REVIEW OF THE NEWLY INTRODUCED ONLINE PROCESS FOR ADMISSIONS UNDER RIGHT TO EDUCATION ACT SECTION 12 (1) (C) IN PRIVATE UNAIDED SCHOOLS IN KARNATAKA

FINAL REPORT

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Chapter 1: Background for the Study

1.1 An Introduction to the Right to Education Act

Since the conceptualisation of our Constitution, the intent to universalise elementary education was embedded within the Directive Principles of State Policy. Since these were mere directives to the State, it was not given adequate importance immediately after Independence. In 1966, the Kothari Commission recommended compulsory education for all. However, it took the Government of India decades to amend Article 21A in the Constitution to introduce the Right to Education as a Fundamental Right in 2002. It took another eight years for the Article to be translated into an Act. The Right of Children to Free and Compulsory Education Act 2009¹ (enacted on 1st April 2010) provides for free and compulsory education by the State to all the children in the age bracket of 6 to 14 years. RTE Act is a major step towards rights-based development policies. The Act seeks to ensure that institutional and financial constraints, whether at the micro or macro levels, do not impede a child from completing elementary education. It provides for every child between the age bracket of 6-14 years, access to free and compulsory education irrespective of gender, income and social category. RTE Act seeks to ensure and enable every child to acquire a minimum set of skills, knowledge, values and attitudes which are essential in order to become a responsible and active citizen of India.

The Act states that "(t)he State shall provide free and compulsory education to all children of six to fourteen years in such manner as the state may, by law, determined". Free education means that no child shall be liable to pay any kind of fee or charges or expenses which may prevent him/her from pursuing and completing elementary education.

Compulsory education, according to the Act, is an obligation on the government to provide and ensure admission and attendance and completion of elementary education by all children. Compulsory education has ten essential features:

- (i) Free education from 6 to 14 years.
- (ii) Compulsory admission, attendance and completion of elementary education.
- (iii) Availability of neighbourhood school.
- (iv) No discrimination.
- (v) Provision of proper infrastructure.
- (vi) Proper monitoring mechanisms for admission, attendance and completion.
- (vii) Quality education.
- (viii) Timely prescribing of curriculum.
- (ix) Proper training for teachers.
- (x) Provision of special training for those children who are lagging behind and who have never been schooled.

The RTE Act specifies the duties and responsibilities of the appropriate Governments, local authority and parents in providing free and compulsory education, and sharing of financial and other responsibilities between the Central and the State Governments. It also lays down the norms and standards relating to the Pupil Teacher Ratios, building infrastructure, school working days, and teacher working hours. It



provides for appointment of appropriately trained teachers with the requisite entry and academic qualifications. It also lays down a provision which prohibits the deployment of teachers for non-educational work, other than decennial census, elections to local authority, state legislatures and parliament, and disaster relief. The RTE Act also seeks to develop a child friendly and child cantered learning system which would ensure the all-round development of the child, building on the child's knowledge, potentiality and talent.

The RTE Act prohibits:

- (i) Physical punishment and mental harassment
- (ii) Screening procedures for admission of children
- (iii) Capitation fee
- (iv) Private tuition by teachers
- (v) Running of Schools without recognition

The National Commission for protection of child rights (NCPCR) and the State Commission for Protection of Child Rights (SCPCR) have been made responsible for examining and reviewing the standards for rights and recommended measures for its implementation.

The Act requires all the private schools other than the minority institutions (as per the order passed by the Supreme Court on 7th May 2014) to reserve 25% of seats for the disadvantaged and the weaker sections of the society. This provision has created ripples across the country and has been debated widely. Section 12(1)(c) of the Act states that a school "...shall admit in class I, to the extent of at least twenty-five per cent, of the strength of that class, children belonging to weaker section and disadvantaged group in the neighbourhood and provide free and compulsory elementary education till its completion." It further states that schools imparting pre-class I education (such as nursery, or kindergarten) would take admissions in the entry level class. Section 2 (d) and (e) of the Act defines who constitutes the disadvantaged groups and weaker sections. However, states have been given the flexibility to further define the sub-groups assign minimum percentage of seats to be allocated to each sub-category².

Karnataka State Rules for RTE Act, implemented in April 2012, define "disadvantaged groups and weaker sections" and indicate allocations of seats for the sub-categories. The percentage of allocation across various categories specified are: 7.5 per cent and 1.5 per cent of seats for children from Scheduled Castes and Scheduled Tribes respectively, remaining 16 per cent seats to be provided to other categories of children belonging to disadvantaged sections (Category I, IIA, IIB, IIIA, IIIB, orphan, migrant children, child with special needs, HIV affected/infected child) and weaker sections (children whose parents/guardians have an annual income of less than Rs 3.50 lakhs)³. It is important to note that Karnataka took a step forward from the Act and included HIV infected/affected children in the disadvantaged section category as well. However, in response to a PIL filed in February 2013, the State Government mentioned that those with annual family income of less than Rupees One Lakh will be given highest preference⁴.

1.2 Debates around Section 12(1)(c) of the RTE Act

The inclusion of this provision was based upon the diversity argument that a diverse classroom is conducive for learning and development while segregated classes impoverishes learning⁵. Jha (2015)⁵, in her paper, explained the rationale given by Ministry of Human Resource Development for inserting



Section 12(1)(c). The insertion was guided by the understanding that "children from different backgrounds and with varying interests and ability will achieve their highest potential if they study in a shared classroom environment; the idea of inclusive schooling was considered consistent with Constitutionalvalues and ideals, especially with the ideals of fraternity, social justice and equality of opportunity."Despite the major debates around the Act and its provisions, it is undoubtedly a step towards process of framing rights based development policies. The most widely discussed aspect of the Act, especially in the media, is the provision of 25% seats in private unaided schools for children from weaker and disadvantaged sections. The major opposition to this provision has been made by Parents' bodies citing that "children from poor neighbourhoods and low-income, low-educated families should not be mixed with those coming from highly educated, high-income families, as it would create problems for both kinds of children." This has been disguised under different rationales – children from poor families will spoil the school environment, lower the quality of education, face competition and have a sense of inferiority when they are compared with others in the school.

Society for Unaided Private Schools of Rajasthan challenged the Section 12 of the RTE Act on the basis that imposing regulatory requirements for private schools violated the right to practice any profession or occupation free from government interference under Article 19 of the Constitution and the right of the minority groups to establish and administer schools under Article 30 of the Constitution⁷. In Karnataka, KUSMA (Karnataka Unaided School Management Association) also protested the implementation of the Section and filed a case in the State High Court, demanding that all children be first enrolled in the neighbouring government schools and only then be enrolled in private schools⁸.

Another critical aspect is related to reimbursement of fees from the Government. Many private unaided schools have indicated that state compensation for marginalised children is not adequate, justifying the need to push the fees for the other students in the class⁹. There is also a lack of clarity in terms of the other entitlements outlined in the Act. Most private schools do not provide hot meals, uniforms and textbooks and parents have to pay separately for these. Government of Karnataka has issued an order, dated 19 May 2016, that all private unaided schools need to consider the fees reimbursed as all-inclusive of tuition, textbooks, uniforms, library and ICT facilities, co-curricular and sports activities. This was challenged by the private unaided institutions but the circular was upheld by the High Court in its judgement on 01 June 2016¹⁰. There are also issues related to the basis of definitions and how does one qualify under these definitions. For instance, the income level specified in Karnataka is significantly high and can also include government teachers under the weaker section category. Similarly, lack of clarity about whether children from low income families but not backward caste can apply eliminates them at the first stage itself.

Despite various rationales for implementing this provision, a critical challenge is insufficient training of teachers in terms of choosing pedagogic practices, providing support and judging learning achievement, especially in the context of high-end private unaided schools. Along with the assurance that children are enrolled under this provision, adequate training of teachers to make them aware of the Act and inculcate sensitivity during their interactions with children admitted under this provision and their parents is extremely critical for an inclusive education system.

1.3 Admissions under RTE Act Section 12(1)(c) in Karnataka

The RTE allows for the state to devise a common pattern of admission to bring about uniformity in the admission procedure especially for the private unaided schools. Section 35(1) of the RTE gives clear guidelines regarding the procedure of admission in schools under section 13(1) and section 12(1) (c). Section 13(1) of the Act briefly states that no student or parent should be subjected to any screening procedure. The objective of this provision is to ensure schools adopt an admission procedure which is non-discriminatory, rational and transparent and that schools do not subject children and their parents to admission tests and interviews in order to decide whether they will admit a child or not.

In Karnataka, admissions under this provision began in 2012-13 academic year. For the first three years (2012-13, 2013-14 and 2014-15) of admissions, the State adopted a manual process for admissions, anchored at the school level. Every school was requested to notify the Block Education Officer (BEO) about the number of seats available under the 25% provision for their entry level class. The BEO notified the dates for submission of forms and other requisite documents to neighbourhood schools. Schools accepted applications (soft copy available online for download and hard copies available at BEO offices) along with necessary documents (age proof of the child, income and address proof of the parents and caste certificate wherever applicable) and scanned them based on eligibility criterion, as explained below:

- a. Age: For LKG admissions, children more than 4 years of age and below 5 years were eligible. For class 1, children above 6 years and less than 7 years were eligible¹¹. However, parents were allowed to admit their under-aged child by submitting a self-attested declaration. The minimum and maximum age of the child, eligible to be admitted in the specified entry level class was also notified by the Department.
- b. Neighbourhood School: The RTE rules specified municipal ward as the limit for considering neighbourhood schools in urban areas and based on distance in rural areas. However, this was not concretised through any order and BEOs were given flexibility to define it based on the needs of their blocks, especially in those situations where private unaided schools were not available in particular wards.
- c. Disadvantaged and Weaker Sections: Disadvantaged and weaker sections were defined by the State Government through a Government Order (defined in the last chapter). For availing admission under the highest priority category (orphan, migrant children, child with special needs, HIV affected/infected child, street children and transgender children), no caste or income proof document was needed. They, however, needed to submit a separate certificate as per their special category from the Tehsildar office. Caste certificates were mandatory for availing seats under the disadvantaged category for SC, ST and OBCs. No income proof was needed for these categories. For those applying under weaker sections, income certificate was mandatory with a preference given to those earning less than 1 lakh per annum.

The responsibility of selecting eligible candidates was delegated to the school management. If the number of eligible candidates were more than the number of seats available in the school, a lottery was drawn, in presence of the BEO (or a representative from the BEO's office) and parents/guardians. At this stage, provisional admissions were given to students. Final confirmations were made after the scrutiny of documents by the BEO's office. In case seats remain vacant after the allotment, applicants from outside the neighbourhood could be considered¹².



The following table explains the role of different stakeholders in the admission process under manual system:

SN	Stakeholder	Role and Responsibility	
1	Directorate of Public Instruction, Government of Karnataka (GoK)	 a. Develop guidelines and issue circulars regarding processes to be followed for the undertaking admissions and register schools under RTE. Also specified the timeline for admissions, eligibility criterion and documents to be submitted b. Estimated per child expenditure in government schools, in conjunction with the Finance Department, for deciding the reimbursement amount for LKG and class 1 admissions in private unaided schools¹³ c. Competent authority for resolving any issues arising due to the admission process d. Constituted RTE Cell within the Directorate to act as a single point of contact for any RTE related queries/issues. They conducted awareness drives, extended help/guidance to stakeholders, addressed any issues arising out of admissions and maintained final data for admissions. 	
2	Block Education Office, Department of Public Instruction, GoK	 (i) Managed the registration of schools in the Block, including scrutiny of all documents related to availability of infrastructure and other requirements as per RTE Act (ii) Scrutinised the accounts of the schools to calculate recurring per child expenditure for reimbursement, based on which reimbursements from the State were made. If the per child expenditure was lower than the State-specified limit, that actual incurred amount was reimbursed. If the per child expenditure was higher, then the ceiling amount calculated by the Government was reimbursed (iii) Conveyed all RTE related information to all schools, especially regarding processes to be followed (iv) Accepted copies of applications submitted to schools, scrutinised documents and verified them. Approved or disapproved the applications shortlisted by the school (v) Final lottery from the eligible pool of applicants was conducted in the presence of BEO or representatives from BEO's office 	
3	Private Unaided Schools	 a) Displayed seat availability under RTE provisions for each sub-category along with other RTE related information in their Notice Board b) Accepted applications from parents and categorised them as eligible or not-eligible based on verification of documents submitted. Allocated eligible applications under different sub-categories c) Undertook lottery (wherever necessary) for final selection 	
4	Parents	 (i) Accumulate information from different sources regarding eligibility criterion and documents needed (ii) Find out about schools that qualify as "neighbourhood schools' for their residence (iii) Assimilated all necessary documents from different government offices (iv) Submitted applications to all schools manually and followed-up with these schools to ascertain their application status 	

1.4 Issues with Manual system

The Right to Education Act 2009 was implemented in Karnataka on 28 April 2012. The department had less than ten days to frame the rules and ensure implementation of Section 12(1)(c). With no time gap in issue of notification and admission procedures, there was trials and errors in the process. However, this was streamlined in the next year of implementation, wherein a proper procedure was set in place through government orders/circulars and guidance notes issued to the schools and public. During 2013-14 and 2014-15, there had been an increase in the number of students accessing admissions in private unaided schools through this provision. In 2012, less than 45,000 students accessed this provision across the state (Data shared by Dept. of Public Instructions). This increased to about 73,000 in the following year and 94,000 in 2014-15. However, there were a number of issues in the manual system of admissions, as



experienced by the Department officials as well as illustrated through academic studies. These issues are broadly classified under the Admission Norms, Application Process and Selection Process:

1.4.1 Norms laid out for the admissions

<u>a. Neighbourhood School:</u> The rules and circulars specified that admissions under this provision is applicable for those private unaided schools within 1 km radius only or municipal ward with certain exceptions allowed when schools were not available in the designated area¹⁴. However, a 2013 research study¹⁵ conducted in Bangalore found that there were serious gaps in the admission process followed. Norms laid down for eligibility criteria differed between Blocks and also within the same Block. These norms seemed arbitrary and no formal documentation was available citing the reasons for relaxing the norms. Lack of clear definitions meant that parents were unsure of which schools to apply, leading to out-of-ward applications. Such applications were rejected by the schools, denying any probability of getting selected even for those within the eligible categories.

b. Disadvantaged and Weaker Sections: Clear definitions of those belonging to disadvantaged sections, based on their social group, were provided to the schools for admissions. This clarity was also reflected in the break-up of 25% seats that the government indicated for the admissions. However, there was fuzziness about the definition of who constituted the "weaker sections". Initial income level defined was high, leading to a court order questioning the reasoning behind a high income limit. Hence, the government stated that preference will be given to those with income within one lakh per annum. This could also, by definition, include those from social groups not defined under "disadvantaged sections". However, this was not accounted for. The above mentioned study also documented the case of an applicant whom the school considered eligible under the weaker section category due to low income level (student-applicant was the daughter of a widow, who worked as an Ayah in the same school). However, the BEO office denied admission as the applicant was a Brahmin and did not belong to the disadvantaged section category.

The system, stationed within the school, also became quite inaccessible for the highest priority groups (HIV, orphans, migrants, street children, Children with Special Needs) as the break-up of seats included them within the OBC category. Hence, no separate percentage was assigned for admitting children from the highest priority sections.

As per the rules, income certificates were mandatory for those applying under weaker section category only. However, all applicants were expected to submit them. The vagueness of "preference to those with income less than rupees one lakh per annum" led to under-reporting of annual income. The case study developed for this report (details later) also documented this practice. The applicant had an annual salary income of Rs 1.2 lakhs and was worried that his application will not be considered with a preference.

<u>c. Age Limit:</u> Flexibility practiced in the age-limit of the child also varied within and between blocks. The State Rules had indicated guidelines but the final age limit was decided by the BEO. Hence, there were wide variations with under-aged and over-aged children securing admissions.

1.4.2 Application Process

Parents had the flexibility to apply in multiple schools, within and outside the specified neighbourhood limits. This led to increasing the workload of the schools as well as the BEO office. The schools were expected to review each application and shortlist the eligible candidates. Hence, all applications made by out-of-specified-distance had to be reviewed and rejected by the schools. Each of the multiple application



submitted by each parent had to be reviewed by the BEO office for final verification. This meant double-work and subsequent delays in the process. A higher probability of selection in multiple schools (due to multiple separate applications) also meant that seats in schools, where the child was selected but did not take admission, were vacant. These had to be taken into account for the second round of seat allocations.

Parents were expected to navigate through multiple government offices to assimilate necessary documents to be submitted along with their application. Parents interviewed during the 2013 study⁹ indicated that they found this challenging. Many of the parents also reported being forced to pay bribes to get the documents.

1.4.3 Selection Process

The process of short-listing the eligible candidates was not monitored by the BEO's office on a regular basis, leading to mis-utilisation of this provision by the school managements. Almost all schools surveyed for the study conducted in 2013⁹ utilised this provision to re-admit their pre-primary students (who met the eligibility criterion) under this provision, projecting this as a scholarship for those who already had access to schooling.

A major recommendation of the 2013 study⁹ was to utilise technology for conducting admissions at Block/District level such that there is "decentralised-centralisation" to counter irregularities of different kinds. Another study¹⁶ conducted in Bangalore and New Delhi also concluded that there was a greater need for simplification of processes with respect to admissions such that there is decentralised application and verification process while admissions can be centralised at block level "to allow parental choice and maximise opportunities for admission". Discussions with officials also revealed that under this system, majority of complaints from parents were related to schools and BEOs not accepting certain applications, no vacancies in schools and issue of certificates to be submitted along with the application. This led to the idea of using technology for the same.

This study reviews the online process through the circulars issued for the same, interviews with officials involved in the process and experiencing the process to understand the merits and issues. Selected schools and parents who participated in the process have been interviewed.

1.5 Main Objectives of the Study

- a. To review the process of online application and admission under Section 12(1)(c) of the RTE Act (i.e. 25 per cent of seats set aside for those from disadvantaged and weaker sections) in private unaided schools in Karnataka
- b. To understand the working of the software developed specifically for this process
- c. To understand the implications of the new process on the different stakeholders i.e. State/District/Block/Cluster officials, Schools and Parents
- d. To gauge the role of the new mechanism in achieving the objective of the RTE, especially in terms of ensuring hassle-free and fair access to children coming from weaker section and disadvantaged groups



1.6 Methods Undertaken

The study involved undertaking a number of methods to understand the online process – from the onset of the idea to final implementation across two years, reviewing circulars and software developed for the same and interviews conducted with stakeholders. The following methods were undertaken:

- a. <u>Review of Literature</u>: Brief review of literature related to Right to Education Act 2009 was undertaken. This included the review of the Act and the Karnataka State Rules, court judgments and other related studies.
- b. <u>Review of Government Notifications</u>: A review of circulars, notifications and guidelines issued for admission processes to be undertaken for the 25% seats in private unaided schools in Karnataka was also conducted.
- c. <u>Semi-structured Interviews</u>: Semi-structured interviews were conducted with different levels of officials belonging to the Department of Public Instruction¹⁷ and Principals/Administration of selected private unaided schools across all educational blocks in Bangalore¹⁸. These included:

SN	Designation	Number of Interviews
1	Commissioner of Public Instruction*	1
2	Director of Public Instruction	1
3	Deputy Director of Public Instruction	3
4	Block Education Officer	1
5	RTE Consultant	2
6	E-Governance Cell Officials	5
7	Principal/Administration of Private Unaided Schools	15

^{*} The Commissioner of Public Instruction who introduced the online admission process was interviewed to understand the inception of the idea and initial challenges. He was transferred to another post in 2015.

- d. <u>Discussion with parents</u>: Twenty-five parents¹⁹, who applied under the online system and were successful in obtaining a seat, were requested to share their experience of the same. While in some schools, parents were available at the same time for group discussions, in other schools, each parent came at a different points of time during a specific time-period. Hence, one-on-one discussions took place in these. For both group and individual discussions, the kind of questions asked remain the same.
- e. <u>Software understanding</u>: In order to review the software, researchers undertook admissions processes for two eligible candidates for the academic year 2015-16 and submitted a dummy admission form for the academic year 2016-17. This helped in understanding the user-interface. Demonstration of the working of the software was also given by the E-governance Cell.
- f. <u>Developing Case Studies</u>: A detailed case study of an applicant was also documented in the academic year 2015-16, in order to understand how accessible and efficient the admission process was. Another short case study was also developed during the academic year 2016-17.

Tools were developed being attached as Annexure I with this Report. This report has three sections: the first chapter gives a background information regarding the Act, the provision about reservation of seats in private unaided schools, Karnataka rules for admissions under this provision and reviews the manual admission process adopted in the first three years. The second chapter reviews the online admission process along with the software and technology used for the same. The concluding chapter analyses the issues with the online process and use of technology for this process.

Chapter 2: Reviewing the Online Admission Process

2.1 Online Admissions under RTE

During the academic year 2015-16, the Karnataka government introduced an online system of admission under the 25% quota with an intention to end the complaints of irregularities in the selection process. Karnataka is the second state²⁰ to introduce the online admissions system for the entire State. This was initially being planned for 2014-15 academic year but the preparations could not be completed on time and hence was deferred to the next academic year i.e. 2015-16. This new system required extensive preparation on part of the Directorate and the schools. As of now, two rounds (2015-16 and 2016-17) of admissions have been conducted under the online system. The issues and hurdles faced during the first round of online admissions were rectified, to the extent possible, during the second round.

According to the new process, applications were submitted online along with photographs of the child and details of the documents related to age, income and address proof. Parents were encouraged by schools to submit hard copies of the same before final selection; however this was not mandatory for them to be considered for lottery. During the first year of online applications, schools could view the applications and review them based on the edibility criterion. They were authorised to reject applications that were not eligible for their school (for out-of-ward applications and documents submitted) and provide a reason for the same. In the second year of online applications, the verification of documents was undertaken online in conjunction with different Department databases (Aadhar, Election Commission, Social Welfare). Only for those applications where there were discrepancies between information provided and the document submitted, BEOs were authorised to collect updated documents and revise the eligibility status of the applications or reject the application.

The online system utilised the Government Orders issued for the admission process. For the sake of an online admission process, certain definitions were concretised. For urban areas, municipal wards became the only geographical location within which applications could be made. For rural areas, this was restricted to the Village Panchayat limits. There was no change in the age of the child for applying in 2015-16. However, in 2016-17, strict cut-off dates for age of the child were specified. This was also controlled within the software (i.e. application form did not accept any date beyond this specified period).

The Department had also requested schools to convert offline forms submitted by those parents who do not have access to internet/computers. Alternatively, provision for submitting offline forms at BEO's office, which in turn would upload their application, was also made²¹. The selection process was also centralised through a pre-designed software. In case of excess applications for schools, centralised lottery system, using randomisation software was used.

2.1.1Role of Directorate

Unlike the manual system, majority of the online system was stationed within the Directorate. The Software Development Centre, located within the e-Governance Cell of the Directorate, was instrumental



in developing the software²² for conducting the admissions online. This required updating the school-database as per ward, the medium of instruction offered, entry level class and the number of seats available in the school under the 25% seats under RTE.

While the software was being developed, the Directorate was entrusted with ensuring uniformity in the definitions that guide these admissions, standardising the documents to be submitted, outlining guidelines for schools and applicants and instructions for the officials at different levels. The Directorate, through the RTE Cell, provided helpline services as well. They were also the designated authority to address any issues related to RTE admissions.

After the applications were submitted and verified, by school in year 1 and by different government departments and BEOs in year 2, the Directorate conducted final selection and allocation of seats using randomisation software in presence of press and other officials in the Legislative Assembly (Annex Building). This randomisation software was used as per the guidelines issued by the National Information Centre (NIC), Department of Information Technology, Government of India²³.

2.1.2 Role of BEOs Office

Unlike the previous years, the BEO office role in the RTE admission process was minimised in the online system. Their prime role was to provide helpdesks and manage helpline numbers for applications. They also carried out awareness drives through the cluster and block resources persons. During the period when the RTE admissions were open online, BEO offices provided multiple helpdesks to guide the applicants and ensure that the processes went smoothly. For applicants who could not complete online forms, the BEO offices had also set up desks which could assist these applicants in converting their offline forms and submit them online.

During 2015-16 admissions, schools verified the documents and reported any discrepancies to the BEO office. The office, based on the discrepancy reported, took action. The applicant was either asked to resubmit the documents or rejected. During 2016-17 academic year admissions, the BEO office was entrusted with the responsibility of verifying documents for those applicants where the online verification of documents failed due to errors and/or discrepancies. The BEO office was asked to collect any updated documents, verify them and categorise them eligible or not-eligible.

2.1.3 Role of Schools

Like the BEOs office, the role of schools in the RTE online admission process was also minimised to providing guidance to parents who approached them and providing services to convert offline forms to online submissions. Schools were also instructed to display necessary information in their notice boards for the benefit of applicants. However, most schools indicated that they did not have adequate resources to extend help to submit forms online. Hence, they guided the parents regarding the procedures and documents needed and requested them to go to the nearest computer centre/cyber café for the same. They were also provided school-level Login ID to check the applications submitted for the school.

During 2015-16 academic year admissions, schools were designated centres for verification of documents for all applications submitted to them. They were expected to notify the BEO any discrepancies between the information provided and the documents submitted.

2.1.4 Role of Parents



The role of parents underwent a major shift from manual to online system. Along with the task of arrangingnecessary documents, which required manoeuvring through different State Government departments, they were also expected to ensure access and availability of internet and computer for submission of application forms online. Guidance, through multiple sources, was available but the knowledge of "where to go" was necessary for successful submission.

2.2 Comparing Feature of Manual and Online Admission Process

The main features of the two phases of admissions under RTE for 25% seats in private unaided schools in Karnataka have been compared through the following table:

S N	Feature	Manual Admission Process (2012-15)	Online Admission Process (2015-17)
1	Availability of admission form	Soft copy available online and hard copies available at BEO's offices	Offline form to be printed from the website and also available at BEO's offices; needed to be converted online
2	Designated Authority for collecting Application Forms and Documents	Schools and BEO offices	Submitted online only. Schools also expected parents to submit hard copies of the completed form and documents.
3	Definition of Neighbourhood School	Those within1km radius of the school; out-of-limit application submission permissible under certain circumstances	Ward for Municipal Councils and Village Panchayat limit for rural areas
4	Identification of Neighbourhood School	Manual identification through school and BEO office visits	School list available online as a document as well as ward-wise list embedded within the form
5	Submitting of Applications	Offline submission and no limit on the number of applications submitted	Online submission and only 5 schools can be prioritised for application
6	Verification of Documents	School and BEO	In 2015-16: Schools; In 2016-17: online verification of documents and BEO to verify documents for those categorised as not-eligible due to errors / discrepancies in the documents.
7	Short listing of the eligible candidates	Conducted by schools	In 2015-16: based on rejections by the schools/BEO. In 2016-17: online for those with all correct documents and through BEO's office for those re-submitting updated documents.
8	Final selection	Lottery system at each school in the presence of BEO office representatives and parents	Online lottery using a software for random selection
9	Notification of final selection	Displayed on School Notice Board	Message sent through the online system and provision to check application status online. Schools were also requested to inform those who got admission in their school.

2.3 Reviewing the Technology Used for Online Admissions

The software designed for the online admissions under Right to Education Act Section 12(1)(c) was a simple bi-lingual form that could be read and filled in Kannada or English. The link for the online form was made available on the website of the Department of Public Instruction. It was located at a particular

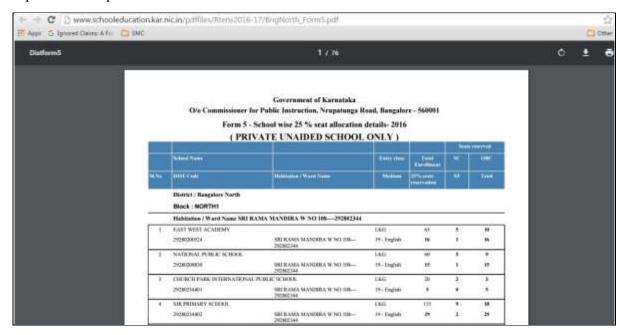


IP address and the link was available on the landing page of the Department of Public Instruction website (www.schooleducation.kar.nic.in). The link was also provided under Right to Education tab in the left-side column of the website. All documents related to the online applications, especially the guidelines issued to the public had the address of the first page of the Department. The link was visible and easy to locate. A simple search of "RTE Bangalore" on the internet also landed on the Department website. The following screenshots help in illustrating the software.

2.3.1 Admission Form

- **a. Basic Information Page:** The first page of the online software listed out the basic eligibility and guidelines for completing the form. This page is only available in Kannada. The simple layout and listing of all criteria helps the applicant to ensure that they have requisite information. (Figure 1, Annex II)
- **b. School Search Page:** The second page shortlists the private unaided schools available for RTE admissions for LKG or Class 1 as per ward. The applicant is expected to know that Educational Block (e.g. nine educational blocks in Bangalore Urban) and Ward No. to be able to fill this format. This page is mono-lingual like the first page but this is available only in English. (Figure 2, Annex II)

This page acts as the first stage of elimination wherein wrong or out-of-ward applications can be made. In order to prevent elimination of eligible applicants due to lack of information, the Department had also compiled list of neighbourhood schools as per District/Educational Block/Ward along with the medium of instruction, entry class, total enrolment in the entry class and number of seats available for RTE admission. The list also displayed the break-up of seats as per SC, ST and OBC categories. Here is a sample of the list provided:



This list was also available on the website of the Department, under the RTE page. During the application process, this link was also available on the landing page of the Department website. These sheets were available separately for each District, clubbed based on their Division. However, these were available in English only. Parents needed to be aware of the existence of these lists. BEO offices also used these lists to inform parents who approached them.

c. Listing of Available Schools: After the District, Block, Ward and Class to be admitted details were entered, the software displays the available schools with RTE seats. This also included Government schools, especially for those wards where there were no private unaided schools available. The following ward selected did not have any private unaided schools available, hence only Government schools are being displayed. (Figure 3, Annex II)

As per the Government instructions, if any ward does not have any private unaided schools, applications were to be made to Government Schools. If the applicants do not want to enrol their child in government schools, they could apply to an adjacent ward keeping in mind that their residence address needs to be within 1 km of the school. Those applications which were out of ward and beyond 1 km radius of the school, were rejected by the BEO office. The page also provided an option to print the same or proceed to the Application Form.

d. Application Form: The landing page of the Application Form was designed in Kannada with an option to select English version of the form as well. The top-most line gave the statistics regarding the total applications received, updated as per the time the applicant logged in. For instance, in Figure 4 (Annex II), the login date and time for the applicant (Application Submission Date) is the same as date and time indicated in the top-most line. This indicates that the system was getting live updates. (Figure 4, Annex II)

The first half of the form requested for details of the applicant (child) along with class to be admitted and place of birth. It also requested for parents' details (name and address) as per the address proof to be provided. For those students born outside Karnataka, option of "Others" under place of birth was available.

Those fields marked with red asterix (*) was mandatory for submitting the application. The residential address details requested mandates the specification of Educational District, Block and Ward along with a mobile number, to send messages and updates. However, the details of address sought are not mandatory. This seemed to be designed to ensure that those falling in the high priority categories (orphans, migrants, HIV positive, transgender, street children) can apply for admissions without having any concrete address and subsequent address proof.

In 2015-16, there was no control for age of the child for application embedded in the software. During that year, a number of issues regarding the age of the child eligible arose as under-aged and over-aged children got admissions. This was resolved during 2016-17 admissions by controlling for the date of birth within the software. A Government Circular issued had restricted the age as per a pre-decided cut-off date. The same was reflective in the software. If a date beyond this period was entered, the software opened a pop-up window indicating the requisite date to be within the specified period. This was different for LKG and class 1 and the pop-up window displayed the dates as per the entry class selected. The form would not be competed till a date, within the specified range, is selected. (Figure 5, Annex II)

The second part of the form was related to the various eligibility criterion and provisions under the RTE admissions. It asked about the category under which the admission was sought along with other related details like religion, caste, mother tongue, vaccination undertaken, preferred medium of instruction and reference numbers of any document for address, caste, birth, income proof. (Figure 6, Annex II)

This section also had the provision of selecting schools in the particular ward, as per individual choice/ranking. After the preferred medium was selected, the form would populate school names as per

the details specified in the form (district/block/ward, entry level and preferred medium). If the preferred medium schools were not available in the ward specified, all other schools, along with their details, would be displayed. The applicant could select up to five schools as per their preference and rank them. This ranking was also taken into account while final randomisation allocation of school. The software takes a couple of minutes to generate this list, possibly due to two reasons: (a) A number of controls and variables that need to be checked to generate this list, and (b) Heavy traffic on the server. After the schools were selected, the same would appear in the second section of the form

The form allows the applicant to submit the application without filling in any documentation/proofs as well. This is possible as the five high priority categories do not require any documentation proofs (especially address proof). The image of the child is mandatory to upload. For the first round, the size of the photo had to be less than 5KB, due to limitations on the server space. However, this was increased to 15KB in the second round. Despite this increase in the three-fold increase in size, it is still very difficult for those with no/limited photo-editing skills to decrease the size, without compromising the quality of the photo. (Figure 7, Annex II)

The form shows another pop-up window when the "Submit" button is clicked. This is to prevent clicking of the button by mistake and ensure that the applicant indeed wants to submit the form.

- **e. Acknowledgement Page:**After the submission of the form, an acknowledgement page displays the Application Number, along with an option to print the application form. It also suggests to go to the BEO office for any clarifications e.g. selection process, dates for final selection etc. An acknowledgement message was also received on the mobile number in the application. (Figure 8, Annex II)
- **f. Printed Application:** The printed application summarises the details submitted through the online form. It gave an option of saving the form submitted in multiple formats (pdf, csv, xml, excel etc). (Figure 9, Annex II)

2.4 Technology Platforms used for the Online Applications

The software for online admission forms was developed in-house by the Software Development Centre, e-Governance Cell located within the Directorate of Public Instruction office in Bangalore. The team used Government Orders and Circulars, which had defined the admission process and eligibility criterion, to develop the algorithms in Visual Studio 5. All systems used to develop the software had anti-virus and adequate precaution was undertaken to prevent it from hacking. The team did the testing for all the use-cases themselves. No specific testing was done for other things like security, as the software was to be used only by trained professionals. Equally, no formal secure coding or similar training was specifically provided to the developers. No formal process that was adopted for tracking of issues and fixing issues. The development and fixes for issues are done in an ad hoc manner.

Data is stored in server provided by the Center for eGovernance, Government of Karnataka. This Data Centre is located within Vikash Soudha (State Assembly Annexure). The eGovernance Cell follows strict protocols laid down by the Center for eGovernance with respect to security of server and data. The Data Centre of Centre for eGovernance, Government of Karnataka, provides state of art Internet and physical security. They also have firewall and intrusion detection systems in place to thwart any attempt to compromise the data on the servers. A port scan revealed no port other than the webserver being open.



All systems do have proper antivirus installed (McAfee Antivirus) keeping risks to a minimum. All the interaction with the data happens within the government premises. At no time does it travel outside the Local Area Network (LAN) on the premises. There is no remote access capabilities provided to any of the systems involved. Data is directly entered into the system through the online applications. While entering the data, basic checks are ensured so that the candidate does not fill in some details incorrectly.

However, insecure HTTP service, instead of the more secure HTTPS, is being used. Hence, data traverses through the public internet in an unencrypted format. As per policy regular tape as well as server backups are taken. No remote access is provided to the servers and the software can only be accessed on the premises. Access to USB and other devices is also restricted in the Data Centre to prevent loss of data.

2.5 How Online System Addressed Issues of the Manual System

Given that the Department of Public Instruction utilises technology to a great extent for its teacher management processes (recruitment and transfers), this move is not really surprising. One of the most critical features of shifting to an online system, as experienced by the Department with teacher management processes, is ensuring transparency and efficiency in the system. The online admission system streamlined some of the critical issues of the manual system, as illustrated below:

2.5.1 Norms specified for admissions

- **a. Neighbourhood Schools:**The online system made it possible to control for the within ward admissions. The first page of the application requested the applicant to select the ward to which they belonged. This helped in the listing and previewing of schools in that particular ward itself.
- **b. Disadvantaged and Weaker Sections:** The break-up of the 25% specified by the Government under the manual system remained unchanged under the online system as well. The top five categories specified as critical and of highest priority were designated to be considered within the OBC category. However, the online admission process made provisions for applicants to apply for admissions under each of these categories. This also meant that those not listed in the disadvantaged sections but belonging to weaker sections (especially financially weaker sections) could now apply for admissions under this provision as well. This also meant that schools could no longer deny accepting these applications or labelling them not-eligible.
- **c. Age Limit:** During the first round of online applications, there was no control for the age limit of the child for admissions within the software. There was one case of an 11-year old child getting admission in class 1²⁴. Hence, for the second round of online applications, the software controlled for the age limit for applications. If the birth date entered in the online form was outside the specified dates for the class (LKG or Class 1), a pop-up window indicated the same and restricted the submission of the form.

2.5.2 Application Process

a. Almost "Paperless" Applications: The centralised nature of the application process meant that parents did not have to visit each school for submitting applications. They could submit the application, at a single instance, online. They were also assured that schools will not reject accepting the application. However, schools expected hard copies of the documents to be submitted as well. This, parents felt, also reassured them that their form had been accepted by the school.

- **b. Decrease in Quantum of Verification to be conducted:**Through the online form submission, the Department did not have to process multiple applications from a single candidate. During the first round of online applications, schools were expected to point out those candidates who were not eligible for applying to their school. However, the onus of shortlisting was shifted to the Department from second round onwards. The Department made it mandatory for all applicants to provide Aadhar Card details or Election Card details. If they had neither of the cards, then they were expected to enrol for Aadhar Card and submit its acknowledgement number along with the application. This data was verified using the databases of the Departments that manage these databases. This ensured paperless verification and efficient use of existing databases. This also brought down the workload of the Department and helped in integrating already-existing databases.
- **c. Parents' Preference Given Importance:** The online system also took into account parents' preferences, which was not present in the manual system. Parents could indicate their top five priority schools within their ward, offering the medium of instruction desired by them for the class for which their child was eligible. In this manner, parents could indicate their preference, which would be taken into account while randomly assigning schools.

2.5.3 Selection Process

The use of randomisation software made it difficult to tamper with the selection process. Schools could not weed out applications which they felt did not fit their school profile and could, no longer, offer seats under this provision to their existing eligible students (from the previous class) as scholarships. The software also ensured that no Department official could indulge in any kind of irregularities for assigning seats to preferred candidates in any particular school. This was ensured through the presence of press and officials from the State Government during the randomisation and final selection.

Hence, it appears that the "decentralised – centralisation" recommendation did lead to streamlining of processes, making it efficient and transparent. The following table summarises the issues of the manual system and how the online system overcame them:



SN	Issue of the Manual System	How Online System Addressed This
1	Flexible definition of neighbourhood schools – dependent upon the BEO	Fixed definition of neighbourhood schools – flexible only when schools in the designated area is not available
2	Flexible definition of age-limit for the child – led to underage and overage admissions	Fixed dates specified as cut-off dates for application
3	Almost no representation of children from the high priority categories	Although the representation has improved, it is still quite marginal and needs more attention
4	Issue of weaker sections applications	Those falling under weaker sections but not belonging to disadvantaged sections could also apply
5	Multiple applications by parents	Single application for five schools
6	No preference could be indicated by parents for admission	Parents could rank five schools within their ward for admissions
7	Verification of documents delayed processes	Online verification of documents using existing databases has ensured some degree of efficiency
8	Shortlisting of candidates could be done by schools based on their own agendas	Schools did not have any role in shortlisting candidates
9	Lottery at school level for final selection could be manipulated by the school authority to give preference to their existing students	Online lottery based on randomisation software eliminated such practices by schools
10	Parents had to constantly visit schools after submitting application	The online software sent messages to the parents at every stage. Parents also had the option of checking the status of their application online. Most schools called to inform the parents after their child got admission in that school.

2.6 Issues of the Online System of Admissions

In many ways, the move to an online system started an era of efficient and transparent process, with a view towards inclusion at various levels. The Department needs to be credited for learning from the issues that arose in the first round of online admissions and address them in the second round. The online system of admissions addressed some of the major issues of the manual system. However, the online system itself is at an infant stage and is being developed further with every year of experience. At present, there are some critical issues that the system faces illustrated below through two case studies and analysis of discussions held with different stakeholders. These issues have been categorised as issues of the online form/software, issues of converting the process online and systemic issues of an online process.

Case Study 1:During the first round of the online admissions, the research team documented the case of an applicant in order to experience the process firsthand. The applicant's father works in a NGO that works on education. He had access to information about RTE through his colleagues. He is literate, speaks Tamil, Telugu, Hindi and Kannada and has functional English skills for reading and writing.

For his son's admission, he first enquired whether the school (where the son was already enrolled in pre-LKG) was registered to undertake admissions under RTE provisions. He was interested in choosing an English-medium school for RTE admissions but also shortlisted Kannada medium schools. He had to make multiple visits to the existing school for getting study certificate, lawyer to get an affidavit to get his income certificate and caste certificate for the son and the Taluk office to obtain the caste and income certificate. He already had the birth certificate as age-proof and Ration Card as address proof.

After obtaining the caste and income certificate, he started the process of online application with the help of his colleagues. Through his work place, he had access to computers and internet. They faced tremendous difficulties in completing the form. The first difficulty was to manoeuvre the server. During the first few attempts, the server would stop responding while trying to open the school-selection page. During the attempts, they also called the RTE helpline and were informed that the server was unable to take the load and hence suggested that they try during early morning or late night hours. Their late night attempt to complete the form was finally successful. This was possible due to his colleagues who had access to computer and internet at home. They received the acknowledgment through an SMS on the registered mobile phone as well as displayed immediately for save/print.

The second difficulty was to decrease the size of the photo of the child to be uploaded online. The photo was a scanned version of a hard-copy and needed to be resized multiple times. This was considerably easier to access due to his colleagues who were well-versed in image editing.

After submitting the form online, he found out from another friend that a form, with same details submitted online, had to be re-submitted to each of the school along with photocopies of the certificates and the photo of the child. This was only available in selected photocopying shops in the area. He submitted the set in the first school. In the second school, he was informed that he need not submit the documents to other schools for verification. He also received a call from one of the schools he had applied in. They wanted to check the original documents for verification. However, the school did not give any prior notice and expected him to present the documents on the same day (within 4-5 hours from the call was made).

His documents were matching with the information provided. However, he did not get any information whether he got shortlisted or not. Repeated checks about the status of the application showed that it is in process. He was not assigned any seat under the RTE provisions in the final lottery.

2.6.1 Issues of the Software and Online form

The online form was indeed designed in a very simple and user friendly manner. The link was also available on the landing page and a separate page dedicated to Right to Education. However, there were some issues with the software as well as the online form.

a. Language: The first page of the online form (instructions and basic guidelines) was available only in Kannada while the second page (Educational District/Block/Ward selection and the subsequent school list) was available only in English. The form itself is available in English as well as Kannada. This speaks volumes about a basic assumption with which the online form was designed. The applicant would need to have the reading competency of both the languages to navigate the first two pages to land on the form. We also observed this while documenting the above case study wherein the issue oflanguage was easily manoeuvred due to access to a literate work environment. For those from marginalised sections and lack of requisite language skills (either self or others around them), it would become even more difficult to apply online.

Another critical assumption is that only those with competencies in both these languages will be applying. This is contrary to the fact that the Government of Karnataka runs schools with seven medium of instructions (Kannada, Urdu, Tamil, Marathi, Telugu, Hindi and English). This forces such applicants to be dependent on others (friends, family, agents, computer centres etc.) and higher out-of-pocket expenditures.

- **b. Spelling errors:**The online form could be read in two languages but the input was only possible in English, leading to minor spelling errors between the typed form and the certificates submitted. These spelling errors led to disqualification of the eligible candidates.
- c. Control for variables:During the first round, the software did not control for minimum or/and maximum age for the child to be admitted in a particular class. This was corrected in the second round. However, other control measures were not very evident, especially when admissions were being availed under the high priority categories. When we tried to fill a dummy application form under the "street children" category, the form repeatedly requested for parents' Aadhar No/EPIC No to be filled. The government circular had clearly stated that no documentation proof (income, address etc) was needed for these high priority categories. Yet, the software did not control for these variables and requested to fill out the details.
- **d. Data Security Aspect:** The software could benefit by using proper versioning system to monitor the code being deployed so as to keep a track of evolution of code. This is also helpful in security audit of the code. The code could be made available in public domain and used by other departments/governments. It would also help to prepare the roadmap for technology upgrade and introduction of more controls within the software (i.e. address proof, income proof requirements). The state would also benefit by securing web access using https rather than unsecure http protocol.

2.6.2 Issues of Converting the ProcessOnline

a. Admission Norms:One of the most important norms for admissions under the RTE provisions was to ensure enrolment in neighbourhood schools. Under the manual system of admissions, the definition was decided by the BEO, depending on the ward-wise availability of schools. However, this definition was tightened during the online process of admission, based on ward or panchayat limits. The new definition was dependent upon the updated online school mapping as per ward/panchayat limits. This database for



the entire State is vast with chances of errors, especially for schools that are on the border line. The issue of no schools in the ward was tackled by requesting parents to apply in Government schools within the ward. For those parents who did not want to send their children to government schools, flexibility of applying in the neighbouring ward such that the school is within 1km of their residence was given. However there was no specific method to ascertain the validity of the same, forcing parents to apply out of ward and risk rejection.

Age of the child was another problematic area for the online application. During the first round, there was no control in the range of birth-date selected leading to overage and underage children getting selected. The second round controlled for the date of birth. But, this was later relaxed due to protests and extended by six more months. While controlling for the birth-date range is critical, it is also important to define the range in such a way that it does not leave any room for negotiations. One example is the way Central Government schools define age-appropriateness. For class 1 admissions, they define a six-year old as someone who is more than 5 years but less than 7 years of age, including all children in the age-range and leaving no room for negotiations for relaxations.

b. Application Process: First and foremost, lack of proper information about eligibility criterions, documents required etc. acted as a hindrance for a number of parents. The Department had advertised about it in leading regional newspapers in Kannada and English, assuming a literate set of parents with access to newspaper for gathering information. Most parents interviewed (who were successful in getting seats under RTE) mentioned that they got the information about RTE from the newspaper. But, this also automatically eliminates those who are illiterate, literate in other languages and/or have no access to newspapers. For those who could access the internet, adequate information was also available online. Information was also displayed at BEO's offices but one had to be aware of existence of these offices and their location to access information through their Notice Boards. Parents often resorted visiting nearby schools for more information and also dependent upon information shared by other applicants within their circle of friends/family.

Lack of proper information also meant confusion between the mandatory set of documents to be submitted versus projected-mandatory requirements. As per the Government circular, income certificate is mandatory only for those applying under weaker sections category (i.e. non-SC/ST/OBC). However, all parents interviewed during the 2013 study in Bangalore (mentioned above) and the present study, reported that they had submitted income proof. Similarly, address proof was not required for those applying under top priority categories. The online form also ensured that submission of the form allowed this provision. But, one of the BEOs interviewed was neither aware of this provision nor aware of the control incorporated in the online form for this²⁵. Half-baked knowledge by those who had been successful in submitting their forms was also contributing to the projected-mandatory requirements. For instance, in our case study mentioned above, a friend of the applicant told him to buy photocopies of a particular form and submit it in schools to ensure that his form is not rejected by them. This, as one school pointed out to him, was not necessary.

From the Department's perspective, the online form was accessible on the landing page as well as a dedicated page for RTE. The Department landing page website address was also given in all guidelines/notifications issued by the Department to various stakeholders (schools, BEO office and public). However, for an applicant, access to this form meant access (directly or through someone else) to computer and internet, fluency in English or Kannada to fill the form, ability to decrease the size of the



photograph and a cell-phone where SMS messages could be received for updates. This meant immediate elimination of the most marginalised and probably, the neediest of this provision. This was also the concern most school management voiced as they felt that the students finally getting enrolled under this provision are not the neediest and come from families that could have afforded private education for their children without this provision as well.

Having no or limited access for submitting online form, also led to higher out-of-pocket expenditure due to internet charges, computer centre fee for assisting in filling the form, printouts to be submitted in schools and scanning and resizing of photograph. Out of pocket expenditure was also incurred in the process of getting income and caste certificates. Parents reported paying between Rs 20 to Rs 100 for internet charges (single or multiple attempts), Rs 500 to Rs 1000 for assisted form filling, Rs 10 to Rs 30 for scanning and printing and Rs 100 to Rs 1000 for obtaining certificates.

The manual system had led to the growth of agents who helped in accessing information, obtaining certificates and submitting application forms for a fee. The online system also gave rise to a specialised set of agents, who managed computer centres / cyber cafes, gathered information about RTE admissions, assisted in submitting the online form, scan and resize the photograph for uploading and print acknowledgment after successful attempt. Almost all schools visited had expressed resource crunch in assisting parents with online applications and hence recommended them to nearby computer centre. One parent also mentioned that he was directed to a computer centre by the BEO office. The centre had charged Rs 500 for conducting a workshop disseminating the information about RTE requirements, assisting in online applications and scanning/printing documents.

Rise of middlemen for filling forms also meant a higher probability of wrong entry of information, leading to rejection, for the wrong reasons. One such case was brought to the CPI's notice during 2015-16 admissions²⁶. The parent mentioned that when the computer centre person asked for "Mother's Name" to be filled in the form, the parent gave his mother's name. Such errors, if not detected would have eliminated eligible candidates at the first stage itself. Although the rise of the middlemen was viewed as a systemic issue by some of the Department officials and translated into higher out-of-pocket expenditures, it also meant that those with limited/no access also had a chance to submit their application.

c. Selection Process: During 2015-16, schools undertook the document verification, which had to be approved by the respective BEO office. A large number of approvals were made offline but not updated online. This led to delays in the process. During 2016-17, direct verifications through existing databases made it slightly efficient as it could be done in batch-mode. However, delays due to the other Department approval delayed the process. For those applications where there were discrepancies, BEO had to verify the documents. This token verification was conducted for the sake of formality and updates for those who submitted the documents were made. In order to address this issue, the Department has decided to adopt automatic validation from the next academic year admissions. Hence, when an Aadhar Card/Election Card number is entered, it will lead to an external page for automatic validation. This proposed process (already in practice for Passport Application) will be efficient and require less manual interference for verification. This will also decrease the workload of the BEO office wherein they only have to verify the documents for those in the top priority categories. Efficient and speedy processes are desirable but not at the cost of eliminating those who do not have an Election Card/Aadhar Card or do not have the resources to apply for one.

The Department adopted the guidelines provided by NIC to ensure that external randomisation software, purchased from Microsoft, was used for final selection. However, lack of awareness about this process led to a number of stakeholders feel that the process was arbitrary. A number of school managements as well as parents interviewed were not sure how final selection was undertaken. Some of the lower level Department officials were also unaware of this. For the first round of selection in 2015-16, press and other Department officials were called, yet there seemed to be a sense of opacity amongst public about this process.

Under the manual system, the most marginalised got eliminated at the school level. The only way to ensure that schools included these top priority applications in their pool was if BEO office scrutinised all applications received by each school within their Block. Given the magnanimous numbers, this was practically impossible. The online system was designed to be inclusive – it did not require any kind of documented proofs to be submitted for the top priority categories and could be submitted with the bare essential information. These were also accepted by the system and after deleting the duplicates, were assigned to the pool in totality. Schools had to accept these allotments and could not reject them on any grounds. The inclusiveness of the design did not really translate into an inclusive practice. Different hurdles of obtaining correct information, necessary skills (language, computerand internet), accessing the form and successfully submitting it and adequate financial and other resources for an easy process eliminated the neediest from the eligible pool, making this practice not inclusive in reality.

A small case study developed during the interviews with parents (applying for 2016-17 academic year) illustrates these issues:

Case Study 2: The applicant's mother works as a domestic help. With the help of the employer, she applied online for admissions under RTE provision for 2016-17 academic year. There were discrepancies between the information given online and the Election Card details submitted. Hence, it was rejected online and she had to go to the BEO's office to re-submit the documents. There was no time-gap given to submit them. They received the SMS around 4pm and had to submit the documents by 5:30pm that same day. They were asked to submit the Aadhar Card for the child as well. They did not have it, hence they had to apply for it and then submit the acknowledgement for the same. When they went to submit the updated documents to the BEO office, staff had gone on strike. They were not given any receipt for the re-submission. The employer mentioned that "There was a big crowd in the BEO office and one official was simply accepting the documents and adding to an existing pile." In total, they had to submit the documents four times. They also faced severe issues regarding the small size of the photograph to be uploaded.

Chapter 3: Conclusions and Suggestions

The Department of Public Instruction in Karnataka has been a pioneer in utilising technology platforms for implementing processes defined by various Acts. This includes admissions for B.Ed/D.Ed colleges, teacher recruitment and transfer. The use of technology allowed handling of large numbers and use of multiple criteria on a dynamic basis while ensuring transparency at the same time. The software was designed to take care of applicable norms and criteria in each case. The development of all these software had been in-house, with initial assistance from NIC. Hosting of the servers and data management is also managed with Data Centre of Centre for eGovernance, Government of Karnataka, providing state of art Internet and physical security. They also have firewall and intrusion detection systems in place to thwart any attempt to compromise the data on the servers.

It is not surprising that the Department decided to use their expertise in technology platforms to convert the manual system of admissions to an online one. At many levels, the online system addressed the issues related to the manual system. It helped in centralising the process to curb malpractices by school managements as well as District/Block/Cluster level officials, streamlined definitions, gave an option to apply and be considered for admission under the high priority categories, reduced the workload of the BEO office leading to decrease in delays, avoided school visits by parents to estimate whether they are eligible to apply there or not and ensured that all those who were eligible had a fair chance to be selected. Needless to say that the process was streamlined to a great extent, made efficient and transparent as compared to the manual system of admission.

But technology itself can be intimidating for many, especially for the most marginalised. Existing literature on the use of technology for development and social inclusion indicates that designing the interventions without considering the structural and social considerations can have adverse effects on social inclusion27. Deen-Swarray (2016)²⁸ notes that there are four levels of literacy required to access ICT for social inclusion: (i) Reading Literacy (Being able to read any language); (ii) Writing literacy (Being able to write any language); (iii) English-language literacy (Being literate in English, the most common medium of online content); and, (iv) E-skills literacy (Tertiary or secondary educations). These skills are interdependent for enhancing use of technology.

Accessing technology to apply online does not simply mean having access to internet, via a computer or a smartphone. It also means navigating through the website to read all instructions, written in language one might or might not be literate / competent / fluent in. It also means digitising document/photograph to be submitted along with the form. The 2013 study in Bangalore captured that 40 per cent of the parents who had successfully admitted their children under the manual system did not have Kannada (main language spoken in Karnataka) as their native language. In a situation like this, English competencies help. But, if the target population is expected to be illiterate/low literacy levels from weaker and disadvantaged backgrounds, then assuming that they will know English, even if they don't know Kannada, is reflective of ignorance.

Discussions with parents reflect that there is a sense of comfort that they feel with the manual system, where they hand the forms to schools personally and are ensured that it has been accepted. Even when the online form did not require them to submit the forms and documents to schools again, all parents reported doing this "just to be on the safer side". Schools also voiced similar concerns.



This provision was inserted with intent to ensure quality education to the neediest and implied a sense of inclusion within the system. However, the practice of this provision, in Bangalore, speaks otherwise. Since the Government has clubbed the high priority categories with the OBC category, there is no segregated data available as to how many children were enrolled under these high priority categories. Even though the numbers for the same are available under the online process, the state-wide numbers are not at all reflective of their proportion in the population.

It is strongly suggested that the Department invests in strengthening the online process to counter the various issues of the online form as well as the process. Some of the suggestions include:

- a. Wider publicity of the RTE admission procedures, eligibility and timeline through media in various languages
- b. Synchronising the final selections with the school calendar so that children do not suffer. This implies starting the process early, ensuring efficiency and promptness in verifications and timely conducting multiple rounds of selection
- c. Multi-lingual online form and hard copies of the same to be made available
- d. Ward-level help-desks for converting applications online. Dedicated computers in Block-level offices that would convert offline forms to online. It could also be delegated to Gram Panchayat office in rural areas.
- e. Establishing more controls within the software so that it doesn't prompt for information that is not mandatory for application under certain categories
- f. Collaborating with local organisations to organise information fairs

The process itself can be easily streamlined but the larger question of accessing admissions online for the target population, consisting of the most marginalised, will still need considerable thought and action by the Department in order to implement this provision in its true spirits.

Annexure I: Tools

A. State Level Officials (Commissioner, Director, Deputy Director)

- 1. Name, Designation
- 2. Can you explain the complete lifecycle of the online admission system for RTE 25% reservation? (Add-on questions, if any, depending upon the discussion)
- 3. How was the decision to conduct online admissions taken?
- 4. What preparatory work was conducted?
- 5. Did you explore the procedures of other states to design the approach? (Follow up questions on which state, what did you learn, etc.)
- 6. Did you explore any other existing system (e.g. teacher recruitment process) for designing this approach?
- 7. What was the main intention behind converting to the online system?
- 8. What are your expectations from the new system?
- 9. What were the hurdles that you have faced, so far?
- 10. How are these being resolved?
- 11. Have you set up any system where user-related hurdles can be resolved? Can you please explain these?

B. Technical Team

- 1. Name, Designation
- 2. Role in developing the software
- 3. Can you please explain the flowchart of the software designed for the RTE 25% reservation admissions?
- 4. How was the flowchart/process designed?
- 5. Did you explore other similar software before designing this software?
- 6. What were the hurdles that you have faced, so far?
- 7. How are these being resolved?
- 8. Can a single applicant made multiple online applications? How is this controlled?
- 9. Once applications are received, how is the database screened for eligibility criteria? Who screens it?

C. Documenting the Case Study

- 1. When did he start the process?
- 2. Where did he go? Schools/BEO Office?
 - a. When did he go there?
 - b. What happened there? What information did he get there?
 - c. Was the information useful?
 - d. How many times he had to go there to get the information?
 - e. Was he asked for bribes? Did he pay any bribe? How much? To whom? For what information?



- 3. Was he following the newspaper articles? Was in their useful information there? What information did he get from newspapers which he didn't get from schools/BEO office?
- 4. Did he take any other help for the process (e.g. someone he knew who could get information easily)? What information did he get from this person/source? Was it useful? Did he try getting the same information from BEO office/newspaper/schools?
- 5. What documents he had to collect for the application? Where did he get them from? Who told him about these documents? Did he pay a bribe in getting the documents? How much time it took him? Did he get all the documents at once or did he have to run around for documents? Did he have the complete list of all documents in the beginning? If his list was not complete, what more was required?
- 6. How many attempts did he make to complete the form online? What issues did he face while submitting the form? Did he take any help for submitting the online form? What kind and from whom? How much money did he spend for getting this help?
- 7. How many days did the whole process take?
- 8. What was the final outcome?

Annexure II: Screenshots of Online Application Form

Figure 1: Basic Information Page



Figure 2: School Search Page



Figure 3: Listing of Available Schools



Figure 4: Application Form (Part I)

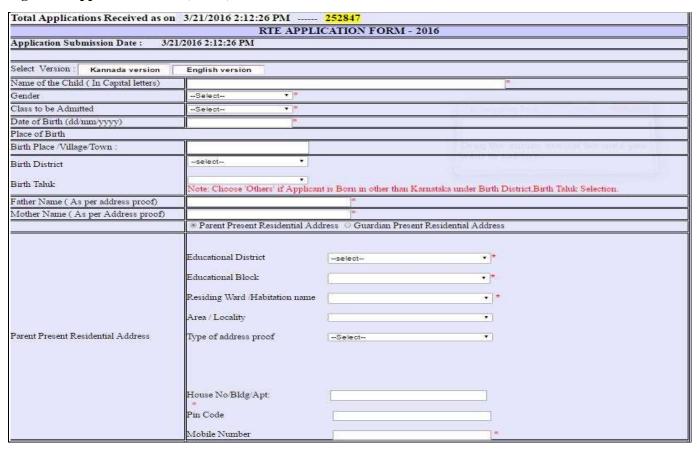




Figure 5: Application Form (Part II)



Figure 6: Application Form (Part III)

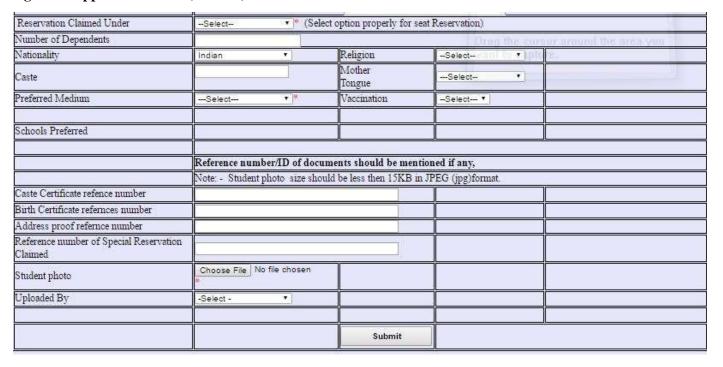




Figure 7: Application Form (Part IV)

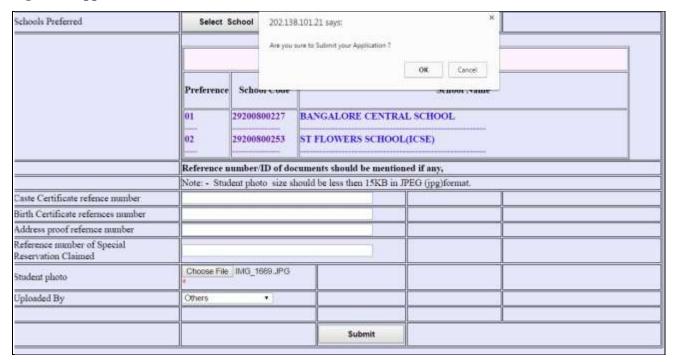


Figure 8: Acknowledgement Page

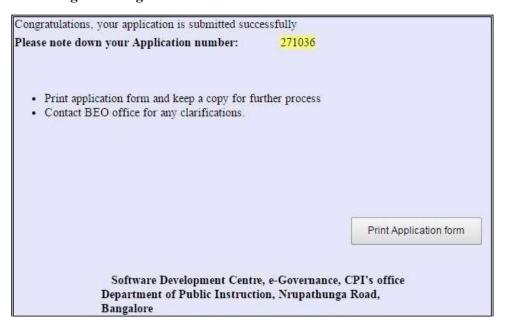
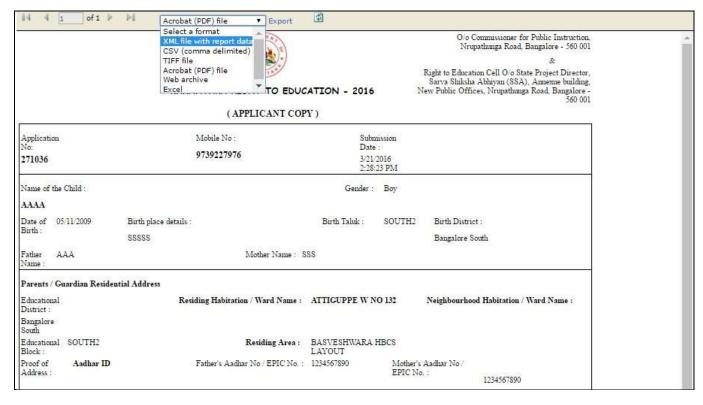




Figure 9: Printed Application



²The Act defines a child belonging to disadvantaged section as those belonging to the SC, ST, socially and educationally backward classes or such other groups having disadvantage owing to social, cultural, economic, geographical, linguistic, gender or other factors (RTE Act Section 2 (e)). A recent amendment has included children with disabilities to this group. A child belonging to the weaker section is defined as a child belonging to such parent or guardian whose annual income is lower than the minimum specified limit by the government (Section 2(d)).

³This income limit is set by the State Government. In Karnataka, this limit is set as Rs Onelakh only (Notification No. ED 27 MAHITI 2012; Government of Karnataka Notification)

⁴The Hindu. (2013, February 27). RTE: Priority for children from weaker sections.

⁵Jha, Jyotsna (2015). Ensuring Inclusion in Private schools: An Analysis of the Discourse and Experiences around Right to Education. Anil Bordia Policy Seminar, NUEPA, New Delhi

⁶Centre for Budget and Policy Studies (2012), Financial and Governance Challenges of Implementing Right to Education Act 2009 in Karnataka, India

⁷Society for Unaided Private Schools of Rajasthan v Union of India and Another (2012) 6SCC; Writ Petition (C) No. 95 of 2010

8http://www.educationworldonline.net/index.php/page-article-choice-more-id-4018

⁹Centre for Budget and Policy Studies (2013) A Study of the Quality of Acceptance of Disadvantaged Children admitted under RTE Act 12(c) in Private Unaided Schools in Bangalore Urban. Bangalore

¹⁰Aradhaya, Niranjan (2016, June 26). RTE: Pvt Schools' Obligation to Society. The Hindu

¹¹Government of Karnataka Order No.ED124 PBS 2012 dated October 2012

¹²Method of Admission and Reimbursement of Fees in Non-Minority Unaided Institutions (No. RTE/02/2012-13), Department of Public Instruction, Government of Karnataka, Bangalore, 10 May 2012.

¹³Government of Karnataka used the mandated provisions outlined in the RTE Act (infrastructure norms, Pupil-teacher ratio, subject-teacher availability, playground etc) and calculated the per child expenditure of government schools in Karnataka. This amount was the baseline for deciding the reimbursement under RTE 25% provision.

¹⁴Government of Karnataka, Sashia/Shihako/Registration/07/2014-15 dated: 21/11/2014

¹⁵Centre for Budget and Policy Studies (2013) A Study of the Quality of Acceptance of Disadvantaged Children admitted under RTE Act 12(c) in Private Unaided Schools in Bangalore Urban. Bangalore

¹⁶Mahendale, A., Mukhopadhyay, R., & Namala, A. Right to Education and Inclusion in Private Unaided Schools: An Exploratory Study in Bengaluru and Delhi. Economic and Political Weekly Vol. L No 7, 14 February 2015, p.43-51

¹⁷ The directorate of education continues to be known as the Department of Public Instruction in Karnataka, as was the practice during colonial period. This is headed by the Commissioner of Public Instruction (CPI). They have Directors of Public Instructions (DPI) for Primary and Secondary Sections. DPIs are assisted by Deputy Director of Public Instruction (DDPI) at district levels. At Block level, administrative officials are called Block Education Officer (BEO).

¹⁸Bangalore Urban has nine educational blocks. Two schools from each educational block was selected to understand their experience with the RTE online admissions.

¹⁹ It must be noted that schools were requested to call at least 5 parents for this discussion. On the day of the discussions, schools stated that they have informed the parents but are not sure how many will come. Hence, we could conduct discussions with very few parents.

²⁰Rajasthan started online process in July 2013. However, Maharashtra had also piloted the online process for academic year 2014-15 in Pune (Pune Municipal Corporation, Pimpri Chinchwad Municipal Corporation and Haveli Zila Parishad) and Mumbai (Mumbai West, Mumbai North, Mumbai South and Panvel).

²¹The Hindu (06 January 2015). Online admissions to schools under RTE for 2015-16. Bangalore

¹Henceforth referred as RTE Act

²²Explained in detail in Section 2.3

²³National Information Centre – Karnataka State Centre Government Circular No. 7(26)/2015-KSU/SIO titled "RTE seat allotment system through Online Lottery for the year 2015-16- reg"dated 7th March 2015, Bangalore, Department of Information Technology, Govt. of India.

²⁴As mentioned by the RTE Cell

²⁵During the interview, the BEO called one of the e-governance cell officials to check this. The official was unable to respond to the BEO at that point of time. This prompted the research team to fill out a dummy form for the top priority categories. The dummy form made it clear that address proof was not mandatory for these categories, as specified by the government circular.

²⁶Information shared by RTE Cell during consultation

²⁷Chaitali Sinha and Raymond Hyma (2013); *ICTs and Social Inclusion*; in Connecting ICTs to Development: An IDRC Experience.

²⁸ Deen-Swarray, M. (2016). Toward digital inclusion: Understanding the literacy effect on adoption and use of mobile phones and the Internet in Africa. Information Technologies & International Development [Special Issue], 12(2), 29–45.