. However, an informal assessment was made during focus groups of language proficiency, with the observer conducting a number of simple interactive activities and games with learners. In many cases, the students found it difficult to do the tasks without the instructions being given in the first language (L1) and observers had to repeat very simple phrases such as 'My name is …' before learners could understand them. Learners in general were assessed at level A0 to A2 on the CEFR, with observers noting that there were three or four students in a class of ninety to one hundred being able to introduce themselves fluently in English. Learners could understand and answer simple A1 level questions but were unable to answer to any extent with extended responses or could only answer in Hindi. Learners could identify basic objects, but could not use prepositions or form basic wh-questions.

Such a level means that learners are ill equipped for either a course of higher study or an occupation in which English is a functional requirement. Learners were also asked to evaluate their own English language competence in speaking and writing, and results are presented in Figure 6, although it is very likely that learners overestimated their own skills. Generally, writing skills were felt to be stronger than speaking skills. Learners emphasised that their use of
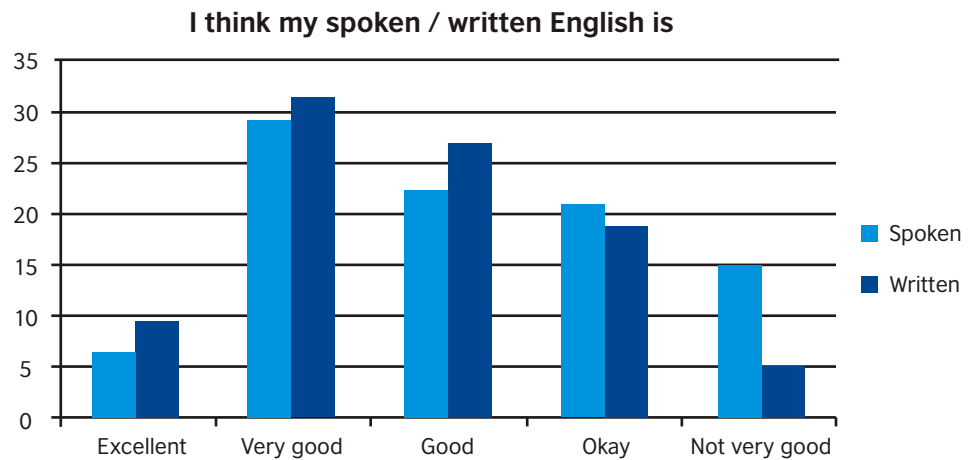

I think my spoken / written English is

Figure 6: Learner language proficiency: self-assessment, needs analysis 2011

and exposure to English outside the classroom was negligible and that they always spoke to their teacher in Hindi. Focus group respondents emphasised that they enjoyed all activities they had taken part in, but rarely or never had the chance to take part in activities such as these in their own classrooms: 'The way we are taught is boring.' Learners also stated that they were satisfied with teaching materials but preferred fictional texts in the coursebook to informative texts; given their language level, one can only assume that they interacted with these texts through the medium of translation. Eighty-six per cent of students stated that they found the textbook interesting.

2.3.4 Views of parents

Parents' focus groups were held in three districts during the study. Around 70 per cent of participants were literate in Hindi, but with no English language skills; the

majority were employed in small trades or farming. Most parents interviewed had only a very sketchy idea of what their children were learning and how learning took place. They were, however, keen to support them in school, although (as research discussed in Section 1.2.2 confirms) without having a clear idea how to go about this. Views on the importance of English varied widely with some parents feeling that English was not important because it was not a compulsory examination subject and others feeling that it should be examined in consequence of its real-world importance, summed up in one parent's response:

Knowing English will mean that no one will be able to trick us or behave badly with us.

Some parents also said that they would be willing to spend money on developing their children's English language to increase future employment prospects.

2.3.5 Gender issues

As described in Section 1.2.2, a proactive policy is in place to encourage women to consider teaching as a career option, in particular at secondary level. However, many challenges remain for female teachers. A focus group of five women teachers from Patna with teaching experience from two to twelve years, conducted by the British Council Academic Coordinator in early 2016,[236] identified a range of negative experiences in the workplace including regular social discrimination on grounds of gender, caste and religion, inappropriate behaviour by colleagues and a lack of balance in delegation of tasks. The teachers interviewed described experiencing larger workloads than male colleagues (including additional correction or administration tasks). Despite some progress made, poor quality facilities for sanitation and hygiene present challenges for female teachers who often have to clean facilities themselves and request keys for locked facilities from male colleagues. The teachers interviewed felt that being in contact with other teachers, being informed about policies and 'speaking up' were ways of meeting these challenges, as would be the formation of a support group of some type.

2.3.6 Summary and discussion

Teachers interviewed stated beliefs that would encourage assumptions that effective learning is taking place in the classroom, with a degree of interaction, learner collaboration and variety of activities. Section 2.4 will examine to what extent this is actually the case. Teachers all emphasise the challenge of the non-examined nature of English in the state and attribute learner demotivation to this challenge. The fact that English is not compulsory in this sense, however, also has implications for the teachers themselves, as they feel less valued or important, and this implication may actually be as important for teachers as its perceived effect on learning. Head teachers also have strong views on this topic, much less so on other aspects of the teaching and learning of English, and all head teachers stress a need for methodology training and language improvement for English teachers.

Learners seem aware of the importance of English and reacted very positively to a range of activities which they emphasised they were participating in for the first time. Learner language proficiency would appear in general to be very low (in fact, observers with some groups estimated that around 10 per cent of the class were illiterate in any language, although this was not assessed systematically). Anecdotally, teachers often comment that the majority of students in their classes 'do not know the alphabet'. Learners themselves emphasise the difficulties they have with spoken English, mainly as a result of a lack of exposure.

There is a pressing need for systematic large-scale investigation of language proficiency of learners. Observations suggest that the bulk of learners in an observed class have low (possibly no) English language skills, while a handful (usually seated at the front) have a much higher level, and it is this minority that the teacher is actually teaching. However, project observations described in Section 2.4 focus principally on the teacher and the project has not aimed at formal assessment of learner levels. In addition, the Bihar School Examination Board is the only body with authority to carry out assessments and was not able to grant a British Council request to test three hundred students during a monitoring programme.

Even the small-scale focus groups described above indicate a wealth of diverse opinions on the importance of English to parents. The limited data presented above does, however, confirm a number of conclusions drawn by research elsewhere in Bihar, discussed in Part One, including parents' desire to support their children's learning, a lack of familiarity with what actually happens in the classroom and mixed opinions on the status of English. Parents' willingness to pay for language improvement for their children is also deserving of more detailed investigation, especially in view of the growth of private teaching and tuition described in Sections 1.3 and 1.8.

Representative class size, Nalanda

2.4 CURRENT TEACHING PRACTICE IN BIHAR

Key questions:

- How large is a typical class in Bihar?
- What variations are there in class size?
- What are the typical current classroom practices in Bihar?
- To what extent can teachers reflect on their teaching?

2.4.1 Class size in Bihar

Discussion of class size in this section is based on a sample of 112 observations in 35 districts of Bihar of lessons delivered by teachers selected as teacher educators through 2013–2014. In each case, the observer was asked to tally or estimate the size of the class and to record if the teacher kept a register. Teachers in Bihar frequently state that they teach classes with more than 80 learners. In one representative survey, September 2015, 39 per cent of the sample stated they teach from 50 to 80 learners; 43 per cent, more than 80; and 18 per cent, less than 50. DISE figures put current PTR at 53:1. However, there appears to be a wide range of class sizes as summarised in Table 23.

Class size in Bihar: 112 observations					
Class size	10–20	21–30	31–40	41–50	51–60
Number observed	12	15	16	17	19
% total	10.7	13.3	14.3	15.1	16.9
Class size	61–70	71–80	81–90	91–100	101–110
Number observed	8	10	4	3	1
% total	7.1	8.9	3.5	2.6	0.9
Class size	111–120	121–130	131–140	141–150	151–160
Number observed	1	1	0	1	0
% total	0.9	0.9	0	0.9	0
Class size	161–170	171–180	181–190	191–200	200 and above
Number observed	0	1	0	1	2
% total	0	0.9	0	0.9	1.8

Table 23: *Class size in Bihar, 2013–2014*

Representative class size, Muzzafarpur

The most frequent class size observed was between 51 and 60, confirming PTRs. However, 53.4 per cent of observations found class size smaller than 50, and 29.3 per cent of observations found class sizes of anything between 60 and, in one case, almost 250 (two classes combined). Except for an extremely wide spread, there is no particular pattern to the likely size of a class. Analysis was also undertaken to identify any patterns across districts. As with teacher language proficiency, districts tend to have a mix of larger and sometimes comparatively quite small classes, which, on average, do tend towards a PTR of over 50. The largest classes observed were in Katihar and Samastipur, both located in what is generally perceived as a less privileged region of the state but even in the case of Samastipur, classes range from 25 to 250. At what one might expect to be the opposite end of the spectrum, in Patna, the majority of classes had less than 50 learners but one of the largest classes observed also took place in this district.

This large spread of class size is confirmed in data collected through the 2011 needs analysis (see Table 24) in which PTR in these observations ranged from 16:1 to 102:1, with an average of 55:1.

Analysis of class size by district		
Location	**Range of class size**	**Total number observations**
Araria	39 40 4851	4
Arwal	52	1
Aurangabad	30 70	2
Baniapur	36	1
Banka	21 53 58 62 88 148	6
Beguserai	14 52 60 71 72	5
Bhagalpur	20 20 24 26 37 56	6
Bhojpur	84	1
Darbhanga	17	1
Daudnagar	40	1
Dishware	43	1
East Champaran	30 34 40 60	4
Gaya	55	1
Gopalganj	54 72	
Jahanabad	47	
Kaimur	21 27 55 3	
Katihar	71 210	2
Khagaria	25 42 52 70 88	5
Kishanganj	11 16 45 50 4	
Luckhisarai	53 54 54 100	4
Madhepura	18 42 46 60	4
Murger	78	1
Nalanda	42 80	2
Nawanda	47	1
Patna	19 24 30 31 34 34 35 46 48 127	10
Purnia	11 32	2
Rohtas	12 16 41 43 55 58 60 6575 9	
Saharsa	16 25 26 37	4
Saidpur	98	1
Samastipur	25 35 43 48 90 105 200 250	9
Saran	94 112	2
Seohar	50 69	2
Sheikhpura	33 45	2
Siwan	61 68 71 78	4
Supaul	65 76	2

Table 24: Observations of class size, 2013–2014, 35 districts

| Analysis of class size by district			
Location	**Range of class size**		**Total number observations**
Chapra	53 54　　　80		3
Kishanganj	16 19　　　63　71　　　102		5
Madhespura	78　80		2
Motihari (East Champaran)	41　52 53		3
Patna	27　33　　58		3

Table 25: Observations of class size, 2011, 5 districts

This reality of class size differs from general perceptions which suggest that the average class is much larger. One reason may be that officials and teachers cite numbers on roll rather than numbers of learners who actually attend. In the 2013–2014 survey, observers were asked to record class size seen; some observers also recorded number of enrolled learners and provided data on absenteeism from 25 per cent to 75 per cent of the class. We have also been advised that, in some cases, less able learners are told not to come to school in order to provide a more convincing picture of overall language proficiency. Learner absences are not commonly recorded: observations of 156 untrained teachers showed that only about one third of teachers actually complete a register and in only 40 per cent of these incidences was the register seen.

Register: completion Sample 1: 156 teachers observed
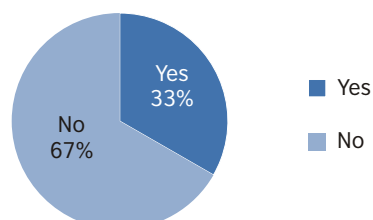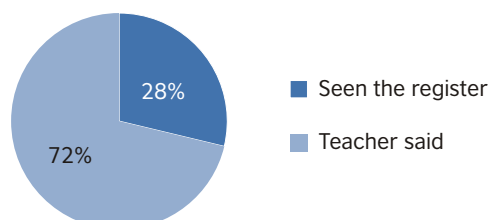
Does the teacher complete a lesson register?

31% Yes
69% No

How do you know?

40% Seen the register
60% Teacher said
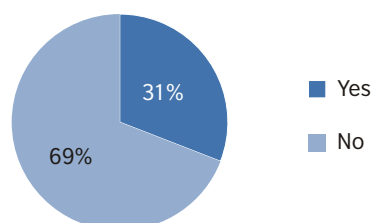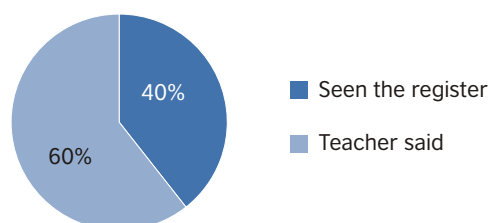
Register completion Sample 2: 122 teacher educators observed

Does the teacher complete a lesson register?

Yes 33%
No 67%

How do you know?

28% Seen the register
72% Teacher said

Figure 7: Register completion recorded by observers

2.4.2 Current teaching practice

Extensive standardised observations using checklists developed through the project of 156 teachers in 13 districts who had not received professional development through project training were carried out by project staff or by British Council Training Consultants (four districts, May–July 2013; nine districts, November–December 2014) in order to establish a baseline. Quantitative data from checklists, qualitative comments from Training Consultants observing lessons and comments from teachers during reflection sessions following observations in which they assessed their own strengths and areas for development were all analysed.

a) Classrooms

Classrooms were not colourful and it was rare to find any display of student work. All classrooms had space to display students' work but none had utilised it. In the majority of classrooms observed, the students had moveable desks or long benches, although in one classroom there were no desks at all. Students sat in rows facing the front of the class where there was a blackboard. Space was very limited making it difficult for teachers to monitor learning effectively, or for students to mingle.

b) Lesson planning: planning and preparation

Although 88 per cent of teachers interviewed in the needs analysis agreed it is very important to lesson plan, in reality, teachers observed were generally unfamiliar with planning. Only 15 per cent of teachers could provide a lesson plan to the observer or to state that they had a lesson plan. In the 42 per cent of cases in which the lesson plan was seen, 70 per cent of objectives could not be described as specific, measurable, attainable, realistic or time-related (SMART) and a little over half the lesson plans examined showed evidence of staging activities. A small minority of teachers (12 per cent) were able to provide other lesson plans to the observer.

c) Skills

In lesson plans examined, the skills of writing (50 per cent) and reading (44 per cent) were highlighted. In 75 per cent of cases, no speaking practice had been planned. In observed lessons, the skill of listening was practised most frequently (59 per cent of lessons observed) although this might simply involve students listening to the teacher. There was evidence of reading (38 per cent of lessons observed) and writing (28 per cent of lessons observed) practice and in 76 per cent of lessons observed, no speaking practice took place. Observers described a prevalent lesson pattern of a teacher-fronted class, a focus on grammar and frequent translation. There is variation in how effectively teachers use this form of grammar translation: over 18 per cent of observer comments described how the blackboard was used effectively to present new grammar or vocabulary and 12 per cent of comments emphasised that grammatical structures were presented fairly clearly. When teachers are asked to reflect, many describe their lesson in terms of giving grammar rules or the structure they taught without being able to provide much more detail on what actually took place.

d) Rapport with students

Teachers observed were generally assessed as treating students equally (87 per cent) and being friendly and understanding (58 per cent) and qualitative comments by observers stressed good relationships between teachers and students.

e) Teacher and student talking time / level of interaction

The level of teacher talking time is high. Sixty-nine per cent of teachers talk for 75 per cent to 99 per cent of the lesson and, in a significant number of lessons (13 per cent), the teacher talked all the time. In the vast majority of observations, teachers spent most of the time (94 per cent) talking, explaining or drilling. As a result, students spent a considerable time simply listening to the teacher and levels of interaction were low. Only 4 per cent of teachers organised students in pairs or groups or provided plentiful opportunities for students to practise and use English, and only 1 per cent of observations showed teachers encouraging students to interact with each other. Analysis of comments from Training Consultants observing teachers showed that the largest number of comments from observers regarding ways to improve the lesson related to encouragement to teachers to try out new interaction patterns, including pair work and group work, provide more opportunities for speaking practice and increase the level of learner participation.

f) Use of English

Use of English in the classroom is comparatively low, with 40 per cent of teachers using English for only 1 per cent to 25 per cent of the time. In 15 per cent of lessons observed, there was no evidence of use of English. Sixty-two per cent of teachers were assessed as overusing the mother tongue during teaching. Thirty-three per cent of observer comments encouraged teachers to use more English in the class. It would appear that teachers do occasionally elicit, although this elicitation is often in Hindi with learners responding in Hindi. While this use of Hindi may at times be useful, and certainly teachers believe it is essential given learner language levels, observers frequently commented on the need to provide learners with more exposure to English. In many cases, Hindi is not actually the learners' first language and puts those learners under the pressure of trying to learn an L3 through the medium of an L2 which they may not be fully proficient in.

g) Student motivation

In the majority (77 per cent) of cases, learning is by rote and only 4 per cent of lessons could be assessed as enabling students to enjoy learning with a sense of fun. Nevertheless, observations indicated a degree of student motivation, with a little over 50 per cent of students being assessed as enthusiastic and motivated to learn.

h) Classroom management

Twenty-eight per cent of teachers were able to provide evidence of effective classroom management. Twelve per cent of teachers were able to monitor their students in the classroom and 19 per cent were able to correct using appropriate techniques. In a class in which learners spend most of the time listening passively to the teacher, the teacher requires only limited classroom management skills: examples of activities and classroom management issues related to their organisation were rare. Small numbers of teachers do monitor, give instructions in English or correct and, on rare occasions, learners are asked to write on the board. On one occasion, the teacher described a role play activity he had organised, although this only involved three students performing at the front of the class and the rest of the class listening.

Positive comments from observers on effective classroom practice	Score	per cent
Comments relating to clear use of blackboard / provision of example sentences on blackboard.	41	18.3
Comments reacting to teacher persona: confidence/positivity/audibility	33	14.7
Comments relating to elicitation (in English or Hindi)	30	13.4
Comments relating to teacher role in explaining/clarifying/giving examples/presenting grammar/presenting vocabulary (in English or Hindi)	27	12.1
Comments relating to use of English (and encouragement to use more)	26	11.6
Comments relating to provision of speaking practice/interaction/involvement	16	7.1
Comments relating to rapport/giving praise	14	6.3
Comments relating to effective use of translation or effective explanation in L1	13	5.8
Comments relating to use of visuals	8	3.6
Comments relating to encouragement of students to use the blackboard	5	2.5
Comments relating to nomination/use of names	3	1.3
Comments relating to developing pronunciation/drilling	2	0.9
Comments relating to correction	2	0.9
Comments relating to staging	1	0.5
Comments relating to monitoring	1	0.5
Comments relating to giving instructions	1	0.5
Total comments	223	

(Continued)

Learners, Patna

Comments from observers on areas for improvement/ways to improve the lesson	Score	per cent
Comments relating to a need to increase level of interaction including pair work and group work / increase student involvement / nominate / avoid focusing on individuals or the front rows	39	22.4
Comments relating to a need to use more English / avoid overuse of L1	33	18.9
Comments relating to a need to reduce teacher talking time, including lecturing and echoing and increase student talking time / encourage student speech	29	16.6
Comments relating to a need to elicit	15	8.6
Comments relating to a need to monitor	9	5.2
Comments relating to a need to include activities/variety of activities	8	4.6
Comments relating to a need to lesson plan	6	3.5
Comments relating to a need to grade language	6	3.5
Comments relating to a need to increase waiting time	5	2.8
Comments relating to a need to encourage students to write on the board	5	2.8
Comments relating to a need to praise	3	1.7
Comments relating to a need to personalise lesson content	3	1.7
Comments relating to a need to slow down speed of voice/volume	3	1.7
Comments relating to a need to deal with new vocabulary	2	1.2
Comments relating to a need to avoid errors in board work	2	1.2
Comments relating to a need to use gestures	2	1.2
Comments relating to a need to correction	1	0.6
Comments relating to a need to avoid asking students to read aloud	1	0.6
Comments relating to a need to personalise	1	0.6
Comments relating to a need to focus on specific language areas and not overload students with content	1	0.6
Total comments	169	

Table 26: Analysis of qualitative observer comments, baseline teachers, 2014

i) Reflection

Observers were not able to identify any evidence of reflection in the few lesson plans seen. In the post-observation session, a little less than 30 per cent of teachers were unable to describe what they had done in the lesson and only 9 per cent could describe how improvements could be made. Comments from teachers in this post-observation reflection stage (Table 27a) show that the most frequent types of reflection on achievements are simply that the class was satisfactory, a description of what was taught (either a reference to the textbook or to grammatical structures) or that the students had understood. A small minority of teachers were able to identify more precise positive features of the lesson. Reflection on areas to develop (Table 27b) often comprises an unelaborated wish to improve, a wish list of features including smaller classes or resources, or comments on low learner level, while very few teachers identified a need for more interaction, lesson planning or activities. Solutions suggested by teachers included unsubstantiated aims to motivate learners more, to give more homework or simply to repeat the lesson.

No reflection	Number of respondents	% responses
Unable to reflect, e.g. 'I don't know, the decision is in your hands.'	3	1.9
No or very limited reflection	**Number of comments**	
'I taught meanings of words/tenses/parts of speech, explained grammar / gave grammar rules'	24	15.3
'I was satisfied / my class was very good / I conducted the class properly / I think I did quite well' (no evidence or reasons why given)	20	12.8
'I taught the chapter/text/passage/syllabus'. 'I taught famous people/Moghuls/ narration' (no further details given)	14	8.9
'I explained / explained the text / explained everything'	14	8.9
'I tried to make the students understand / taught the students simply / tried to make the students see English is not difficult'	12	7.7
'I taught new words / taught translation / taught different meanings / taught vocabulary'	7	4.5
'I noted words on the board / used the board / wrote spellings on the board'	6	3.8
'I used Hindi because student language level is too low'	4	2.5
'I tried to improve' (no details of how recorded)	3	1.9
Other: 'My lesson was very, very musical, like an instrument'	1	0.7
No or very limited reflection: students	**Number of comments**	
'Students understood / understood the poem / listened peacefully / memorised'.	11	7.0
'I encouraged the students to be optimistic / I encouraged students' ardency / I made students personally and mentally well fed'	2	1.2
'I judged ability / evaluated'	2	1.2
Developing reflection: classroom practice	**Number of comments**	
'I used a warmer/recap/summary/reading aloud/silent reading'	6	3.8
'I asked questions / didn't lecture / answered students' questions'	5	3.2
'I corrected / corrected pronunciation'	4	2.5
'I used a drill/role play'	3	1.9
'I had good relationships with students'	1	0.7
'I tried to communicate in English'	1	0.7
'I tried to use a communicative approach'	1	0.7
Developing reflection: students	**Number of comments**	
'Students interacted/co-operated/asked questions'	6	3.8
'Students responded/answered questions/asked questions'	4	2.5
'Students concentrated/were attentive'	3	1.9

27a: Reflection on what was achieved/done well during the lesson

Table 27: *Reflection by baseline teachers, 2014*

No reflection	Number of respondents	% responses
'I don't think I need to change anything' 'I don't know'	6	4
Very limited reflection: factors beyond the teacher's control: 'My teaching would be better …	**Number of comments**	
if English was compulsory / there was a new exam'	6	4
if they taught English better at primary/middle school/lower levels'	6	4
if I had more visual aids'	4	2.7
if I had more textbooks'	1	0.6
if I had computer/microphone/audio-cassette'	3	1.9
if I had more maps and tourist books'	1	0.6
if classes were smaller'	1	0.6
if student attendance was better'	1	0.6
if the school had better infrastructure'	2	1.3
if I had a dictionary'	1	0.6
if there was a speaking class'	1	0.6
Very limited reflection: general improvement	**Number of comments**	
'I will improve / try to do better / teach well in future / give students more knowledge'.	25	16.7
'I want to learn new methods / have more training / teach in a more interesting way'	9	6
'I want to teach more grammar'	3	1.9
'I will inform the students about the language before the observation'	1	0.6
No or very limited reflection: students	**Number of comments**	
''Students are bored / not up to the mark / are from rural backgrounds and cannot learn / are not well prepared / need to be fluent / only have basic words / have problems'	10	6.6
Limited reflection: self: teacher language	**Number of comments**	
'I want to improve my word power / pronunciation / writing / avoid hesitation / avoid grammar mistakes'	14	9.3
'I need to use more English / use less Hindi'	4	2.7

Limited reflection: Teaching skills	Number of comments	
'I will inspire/motivate/convince/help students to understand English for careers / encourage students to use English outside school / make students speak'	13	8.6
'I want to have more interaction/participation / be more learner-centred / pay attention to weak students'	7	4.6
'I need to use more visual aids/the board/pictures of holy places and shrines'	6	4
'I need to teach more words / write words on the board / teach meanings'	6	4
Lesson planning (no further detail given)	3	1.9
'I can give more homework / check books and notes'	3	1.9
'I will repeat chapter/lesson'	3	1.9
'I can make content clearer'	1	0.6
'I ended in a hurry'	1	0.6
'I will make content clear' (no further detail given)	1	0.6
'I need to give more exercises'	1	0.6
'I need to give more attention to students'	1	0.6
Developing reflection: teaching skills	Number of comments	
'I need to use direct method'	1	0.6
'I need to use role play'	1	0.6
'I need to give better instructions'	2	1.3
'I walk around too much'	1	0.6
Total comments	150	

27b: *Reflection on areas for improvement*

Table 27: *Reflection by baseline teachers, 2014*

The beliefs expressed by teachers in the 2011 needs analysis contrasted with the practices observed in the 2014 observations are presented in Table 28. In no case does actual practice support teachers' beliefs. While the majority of teachers stated that lesson plans are essential and that a teacher should use as much English as possible in a lesson, few have a plan and little English is used. Teachers identified that lessons should be fun, lively and interesting, but most lessons observed involved students listening passively to the teacher and there were few examples of activities taking place.

Statements	% of teachers agreeing	Observed in practice
Using as much English as possible	91	No
The need for pair and group work in the lesson	68	No
The need for fun in the lesson.	91	No
Language not simply for examination purposes	56	Not recorded
The need for lesson planning	88	No
The need for lively, interesting lessons	97	No
Students teaching each other	85	No
Asking students for opinions	97	No
It is a good idea to let students correct their own work or each other's work.	79	No
Visuals like flashcards, real objects and mime can help understanding	94	No
A good teacher writes everything on the board	73	Not recorded

Table 28: Comparison teacher beliefs and observed practice, 2011/2014

2.4.3 Learner feedback
It was not possible to access learner feedback in the 2014 survey, but feedback from the 2011 needs analysis shows learner perceptions that the teacher speaks all or most of the time during the lessons. A small majority stated that they use English for more than half of the lesson. Almost one third (32.6 per cent) of learners suggested that they used a national language such as Hindi or a regional language such as Bhojpuri all of the time in English language lessons and 27.2 per cent most of the time. Learners noted that lessons most frequently involve copying and reading.

2.4.4 Summary and discussion
The evidence indicates that the vast majority of untrained teachers adopt a highly traditional approach in which teacher talking time is very high, as is use of regional languages as opposed to

English. Activities, games and the use of pair work and group work are rare, with rows of passive students who are – occasionally – asked a question to which they reply with short utterances. Classrooms are generally bleak places to learn, with a lack of visual aids or display of students' work. The preferred patterns would appear to be the presentation of grammar rules which, in terms of estimated student language proficiency will be absorbed by few, or what has been termed 'exegesis', the teacher working through the textbook line by line with frequent translation. Lesson planning is rare as is the teacher's ability to reflect on lesson content and how it was delivered. The principal positive feature is that rapport between teacher and students is generally good, although there is a need for more praise and encouragement. What teachers say they do or believe seems at striking variance with what they actually do. Each teacher

belief established by the 2011 needs analysis is systematically contradicted by classroom practices observed.

Untrained teachers observed regularly teach in a way which is inconsistent with the Bihar Curriculum Framework (which, anecdotally, many of them are unfamiliar with). For the teachers observed, there is a clear need for training in awareness of how learning a language can take place effectively, the concept of a more learner-centred classroom and the inefficacy of the lecture mode to support children in learning a foreign language, the need for student interaction and skills development, continuing professional development and an ability to reflect, and classroom management skills. This need has informed BLISS input and Section 2.5 will seek to measure the impact of this training.

2.5 IMPACT OF TRAINING ON DELIVERY OF CLASSROOM ENGLISH AND TRAINING OF TEACHERS

Key questions:
- What are the attitudes of teachers and teacher educators towards training?
- What is the impact of training on classroom practices?
- What variations are there in this impact?
- What is the impact of training on teachers' ability to reflect?

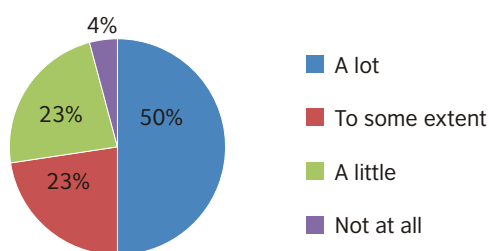Professional development interventions described in Section 2.1 include support for language proficiency and classroom practice. Section 2.2.3 has discussed the impact of the language proficiency component. This section will outline the impact of training on classroom delivery.

2.5.1 Responsiveness to training Pre-training: Identification of areas for development

Immediately before training begins, participants are asked to complete questionnaires in which they self-assess their confidence and identify areas for improvement. Representative data (28 participants just about to embark on a programme of language improvement in September 2015) shows that the group felt least confident about speaking (only 29 per cent felt very confident and 58 per cent felt their speaking skills needed to improve a lot) and much more confident about receptive skills. The sample felt considerably more confident about their awareness of grammar than of vocabulary. Using English in the classroom, motivating learners in general and encouraging them to speak, and some aspects of classroom management were all identified as areas for improvement.

Making students interested and motivated

- A lot — 50%
- To some extent — 23%
- A little — 23%
- Not at all — 4%

Using English in the classroom

- A lot — 56%
- To some extent — 18%
- A little — 19%
- Not at all — 7%
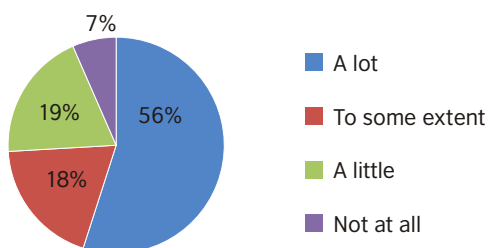
Developing students' speaking skills

- A lot — 67%
- To some extent — 22%
- A little — 7%
- Not at all — 4%
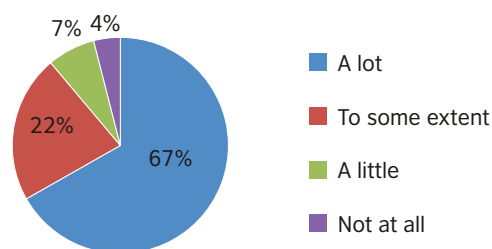
Figure 8: *Areas requiring improvement as identified by new teacher educators, 2015*

BLISS professional development

Post-training: Reaction to training and professional development

Representative teacher and teacher educator feedback following training shows that 99 per cent of participants assessed the professional development they had received as relevant or highly relevant to their work. All teacher educators who responded and 99 per cent of teachers stated that they would apply new learning practically. Interestingly, while a little less than half the teacher educators stated that they would be able to apply ideas learnt from the course with further support and a little less than half the group felt fully confident, two thirds of teachers felt confident, which is likely to indicate more awareness on the part of the teacher educators of the challenges application faces. The data would appear to indicate the receptivity and responsiveness of the two groups and a willingness to try out new ideas.

2.5.2 Teacher educators as classroom practitioners: impact

All teacher educators are also classroom teachers and the expectation is that they will apply learning from Blocks 1, 2 and 3 to their own classroom situations as well as to the training of others. One hundred and twenty-six trained teacher educators from over twenty districts in Bihar were observed delivering English language lessons to measure the impact of training. Teacher educators were around two thirds of the way towards completing training, so observations discussed in this section therefore very much represent project midline data. Observations and analyses were carried out as detailed in Section 2.4. This enables comparison with untrained teachers and measurement of impact, with some limitations: it is likely that, at entry point, language proficiency and awareness of methodology for this group might have been higher than the baseline sample. Nevertheless, the data provides broad indicators of the extent of change in teacher behaviour and practices.

How relevant was the content of the course to your current job?

Teachers

How relevant was the content of the course to your current job?

- 1%
- 1%
- 0%
- 27% — Relevant
- 71% — Highly relevant

- Highly relevant
- Relevant
- Somewhat relevant
- Not relevant
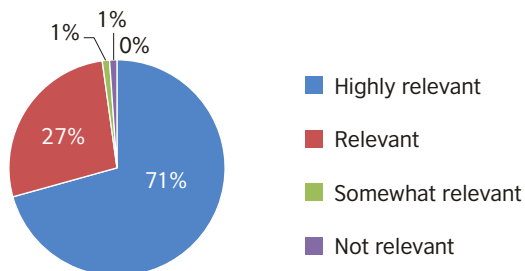
How relevant was the content of the course to your current job?

Teacher educators

How relevant was the content of the course to your current job?

- 0%
- 1%
- 26% — Relevant
- 73% — Highly relevant

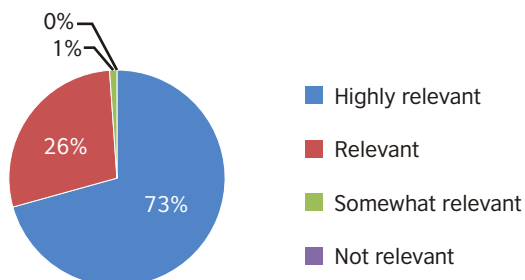- Highly relevant
- Relevant
- Somewhat relevant
- Not relevant

Figure 9: Assessment of relevance of training by teachers and teacher educators, 2013–2014

Are you going to apply new ideas and skills acquired during the course in the workplace?	
Teachers	**Teacher educators**

Are you going to apply skills acquired during the course at your workplace?

- 2% — No
- 98% — Yes

- 4% — Not Marked
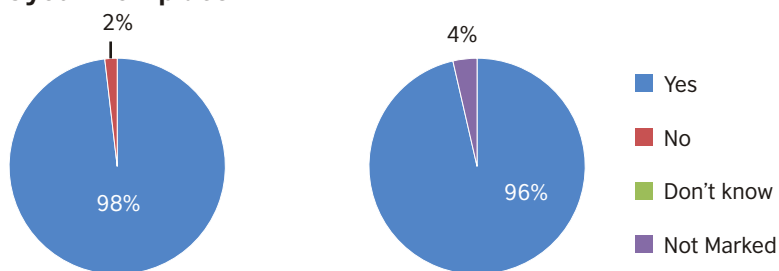- 96% — Yes

- Yes
- No
- Don't know
- Not Marked

Figure 10: Extent of interest in applying new ideas from training by teachers and teacher educators, 2013–2014

a) Classrooms

Twenty-one per cent of classrooms were described as colourful and a small number of teacher educators had displayed students' work in the classroom. Observers noted that more use of visuals was also made.

b) Lesson planning: planning and preparation

Fifty-seven per cent of teacher educators were able to provide a lesson plan to the observer or to state that they had a lesson plan, and plans were seen in 89 per cent of these cases. Forty-three per cent of lesson plans examined presented objectives although only 17 per cent of these objectives could be classified as being SMART. Sixty-eight per cent of plans showed evidence of staging activities and 62 per cent included activities which were interpreted by the observer as interesting to students. An equivalent number of teacher educators (13 per cent) to teachers observed were able to provide other lesson plans to the observer.

c) Skills

A little more than half of the plans examined included a focus on speaking skills. Reading was also highlighted in 57 per cent of lesson plans with a lesser focus on writing (43 per cent) and listening (42 per cent). In observed lessons, the skill of reading was practised most frequently (in 57 per cent of lessons observed) but ample speaking practice was provided (58 per cent of lessons observed). Listening (58 per cent of lessons observed) and writing (51.5 per cent of lessons observed) were also practised.

d) Rapport with students

As was the case with teachers, but to a more significant degree, teacher educators were assessed as treating students equally (97 per cent) and empathising with their students (87 per cent). The highest number of comments from observers related to positive relationships between teacher and students. Teacher educators also tended to elicit more than the baseline group.

e) Teacher and student talking time / level of interaction

There was a lower level of teacher talking time (TTT) than with teachers, although it was still fairly high. Sixty-one per cent of teachers talked for 75 per cent to 99 per cent of the lesson. The number of teacher educators talking all the time was also lower than that of teachers (9 per cent) but still significant. Teacher educators also spent considerable time (81 per cent of the time) talking, explaining or drilling. Over 20 per cent of comments from observers related to a need to reduce teacher talking time.

Levels of student interaction were, however, much higher in teacher educator observed lessons, with students engaging in pair and group work in 68 per cent of observations and teacher educators encouraging students to interact with each other in 60 per cent of observations. Teacher educators were very keen throughout to try new activities, especially warmers, and the frequency of these was noted by observers. At the same time, teacher educators required more support for selecting appropriate activities with a clear purpose, ensuring that there was a lesson fit with the activity and ensuring that the activity did not go on too long.

f) Use of English

Use of English in the classroom was far higher than in observed teacher lessons, with 44 per cent of teacher educators using English 75 per cent to 99 per cent of the time and 34 per cent all the time. There were no incidences of English not being used in the classroom at all. The mother tongue was still overused by some teacher educators, but at a lower level of 34 per cent of lessons observed. There was also a need for teacher educators to grade the language they were using.

Interactive learner activity, Patna

Interactive learner activity, English Club, Saran

g) Student motivation

In contrast to teachers, 49 per cent of observed lessons showed evidence of enabling students to enjoy a sense of fun, and levels of motivation were also significantly higher, with 86 per cent of students being assessed as enthusiastic and motivated to learn.

h) Classroom management

Sixty-seven per cent of teacher educators were able to provide evidence of effective classroom management. Fifty-four per cent of teacher educators were able to monitor their students in the classroom and 47 per cent were able to correct using appropriate techniques. Although observers noted that some significant progress had been made, giving instructions remained a challenge for the teacher educators and there was also a need to involve everybody, not just the front rows or more confident learners volunteering responses.

i) Reflection

Observations of teacher educators also showed considerably more evidence of an ability to reflect. Observers identified evidence of developing reflection in 46 per cent of lessons observed. Evidence was provided of teacher educators' ability to recall what had been done in the lesson (93 per cent) and to recall learners' responses to activities (60 per cent). Almost half of the teacher educators were able to suggest improvements in the lesson and 36 per cent could suggest how these improvements could be implemented.

During the post-observation interview, teacher educators observed were asked to detail what they felt had gone well/been achieved in the lesson and what they felt could be improved and how this could be done. On average, teacher educators provided two to three comments for the first question with fewer responses to the second. Comments have been analysed and are presented in Table 29.

The group seemed to be at a transitional stage in their ability to reflect on what had been achieved or could be developed further. Almost all were able to recall what had been done in the lesson and reflect on strengths in delivery. The majority of the sample were able to identify areas for improvement, although often without any level of precision. In its most limited form, reflection on achievements simply consisted of a description of the lesson, the fact that steps were followed or the lesson was completed on time. However, many teachers were able to identify specific aspects of classroom teaching, including management of interaction, instruction giving and eliciting. The fact that the highest number of comments focused on student responses or interaction was a significant indication of new awareness of learner-centred approaches.

Reflection on how the lesson could be improved involved, in its most undeveloped form, simply a wish list for resources or smaller classes, a desire for self-improvement in speaking skills or confidence or unfocused comments on the need to plan lessons. However, significant numbers of teacher educators identify specific methods, techniques or aspects of classroom management which need to be improved, including encouraging interaction, reducing TTT, timing and instructions. Sixty-four per cent of comments focusing on a specific area to improve were corroborated by comments from the observer.

Positive comments from observers on effective classroom practice	Score	%
Comments relating to rapport/giving praise	31	14
Comments relating to use of interactive activities, especially warmers, and variety within the lesson	27	12.3
Comments relating to level of elicitation	26	11.7
Comments relating to use of interactive patterns: pair work and group work	25	11.3
Comments relating to use of English	21	9.5
Comments relating to effective use of instructions	21	9.5
Comments relating to classroom management	19	8.6
Comments relating to confidence/positivity/clarity and audibility of teacher	18	128.2
Comments relating to board work	16	7.3
Comments relating to use of visuals/realia	7	3.2
Comments relating to staging	5	2.3
Comments relating to developing pronunciation/drilling	3	1.5
Comments relating to grading language	1	0.6
Total comments	220	

Comments from observers on areas for improvement/ways to improve the lesson	Score	%
Comments relating to a need to improve instructions through e.g. staging instructions, avoiding repetition, using instruction checking questions (ICQs), using gestures or demonstration	66	32.2
Comments relating to a need to reduce teacher talking time, including lecturing and echoing	44	21.5
Comments relating to a need to encourage more student involvement / nominate / avoid focusing on individuals or the front rows	24	11.7
Comments relating to a need to choose activities which are appropriate to aims and lesson content / ensure that activities have a clear purpose / lesson plan fit	19	9.2
Comments relating to a need to develop classroom management skills / ensure students' attention	11	5.4
Comments relating to a need to grade language / avoid metalanguage	9	4.4
Comments relating to a need for more effective timing (especially avoiding overlong warmers)	9	4.4
Comments relating to a need to deal more thoroughly with vocabulary / pre-teach	8	3.9
Comments relating to a need to praise more	7	3.5
Comments relating to avoiding overuse of L1	5	2.4
Comments relating to a need to focus on specific language areas and not overload students with content	3	1.4
Total comments	205	

Table 29: Analysis of qualitative observer comments, trained teachers (126 teacher educators)

No reflection	Number of respondents
Unable to reflect	1
Limited reflection: Self	**Number of comments**
'I explained the grammar/grammar rules/meaning of words/defined the words'	10
'I explained/elaborated/told my students about the topic / explained the concept of the lesson'	7
'I gave homework'	5
'I made students understand'	4
'I felt confident/comfortable'	4
Lesson planning: 'I did my steps well / I did the steps in my lesson plan'	4
'I taught the topic/moral of the text / familiarised my students with the topic'	3
'I told the story well'	1
'Lesson was completed on time'	1
'I am always devoted to my duty'	1
Limited reflection: Students	**Number of comments**
'Students were polite/disciplined/paid attention'	5
'The class was peaceful/controlled'	2
'Learners had textbooks'	1
Developing reflection: Teaching skills	**Number of comments**
'I grouped students well'	23
'I asked questions/elicited'	11
Voice/pronunciation was good/audible'	8
'My presentation/introduction/lead in/conclusion was good'	7
Lesson planning: 'I achieved aim / sequenced / staged / linked'	6
'I used the board/visuals/stick pictures well'	5
'I controlled/managed/arranged the class well'	5
'I set the context well'	3
'I praised and encouraged'	1
'I tried to reduce TTT'	1
'I used only English'	1
'I corrected errors'	1
Developing reflection: Instructions	**Number of comments**
'My instructions were short and clear'	7
'I used ICQs'	5
'Students understood/followed my instructions'	2
'I used English instructions'	1
Total instructions	15

Developing reflection: Students	Number of comments
'Students were interested/enjoyed the lesson'	16
'Students responded to/answered my questions'	9
'Students were involved/actively participated'	9
'Students spoke in English'	4
'The lesson was learner-centred'	4
'Students gave positive feedback'	2
Total responses: students	44
Skills: 'I used …	**Number of comments**
pre-reading'	6
while-reading'	7
post-reading'	3
prediction'	1
reading silently'	1
skimming/scanning'	1
rapid reading'	1
'LSRW were performed well / I developed skills in LSRW'	2
pronunciation activities/drill'	4
Activities: 'I used …	**Number of comments**
backs to the board'	2
board rush'	4
Chinese whispers'	4
class mingle'	1
ladder race'	3
mind map'	1
onion'	1
quiz'	1
running dictation'	2
Simon says'	1
slap the board'	4
throw the ball'	4
word train'	1
warmer' (unspecified)	11

30a: Reflection on what was achieved/done well during the lesson

No reflection	Number of respondents	
Unable to reflect	5	
'I want observer's comments for improvement'	1	
Very limited reflection: Factors beyond the teacher's control: 'My teaching would be better …	**Number of comments**	**Corroborated by observer**
if English was compulsory'	2	0
if classes were smaller'	3	
if I had more aids/technical equipment'	2	
if I had more training'	1	
if student attendance was better'	1	
Very limited reflection: General improvement	**Number of comments**	**Corroborated by observer**
'I will follow the techniques / improve as best teacher / labour hard and follow British Council instructions / go through techniques and tips'	6	0
'The way of teaching was not good / improvement is required everywhere'	4	
'I will apply appropriate methods / make learning easier / use improved techniques'	3	
Limited reflection: Self: Teacher language/persona	**Number of comments**	
'I need to improve my own language / be more fluent / improve my ability to narrate a story'	4	0
'I need to improve my own pronunciation'	3	1
'I need to be more confident/positive'	1	0
Limited reflection: Teaching skills	**Number of comments**	
Lesson planning: 'I lacked a lesson plan / I could have planned better' (no further detail given)	19	8
'I need to use audio-visual aids / I need to use more visuals' (no further detail given)	12	1
'I need to use more activities/games/more variety'	9	0
'I will improve student fluency / remove hesitation and shyness / improve student speaking skills / raise student speaking power' (no further detail given)	8	0
'I will improve student comprehension/understanding/reading'	5	2
'I need/want to use warmers' (no further detail given)	4	0
Developing reflection: Teaching skills	**Number of comments**	
'I need to use more pair work and group work / make my class more interactive'	21	14
'I need to use better timing / my timing was poor'	11	6
'I need to use clearer instructions / use more gestures / use more ICQs'	9	9
'I need to ask more/better (yes-no/concept) questions'	5	4
'I need to use less TTT/more STT'	5	5
'I need to group students better / put strong and weak students together'	5	3
'I need to pre-teach more vocabulary / elaborate words more'	3	1

'I need to use more vocabulary activities / develop student vocabulary'	3	0
'I need to think about / involve lower levels more'	3	3
'I need to slow down my speed of voice'	2	1
Visual aids: 'I need to organise my blackboard / make my charts more visible'	3	1
'I need to give more listening practice'	2	0
'I need to drill pronunciation'	1	0
'I need to do more pre-reading'	1	1
'I need to insist on the use of English'	1	0
'I need to give more writing practice'	1	0
Other: unclassified		
'I need to use more funny tricks'	1	0
'I need to get students to understand the music of English'	1	
'I need to do more theatre representations' (role play?)	1	

30b: *Reflection on what could be improved: trained teachers (sample of 126 teacher educators)*

Table 30: *Reflection by trained teachers (sample of 126 teacher educators)*

2.5.3 Summary and discussion

While there are limitations for direct comparison between untrained and trained teacher data, some striking differences would appear to indicate that the impact of training on classroom skills was significant and, in some cases, quite remarkable. Although there was evidence of the overuse of the mother tongue, learners in teacher educators' classrooms observed had much more exposure to English than in those of the baseline sample as a result of teacher use of the language. The level of interaction and collaboration was also far higher. Teacher educators planned lessons and prioritised speaking skills more frequently than baseline teachers and there were significant differences in quality of classroom management.

Teacher talking time, however, remained high, and input introduced in training sessions following these observations aimed to address this issue. Responses from teachers collected throughout the project (see, for example, Section 2.3.1) would suggest just how much adherence there is to the traditional concept of chalk and talk and the potential level of resistance to change as regards TTT.

Teacher educators' ability to reflect is significantly more developed than that of the baseline teachers and is at a transitional stage: many teacher educators have begun to identify what was successful in their lessons and what could be improved in concrete, specific form, although others still struggle and there is considerable scope for development.

The data here is midline data and the sample group will be receiving further training in late 2015 and early 2016. Nevertheless, despite limitations to the samples, evidence would suggest high receptivity to and significant application of professional development.

2.6 TEACHERS, LEARNING AND TECHNOLOGY

Key questions:
- What access do teachers have to information technology in Bihar?
- What obstacles are there to this access?
- What approaches do teachers take to using information technology for teaching and learning?
- How effective are these approaches?

2.6.1 Availability and accessibility to information technology: survey of teacher educators: July 2015

The project undertook a telephone survey in July 2015 with 149 teacher educators to determine:

- extent of access to computers and other forms of information technology for personal, language learning and language teaching use
- extent of personal ownership of computers and extent of personal use of computers
- existence of a computer room or other IT resources at school, accessibility to this room for teachers and learners and uses to which the computer room is put
- existence of any alternative locations where computers are accessible, e.g. Block Resource Centres, commercial internet cafés (and likely costs)
- other forms of access to online resources, e.g. mobiles.

Findings

Computer ownership is limited (and, anecdotally, may be more common in larger urban centres). A little more than a quarter of teacher educators own their own laptop or computer and are familiar with use of DVDs/CDs/data cards. However, a majority of teacher educators do not own any device of their own.

In recent years, the Department of Education has put considerable investment into establishing computer rooms in schools. Sixty-seven per cent of teacher educators state that there is a computer room in their school (although this leaves more than a quarter who do not). However, the vast majority do not have access to the computer room to work individually or with their class. Eighty-five per cent of schools where teacher educators work do not have an internet connection. A number of teacher educators commented in the survey that computers are available but not functioning (one commented that it had been stolen) or that teachers are not allowed to use the computers. This lack of accessibility to computers at school, even where they are in place, is reinforced by comments received by teacher educators throughout training.

Do you own your own laptop or computer?

Yes 27%

No 73%
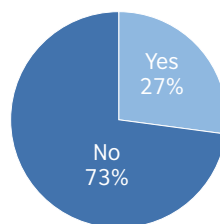
11a: Ownership of computers

Do you watch films or listen to music on DVD/CD/data card on your laptop?

Yes 28%

No 72%
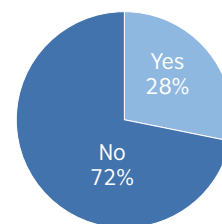
If there are computers in your school, do you have regular access to the computer room to work individually?

Yes 14%

No 86%
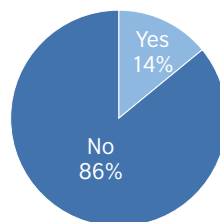
If there are computers in your school, do you have regular access to the room to work with your class?

Yes 17%

No 83%
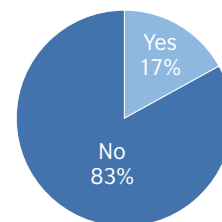
11b: Access to computers at school

Figure 11: *Teacher access to information technology, 2015*

Of those teacher educators who do have access to computers to work individually, only between one and two per cent use these resources for email writing or preparing resources. Of those who use the computer room with their students, 87 per cent described their use of the room as 'theory and practical', a rather puzzling term which needs to be explored further. A small percentage stated that they use the computer 'for classroom teaching once in a while', use British Council BLISS resources to develop pronunciation, 'switch on the computer and make programs' or 'inform the students about computers'. This extent of use is low compared to the South Asia region as a whole: a British Council research report presenting a large-scale survey completed in 2015 found that, on average, 33 per cent of teachers use computers in school across the region, with a figure of over 40 per cent for India as a whole.[237]

Sixty-eight per cent of teacher educators live near a Block Resource Centre, but 77 per cent of all teacher educators state that the resource centre does not have computers or internet connectivity.

Internet connectivity is available in internet cafés (usually referred to as computer centres or cyber cafés) for the vast majority of teacher educators at a rate of between ten and thirty rupees per hour. Other alternative sources of access to information technology are shown in Figure 12.

Apart from schools, resource centres and internet cafés, are there any other locations in your town/village where you can use a computer? If so, what are they?

Friends & family computer
Friends & family computer + Mobile
Personal computer + Mobile
Office computer + Mobile
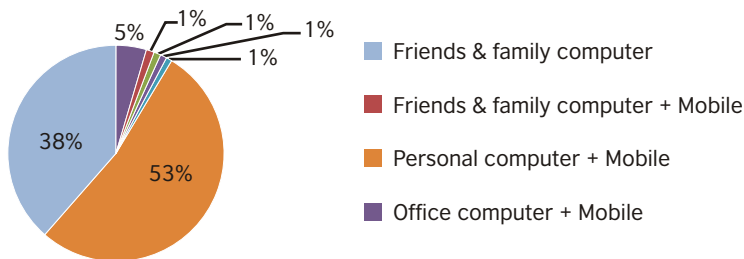
Figure 12: *Access to information technology: outside school as identified by teacher educators, 2015*

Fifty-six per cent of teacher educators state that they access online resources and systems through their mobile, and this emerges as the most popular and effective way to access these resources. Although figures for Bihar appear lower than the norm, these results corroborate the British Council South Asia study which reported widespread access to and use of mobiles among English language teachers.[238] Teacher educators gave a range of examples of how mobiles are used to access the internet, including accessing British Council and other ELT resources, obtaining information from the Bihar Educational Board and personal uses including accessing news items or travel information. Some aspects of mobile use appear more familiar than others: 89 per cent of teacher educators have registered for and use the BLISS SMS service, but 83 per cent do not regularly access the BLISS Facebook.

Qualitative views on the use of information technology for teaching and learning

In two separate exercises, teacher educators were asked to give their views on the use of information technology for teaching and learning. Teacher educators who had joined the BLISS Whatsapp group were asked to give their opinions on the use of information technology for teaching and learning. A small group of teacher educators who had expressed an interest in information technology were also interviewed during training.

Key elements included an enthusiasm for use of information technology, a keen desire to learn more about it, a certain degree of lack of confidence as to computer skills and, to some extent, a frustration with lack of IT resources which led interviewees to focus on what they would like to do with their students online rather than what they actually had done. Teacher educators identified advantages of computer use as providing 'teaching resources beyond our limited chalk and talk teaching method' and giving 'constant novelty to our teaching that catches the attention and imagination of our learners'. In one respondent's view:

'Computers are like a revolution which is changing everything. If we don't use computer technology, we are irrelevant.'

Some teacher educators described how they have used their personal mobiles in class, chiefly to show pictures to learners. One teacher educator described how he had bought a recording device to record learners, recorded them debating and played back the recording to the learners and parents: 'they were amazed'. A number described accessing British Council sites, online dictionaries or visuals (mainly on mobiles) and sharing information with members of clubs. The Whatsapp group identified advantages of IT use for professional development:

> I think most of us use technology for our personal professional development … So far as classroom communication is concerned in government schools of Bihar, it's very sad to say it's still lacking behind.

One comment appears to summarise the lack of accessibility and, to some degree, skills, but at the same time, an appreciation of what could be achieved:

> I've never used the internet for teaching purposes. I've used computers once – the students practised using a pronunciation drill to improve their language. If the students could use computers, they would be able to find out the ideas of great people and scholars and computers would inspire and motivate them.

While the enthusiasm may well be there, skills and access to computer technology may well not be.

2.6.2 LearnEnglish Schools DVD pilot, August–September 2015

The resource:
LearnEnglish Schools DVD

The British Council LearnEnglish Schools DVD is a compilation of online resources which provides support for skills development in listening, reading, writing and speaking, vocabulary and grammar developed for contexts where access to internet is a challenge. The DVD aims to provide enjoyable, motivating, interactive and contextualised language practice for learners, and, in this way, support NCERT principles on the use of computer technology which include:

- *Educational Technology makes education dynamic and arouses students' curiosity and desire to learn.*
- *Educational Technology means the teacher has to move from being a 'teacher' to being a facilitator or guide.*[239]

Content includes resources for primary, upper primary and secondary learners. Hindi is used where appropriate, and initiatives have been taken to ensure that DVD content is mapped to the National Curriculum Framework (2005). Bihar is unusual among states in that it operates its own curriculum (the Bihar Curriculum Framework), but there are potential links which can be established between the Bihar curriculum and the DVD, especially in grammatical content of coursebooks used in Bihar classrooms.

Implementation

In co-operation with RMSA Bihar, the British Council piloted the use of the resource at eight schools in Patna and three schools in Bhojpur already provided with a computer room (equipped with eleven computers) through RMSA initiatives. Ten of the eleven schools have an English teacher; all schools have an Information Technology (IT) teacher. Both English and IT teachers were targeted through the pilot, with IT teachers providing technical support. Implementation included orientation sessions for English teachers, IT teachers and head teachers. An orientation session was held in February 2015 with a refresher in August 2015, which provided hands-on practice in DVD use and matching DVD content to the text book *Panorama* and, therefore, with the curriculum, and also included awareness-raising on classroom management and child protection issues for IT use in schools. Discussions were also held with head teachers to familiarise them with the DVD and its use and possible challenges and solutions.

Monitoring and evaluation: methodology

Data collected included:

a) feedback from English and IT teachers collected through questionnaires at the beginning and end of the monitoring period, including teachers' opinions of the ease of use and usefulness of the DVD and the opportunity to reassess opinions following direct experience

b) monitoring logs completed by each English teacher detailing frequency of use, number of users and specific activities used

c) structured interviews with English teachers to explore issues in more depth and capture data on challenges and solutions for IT use

d) focus groups with small groups of learners

e) observations of DVD use at six schools in Patna and Bhojpur exploring areas including teacher classroom management, student involvement and teacher reflection.

Pre- and post-student assessment at the beginning and end of the monitoring period had been planned but was not possible as the Bihar State Examination Board is the sole body authorised to conduct assessments.

Reactions of teachers, learners and head teachers

Teacher reactions to the DVD itself were generally very positive. Teachers at both orientation sessions stated the software was fun, easy to navigate and contained a wide range of materials to develop skills, and would support learners in developing skills, grammar and vocabulary, with a minority undecided on its applicability for writing. One Bhojpur teacher commented, 'the content is a fun, interactive, very interesting and helpful way of teaching and learning English'. Teachers expressed some concerns as to the suitability of the DVD for their learners (for example, a commonly heard response: 'My students do not even know the alphabet') and not all teachers were convinced of the link between the DVD and the curriculum or coursebook. This is understandable: differences between the NCF and BCF and the fact that the coursebook reflects the BCF in a rather idiosyncratic way mean that links are not overt and require teasing out through comparisons between grammatical and lexical content. In discussion during the orientation, teachers expressed scepticism on obtaining access to the computer room/lab, reporting that, as computers were generally viewed as highly valuable and hard to replace, schools were reluctant to use them regularly. Concerns were also expressed that equipment was rarely serviced and not all units were fully operational. Teachers were aware that use of the DVD would also have an indirect impact on learner IT skills.

Initial teacher reactions to LearnEnglish Schools DVD by percentage: 2015

N = 22	Agree strongly	Agree	Neither agree or disagree	Disagree	Disagree strongly
1. It is suitable for my students' level of English.	4.5	73	17	4.5	0
2. It covers all of the skills (reading, writing, speaking, listening).	0	95.5	4.5	0	0
3. It has activities for vocabulary, grammar and pronunciation.	4.5	91	4.5	0	0
4. The material has a clear link with the curriculum used in my school.	4.5	73	13.5	9	0
5. The content is fun and entertaining.	4.5	95.5	0	0	0
6. It will help my students to learn many new words.	0	100	0	0	0
7. It will help my students to improve their grammar.	0	100	0	0	0
8. It will help my students to speak better English.	9	91	0	0	0
9. It will help my students to develop their listening skills.	0	100	0	0	0
10. It will help my students to develop their reading skills.	0	100	0	0	0
11. It will help my students to develop their writing skills.	0	86.5	13.5	0	0
12. The DVD is easy to use.	4.5	95.5	0	0	0
13. I feel confident about using the DVD with my students.	0	95.5	4.5	0	0
14. I will regularly use this DVD with my students.	0	100	0	0	0
15. I plan to use the DVD to develop my own English language skills.	0	100	0	0	0

Table 31: Initial teacher reactions to LearnEnglish Schools DVD by percentage: 2015

Of the four teachers interviewed following DVD use in September 2015, three had been actively using the DVD and in three cases some provision had been made for large classes, although in one case this comprised sending learners home, clearly not a sustainable or productive strategy. In the fourth case, there were too many learners in the room for everyone to have access to the DVD. Teacher assessments of learner motivation were generally very positive and one teacher stated that she had been using the DVD in her free time to develop her own language. Teachers described challenges such as a lack of personal information technology skills and personal language proficiency and one teacher requested further observations to support development. It would also appear that there is scope for firmer relationships between English and Information Technology teachers.

Head teachers all agreed on the quality and relevance of the DVD, but opinions on its suitability varied: around one third of the discussion group were very enthusiastic about use of the DVD with their students, some were non-committal and a minority questioned its applicability. One head teacher in particular expressed negative views on the language learning potential of his students ('My students only come to school to get a free meal and a bicycle') and questioned the choice of English and not Hindi as the language of instruction for the DVD and why English had been targeted rather than science or mathematics.

Learners were interviewed and asked to complete questionnaires during school visits; 98 per cent of learners stated in questionnaires that they had had some measure of regular use of the DVD. Ninety-seven per cent of learners had enjoyed using the DVD, 96 per cent had found the contents interesting and all learners would like the opportunity to use the DVD in the future. Learners identified reading as the skill the DVD helped them with most, with vocabulary and listening also very important. Learners also confirmed that they felt the

DVD was easy to navigate and language was easy to understand (despite teachers' concerns).

Learners in focus groups stated as advantages the impact on learning (including grammar), which some learners felt would lead to future employability; the opportunity to work with games, videos, songs and visuals and to interact in small groups; in cases where language was a problem, learners could replay the same story or song or retry the same activity more than once.

Classroom observations
Observations indicated a number of possible outcomes for DVD implementation and, although the sample of lessons observed was small, the evidence indicated these outcomes are likely to be found in larger samples. They include:

a) successful use of the DVD
At Patna Muslim School, rotations had been timetabled as the number of learners in the class was too high for all students to participate at the same time. Learners worked in small groups, with the teacher monitoring and giving instructions in English. Sufficient evidence was provided of previous DVD use and learner involvement was high.

b) partly successful use of the DVD
In a second observation in Patna, no provision had been made for large numbers, with the whole class in the room, with far too many learners for each learner to have access to the computers and some sitting on the floor and having no access. Learners worked together but generally selected at random from the primary and upper primary resources of the DVD, working in an unplanned way, with English and Information Technology teachers playing only a limited role in providing support.

c) teacher-fronted use of the DVD
In two observations (Patna and Bhojpur), learners visited the computer room but did not interact with the DVD themselves, watching demonstrations of the DVD given by (in one case) the IT teacher and

(in the second) the English teacher. In one lesson, the teacher began by narrating a story from the *Panorama* coursebook in Hindi, while Standard 10 learners, seated traditionally in rows, listened. The teacher then completed a DVD practice activity on articles herself on the DVD, while learners watched on a TV monitor mounted on a wall.

d) no use of the DVD observed
In one Bhojpur school, no observation was possible because the computer room was not functional: the roof of the computer room had collapsed a few months previously and it had not been repaired. Apparently, this (and an erratic electricity supply) had been a long-standing problem. In another school, observers reported that the teacher appeared very unfamiliar with the DVD and that equipment was not in working order.

This limited data from comparatively small samples may well represent more general trends in use of information technology across the state. The pilot indicated only very mixed results in terms of organised, interactive activities. Two of the observations in particular provided classic examples of teachers 'traditionalising' and turning what should have been an interactive activity into a teacher-led demonstration in which only the teacher was allowed anywhere near the computer. There was also evidence of computers or computer rooms not functioning, confirming teacher and teacher educator feedback.

Summary and discussion
Any initiative in Bihar which aims to encourage the use of software and to develop English through information technology will inevitably be faced by a raft of challenges. Teachers interviewed in this programme generally self-assessed their information technology skills (and language proficiency) as inadequate and some were happy to abdicate all responsibility to the Information Technology teacher (who, despite their enthusiasm, might have limited or no language or language teaching skills). Teachers found it difficult

to find links between the DVD and the coursebook and no teacher was able to produce a lesson plan. Only a minority of schools have successfully developed timetabling skills to accommodate batches of learners using the computer room at a time. There are significant problems with computer room infrastructure and maintenance of equipment.

These challenges are familiar from experiences elsewhere in and outside India of implementing use of information technology in contexts comparable to Bihar. The British Council 2015 research report stresses that, according to respondents, there are often problems with maintenance or permission to use computer labs across the South Asia region.[240] Moreover, in the majority of schools, learners had had some experience of working with the DVD, even if organisation of this learning could have been more effective. Learner reactions were extremely positive, and, based on only limited exposure, high numbers of learners agreed that the DVD was easy to use, language level was generally appropriate, and the resource was interesting. Some learners were able to identify a positive impact on their learning. Despite all the challenges, end-users would clearly like more. Initiatives of this type are one concrete way to ensure that learners have more exposure to using information technology (both in itself and for language learning purposes) and that, through this exposure, teachers might incrementally develop more effective skills.

Perhaps the greatest obstacle to successful implementation is the fact that, for a typical teacher in a context such as Bihar, conducting an effective DVD lesson makes such enormous demands not simply because that teacher may have only very limited computer skills. Baseline observations show that an average class in Bihar is very teacher-centred, teachers seldom if ever plan lessons and are extremely coursebook dependent, greatly over use regional languages and are unfamiliar with organising interaction. These are

perhaps issues that require tackling in terms of general rather than IT-based classroom practice. Once progress has been made in these areas, teachers can engage with developing familiarity with resources and appropriate computer skills to use them, matching the coursebook to resources beyond the coursebook and managing learners working in the computer room. A future pilot will aim to track the progress of teachers in using the DVD who have already received training in classroom methodology through the project.

2.7 CONCLUSIONS

2.7.1 Learners and parents

As described in Part One, with the exception of studies by ASER which look only at selected aspects of English language proficiency, results of examinations at Inter level and National Achievement Survey results on reading comprehension, there is no reliable data available on English learner language level. Data based on very limited samples by the BLISS project would indicate that this level is low, and certainly far below B1 level for the majority of learners. The number of learners in an average secondary school class who may have very limited or no English language skills is difficult to identify, but it is likely to be very significant. After eight years of English language learning, large numbers of learners are likely to have made very little progress. Systematic assessment of learner language level is long overdue.

Nevertheless, what emerges from the limited interaction with learners in the BLISS data is an enthusiasm of learners to learn English, a desire for variety and more effective teaching activities and an appreciation of the importance of English. Learners were keen to engage in new types of activity and, in particular, to have the opportunity to use software to develop their skills. More research is required, but learners appear open to change. More research is also needed to identify the attitudes and opinions of parents. Parents interviewed in 2011 expressed a range of opinions about English and English language learning. The voices of learners and parents deserve a wider audience and the project has planned an initiative to identify and present these views. Once project research, which will be undertaken in 2015–2016, is complete, it will be interesting to see if these views have changed.

2.7.2 Teacher language proficiency and current practice

While the negative focus of the national media on low levels of teacher proficiency and teaching practices might be excessive at times, BLISS data certainly gives very limited grounds for optimism as regards teachers who have not received training. In almost every district where testing took place, around half of the sample groups had a language proficiency below B1, with a small minority having no English skills at all. This situation seems to be state-wide and not limited to poorer or more rural areas. At the same time, even these districts have numbers of teachers with a B1 or even B2 proficiency. The data has not shown any particularly significant increase in general proficiency over the last four years, except that newly recruited teacher educators do have a noticeably higher language level.

Class size does converge on the norm of over 50:1 as presented through DISE statistics in Part One, although a very wide range of class sizes combine to produce this norm, with some classes observed having fewer than 20 students and a small number over 200. With variations, this trend is similar across districts and, for an average learner, it seems something of a lottery whether they find themselves in a class much smaller than state and national averages or one much larger. This variance in class size also has implications for training and to what extent to focus on large class methodologies.

Data on classroom practice is also rather depressing in its depiction of teacher-centred classrooms with limited use of English, and virtually no interaction or opportunities for learners to use English for themselves. Anecdotally, what emerges from discussion with teachers is something of a cycle of despair, with teachers taking a very disparaging view of the abilities of their students (although rapport in the classroom is often good) and unsure how to develop them. There are considerable disparities between how teachers are encouraged to teach (with a curriculum that accepts the benefits of learner-centred education but a text-heavy coursebook with a demanding

level of language), how teachers profess to teach, how they teach in reality, and what learners actually learn in English language lessons. For untrained teachers, project data would indicate that language proficiency and current practice are weak by any yardstick.

The efforts of the Department of Education to introduce information technology both at an administrative level and in schools has been strenuous, but it is clear from the limited data presented in Part Two that its use for English language teaching and learning purposes is very new in Bihar and faced by many challenges, including accessibility and low teacher skills and confidence about these skills. Observers noted a mix of more or less effective activities, 'traditionalising' the use of software and instances where no use was possible. However, again, learner and teacher enthusiasm for new technology is clear, as is a flexible approach to use of mobile phones.

2.7.3 The impact of training

When professional development is provided, however, the results can be quite remarkable. There is high demand for and strong response to training by teachers. While they were not subject specialists and were unable to comment in detail, head teachers also identified an urgent need for training. The BLISS data presented in Part Two confirms the impact of language proficiency training, with significant upward movement between CEFR bands. Professional development for teacher educators has also led to much more prevalent lesson planning and initiatives by the teacher to introduce more interesting activities into the classroom and develop learners' speaking skills. There is also noticeable development in an ability to reflect.

In Part One, the challenges that have faced the Department of Education in implementing training and current initiatives to expand training were described. Conversations with RMSA

officials in 2015[241] have indicated a change in focus from quantity (in which significant steps have been made) to quality. Teacher responses to face-to-face training and continuing professional development and the impact assessed would reinforce that this is exactly the strategy which is required. Collaboration between RMSA and the British Council on identifying ways to embed professional development delivered through the BLISS project into state systems has begun and will continue throughout 2016.

In 2015, the British Council launched a set of Teacher Development Films which show teachers and learners in the classroom.[242] Teachers are seen using simple but effective large-class, low-resource activities to encourage learner reading skills, and it is hoped the films will be of use both as a self-access resource and a training aid. What is immediately apparent in the films is the enthusiasm and energy of teachers in using these techniques and the excellent responses of learners, whose motivation is evident as they engage in pair work and group work, interact with the teacher and, perhaps most importantly, enjoy the experience of language learning. It is hoped that it is this type of classroom context which will be captured by a future edition of a profile of English in Bihar.

Filming, BLISS Teacher Development films
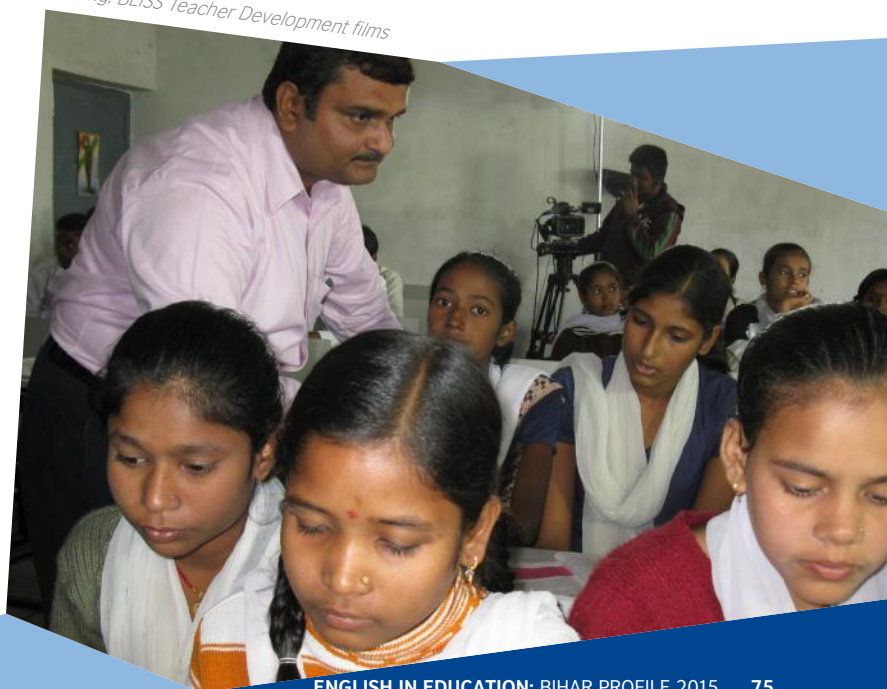
BIBLIOGRAPHY

Publications and online resources produced by the Government of India

Statistics: State overview

Bihar's Annual Tourist Statistics Report Department of Tourism Government of India Market Research Division
http://tourism.gov.in/CMSPagePicture/file/marketresearch/statisticalsurveys/Final.pdf

Bihar Population Census data 2011: http://www.census2011.co.in/census/state/bihar.html

Bihar Population Census data 2011: households:
http://allaboutbiharhttp//censusindia.gov.in/2011common/nsdi/houses_household.pdf.com/govt_state.jsp

Crime in India, 2012 National Crime Bureau
http://ncrb.nic.in/CD-CII2011/Statistics2011.pdf

Ministry of Statistics and Programme Implementation
http://mospi.nic.in/Mospi_New/site/inner.aspx?status=3&menu_id=82

National Commission for Enterprises in the Unorganized Sector (2009)
www.indianstatistics.org/nceus.html

National Commission on Population:
http://populationcommission.nic.in/content/934_1_Densityofpopulation.aspx

Patna district 2011 census data http://www.census2011.co.in/census/district/82-patna.html)

Press Note on Poverty Estimates Government of India Planning Commission (2013)
http://planningcommission.nic.in/news/pre_pov2307.pdf

Report on Employment and Unemployment Survey
http://labourbureau.nic.in/rep_1.pdf

Third Wave of the District-Level Health Survey (DLHS-3) in India (2007-08)

Trends in Urbanization, Indian Census Papers (2011)
www.censusindia.gov.in/2011-prov-results/paper2-vol2/data_files/Bihar/Chapter_IV.pdf

Statistics: education: India and analysis of individual states

Elementary Education in India: Progress towards UEE, National University of Educational Planning and Administration (2013)
www.dise.in/Downloads/Publications/Publication2013-14/FlashBook2013-14.pdf

Secondary Education in India: Progress Towards Universalisation, National University of Educational Planning and Administration (2013)
http://dise.in/Downloads/Publications/Documents/SecondaryFlash%20Statistics-2013-14.pdf

School Education in India U-DISE 2013, National University of Educational Planning and Administration
www.dise.in/Downloads/Publications/Documents/U-DISE-SchoolEducationInIndia-2013-14.pdf

Elementary Education in India: Where do we stand? State Report Cards 2011–2012,
National University of Educational Planning and Administration
www.dise.in/Downloads/Publications/Publications%202011-12/State%20Report%20Cards%202011-12.pdf

Statistics of School Education 2010–2011 Government of India Ministry of Human Resource Development
Bureau of Planning, Monitoring & Statistics New Delhi 2012
http://mhrd.gov.in/sites/upload_files/mhrd/files/SES-School_201011_0.pdf

State Report Cards SEMIS 2010–2011
www.semisonline.net/ReportCard/State%20Report%20Card/State%20Report%20Cards_2010-11_SEMIS.pdf

DISE statistics 2009–2010
www.dise.in/Downloads/Publications/Publications%202009-10/SRC%202009-10/SRC%202009-10.pd

Enrolment figures DISE 2006–2007 Enrolment-based indicators
www.dise.in/Downloads/Publications/Publication%202006-
07/AR0607/Enrolment%20Based%20Indicators.pdf

Educational policy and research
All India Survey on Higher Education 2011–2012 Government of India Ministry of Human Resource
Development Department of Higher Education New Delhi 2013
http://mhrd.gov.in/sites/upload_files/mhrd/files/statistics/AISHE2011-12P_1.pdf

ASHE: Annual Status of Higher Education in States and UTs (2014)
http://www2.deloitte.com/content/dam/Deloitte/in/Documents/IMO/in-imo-annual-status-of-higher-
education-2014-noexp.pdf

The Constitution of India
http://hcmimphal.nic.in/Documents/constitutionofindiaacts.pdf,

The Constitution of India (Eighty-Sixth Amendment) Act (2002)
http://indiacode.nic.in/coiweb/amend/amend86.htm

Interrogating 'Best Practices' for the Implementation of School Nutrition Programmes in Urban India, Centre
for Equity Studies New Delhi 2003
http://centreforequitystudies.org/wp-content/uploads/2012/08/Best-practices-Mid-day-meal.pdf

National Achievement Survey Class 3 Achievement Highlights 2014
http://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/Main-Report-NAS-Class-3-Final.pdf

National Achievement Survey Class 5
www.ncert.nic.in/departments/nie/esd/pdf/Bihar.pdf

National Curriculum Framework (2005)
www.ncert.nic.in/rightside/links/pdf/framework/english/nf2005.pdf

National Policy on Education (NPE) 1986
www.ncert.nic.in/oth_anoun/npe86.pdf

National Policy on Education (NPE) 1986: Programme of Action 1992
www.teindia.nic.in/Files/Reports/CCR/POA%201992.pdf

NCTE (Determination of minimum qualifications for recruitment of teachers in schools) Regulations (2001)
www.ncte-india.org/NOTI/noti27.htm

Planning and Appraisal Manual (Secondary Schools), National University of Education and Planning (2012)
http://mhrd.gov.in/sites/upload_files/mhrd/files/upload_document/Planning%20And%20Appraisal%20Manu
al%20(%20NUEPA).pdf

Position Paper National Focus Group on Educational Technology, National Council of Educational Research
and Training (2006)
www.ncert.nic.in/new_ncert/ncert/rightside/links/pdf/focus_group/educational_technology.pdf

Right To Education, Department of School Education and Literacy, Ministry of Human Resource Development
(2010)
http://mhrd.gov.in/rte

Teaching of English at Primary Level in Government Schools: NCERT (2012)
www.ncert.nic.in/departments/nie/del/publication/pdf/english_primary_level.pdf

Twelfth Five-Year Plan (2012–2017) Social Sectors
http://mhrd.gov.in/sites/upload_files/mhrd/files/document-reports/XIIFYP_SocialSector.pdf

Publications and online resources produced by the State of Bihar

Statistics: State overview
'Approach to 12th Five-year Plan 2012'. Planning Commission, Government of Bihar
http://planning. bih.nic.in/Documents/DOC-01-06-08-2012.pdf

Bihar: Administration
www.bihareebabu.com/ADMINISTRATIVE_UNITS.HTM

Bihar Chamber: Income tax rates
www.biharchamber.org/sites/default/files/Income%20Tax%20Rates%20FY%202012-13.pdf

Bihar State Council / Confederation of Industries: Bihar @2022 Vision Document
www.indiaat75.in/document/biharvision@2022.pdf

Government of Bihar, Finance Department, Economic Survey 2014–2015
http://finance.bih.nic.in/Documents/Reports/Economic-Survey-2015-EN.pdf

Press release: Government of Bihar: Finance Department: Main features: budget 2015–2016
http://finance.bih.nic.in/Budget/Highlights/Budget-Highlights-English.pdf

Status of Agriculture in Bihar, Department of Agriculture, Government of Bihar 2003
http://bameti.org/pdf/state_profile.pdf

Government of Bihar: statistics and educational policy
About BSMP
www.bmsprmsa.in/about.htm

Bihar Curriculum Framework: Education for Equity, Harmony and Excellence: 2008
Rajya Shiksha Shodh Evam Prashikshan Parishad, Bihar

Bihar Curriculum Framework: Revised Syllabus for Classes I–V. 2009. SCERT, Bihar

Bihar Curriculum Framework: Revised Syllabus for Class IX–X. 2009. SCERT, Bihar

Bihar Education Department
www.educationbihar.gov.in/Organizational_Structure.aspx

Bihar Education Project Council: SSA
http://bepcssa.in/en/NPEGEL_IMPLEMENTATION.PHP

Bihar School Examination Board 2007–2009 'English Language'
http://biharboard.bih.nic.in/Docs/lit.pdf

Bihar Teacher Recruitment 2015
https://www.sarkariexaam.com/bihar-teacher-recruitment-2012/1882

BMSP: RMSA
www.bmsprmsa.in/rmsa.htm

Bodh: Chal Padh, Kuch Ban: A Newspaper for Neo-literates
www.jagranpehel.com/ContentPages/Programs/ProjectDetails.aspx?programId=2&projectId=39

Department of Education Bihar: CTET (2015)
http://ctet-online.blogspot.in/p/bihar-tet-2015-notification-syllabus.html

Education Department, Bihar: Budget
www.educationbihar.gov.in/Budget.aspx

English Language and Literature. In Revised Curriculum for School Education: Upper Primary, (2009), Patna, Bihar State Textbook Corporation / SCERT.

Government of Bihar: A snapshot of changing Bihar
www.theigc.org/wp-content/uploads/2014/09/Country-India-Bihar-Bihar-Data-Presentation.pdf

Government of Bihar: Department of Education: Teacher salaries (2015)
http://bssc-bihar.in/bihar-teacher-salary-july-2015-trained-untrained-teachers-pay/

Government of Bihar: Education Department: Bihar Education Service Rules
www.educationbihar.gov.in/ACTPdf/13Feb2014123009.pdf

Government of Bihar, Department of Information Technology, Information and Communication Technology Policy (2011)
http://gov.bih.nic.in/Documents/IT-Policy-2011-English.pdf

Government of Bihar: Educational Statistics
http://gov.bih.nic.in/Statistics/Table-115.pdf

Government of Bihar: Growth with Justice
http://planning.bih.nic.in/Documents/DOC-01-06-08-2012.pdf

Government of Bihar: Planning and Development Department: Bihar through figures
http://planning.bih.nic.in/

Minutes of the 40th RMSA PAB Meeting March, 2014
http://mhrd.gov.in/sites/upload_files/mhrd/files/minutes/Bihar.pdf

Report of the Common Law System Commission, Government of Bihar, 2007
www.educationforallinindia.com/CSSReport.pdf

Report of the Joint Review Mission on Teacher Education Bihar 17–23 March, 2013
www.teindia.nic.in/Files/jrm/JRM_Reports/JRM-TE-BiharMarch7Version8_with_Field_Notes.pdf

Publications and online resources: organisations and institutions

ASER annual reports 2005–2014
www.asercentre.org/p/84.html

ASER: 2011 Translating Policy into Practice: Right to Education, Assessment Survey Evaluation Research (ASER) Centre, New Delhi

Babasaheb Bhimrao Ambedkar Bihar University, Muzaffarpur: self-study report submitted to NAAAC
www.brabu.net/naac/ssr.pdf

Best Media
www.bestmediainfo.com/2011/10/irs-q2-2011-top-10-dailies-in-bihar/

BLISS: Bihar Language Initiative for Secondary Schools (2013): English for All in Bihar (online film). Available online at:
https://www.youtube.com/watch?v=ZDtkW4Uc5kQ

BLISS: Bihar Language Initiative for Secondary Schools:
https://www.britishcouncil.in/programmes/english-partnerships/english-state-partnership-projects/bihar-language-initiative

BLISS: Bihar Language Initiative for Secondary Schools (2015): Teacher Development Films: currently available at:
https://www.youtube.com/playlist?list=PLUwf3cy5FZzj28BOO54tOqqMX3-N-ju88

British Council India (2015) Technology for Professional Development, Access, Interest and Opportunity for Teachers of English in South Asia. British Council, New Delhi.
http://issuu.com/britishcouncilindia/docs/digital_teachers_report_final_low_r

Chanakya National Law University, official website
www.cnlu.ac.in/

CfBT / DFID (2011) Preliminary Study into Low Fee Private Schools and Education,
http://r4d.dfid.gov.uk/pdf/outputs/mis_spc/60912-GyanShalaFinalReport.pdf

Department for International Development (DFID) (2015) Summary of DFID's work in India 2011–2015
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67378/india-2011-summary.pdf

Deshkal Society (2014) Report on Social Diversity and Learning Achievement: The Status of Primary Education in Bihar
www.deshkalindia.com/pdf/Reports/Final%20Report_22-10-14.pdf

Gray Matters Capital (2012) Affordable Private Schools (APS) Sector Analysis Report – 2012
www.periglobal.org/sites/periglobal.org/files/APS%20Sector%20Analysis_2012_GrayMattersCapital.pdf

International Growth Centre (IGC)
www.theigc.org/project/quantitative-baseline-assessment-of-child-nutritional-status-and-performance-of-icds-supplementary-nutrition-programme-in-bihar-2/

International Growth Centre (IGC): Choice and cost: The role of household decision making and spending on secondary education in rural Bihar (2015)
www.theigc.org/project/choice-and-cost/

Patna University
www.patnauniversity.ac.in/

Plan India (2015, upcoming report) State of the girl child in India: the state of the girls: what's next

Pratichi (India) Trust Kolkata and Asia Development Research Institute Patna Status of Elementary Education in Patna (2011)
http://pratichi.org/sites/default/files/Status_of_Elementary_Education_in_Bihar.pdf

UNICEF India, Bihar
http://unicef.in/State/Bihar#sthash.2LR3FzKr.dpuf

United Nations Millennium Goals
www.un.org/millenniumgoals/

World Bank press release, (27 February 2015)
www.worldbank.org/en/news/press-release/2015/02/27/bihar-needs-ramp-up-power-infrastructure-provide-access-all

World Bank press release (8 September 2015) Improving the quality of teachers in India's Bihar state
www.worldbank.org/en/news/video/2015/09/08/improving-the-quality-of-teachers-in-bihar-state

World Bank 2015 Program Appraisal Document (2015) Enhancing Teacher Effectiveness in Bihar
http://documents.worldbank.org/curated/en/2015/05/24438295/india-enhancing-teacher-effectiveness-bihar-operation-project

Books, research and journal articles

Abbas, R and Varma, D (2014) Internal labor migration in India raises integration challenges for migrants. Migration Policy Institute: Online Journal: 3/3/14. Available online at:
www.migrationpolicy.org/article/internal-labor-migration-india-raises-integration-challenges-migrants

Atherton, P and Kingdon, G (2009) The relative effectiveness of regular and 'para' teachers in India. Institute of Education, University of London. Available online at:
www.isid.ac.in/~pu/conference/dec_09_conf/Papers/PaulAtherton.pdf

Azam, M, Chin, A and Prakash, N (2010) The returns to English-language skills in India. Discussion Paper Series, IZA. Available online at:
http://ftp.iza.org/dp4802.pdf

Banerjee, R (2011) Challenging Bihar on primary education. EPW Economic & Political Weekly Vol xlvi no 11. Available online at:
http://old.aud.ac.in/Downloads/Rukmini_Banerjee-EPW.pdf

Banerjee, R (2015) 'Language and Learning: the Challenges of Primary Education in India'. Conference presentation, 11th International Language and Development Conference: Multilingualism and Development, New Delhi.

Bangay, C and Latham, M (2012) 'Are we asking the right questions? Moving beyond the state vs non-state providers debate: Reflections and a Case Study from India'. *International Journal of Educational Development* 33 242-255

Basu, K (2013) 'The Bihar economy and some field notes' in *The New Bihar*, eds. Singh, N K and Stern, N. Harper Collins, London, 2013.

Bushan, S and Rustagi, P (2013) Education in Bihar. Available online at:
www.globalbihar.net/wp-content/uploads/2012/02/papers/sudhanshu_bhushan.pdf

Chaudhury, N, Halsey Rogers, F, Hammer, J, Kremer, M and Muralidharan, K (2004) Teacher absence in India, Journal of the European Economic Association 9/15/04.
Available online at:
http://siteresources.worldbank.org/DEC/Resources/36660_Teacher_absence_in_India_EEA_9_15_04_-_South_Asia_session_version.pdf

Desinghkar, P, Kumar, S, Kumar Chobey, S and Kumar, D (2006) The Role of Migration and Remittances in Promoting Livelihoods in Bihar, London, Overseas Development Institute, London
Available online at: www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/2354.pdf

Ghosh, P (2004) Socioeconomic Status of Muslims. Asian Development Research Institute.
Available online at:
www.adriindia.org/dashboard.php?name=sections&id=15&action=details&catid=69

Ghosh, P and Rana, K (2011) Elementary Education in Bihar: Progress and Challenges. Centre for Economic Policy and Public Finance. Available online at:
www.adriindia.org/download.php?id=75&op=publication

Graddol, D (2010) English Next India: The Future of English in India. London, British Council.

Gupta, P. (2004) Socio-linguistic Constraints in Teaching English. New Delhi, Concept.

Kapur, S and Chakraborty, T (2008) English Language Premium: Evidence from a policy experiment in India. Washington University, St. Louis, USA

Kaushal, S and Patra, S (2007) Elementary Education in Bihar, Some reflections from DISE.
Available online at:
www.dise.in/Downloads/Use%20of%20Dise%20Data/Savita%20Kaushal%20&%20%20Sudhanshu%20S.%20Patra.pdf

Kingdon, G (2010) The Impact of the Sixth Pay Commission on Teacher Salaries: Assessing equity and efficiency effects. RECOUP Working Paper No. 29, Research Consortium on Educational Outcomes and Poverty.
Available online at:
http://ceid.educ.cam.ac.uk/publications/WP29_GK_SixthPay.pdf

Kingdon, G and Rao, S (2010) 'Para Teachers in India: status and impact'. Economic and Political Weekly, Vol. XLV, No. 12, p. 60. Available online at:
http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.469.6135&rep=rep1&type=pdf

Lewin, K M (2011) Beyond Universal Access to Elementary Education: Is it Achievable at Affordable Costs? University of Sussex, Centre for International Education, UK.
Available online at:
http://r4d.dfid.gov.uk/PDF/Outputs/ImpAccess_RPC/PTA53.pdf

Majeed, R and Nuka, P (2015) Modernizing the state, connecting to the people: Bihar, India, 2005–2012. Innovations for Successful Societies, Princeton, Princeton University. Available online at:
http://successfulsocieties.princeton.edu/

Muralidharan, K and Prakash, N (2015) Cycling to School: Increasing Secondary School Enrolment for Girls in India. Available online at:
http://econweb.ucsd.edu/~kamurali/papers/Working%20Papers/Cycling%20to%20School%20(Current).pdf

Nilekani, N (2009) *Imagining India*, Penguin, New Delhi.

Rangaraju, B, Tooley, J and Dixon, P (2012) The Private School Revolution in Bihar: Findings from a Survey in Patna Urban. New Delhi, India, India Institute / EG West Centre, Newcastle University

Ranjan, P and Prakash, N (2012) Education policies and practices: what have we learnt and the road ahead for Bihar. Discussion Paper Series, IZA. Available online at: http://ftp.iza.org/dp6614.pdf

Singh, R and Bangay, C (2014) Low fee private schooling in India – more questions than answers? Observations from the Young Lives longitudinal research in Andra Pradesh. International Journal of Educational Development. EDV-1597

Sudhanshu, B and Preet, R (2010) Education in Bihar.
Available online at:
www.globalbihar.net/wp-content/uploads/2012/02/papers/sudhanshu_bhushan.pdf

Tsujita, Y (2008) An overview of inequality in education in Bihar. Available online at:
www.ide.go.jp/Japanese/Publish/Download/Report/pdf/2008_0106_ch3.pdf

THE PRESS

Bihar overview	
Migration	**Times of India** 7/1/2013: http://timesofindia.indiatimes.com/india/Im-proud-to-be-a-Bihari-says-Mauritius-president/articleshow/17918798.cms
Tourism	**IBN Live:** http://ibnlive.in.com/generalnewsfeed/news/tourism-given-industry-status-in-bihar/225904.html
Teaching and learning	
Teacher recruitment	**Daily Mail** 18/9/2012: www.dailymail.co.uk/indiahome/article-2221473/PATNA-DURBAR-Returning-teachers-schools.html
Student enrolment	**Calcutta Telegraph** 19/7/2014: www.telegraphindia.com/1140719/jsp/bihar/story_18629660.jsp#.Vfwc0fmUdBk
Information technology	**Economic Times** 22/3/2012: http://articles.economictimes.indiatimes.com/2012-03-22/news/31225114_1_computer-training-lakh-teachers-microsoft-director

The Hindu, 5/5/2013. www.thehindu.com/business/Industry/mobile-subscribers-largest-in-uttar-pradesh-tamil-nadu/article4686257.ece |
| School construction | **Hindustan Times** 6/9/2012: www.hindustantimes.com/patna/bihar-govt-to-build-1-000-high-schools-every-year/article1-925520.aspx |
| Growth of English-medium schools | **Times of India** 28/9/2015 http://timesofindia.indiatimes.com/india/Number-of-children-studying-in-English-doubles-in-5-years/articleshow/49131447.cms |
| Teacher standards | **The Economist** 28/3/2015: www.economist.com/news/asia/21647337-teaching-standards-go-out-window-crib-sheets-come-wall-shame,

India Today 18/1/2014: http://indiatoday.intoday.in/education/story/over-2500-school-teachers-fail-bihar-teaching-competency-test/1/338461.htm |
| The private sector | **New York Times** 15/11/2003: www.cs.princeton.edu/~rywang/05s598/docs/031115-000938.india_school

New York Times 14/12/2003: www.nytimes.com/2003/12/14/weekinreview/the-world-in-india-a-new-heyday-for-english-the-language.html |

ENDNOTES

1   2011 census
2   2011 census
3   2011 census
4   National Commission on Population
5   UNICEF India: Bihar
6   2011 census
7   Banerjee, 2015, based on 2011 ASER report
8   2011 census
9   Press Note on Poverty Estimates Government of India Planning Commission July 2013
10 Government of Bihar, Finance Department, Economic Survey 2014–2015
11 Desinghkar et al. p8
12 International Growth Centre
13 Report on Employment and Unemployment survey
14 See, for example, Times of India 7/1/2013
15 Desinghkar et al. p18
16 Migration Policy Institute 3/3/2014
17 Desinghkar et al. p12
18 Government of Bihar, Finance Department, Economic Survey 2014–2015
19 National Commission for Enterprises in the Unorganized Sector December 2009
20 Government of Bihar, Finance Department 2011–2012
21 State of Agriculture in Bihar, Department of Agriculture, Government of Bihar
22 Government of Bihar, Finance Department, Economic Survey 2014–2015
23 Government of Bihar, Finance Department, Economic Survey 2014–2015
24 Government of Bihar, Finance Department, Economic Survey 2014–2015
25 Bihar's Annual Tourist Statistics Report Department of Tourism
26 IBN Live
27 'Approach to 12th Five-year Plan 2012'
28 World Bank press release 2015
29 Bihar Population Census data 2011: households
30 The Hindu, 5/5/13
31 Majeed and Nuka
32 Patna district 2011 census data
33 Muralidharan and Prakash p42
34 Economic Survey of Bihar 2014–2015
35 Trends in Urbanization, Indian Census Papers 2011
36 Ghosh and Rana p37
37 Desinghkar et al. p4
38 Ghosh passim
39 Press Notes on Poverty Estimates
40 Bihar Administration
41 Ministry of Statistics and Programme Implementation
42 Press Note on Poverty Estimates Government of India Planning Commission July 2013
43 Bihar Education Department
44 About BSMP
45 Bihar Education Project Council: SSA
46 BMSP: RMSA
47 National Curriculum Framework 2005
48 Bihar Education Project Council: SSA
49 Elementary Education in India: Progress towards UEE
50 Secondary Education in India: Progress Towards Universalisation
51 Conversation with RMSA 2015
52 Elementary Education in India: Where do we stand?

53   Statistics of School Education 2010–2011

54   Bihar Chamber: Income tax rates

55   Press release: Government of Bihar: Finance Department: Main features: budget 2015–2016 p3

56   Education Department, Bihar, budget

57   Government of Bihar, Finance Department, Economic Survey 2014–2015

58   Constitution of India

59   National Policy on Education (NPE) 1986

60   National Policy on Education (NPE) 1986: Programme of Action 1992

61   The Constitution of India (Eighty-Sixth Amendment) Act, 2002

62   United Nations Millennium Goals

63   Right To Education, Department of School Education and Literacy

64   School Education in India U-DISE 2013

65   Statistics of School Education 2010–2011

66   ASER 2006

67   Enrolment figures DISE 2006–2007

68   School Education in India U-DISE 2013

69   Statistics of School Education 2010–2011

70   ASER 2014

71   Statistics of School Education 2010–2011

72   Calcutta Telegraph 19/7/2014

73   Statistics of School Education 2010–2011

74   School Education in India U-DISE 2013

75   ASER 2014

76   State of the Girl Child in India, upcoming report 2015

77   Desinghkar et al. p32

78   Twelfth Five Year Plan (2012–2017) Social Sectors

79   Elementary Education in India: Progress towards UEE

80   Government of Bihar: Educational Statistics

81   Deshkal p lx

82   National Achievement Survey Class 5

83   National Achievement Survey Class 3

84   ASER 2014

85   Atherton and Kingdon p18

86   Ghosh and Rana p31

87   Deshkal Chapter 3

88   Ghosh and Rana p42

89   Ibid p37

90   Ibid p61

91   School Education in India U-DISE 2013

92   Ghosh and Rana p51

93   NCTE

94   Government of Bihar: Education Department: Bihar Education Service Rules

95   School Education in India U-DISE 2013

96   Ghosh and Rana p53

97   Secondary Education in India

98   Bihar Teacher Recruitment 2015

99   Department of Education Bihar, CTET 2015

100 State Report Cards SEMIS 2010–11

101 Interview with Shankar Dutta, Professor of English, Patna University

102 Kingdon p11

103 Government of Bihar: Department of Education: teacher salaries

104 Daily Mail 18/9/2012

[105] Interview with RMSA by the original authors of this report, 2013
[106] Elementary Education in India: Progress towards UEE
[107] Elementary Education in India: Progress towards UEE
[108] World Bank 2015 Program Appraisal Document: Enhancing Teacher Effectiveness in Bihar
[109] World Bank 2015 Enhancing Teacher Effectiveness in Bihar
[110] Atherton and Kingdon p22
[111] Report of the Joint Review Mission on Teacher Education Bihar 2013
[112] Report of the Joint Review Mission on Teacher Education Bihar 2013 p10
[113] Interview with RMSA by the original authors of this report, 2013.
[114] Ibid
[115] World Bank 2015 Enhancing Teacher Effectiveness in Bihar
[116] Kaushal and Patra
[117] School Education in India U-DISE 2013
[118] Third Wave of the District-Level Health Survey (DLHS-3) in India 2007–08
[119] Enrolment figures DISE 2006–2007
[120] Ghosh and Rana p48
[121] Planning and Appraisal Manual (Secondary Schools)
[122] Muralidharan and Prakash p39
[123] Ranjan and Prakash p6
[124] Elementary Education in India: Progress towards UEE
[125] DISE statistics 2009–2010
[126] Summary of DFID's work in India 2011–2015
[127] Secondary Education in India: Progress Towards Universalisation
[128] Government of Bihar: Growth with Justice
[129] Elementary Education in India: Progress towards UEE
[130] Secondary Education in India: Progress Towards Universalisation
[131] Government of Bihar, Department of Information Technology, Information and Communication Technology Policy 2011
[132] Economic Times 22/3/12
[133] ASER 2014
[134] Report of the Common Law System Commission, Government of Bihar, 2007
[135] Chaudhury et al.
[136] Report of the Common Law System Commission, Government of Bihar, 2007
[137] DISE 2005 and 2011
[138] Banerjee 2011
[139] Pratichi Trust
[140] A snapshot of changing Bihar
[141] Hindustan Times 6/9/2012
[142] Information provided 2013 by the Directorate of Secondary Education
[143] World Bank 2015 Enhancing Teacher Effectiveness in Bihar
[144] Government of Bihar: Planning and Development Department: Bihar through figure
[145] Atherton and Kingdon passim
[146] Interview with Directorate of Primary Education by the original authors of this report, 2013
[147] Interrogating 'best practices' for the Implementation of School Nutrition Programmes in Urban India
[148] Tsujita p61
[149] Muralidharan and Prakash
[150] Twelfth Plan
[151] Lewin p3
[152] 2011 British Council needs analysis report
[153] Approach to 12th Five-year Plan 2012
[154] World Bank 2015 Enhancing Teacher Effectiveness in Bihar
[155] World Bank press release 8/9/2015
[156] Interviews with private school directors in Patna with original writers of this report, 2013

157   Rangaraju, Tooley and Dixon
158   Elementary Education in India: Progress towards UEE
159   Graddol p85
160   Rangaraju, Tooley and Dixon passim
161   New York Times 15/11/2003: India's Poor Bet Precious Sums on Private Schools
162   Translating Policy into Practice: Right to Education ASER
163   Rangaraju, Tooley and Dixon p37
164   Gurcharan Das, foreword in Rangaraju, Tooley and Dixon, p ix
165   Choice and cost: The role of household decision making and spending on secondary education in rural Bihar
166   Atherton and Kingdon p19
167   Deshkal p19
168   Ghosh and Rana p30
169   Ibid p37
170   Ibid p29
171   Atherton and Kingdon p25
172   Singh and Bangay p7
173   Ibid p 5
174   Preliminary Study into Low Fee Private Schools and Education p58
175   Gray Matters Capital pp8–9
176   Singh and Bangay, p7
177   Preliminary Study into Low Fee Private Schools and Education passim
178   Ibid p15
179   Graddol p98
180   All India Survey on Higher Education
181   Official website, Patna University
182   Official website, Chanakya National Law University
183   All India Survey on Higher Education
184   All India Survey on Higher Education
185   Survey of Diploma students Patna, original authors of this report
186   ASHE
187   Interviews with university staff Patna University by the original writers of this report 2013
188   ASHE
189   All India Survey on Higher Education
190   ASHE: Annual Status of Higher Education in States and UTs, 2012
191   Bushan and Rustagi
192   ASHE
193   Bihar State Council/Confederation of Industries: Bihar @2022 Vision Document
194   Babasaheb Bhimrao Ambedkar Bihar University, Muzaffarpur: self-study report
195   Graddol, p98
196   Times of India 15/9/2015
197   British Council Needs Analysis report, 2011
198   Best Media
199   Graddol p 35
200   Kapur and Chakraborty
201   Azam, Chin and Prakash
202   National Curriculum Framework 2005 p38
203   National Curriculum Framework 2005 p39
204   Bihar School Examination Board
205   Ibid
206   English Language and Literature. in Revised Curriculum for School Education SCERT
207   Education for Equity, Harmony and Excellence: Bihar Curriculum Framework, 2008
208   Bihar School Examination Board

[209] Bodh: Chal Padh, Kuch Ban
[210] Revised Syllabus for Classes I–V. 2009. SCERT
[211] Revised Syllabus for Class IX–X. 2009. SCERT
[212] See, for example,The Economist, 28/3/2015 , India Today 18/1/2014
[213] See https://www.youtube.com/watch?v=VC7_MTlbmSc
       See also https://www.youtube.com/watch?v=5Vng2zv5B3c
[214] Gupta p34
[215] Teaching of English at Primary Level in Government Schools
[216] Teaching of English at Primary Level in Government Schools p46.
[217] ASER 2014
[218] Bihar Curriculum Framework
[219] British Council needs analysis 2011
[220] Source: Bihar School Examination Board
[221] Times of India, 28/9/2015
[222] Interview with SCERT by the original authors of this report, 2013
[223] Interview with state officials by the original authors of this report, 2013
[224] Interview with state officials by the original authors of this report, 2013
[225] Interview with senior academic staff, AN College by the original writers of this report, 2013
[226] All information provided by Inter Council Bihar
[227] Interview with senior academic staff, Magadh Mahila College and Patna University College by the original
       writers of this report, 2013
[228] Interview with senior academic staff, AN College by the original writers of this report, 2013
[229] Graddol p10.
[230] Interviews with university staff Patna University by the original writers of this report, 2013
[231] See, for example: http://tutorindia.net/Personal_Tutor-Private-English-Bihar-Patna
[232] New York Times 14/12/2003
[233] Online film: English for all in Bihar
[234] See http://www.coe.int/t/dg4/linguistic/cadre1_en.asp
[235] Online film: English for all in Bihar
[236] Mrinalini Sen, January 2016
[237] Technology for Professional Development: British Council p30
[238] Technology for Professional Development: British Council p15
[239] Position Paper National Focus Group on Educational Technology, National Council of Educational
       Research and Training, 2006.
[240] Technology for Professional Development: British Council p39
[241] Interviews by the British Council with RMSA officials 2015
[242] British Council BLISS Teacher Development Films will be available to the public soon on the Bihar
       Language Initiative for Secondary Schools website.