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Meeting the RTE Commitment

Engaging with Non-Formal Basic Education Across Pakistan

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This report has been produced with the support of Ilm-Ideas (UKAid). The data and interpretations in this study are those of SAHE and IDEAS, they do not necessarily reflect the views of Ilm-Ideas.

Published by: Society for the Advancement of Education (SAHE)
65-C Garden Block, New Garden Town, Lahore, Pakistan
www.sahe.org.pk & www.cqe.net.pk

Cover Design & Layout: Balance Publicity

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Acknowledgements

This report is an outcome of the collective effort of numerous individuals and organizations who provided their help, support and guidance along the way. We thank members of the Working Group constituted jointly by SAHE and IDEAS to steer the study activities and tasks assigned to them.

Above all, we are particularly thankful to the organizations and individuals (teachers, parents and students) that gave us access for doing this study and shared information with us. Special mention and thanks are certainly due to the federal National Commission for Human Development (NCHD), Basic Education Community School (BECS) Directorate as well as to the Literacy and Non-Formal Basic Education Department (L&NFBED) Punjab and other provincial level government and non-government organizations engaged in the provision of non-formal basic education.

We would also like to acknowledge the support of our provincial partners: Society for Community Strengthening and Promotion of Education, Balochistan (SCSPEB), Sindh Education Foundation (SEF) and Khwendo Kor in KP who coordinated with multiple organizations at the provincial level to implement this study.

We owe a debt of gratitude to Noor ul Zaman Rafiq for overall coordination and supervision of field work and all the research teams who participated in the survey. Special thanks to Idara-e-Taleem-o-Aagahi (ITA) and Baela Raza Jamil for sharing the ASER assessment tools and to Imtiaz A. Nizami and Muhammad Usman for providing specific training on implementing the tools. We are grateful to RCons (Pvt.) Limited for support in data processing.

Not least, we would like to acknowledge the Ilm Ideas team, and especially Zehra Zaidi, Aban Haq and Asim Latif, for continuous engagement, support on technical aspects of the study and also making it possible for SAHE to explore the largely neglected but potentially significant sector of non-formal basic education in Pakistan.

NFBE study team

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Abbreviations

AEPAM	Academy of Educational Planning and Management
AJK	Azad Jammu and Kashmir
ASER	Annual Status of Education Report
B.Ed	Bachelor in Education
BECS	Basic Education Community School
BEF	Balochistan Education Foundation
BRAC	Bangladesh Rural Advancement Committee
CCF	Child Care Foundation
DSD	Directorate of Staff Development
EEF	Elementary Education Foundation
EMIS	Education Management Information System
ESRC	Education and Social Research Collective
FGD	Focus Group Discussion
GB	Gilgit Baltistan
HDF	Human Development Foundation
IDEAS	Institute of Development and Economic Alternatives
IRC	Indus Resource Center
JICA	Japanese International Cooperation Agency
KP	Khyber Pakhtunkhwa
L&NFBED	Literacy and Non-Formal Basic Education Department
NCHD	National Commission for Human Development
NEF	National Education Foundation
NFBE	Non-formal Basic Education
NGOs	Non-Government Organizations
NRSP	National Rural Support Program
PEF	Punjab Education Foundation
PSLM	Pakistan Social and Living Standard Measurement
PTC	Primary Teaching Certificate
QCO	Quality Control Officer
SAHE	Society for the Advancement of Education
SCSPEB	Society for Community Strengthening and Promotion of Education, Balochistan
SEF	Sindh Education Foundation
STR	Student Teacher Ratio
TLM	Teaching Learning Material
UNESCO	United Nations Educational, Scientific and Cultural Organization

Executive summary

Introduction

Nearly five million children of primary school-going age are estimated to be out-of-school in Pakistan. Given Pakistan's commitment under Article 25-A to educate all boys and girls between the ages of 5-16, even the most ambitious program for scaling up formal schooling will need to be supplemented by other means of providing education in the interim. In this context all possible alternatives to the formal system should be explored. Policy has so far given a great deal of emphasis to the low-cost private sector, that is public funds have been utilized to subsidize low-cost private sector schools and provide vouchers to families. Non-formal Basic Education (NFBE) represents another such avenue which, in other parts of the world as well as in Pakistan, has been used to address the issue of out-of-school children.

NFBE is commonly understood to be a flexible form of education, which targets a specific group of people, mostly under-privileged children who have been left out by the formal education system: out-of-school children, working children or children who have dropped out of the formal education system. NFBE in practice in Pakistan is not necessarily accelerated, but often has flexible timings, a curricula that aims to address learner and community needs, a program that is participatory in nature involving communities in setting up the center and finally costs that are not as high as in the formal sector.

Internationally, a number of countries have non-formal education programs. A review of the literature shows that quite a few non-formal models have succeeded in providing education to a large number of students who otherwise would have been left out by the formal education sector and have improved the learning levels of learners. Despite evidence of NFBE's potential, it has not received due attention as a mode of education service delivery and policymaking has often failed to effectively address it. In Pakistan we find that the most recent National Education Policy 2009 and the provincial education sector plans recognize the importance of the non-formal education sector as a means of supporting and assisting the formal sector and outline policy actions to do so. However implementation of many of these policy actions remains to be seen.

Given this context, a nationwide study on the NFBE sector was conducted. This study sought to fill the gap in information on the NFBE sector in Pakistan and report on its current state with a view to provide insight into the institutional arrangements, the role of the community and factors that impact teacher performance as well as student performance. The study consisted of three phases: (1) An initial mapping phase; (2) A quantitative survey which entailed collecting data on 626 centers and teachers and 2,187 parents and students across all provinces and selected regions of Pakistan. It also entailed assessing 4,612 students from grades 3, 4 and 5 in languages (Urdu, Sindhi and Pushto), English, mathematics and general knowledge using the Annual Status of Education Report (ASER) tools; and (3) A qualitative phase which entailed semi-structured interviews with teachers and program staff, community focus group discussions and classroom observations in 44 NFBE centers.

Approaches to NFBE in Pakistan

In Pakistan there are approximately 28,000 NFBE centers catering to close to 1 million students across the country. There are four types of organizations running NFBE programs: those supported by the federal government (NCHD and BECS), provincial government (L&NFBED), provincial foundations (BEF, EEF and NEF) and those run by the NGOs. Going by our survey, the per child cost per month ranges from approximately PKR 200 to PKR 500. This indicates that NFBE is a cost effective alternative.

From the data it is clear that the NFBE sector caters largely to female students with 60% of the student population being female. The majority of students are within the normal age range for primary with only 12% of students over-age. This is not surprising as more than half of the students are admitted in grade 1. Roughly half the students complete the program cycle equivalent to grade 5.

Many parents are satisfied with NFBE and would like their children to continue with their education after completing primary, preferably at a government school. Several programs have taken initiatives to ensure students are able to mainstream, with NCHD's approach of linking feeder schools to government primary schools standing out in this regard.

The typical center is located inside the community (84%), usually opened in a teacher's home. The centers are not necessarily opened in areas where no schools exist (69% had schools within 2 km) as identified by program goals. But for girls and younger children distance is critical issue and even a distance of one kilometer can make a difference to parents.

The provision of facilities and materials by programs is fairly mixed by organizational type. In most cases the building is provided by the community. The vast majority of the programs offer education free of cost to the students (88%).

In terms of academic approach, by and large most programs follow the government curricula. The majority of programs are often not accelerated, average duration of NFBE programs is 5 years, which is the same as the formal primary cycle duration. And the vast majority, 96%, operate on a morning shift. This contradicts the assumption that NFBE centers are often providing accelerated learning and catering to a working population. They do however maintain flexibility in terms of timings and admissions, which is a typical feature of NFBE. A rough estimation of instructional time shows that it is approximately 1,200 hours per year in NFBE sector as compared to approximately 1,000 hours or less in the public sector.

The majority of centers operate on a multi-grade basis, running with a single teacher. The average student-teacher ratio is 1:40, which is within a manageable range. And teachers, unlike those in the public sector, have very few non-teaching duties. Teacher salary ranges between PKR 5,000 to 6,000, which is comparable to low cost private sector teacher salaries but lower, of course, than public sector teacher salaries.

Program support also appears to be mixed. Programs often provide support to teachers in terms of planning (67% receive such support). They also provide professional development with more organizations providing induction training (74% of cases) as compared to ongoing training (50% of cases). Generally teachers are satisfied with the training received, but would like more training. A little more than half receive in-classroom support usually on a monthly basis. The majority of programs monitor the centers with a focus on teacher and student attendance.

NFBE teachers are mostly female and young but somewhat older than their counterparts in the low-cost private sector, with an average age of 29 and also two-thirds of the teachers are married. By and large the

teachers are from the same community, which is likely to be helpful in attracting students to the center, as parents are often comfortable sending their children, particularly daughters, to someone they know. And for creating an in-built accountability mechanism as teachers probably have a greater sense of responsibility towards children from their community and fewer reservations responding to queries from parents about their progress.

Most of the teachers have a Bachelors degree or an Intermediate certificate and about half have professional teaching certification as well. Teacher often note the high status of the teaching profession in the local context as their reason for choosing to teach at these NFBE centers. Their reasons for satisfaction are usually proximity of the centers, flexibility of timings and ease of obtaining leave. Reasons for dissatisfaction are usually the salary amount, lack of qualification-based salary and delays in receiving it.

With regard to teaching and learning practices, the data shows that the vast majority of teachers plan their lessons. Where case studies were conducted, classroom observation data shows that teachers work in a sequential manner in multi-grade situations, teaching one class at a time and often assigning a monitor to manage the classes not being taught. They often use multiple strategies to ensure attention in the classroom. With regards to disciplining practices, 68% of teachers note using corporal punishment but only 40% agree it is actually useful for disciplining students.

In terms of other teaching practices, teachers claim encouraging questions to a great extent (84%) and a smaller percentage use group work to a great extent (60%). In terms of teaching practices observed, lecturing appears to be the most popular method followed by whole group recitation.

In terms of assessment three-quarters of the teachers use both oral and written assessments. About three-quarters of teachers respond that oral and written assessments are conducted by other program staff and this data is used mostly to improve teaching methods and promote students. Certificates are awarded on successful completion of a grade level in about three-quarters of the cases.

The language primarily used in the classroom is Urdu (64%) followed by regional languages 36%). However, as expected the language used to explain difficult concepts and by way of conversation among students is predominantly the regional language.

The majority of parents are not educated, with only about a third of fathers and fewer mothers completing primary or elementary education. The majority of other children in the household, 76%, are enrolled in some sort of educational institution and many are in NFBE centers as well. This, again, indicates a trend towards education in these families. Going by survey findings, the majority of households in the relevant localities are single member earning, with fewer mothers earning an income (only about 20%). The majority of fathers have an income of between PKR 5,000 to 10,000 (42%) followed by an income level of PKR 10,000 to 15,000 (23%). It is clear from this data that many families earning close to or below minimum wage. About two-thirds of families live in a pacca house. Despite the low-income level of the households very few students, 3%, report engaging in paid work. This again corroborates the assumption that NFBE centers in Pakistan do not generally cater to students who are working. At the same time it underlines the social demand for education even among the poorest.

In term of parents reasons for choosing NFBE centers the majority of parents note proximity and flexibility as key reasons. Many community members point out that they would not be sending their daughters to school if it was not for this center. Affordability is also an important factor as is the perceived quality of center as the teacher is seen as hardworking and accessible. The communities note a great change in their attitudes towards education over the years especially for girls. Amongst their children they notice positive

changes particularly in their behavior and practical skills such as being able to read a prescription or sign boards.

About 88% of community committees are active, and about half are involved in providing funds or in-kind contribution and voluntary labor, while the rest support in ensuring student enrollment or attendance. Usually mothers are responsible for maintaining contact with the teachers. In fact many committees have a high number of females.

Student performance in NFBE

Interestingly, a comparison of student performance across the sectors (using ASER data) shows that 51% of the students studying in NFBE centers are able to read a story in Urdu, Sindhi or Pushto whereas only 37% of the students in government and 34% in private schools are able to do the same. In the English test, the students of government and private schools generally perform slightly better than their counterparts in NFBE centers, with more students being able to read a sentence in English in the former two. In the math test, the difference between government and private schools student performance and that of NFBE students is the greatest, with the former two outperforming the NFBE sector by a considerable margin. For the highest level of proficiency—division—more government and private school students are proficient, 33% and 31% respectively, as opposed to NFBE students 11%.

The analysis also checked for differences in test performances among rural and urban students. Normally, one would assume that urban students are likely to perform better than rural students due to access to better facilities and opportunities in the case of the former. However, surprisingly, the results fail to show any significant difference on any of the tests; rural and urban students perform quite close to each other in all three tests.

The study also conducted a thorough review of the program, teacher and community related factors that could possibly explain student performance. Among programmatic factors, an important one appears to be the location of the center. There is a 10% difference in the proportion of high proficiency students between those centers that are within the community and those at a distance. This bolsters the previous findings that the local nature of the center is a critical element in quality. Centers with a higher daily attendance rate have a higher proportion of students with average high proficiency. This may imply that peer attendance plays a role in shaping a child's performance or this may be an indicator of the quality of the center itself (i.e. those centers with low attendance may also just be those centers where quality is poor).

In terms of what the program or organization provides to the centers, infrastructure or facilities only have a nominal relationship with performance. Similarly there is a nominal difference of 3% between centers charging a small tuition fee and those that do not do so. Interestingly there is an insignificant effect of student teacher ratio on the percentage of students with high proficiency.

In terms of academic approach, in NFBE centers four main types of textbooks are in use. There is a difference in students proficiency between those centers using privately published or NGO/agency developed textbooks and those using government textbooks, with the former having a somewhat higher proportion of high proficiency students. Instructional time, which we noted previously appears to be greater in the NFBE sector compared to the government sector, has an interesting effect on student performance. There appears to be a certain range of about 1030 to 1430 hours per year in which instructional time has a significant impact on student performance, anything below or above has less of an effect.

There is only a nominal difference in the proportion of students with high proficiency where the teacher has

Matriculation (grade 10) and where she has a Masters' degree. The same is the case with teaching experience where less and more experienced teachers appear to make only a nominal difference.

Teaching practices have been cross-tabulated with high proficiency as well. The use of corporal punishment by teachers appears to have slightly negative relationship with student performance. Of the students whose teachers use corporal punishment, there is a slightly lower proportion of students with high proficiency than those that do not use corporal punishment. However, there is the issue of reverse causality, namely it is possible that it is the low performing students who get the punishment to begin with. It is no surprise that the highest proportion of students with high proficiency are from classrooms where teachers use the following practices more than once in a week to daily: Explaining objectives before the lecture, revising earlier lessons prior to learning new lessons, assigning homework to students and providing written feedback on homework.

The data shows that there is no relationship between father's education level and the percentage of students with high proficiency. On the other hand, mother's education level has a positive relationship with student performance. Between the highest level of education, Bachelor's degree and no education there is a 17% difference in the number of students with high proficiency. These results are in keeping with most research, which shows that mother's education has the greatest impact on children's performance at school.

Interestingly students whose families are from the same community are more likely to have high proficiency as compared to those who are from another community, there is almost a 9% difference. Students are more likely to have high proficiency if they are getting tuition from a teacher of another school followed by a teacher in their own school, followed by getting tuition from a relative or neighbor.

The teacher's view about community support appears to have a positive relationship with performance, that is those teachers that are highly satisfied with their community's support have more high proficiency students and those that are not satisfied have a lower proportion of high proficiency students. There is also a positive relationship between parents who ask about their children's performance and student performance, as opposed to those who do not.

Conclusion and recommendations

There needs to be greater coordination between the formal and the non-formal education sectors in order to create a more enabling environment for learners to mainstream into the formal sector. The NCHD model may be useful in this regard. Secondly, greater coordination is needed to ensure there is no duplication of resources both between the formal and NFBE sectors and among NFBE providers. GIS mapping of existing schools and centers may be needed to ensure this. In addition, a coordinating mechanism and strategy for opening schools will be needed to ensure that such information is used effectively.

The early stages of primary education could be taken care of at the local level. Currently, the large number of children in pre-primary and early grades in public sector schools are usually ignored and left largely to their own devices by teachers whose attention is mainly focused on the higher grades. To begin with, children at pre-primary, grades 1 and 2 can easily be taught at a local well-supported NFBE center. This would allow for the children to get better care and experience education in the important early stages in a congenial environment more supportive of learning. At the same time it would relieve pressure on public sector schools allowing teachers to concentrate on the higher end of the primary cycle.

A provincial level strategy for NFBE is needed which would include: developing a detailed database of

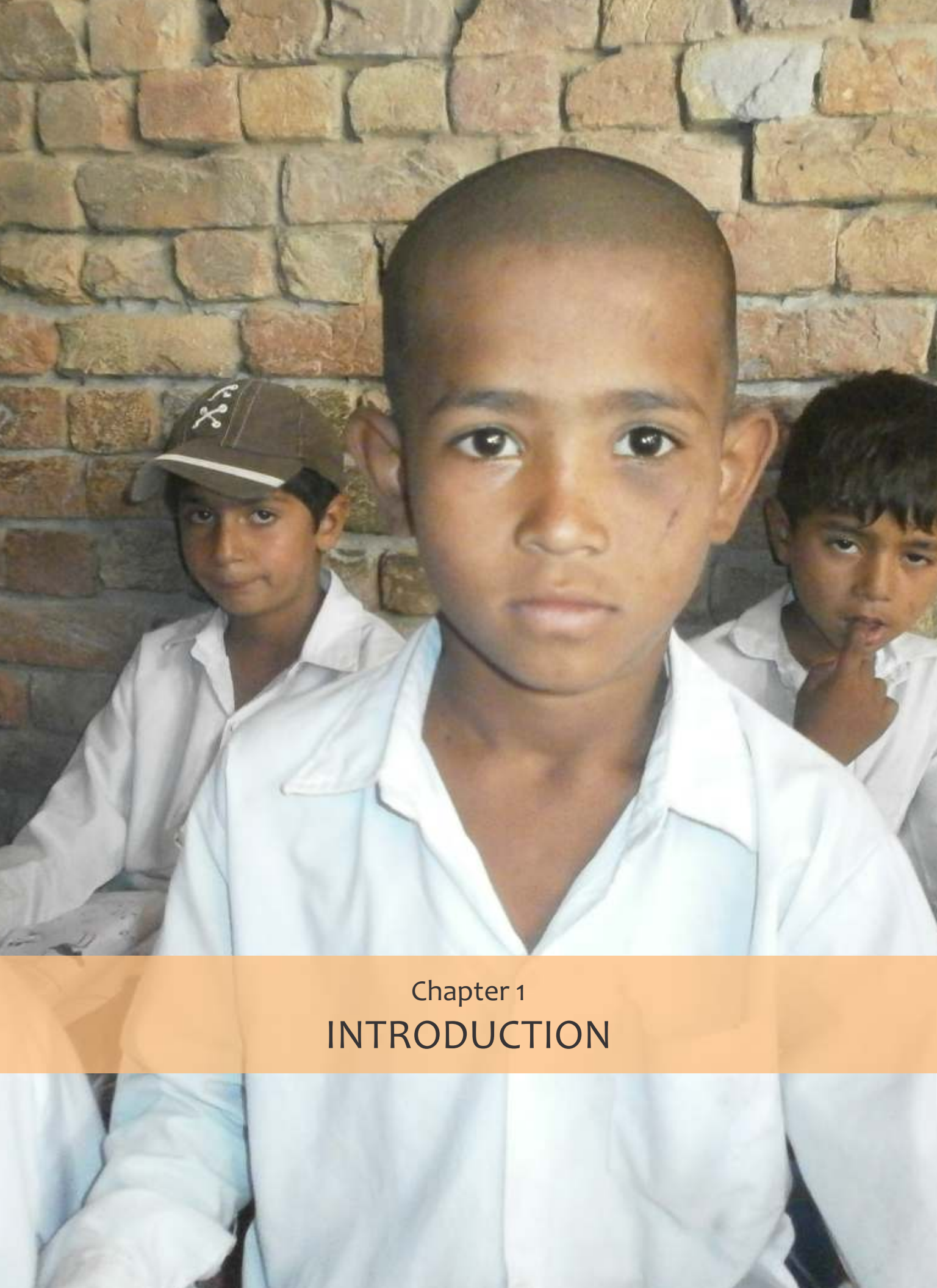
programs, identifying reform support areas, allocating budget and developing a detailed action plan along with identifying a provincial coordinating body. More importantly if the NFBE centers are to play a role in supplementing the formal sector, there must be some standardization amongst the NFBE programs and between the sectors. For this there is a need to develop standards for national equivalence so students can transfer between different NFBE programs and the formal system. Standards for NFBE programs can include the minimum requirements for provision of basic facilities to centers, qualification of teachers, pre-service teacher training as well as curriculum and assessment criteria. A standard multi-grade NFBE curriculum with guidelines for teacher training and sample teaching and learning material for use by NFBE programs is needed as well.

Proximity, flexibility and a local female teacher are critical factors for making the NFBE centers viable options for parents to send their children, especially daughters, to school. Therefore NFBE centers should continue to be built inside the community. Secondly, some programs do operate on fixed timings; this practice may be revisited in order to allow those students who have additional responsibilities to discharge these and still be able to access the learning centers.

Since multigrade setting is the norm in NFBE, professional development and continuous in-classroom support is a critical feature, as is to be found in the formal sector. Several NGOs (BRAC, Bunyad, HDF and Khwendo Kor) have very effective models that are worth studying and learning from. The issue of course remains taking any of these ideas to scale. In this regard, greater collaboration across the sectors may be required. For example in the case of BECS, utilizing local NGOs for support and monitoring of the centers appears to be a viable strategy. For professional development publicly supported programs have used existing public teacher training institutions, such as DSD in the case of Punjab and PITE in the case of Balochistan. Such support needs to be continuously provided.

Finally an exit strategy is required. In Pakistan, one assumption not borne out by experience has been that after some years of support the relevant communities, recognizing the value of education, will take charge of the non-formal centers. In many cases this has not happened due to poverty and the consequent inability of the community to pay even the low teacher salaries. The only viable option in our context appears to be for the government to factor all NFBE initiatives into the overall policy planning. The government should assume responsibility for sustaining the center in accordance with an agreed timeframe. It is after all the obligation of the state to ensure that all children of relevant age get an education.

Going by the findings of this study, the non-formal education sector can play a significant role in the state's efforts to provide education to all children. It has particular promise in terms of providing basic literacy and numeracy to the poorest. And, there is certainly a need to explore its possible role in taking on much greater responsibility for providing early grade education at the local level.



Chapter 1

INTRODUCTION

Introduction

Context

Nearly five million children of primary school-going age are estimated to be out-of-school in Pakistan.[1] Given Pakistan's commitment under Article 25-A to educate all boys and girls between the ages of 5-16, even the most ambitious program for scaling up formal schooling will need to be supplemented by other means of providing education in the interim. In this context all possible alternatives to the formal system should be explored. Policy has so far given a great deal of emphasis to the low-cost private sector, that is public funds have been utilized to subsidize low-cost private sector schools and provide vouchers to families, such programs support more than 1.5 million students in Punjab and 200,000 students in Sindh.[2] Non-formal Basic Education (NFBE) represents another such avenue which, in other parts of the world as well as in Pakistan, has been used to address the issue of out-of-school children.

Before assessing NFBE's viability as another potential option it is important to understand what non-formal education means. Non-formal education is understood to be a flexible form of education, which targets a specific group of people, mostly under-privileged children who have been left out by the formal education system; out of school children, working children or children who have dropped out of the formal education system as well as adults.[3] Learning in these programs often fulfills basic learning requirements of the learner and provides them with knowledge on their basic rights and needs, moreover, it is closely linked to the skills that the learner needs for future employment opportunities and enhances their survival in the community.[4] NFBE in practice in Pakistan is not necessarily accelerated, but often has flexible timings, a curricula that aims to address learner and community needs, a program that is participatory in nature involving communities in setting up the center and finally costs that are not as high as in the formal sector.

NFBE policy and practice

Internationally, a number of countries have non-formal education programs. A review of the literature shows that quite a few non-formal models have succeeded in providing education to a large number of students who otherwise would have been left out by the formal education system and have improved learning levels of learners. The Bangladesh Rural Advancement Committee (BRAC) education models in Bangladesh and the Child Labor Project Schools (CLPS) model in India are two popular non-formal education programs.

The BRAC education system operates in Bangladesh with 35,000 schools and 1.1 million enrolled students.[5] The program provides a four years long primary education course to children between the ages of 8 - 10. The BRAC schools differ from the formal school system as the class sizes are limited to 33 students per class; the parents are actively involved in the school through parent teacher meetings and are given an active role in deciding the school timings for the children. Moreover, the schools are regularly supervised and monitored through a decentralized management system as opposed to the centralized management of the formal schools. This improves the overall operations and management of the schools.[6] An empirical investigation, concluded that the BRAC model is able to provide quality education to disadvantaged children of Bangladesh as 70% of the children of these schools were able to pass the basic education test.[7]

The CLPS in India is supported financially by Education Department of India and the schools are run by local NGOs. Similar to BRAC, CLPS has reduced the instruction time for students to three years. At the end of the three years, the students are registered to appear for the grade 5 board examination; students who pass this test can then easily enter the mainstream formal education sector.[8]

Despite evidence of NFBE's potential, it has not received due attention as a mode of education service delivery and policymaking has often failed to effectively address it. In Pakistan non-formal education made its appearance fairly early on, in the 1950s, with the focus over the years shifting from adult literacy to primary education. However, the initiatives introduced (Village AID Program 1953; Literacy Program under Basic Democracies 1964-69; Experimental Pilot Projects 1977-78; Iqra Pilot Program 1987; Nai Roshni Schools 1987-89) have often been launched in isolation from the mainstream formal education system and mostly not proven sustainable.[9]

In recent policy documents we see an emphasis on non-formal education. The Education Sector Reforms Action Plan for 2001-2005, stated that for those who had missed the first chance, new opportunities would be created on a mass scale through NFBE and adult literacy programs, which would cater to three different age groups (i.e., 5-9 years, 10-14 years and 15+ years) and the younger age group would be enabled to enter mainstream education.[10] The National Education Policy 2009, sought to address weaknesses in the earlier policies by defining specific actions, "Non-formal education programs should be strengthened with greater budgetary allocation recommended 3% of the education budget for literacy and non-formal basic education; Minimum standards should be developed for all organisations involved in non-formal education; An accreditation and equivalence system should be developed for all programs/ students facilitating reintegration into the mainstream."[11] Unfortunately, there has been little effective implementation of the strategies identified in these policies.

Most recently, the provinces have sought to take steps towards NFBE as evidenced by their provincial education sector plans. The KP Education Sector Plan recognizes the importance of the non-formal education sector as way to support and assist the formal system. It outlines a plan to do so by strengthening and expanding existing initiatives such as a community learning centers program to benefit women and girls.[12] In Punjab, non-formal education has been given a fair amount of importance, as a separate government institution, the Literacy and Non Formal Education Department (L&NFBED), has been created to oversee such initiatives. The Punjab Education Sector Plan mentions the importance of a strong non-formal program that is linked to mainstream schooling and equally emphasizes the need to collect data on non-formal enrolments.[13] The Balochistan Government, recognizing the importance of NFBE as a strategy to address out-of-school children, has recently transferred the responsibility for it from the Social Welfare Department to the Education Department.[14] Finally in Sindh, the Sindh Education Sector Plan stresses the need to develop a sector approach, strengthen institutional linkages, develop standards for NFBE and build the institutional capacity of the relevant department the Directorate of Literacy and Non-Formal Basic Education.[15] How any of the policy actions are implemented remains to be seen.

Structure of the report

In Pakistan, the federal and provincial governments and a variety of non-government organizations are running NFBE programs to address the problem of out-of-school children. However, little is known about the scale, distribution and quality of these existing programs and as to which programs work better in different circumstances and with different populations. In light of this context, a study on the NFBE sector was conducted. This study seeks to fill this gap in knowledge on the NFBE sector in Pakistan by providing a

report on its current state. In order to more fully comprehend what works and why in this sector, the study seeks to examine the key NBFE programs in terms of quality-related factors and identify best practices in this context. It specifically seeks to provide insight into the institutional arrangements, the role of the community and factors that impact teacher performance as well as student performance.

The report's structure is as follows: Chapter two provides an overview of the study methodology, particularly it sets out the research questions, a working definition for NFBE and the methodological approach used for the study. Chapter three describes the various approaches to NFBE in Pakistan through the (1) Programs, the organizations supporting them, program characteristics and support mechanisms, (2) Teacher characteristics and motivations as well as teaching and learning practices and (3) Family and student backgrounds, community motivations and community participation in the centers. Chapter four presents the analysis of student assessment results, which includes a comparative analysis of student performance by sector and key demographics as well as an exploration of the relationship between performance and factors related to the program, teachers and teaching and community and families. Chapter five provides a discussion of the study's findings followed by recommendations for policymakers.

[1]NEMIS & AEPAM (2014)
[2]SAHE (2015)
[3]Rogers (1996)
[4]Thompson (2001)
[5]BRAC (n.d.)
[6]Nath, Sylva & Grimes (1999)
[7]Ibid
[8]Sud (2010)
[9]Mukhtar & Iqbal (2004)
[10]Government of Pakistan (2001)
[11]Government of Pakistan (2009), p.39
[12]Government of KP (2012)
[13]Government of Punjab (2013)
[14]Government of Balochistan (2013)
[15]Government of Sindh (2013)

Chapter 2

STUDY METHODOLOGY

Study Methodology

Introduction

This chapter provides an overview of NFBE study methodology. It begins with by reviewing the definitions of non-formal education in the literature and determines a working definition of the study and along with that sets out the research questions for this study. It then moves on to the methodological approach that describes the phases of research, tools developed, sample, data collection methods and data analysis. Finally this chapter provides some of the ethical considerations and limitations of the study.

Research purpose and questions

To date, there has been very little research on non-formal education in Pakistan. Yet it is a possible alternative path to education or supplement to the formal system in a country where the challenge of educating all children between the ages of 5 and 16 remains and the number of out-of-school children is very high. In this context the purpose of this research is to fill gap in knowledge about the non-formal education sector, its scope and effectiveness, in Pakistan. The study seeks to identify the potential room for Non-formal Basic Education (NFBE) interventions as a supplement to the formal education system in Pakistan and with it the factors that make NFBE models successful.

In relation to this objective the study seeks to address the following research questions:

- What are the characteristics of NFBE in Pakistan across different models and regions?
- What factors contribute towards making an NFBE model successful and effective?
- What role does the organization or program, teachers and community play in enabling effectiveness?
- What challenges to NFBE centers remain and how can programs be made more effective?
- How do NFBE centers perform in comparison to the other sectors?
- What role, if any, can NFBE play in supplementing the formal education system?

Defining non-formal education

Before defining non-formal education, it is useful to understand the definition of formal education system. Formal education, generally, refers to the classroom based structured system of educating people, administered by the state and non-state providers. The formal education system follows a coherent system, has defined durations, caters to specific age group and often confers certificates of learning upon completion of a certain level.[1]

Unlike formal education, the existing literature does not have one uniform definition for non-formal education rather it varies. One such definition by UNESCO is as follows:

> *"Any organized and sustained educational activity that does not correspond exactly to the definition of formal education. Non-formal education may therefore take place both within and outside educational institutions, and cater to persons of all ages. Depending on country contexts, it may cover educational programs to impart adult literacy, basic education for out of school children, life-*

skills, work-skills, and general culture. Non formal education programs do not necessarily follow the "ladder" system, and may have a differing duration."[2]

UNESCO has subdivided non-formal education into three categories based on geographical access, length of the program and learning pathways.[3] Alternative access programs often look exactly like a formal school program, but are focused on a different group of learners, operate in different geographical areas and/or offer different curricula and methods. Alternative access programs also include programs that provide standard curricula but in a non-traditional environment (such as home schools or mobile schools). Then accelerated learning programs, compress a curriculum designed to be delivered over a number of years into a smaller number of years. In Pakistan, for example the formal education system defines the primary education cycle as unfolding over 60 months. In an accelerated learning program this might be compressed into 40 months. Third, the alternative learning pathway covers all sorts of programs that are offered outside the formal education system and which can be included in NFE.

A summary of key aspects on which formal and non-formal education differ, namely objectives, target group, time-scale, curricula, assessment, program and management and resources has been provided in Table 2.1.[4]

Table 2.1 : Comparison of formal and non-formal education

Aspect	Formal education	Non-formal education
Objectives	Long-term and general	Short-term and specific
Target group	Age specific and compulsory for certain age group such as 5-16	Out-of school children, over-age, working children, adults
Time-scale	Full time, fixed duration	Part-time, flexible timings, accelerated and varying duration
Curricula/ content	One kind of education for all, standardized curriculum, academic	Education is based on learners and community needs, curriculum is open/ flexible, academic and practical
Assessment	Terminal at each stage; validated by external bodies	Continuing and terminal at each stage; informal
Program/ management	Run by departments/professionals, institution based	Participatory, community-related, flexibly structured
Costs	Resource intensive	Resource saving

Working definition for NFBE

In light of the study objectives and after an extensive literature review, we found that in the context of Pakistan, NFBE only includes some of the aspects typically associated with it. For example more often than not, NFBE programs are not accelerated. Therefore the study team developed a working definition, to serve as a selection criteria for programs in the study, this includes those programs that fit the following criteria:

- Provides accelerated and non-accelerated forms of learning
- Serves as alternative to formal schools to children who are most vulnerable and marginalized;
- Uses flexible and innovative strategies;
- Targets children of age group 4-16 have not been admitted into, or who have subsequently dropped out of the formal education system and provides them with a second chance to achieve basic levels of competency in literacy and numeracy.
- Enables the child to mainstream into the formal education system.

The working definition specifically excludes programs that fit the following criteria:

- Adult literacy programs aimed at providing functional literacy and numeracy skills;
- Religious education imparted in madrassas;
- Vocational or technical training centers;
- Any other short-term education related to with smaller component of literacy and numeracy.

Some existing large programs in Pakistan such as the NCHD feeder school mode and Provincial led programs such as the Balochistan Education Fund (BEF) are reasonably described as formal, except that they usually take place in a community setting and head teacher of nearby formal school oversees some of the functions of the feeder school. They have been included in this study as non-formal formal basic education providers because they have developed strategies which share number of commonalities with other NFBE programs.

Methodological approach

The study was divided into three phases. During the first phase of the research, substantial efforts were made to map out the different models and types of organizations offering NFBE through various projects and interventions in Pakistan. For this purpose, an exhaustive directory of programs running under different organizations across Pakistan was developed through organizational mapping. The second phase consisted of a quantitative survey aimed at developing a picture of NFBE in Pakistan by collecting information from teachers, student and parents as well as assessing student performance in different subjects. The third phase, largely qualitative, entailed taking a deeper look into at selected NFBE programs and centers to understand the factors contributing to the better academic performance of the students.

Working group

A working group was setup to design the study and to make effective use of its in-house and partner organizations resources to oversee the project (refer to Appendix A for details). The group met at regular intervals providing feedback on the different stages of the study. Specifically the working group provided guidance on the following:

- Finalizing the research design and framework of analysis
- Identifying the sample size and various sampling issues
- Facilitating provincial partners in developing guidelines for the identification and collection of data pertaining to existing NFBE models
- Reviewing NFBE models shortlisted in the light of evaluation criteria
- Developing multiple research tools for quantitative and qualitative phases and providing feedback on tool appropriateness and amenability to different types of analysis

Designing research tools

A different set of tools were designed for each phase of the study.

Mapping phase tools

For the mapping study, a comprehensive tool was developed to collect all relevant information from the organizations about their current projects, total number of active centers, objectives, targeted

beneficiaries, salaries of teachers, enrollment ratios, cost per child incurred and so on.

Quantitative phase tools

The quantitative data collection consisted of four tools: teacher and center questionnaire, parent questionnaire, student questionnaire and student assessment. The teacher and center interview tool was divided into two major parts: center related and teacher related information. The section pertaining to NFBE center collected information on students and teacher numbers, center characteristics (such as gender, level, location), infrastructure and facilities, teaching and learning resources, curricula, academic approach and so on. Teacher related information included educational and professional development, teacher workload, programmatic support provided, classroom practices and so on.

The parent interview tool collected detailed information on the background NFBE families (their education status, income, assets etc.) as well as parental perceptions on education and its importance, their reasons for choosing this mode of education and this center in particular. The student interview tool sought to collect information on their learning practices and study habits, working habits, teaching techniques used by the teacher in the centers and their own perceptions about education and NFBE.

Finally the student assessment tools seek to assess basic proficiency levels of students in grades 3, 4 and 5 in basic languages (Urdu, Sindhi and Pushto) and English specifically reading and comprehension, mathematics and general knowledge. The assessment tools were adopted from the Annual Status of Education Report (ASER), which has been used to test students from the formal sector across Pakistan. Using the same assessment tool allowed for an opportunity to compare student performance in non-formal centers with formal school.

> Annual Status of Education Report (ASER) Pakistan, an initiative inspired by ASER India, is one of the largest household surveys that provides annual estimates of student basic proficiency levels. ASER collects information at two levels: at the household level it collects household characteristics and student learning levels and at the school level it collects information on student enrollment levels, facilities and grants disbursed and so on. ASER tests all the children between the ages of 5-16 enrolled in both government and private schools as well as out-of-school children and drop-outs across Pakistan. The tests seek to assess student proficiency in language (Urdu, Sindhi or Pushto), English, mathematics and general knowledge.

Qualitative phase tools

During the third phase, four tools were designed to collect information from teachers, program staff and community members as well as observations of teaching and learning practices in the classroom. Broadly the instruments were designed on the basis of the factors identified during the quantitative phase that appeared to contribute towards the student performance and overall better management of centers.

The first tool, the teacher semi-structured interview, sought to delve further into factors such as teaching practices, program and community support, teacher motivation and satisfaction and expectations. The second tool, community focus group discussion (FGD), was designed to record community perceptions and attitude towards the NFBE and assess the form and extent of support offered to the center. The third tool, program support staff semi-structured interview, was designed to understand the structure and the management of the program, room for scale and sustainability of the project.

Lastly, the classroom observation tool was designed to capture both closed-ended data as well as open-

ended observations of teaching and learning practices in the classrooms. Specifically the tool looked at the classroom environment, planning and preparation, classroom management in a multi-grade setting, instructional strategies, student teacher interaction, use of language and attitudes towards gender balance in the classroom.

For both the second and third phases the tools were designed and reviewed by experts in the working group. After the initial design, the tools were pilot tested to ensure their amenability to statistical analysis and usability in the field. For the quantitative phase a total of 24 centers in all four provinces were visited for piloting and for the qualitative phase a total of 5 centers were visited for pilot testing. The findings were tabulated and analyzed in order to identify gaps and issues faced in filling the information. Any issues faced during piloting were discussed in the working group meeting. In light of the feedback from the pilot phase and researcher trainings the tools were then revised and translated into Urdu.

Determining the sample

Mapping phase sample

Mapping of the organizations was done utilizing three different sources. Firstly, using the already existing directories; secondly conducting meetings with the key stakeholders working in the non-formal sector and lastly, visiting the organizations and getting the information directly from the organizations. A total of 164 organizations were contacted during the course of organizational mapping. As a result of the mapping exercise, it was found that almost 70% of all NFBE centers operated in Punjab province while AJK and Balochistan had a very small share, 0.4% and 3.6% respectively, of the total mapped NFBE centers.

Quantitative phase sample

Quantitative sample size selection was two tiered. In order to achieve sufficient geographical coverage to capture local variations in NFBE models, at the first stage sample allocation was stratified based on province as well as the size of the NFBE organization (measured by number of operational NFBE centers). The stratified sampling was first done by region to select a sizable sample in each region even if that meant having a higher sampling rate in areas with fewer NFBE centers.

Second, within each region, the sample allocation among different organization was again re-weighted in favor of medium and small-sized organizations to achieve a more 'balanced' sample since the population was dominated by a few very large organizations, such as NCHD, BECS and L&NFBED, operating thousands of NFBE centers. Therefore, within each province, we classified any organization as 'big', which operated more than 12.5% of the total NFBE centers in that province. All other organizations were classified as 'small'. The provincial sample was then allocated to these two strata in 45:55 ratio, that is 45% of the sample centers from each province were selected from those run by 'big' organizations in that province and 55% of the sample comprised of centers run by small organizations.[5]

Once the number of centers to be included in our study from each organization was decided, the next step was to randomly select the sample centers from each organization's list of NFBE centers (Appendix B for a list of some organizations). In the second stage, randomization, we selected sample centers by following a systematic random sampling design with a random starting point provided by the organization's name coupled with a random number table. In case of non-response, a random replacement sample was also to be drawn using the same mechanism. A total of 626 centers were identified across 45 districts with 200 replacement units for the quantitative phase across Pakistan (Table 2.2). The stratified random sampling design ensured that the final mix of centers in the sample did not move away from representing the relative size and contribution of different organizations to the NFBE sector and yet managed to capture the flavor of diversity in the universe of NFBE centers despite its relatively modest size.

Table 2.2: Sample of centers visits during quantitative phase

Region	District	Center sample
AJK	Bagh	10
	Mirpur	1
	Muzaffarabad	4
	Neelum	8
	Poonch	3
Balochistan	Jaffarabad	9
	Mastung	12
	Panjgur	5
	Pishin	12
	Killa Abdullah	8
	Quetta	10
GB	Astore	10
	Diamer	15
	Ghizer	15
KP	Bannu	6
	Charsadda	8
	Chitral	4
	D.I.Khan	10
	Haripur	5
	Lower Dir	13
	Mansehra	8
	Nowshera	1
	Peshawar	16
Punjab	Bahawalnagar	34
	Chakwal	9
	Hafizabad	17
	Lahore	32
	Mianwali	24
	Muzaffargarh	33
	Narowal	13
	Pakpattan	17
	Rahim Yar Khan	40
	Sahiwal	30
	Sargodha	31
	Sheikhupura	34
Sindh	Badin	7
	Dadu	7
	Karachi	31
	Khairpur	18
	Qamber ShahdadKot	16
	Sanghar	6
	Shikarpur	11
	Sukkur	6
	Tando Mohammad Khan	13
	Thatta	4
Total		626

Subsequently, the study selected 8-10 students in each selected center for the student assessment. A total of 4,612 students from grades 3, 4 and 5 were assessed in reading and numeracy skills (Table 2.3). Only those parents were interviewed whose child was assessed during the student assessments, and of those only half were selected, thus a total of 2,187 parents were interviewed.

Table 2.3: Sample of student assessed during quantitative phase

Students	Grade 3	Grade 4	Grade 5	Total
Boys	714	564	479	1,757
Girls	1,153	867	835	2,855
Total	**1,867**	**1,431**	**1,314**	**4,612**

Qualitative phase sample

For the qualitative phase, 44 centers were selected primarily on the basis of composite student scores on the ASER. The averages of student assessment scores per center were calculated and the centers scoring below 60% were filtered out. The other criteria included the number students tested in each center (with at least six students assessed per center), geographical coverage and total number of functional centers per organization (in the case of NGOs). The final sample included 6 centers for NCHD, 6 for BECS, 2 L&NFBED, 8 Foundations, and 22 NGOs.

Collecting, managing and analyzing data

Field team selection and training

The data collection team for the quantitative phase consisted of 90 field researchers and qualitative phase 15. Selection criteria for field researchers took into account those with research and education sector experience, many have been working in education sector for over 10 years, and experience with the region and local language expertise for the region they were expected to work in. During the quantitative phase, three-day trainings were conducted in Lahore (bringing together researchers from Punjab, KP, AJK and GB) and Karachi (bringing together researchers from Balochistan and Sindh. For the qualitative phase a two-day training was conducted in Lahore. Trainings in both phases provided an overview of research objectives and objectives of the specific phase, an overview of research methods and ethics, a thorough review of research tools along with opportunities to practice interview and observation and preparation of field data collection plans. During the quantitative training a representative of ASER provided specific training on implementing and using the assessment tools.

Data collection and monitoring strategy

The shortlisted districts were divided into clusters according to their geographical proximity. The field teams were assigned a cluster of three to four districts. The data collection team consisted of two members (three in some cases in KP and Balochistan). Each team consisted a focal person, responsible for managing the logistics, contacting the center teacher, updating vehicle logs and sending the data to SAHE office. The number of field researchers in each district varied according to the number of sampled centers.

A strong monitoring strategy was laid out to ensure the quality and integrity of the data collected from the centers. A quality control officer (QCO) was appointed in each cluster to monitor the progress and the quality of the data. The QCO conducted surprise visits of the centers interviewed and filled a quality control tool to assess the quality of field researcher's data collection skills. At the second level, the QCO was responsible for validating all the survey forms filled by the field researchers. Monitoring meetings were

called at regular intervals to guide and provide feedback to the field researchers and to resolve any confusions faced in the field.

Data management and analysis

The quantitative data was managed diligently to avoid any data loss. Each center data received was uniquely coded for identification, re-verified for missing entries and sent to the external data entry firm. The entered data was again randomly inspected for quality of entries. The qualitative data was recorded and transcribed by the field researchers. The data was cleaned and analyzed in SPSS and Excel.

For analysis of the program, teacher and community data, the different NFBE centers were divided into five different categories based on the scale, management and source of funding. The categories are NCHD, BECS, L&NFBED, Foundations, and NGOs. For the student assessment data, a comparative analysis of student scores by school sector was also conducted using the existing ASER data. To create a comparable sample, the student scores in ASER data were filtered to match the characteristics of the NFBE study sample. Namely data was filtered to include only those children that are school-going rather than out-of-school as ASER collects both, in grades 3, 4, 5 as ASER covers a wider range and in the same districts covered in this study.

Ethical considerations and limitations

Permissions and confidentiality

Prior to visiting the centers, official permissions were obtained from the head offices of each organization. Letters were written along with the personal visits to each organization head. Field researchers were given a copy of signed letter of permission to carry with them in the field. Though, permissions were sought from the organizational head, details of the exact centers were not shared to maintain the element of surprise in the visits and to record observations on a normal day.

Teachers, parents and students were given an overview of the objectives of the study and their permissions were sought before the interviews. Where tape recorders were used, participants were informed and their permission obtained as well. In order to take respondents into confidence confidentiality was ensured at all levels throughout the study. Interviews were conducted individually, where possible. Researchers were able to record extempore responses as the teachers, parents, students and community members talked freely. The quotes used throughout the study have been taken from the interviews. The names of the respondents have been changed to protect their identities.

Study limitations

The study sought to include the maximum number of models operating in the NFBE sector in Pakistan. To this end the study sought to identify such organizations during the mapping phase, however the availability of organizations operating in this sector and clear identification of the affiliation of centers with organizations proved to be a limitation due to the sheer lack of reliable data. In addition some models and could not be covered in the study due to closure of projects, lack of permission and information sharing by the respective organizations. Secondly, although the scope of this study is nationwide, certain districts of Balochistan, Khyber Pakhtunkhwa and Gilgit Baltistan had to be left out due to the security considerations. Finally, with regards to using ASER data as a comparison for student proficiency across sectors, there are slight differences in the methodology of both studies, which may limit comparability. Namely ASER data is

collected at a household level whereas this data was collected at the center level. To address this limitation only the data of school going children in the same districts as visited for this study were used as a comparison for student results.

[1]UNESCO (2006)
[2]UNESCO (2009a)
[3]UNESCO (2009b)
[4]Fox (1989); Walker (1998)
[5]Within the sub-strata of big and small organizations, the sample was allocated proportionately among the different organizations. So within the 3 big organizations in Punjab, L&NFBED will have the largest number of centers included in the sample followed by BECS and then NCHD.

Chapter 3

APPROACHES TO NFBE IN PAKISTAN

Approaches to NFBE in Pakistan

Introduction

This chapter seeks to provide a picture of NFBE in Pakistan, by describing in detail the various approaches to it. The first section deals with the NFBE programs; it describes the organizations behind them, their program characteristics and academic approach and support mechanisms. The second section deals with the teachers, their characteristics and motivations as well as teaching and learning practices. The third section looks at NFBE communities; it includes an overview of the family and student backgrounds, community motivations and community participation in the centers. Each section compares the data according to different organizational types and where needed by region as well. It draws from both quantitative and qualitative data.

Section 3.1: Programs

This first section provides an overview of the NFBE programs, the organizations behind them and the centers they run. It first describes the types of organization involved in providing NFBE, their programmatic goals and scale. This is followed by the program characteristics, which provides a description of the centers, programmatic provisions, academic approach, costs as well as students and the teacher policies and workload. The final part describes the support and accountability mechanisms put into place especially professional development, in-classroom support and monitoring.

Organizations, goals and scale

Organizational overview

Overall, according to our mapping study, there are an estimated 137 organizations actively implementing NFBE projects across Pakistan. Of these some operate on a very large scale and some operate on a very small scale. Organizations involved in NFBE fall into four major categories.

The first category includes those programs operated by the federal government, such as the National Commission on Human Development (NCHD) and Basic Community Schools Program (BECS). These programs operate in all provinces and regions of Pakistan (Figure 3.1.1) and have a very large scale. NCHD was established in 2002 and now runs close to 5,600 centers. BECS has been operating since 1996, initially as a part of the National Education Foundation (NEF) and now as a separate program. It runs the largest network of centers approximately 12,000 centers across Pakistan (Table 3.1.1).

Figure 3.1.1. Map of NFBE programs across Pakistan

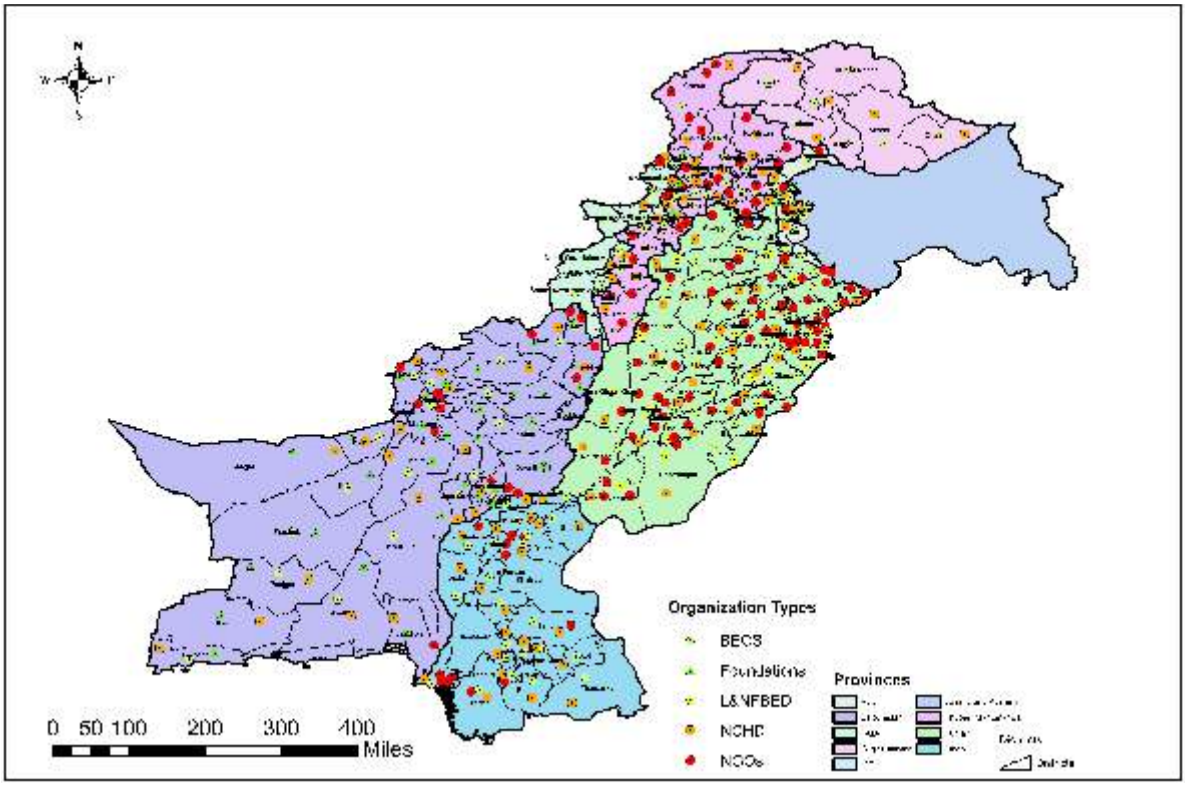


Table 3.1.1: Scale of programs
Source: Interview data and program documents

Organizational type	Number of centers	Number of students
NCHD	5,694	188,110
BECS	12,058	432,660
L&NFBED	6,464	220,400
Foundations	846	40,611
NGOs	3,675	157,385
Total	**28,737**	1,039,166

The second category includes those programs operated by the provincial governments. At the time there is only one active provincially led program in the Punjab, by the Literacy & Non-Formal Basic Education Department (L&NFBED). Their program is comparatively new, running centers for the last five years, although in a short time they have reached a scale of close 6,400 centers, making it the second largest program in Pakistan. In Sindh there is a Directorate of Non-Formal Education, however at the moment it has no active projects. In Khyber Pakhtunkhwa (KP) there is no Directorate or Department rather the provincial foundation runs a program

The third category includes those programs run by the semi-autonomous provincial foundations. Currently there is the Balochistan Education Foundation (BEF) operating in Balochistan, Elementary Education Foundation (EEF) operating in KP and NEF operating in Azad Jammu & Kashmir (AJK). The Sindh Education Foundation (SEF) up until last year operated an NFBE program, these centers have recently been converted to formal schools. And the Punjab Education Foundation (PEF), which largely focuses on the low cost private sector, has only very recently started a small project on NFBE.

The fourth and final category is that of the NGO run and assisted NFBE centers. There are as many as 36 NGOs independently running NFBE projects without the federal or provincial support, several are running programs in conjunction with BECS. Of these there are those NGOs formerly affiliated with the government such as the rural support networks, one international NGO such as BRAC and several local NGOs that are operating in specific provinces and a few operating in more than one region.

Altogether across programs and organizational types, the total number of boys and girls enrolled in these NFBE centers is estimated to be approximately 1 million across Pakistan.

Program goals and approach

By and large all programs seek to address issue of access to education specifically they seek to bring out-of-school children and drop-outs into the system and improve overall literacy in the areas that they work in. Several programs also seek to encourage girls education and ensure greater empowerment of rural and disadvantaged communities and women (e.g. BECS several NGOs such as BRAC, Bunyad, Magnet). In general all programs expect to mainstream the students into the formal system.

Normally organizations seek to establish centers in areas where no primary school exists. For example NCHD, BECS and L&NFBED have a distance criteria that no NFBE center should be established within 1.5 – 2 km of an existing school. However, this criteria is not necessarily followed in practice as data in subsequent sections reveals that formal government schools at least exist within the vicinity. In almost all cases, a critical feature of the program is to engage the communities in the delivery of education. As a result, a first step in center establishment is meeting with the communities to ensure their ownership. Many communities are those where schools have not existed and communities may be reluctant to send their kids. Often communities are expected to provide some space within the community to and identify a local teacher with certain qualifications to serve as a teacher.

Several programs have taken steps to ensure that students join the formal stream by ensuring linkages with the formal education department. For example NCHD establishes feeder schools to provide education for students from grades 1 to 3. These students are then mainstreamed into the formal government primary schools, parent schools, where students can complete the remainder of their primary education. The feeder schools also carry an EMIS code. In some cases, NCHD has relaxed the grade requirement and students continue on with grades 4 and 5 in these feeder schools as well such as in Gilgit-Baltistan (GB). In this way NCHD has built linkages with the formal education into the program through their feeder and parent school system. In contrast, with BECS and L&NFBED, the linkages with the formal system are not as strong or systematically built.

In terms of program structure, in the NCHD model, NCHD maintains regional offices, which provide overall support to both parent and feeder schools. The parent school is responsible for providing administrative and teaching support to the feeder school. BECS maintains regional offices but at the district level operates in partnership with approximately 260 NGOs who are largely responsible for monitoring and other administrative support. Each NGOs is given between 20 to 50 centers to work with. BEF also runs its schools with the assistance of local NGOs, who serve as implementing partners, effectively running the program.

Funding and costs

Organizations working on NFBE projects receive funding from a range of sources. NCHD is funded solely by the federal government, while BECS appears to have funding from the international donors as well. L&NFBED draws its resources from the Punjab provincial government and international donors such as

Japanese International Cooperation Agency (JICA). The Foundations draw resources primarily from provincial governments and international donor agencies, such as the World Bank in the case of BEF. NGOs appear to have the broadest fund base, in addition to government and international donors, several NGOs are funded by BECS and some receive funds from philanthropists and the community as well. Despite the range of sources, it appears that continuous funding is an issue for many programs because they have to continuously apply for funding every 3 to 5 years to ensure that schools stay open.

According to program staff estimates, on average it costs approximately PKR 5,600 per year and PKR 467 a month to educate a child in a non-formal setting (Table 3.1.2). To put these costs into perspective low cost private sector primary schools subsidized by the Punjab Government through PEF is almost about the same, PKR 5,700 per child per year[1], while this is often claimed to be about half of what it costs to educate a child in a government school.

Table 3.1.2 : Average cost to educate a child in a non-formal center by organizational type[2]

Organizational type	Average cost per child per month (PKR)	Average cost per child per year (PKR)
NCHD	350	4,200
BECS	455	5,460
L&NFBED	450	5,400
NGOs	515	6,180
Total	**467**	**5,604**

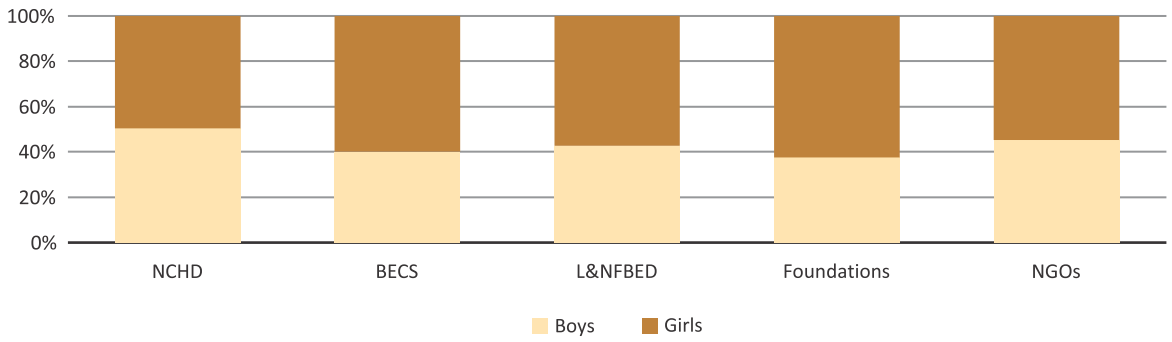
Program characteristics

Students

Student gender and age

The majority of students in the NFBE center are girls, they account for 56% of students overall. Particularly in grades 3, 4 and 5, enrollment of girls appears to be higher as compared to boys, with a ratio is 60:40 (Figure 3.1.2). Enrollment of girls in Foundations and BECS schools is more than 60%. These trends reflect the programmatic focus on education of girls as well as the choice of communities (reasons for which are explored in subsequent sections).

Figure 3.1.2. Student Gender by organizational type



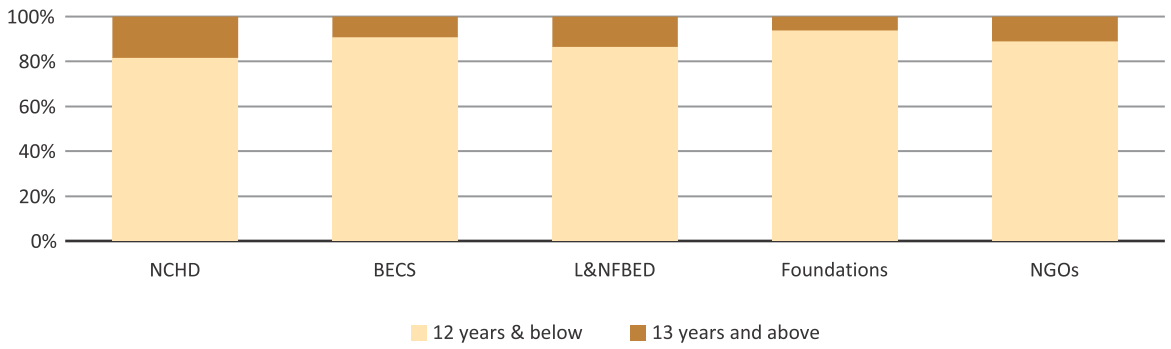
In general we find the average ages to be within keeping of the normal age range (Table 3.1.3). There are over-aged students, but they account for only a small percentage of the total enrolment, 12% are 13 years or more. NCHD has the greatest number of over-age students enrolling 19% of students of age 13 years or above (Figure 3.1.3). This data indicates that the NFBE centers are not necessarily catering to over-age

students who have been out of school.

Table 3.1.3 : Minimum, maximum and average age by grade

Level	Min Age	Max Age
Pre-Primary	2	15
Grade 1	4	13
Grade 2	3	15
Grade 3	5	15
Grade 4	6	16
Grade 5	7	16

Figure 3.1.3 Over-age students by organizational type



Student enrollment and attendance

The average enrolment per center is about 62 students (Table 3.1.4) and modal number of students enrolled is 8 to 50, while the maximum enrolment can go up to 300 students in cases such as Read Foundation and EEF centers. There are more students enrolled in the lower grades and there are more girls on average than boys. The total enrollment by organizational type is close to the overall average, except for the Foundations, which tend to have a higher total average enrollment of 89 students (Table 3.1.5).

Table 3.1.4 : Average enrollment by gender and grade

Level	Average enrollment		
	Boys	Girls	Total
Pre-Primary	8	10	18
Grade 1	5	7	12
Grade 2	4	6	10
Grade 3	4	5	9
Grade 4	3	4	7
Grade 5	2	4	6
Total	26	36	62

Table 3.1.5 : Total average enrollment by organizational type

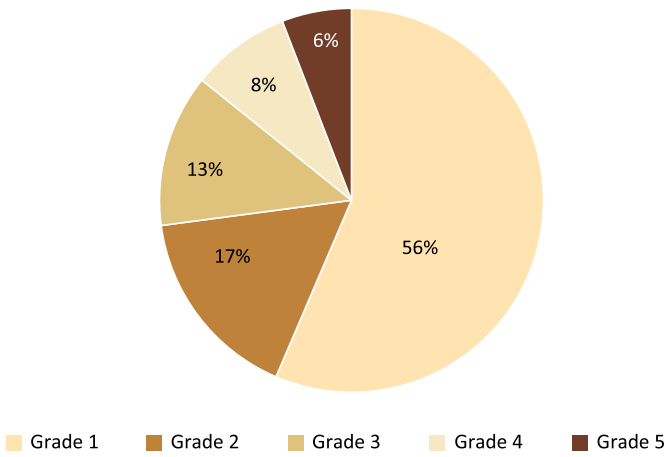
Organizational Type	Total average enrollment		
	Boys	Girls	Total
NCHD	26	33	59
BECS	19	28	47
L&NFBED	21	28	49
Foundations	33	56	89
NGOs	25	30	55

Teachers report low attendance issues in about 50% of the cases. When explored further it is clear that most of the teachers, 70%, report three-quarters attendance in their centers, 21% of teachers report about half attendance, only 5% of teacher report one-quarter attendance and 4% report full attendance. There is little variation across organizational types.

Student admissions

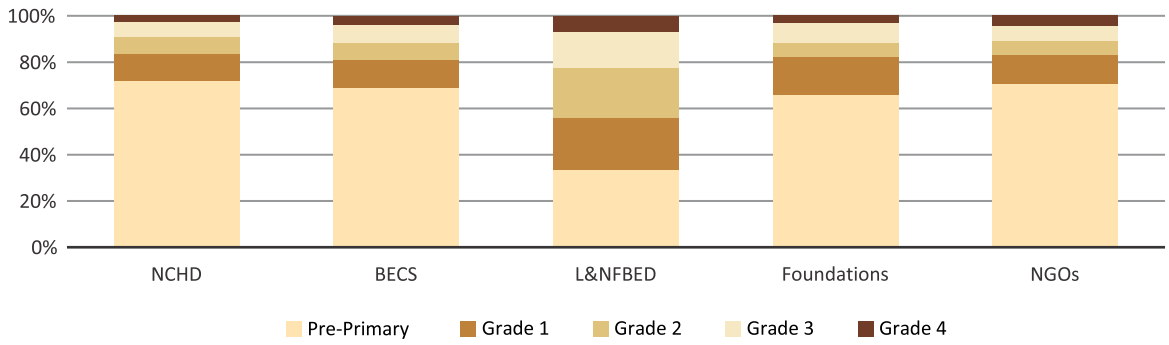
The attendance registers were used to determine the number of students admitted in different grades during the last year. Results show that on average 10 students were admitted per center in the last year, with the largest number being admitted in grade 1. Other data supports this trend with 56% of the enrollment happening in grade 1 (Figure 3.1.4).

Figure 3.1.4. Percentage of students admitted by grade



According to parental reports, the majority of students entry grade is pre-primary, nearly 65%. This trend is found across organizational types, except L&NFBED where enrollment levels are higher from grade 1 and 2 onwards (Figure 3.1.5). Again this data raises an important point about whether NFBE programs are actually addressing older age and out-of school students.

Figure 3.1.5. Student grade at the time of admission by organizational type



Student graduation and dropout

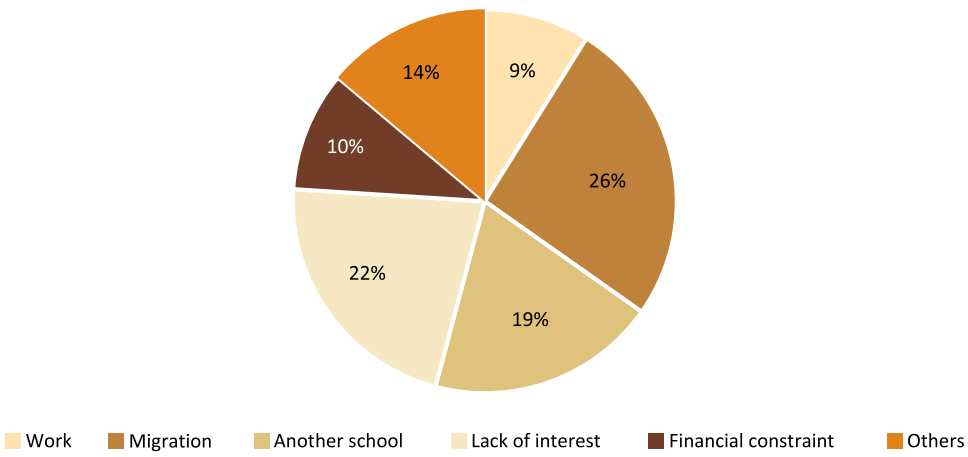
To get a sense of the graduation and dropout rates, we used the current enrollment figures as a base to estimate these figures. It is important to keep in mind that since enrollment varies throughout the year, these figures are not exact. We find that, roughly, on average about half the students graduated from grade 5 in the last 12 months, while a smaller percentage graduated from grades 3 and 4 (Table 3.1.6).

Table 3.1.6: Average percentage of graduates and dropouts in last year

Level	Current enrollment (total)	Students graduated last year (total)	Graduates (average %)	Students dropped out last year (total)	Dropouts (average %)
Grade 3	5275	573	13%	314	9%
Grade 4	3410	339	11%	172	7%
Grade 5	2538	1758	53%	236	8%

The dropout rate is fairly low in the NFBE centers surveyed, under 10% in all grades. Teachers identified different reasons for dropouts (Figure 3.1.6), the most popular being family migration, lack of interest by the student or parent in getting education and moving to another school. Other reasons include the financial burden and the need to send children out for work.

Figure 3.1.6. Reasons for student dropout (teacher perception)



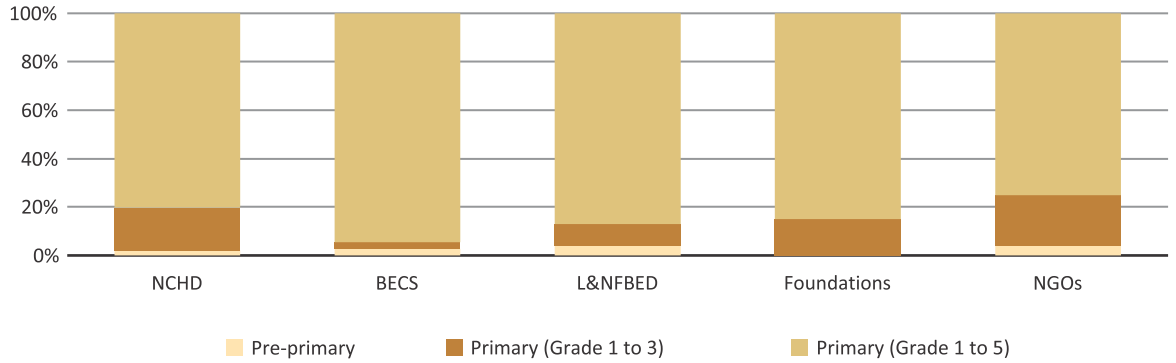
Center description

Center gender and level

Most of the NFBE centers are mixed gender centers with 90% in all the provinces having both girls and boys enrolled, only a small proportion, 8% and 2% operate as girls only and boys only centers respectively.

Most of the centers working in NFBE go up to the level of grade 5, although some programs such as BRAC and NCHD have centers that go up to grade 3 (Figure 3.1.7). There are instances where the centers or teachers themselves offer elementary and secondary education as well to facilitate out-of-school children who due to lack of centers in the area or financial constraints are unable to join any other centers. Such classes are often offered for a fee. Examples include the Read Foundation in AJK and GB and Child Care Foundation (CCF) in Punjab.

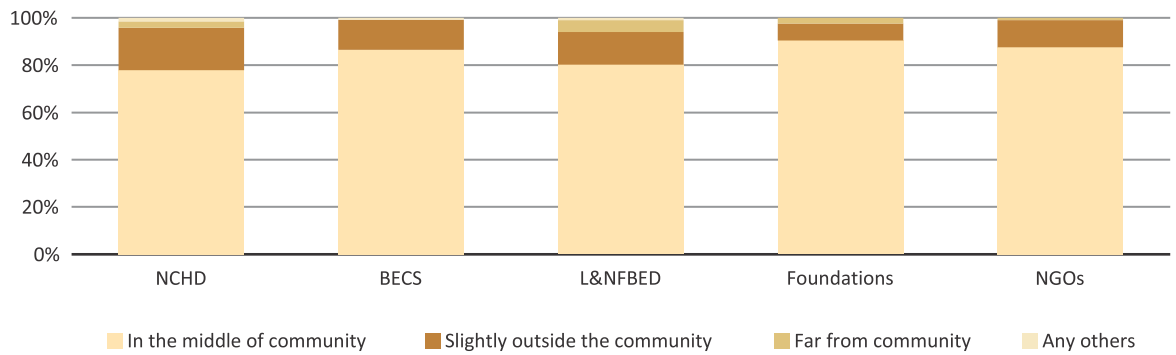
Figure 3.1.7. Center Level by organizational type



Center location

Most of the centers are community-based centers, 84% are located within the community, however 13% of the centers are built outside the community (Figure 3.1.8). Road access is available for most centers but is an issue for 20% centers, particularly those run by NCHD and L&NFBED and in Sindh where 35% of the centers have no road access to the school.

Figure 3.1.8. Location of School by organizational type

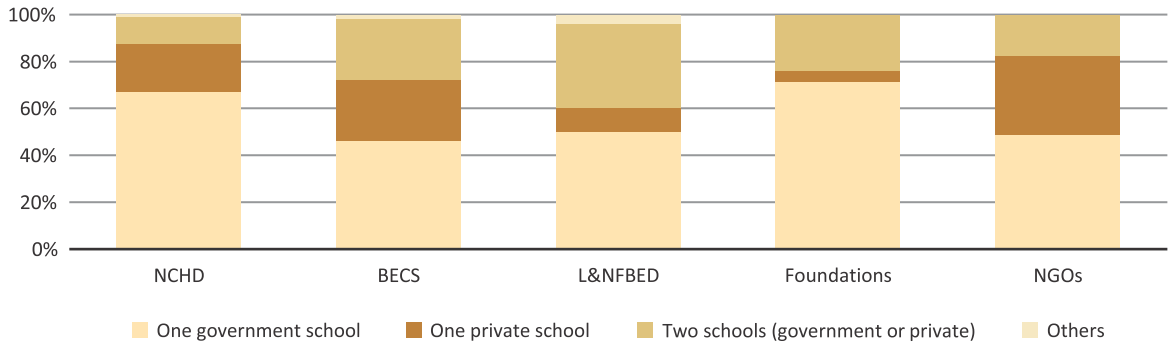


In 69% of the cases there are other schools within 2 km, with the most cases, close to three quarters found in BECS, L&NFBED and NGO centers, and about half of cases in NCHD and Foundations centers. This means that organizations do not necessarily follow their own distance criteria for establishing schools. For example NCHD and BECS have a requirement that no school, public or private, should exist within a 1.5 to 2 km radius while 56% and 75% of centers do have other schools in their vicinity. This trend of other schools in the

vicinity is found across provinces with the least instances found in GB, there is low concentration of other centers within the 2 km radius.

In 50% of the cases, these other centers are government centers, 22% are private only and 23% both government and private centers (Figure 3.1.9). Sindh appears to have the most private centers with 37%, within the vicinity of the NFBE center.

Figure 3.1.9. Type of School within 2 km by organizational type



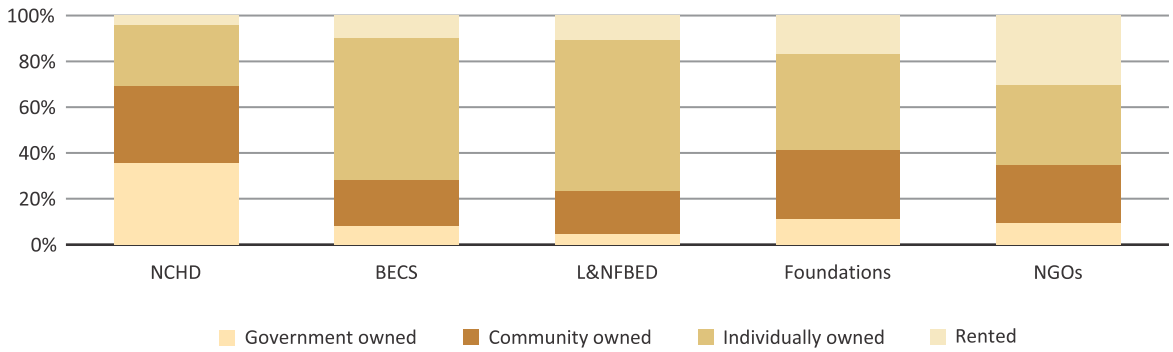
Program provisions and costs

The programs vary in what they provide to the centers and communities they work in. In addition with larger organizations, such as NCHD and BECS, there is a great deal of variation within the programs as well.

Building, infrastructure and facilities

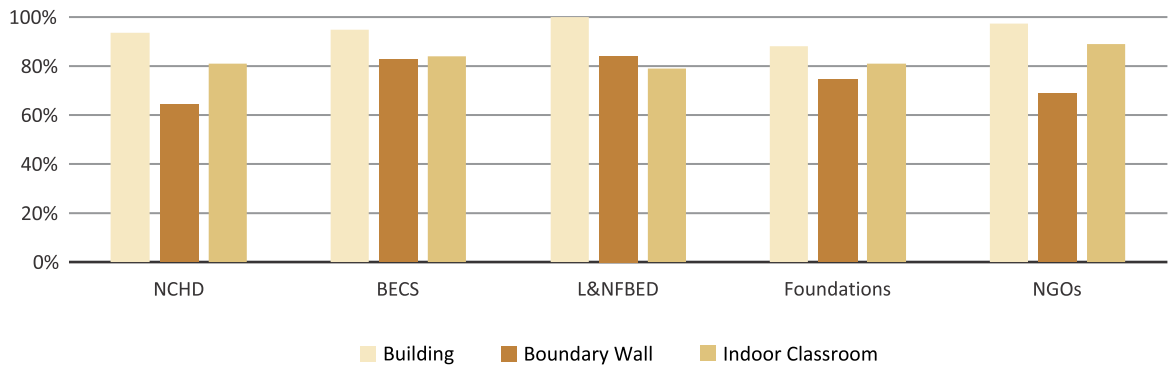
The vast majority of centers, 97%, have a building that is separately provided, while the remaining centers are setup in mosques or madrasahs. Most of the centers are located in building owned by either the government, community or teacher, 87% while the remaining 13% run in rented buildings. In general the greatest amount of centers are owned by individuals, with the exception of NCHD where there tends to be more centers owned by government and amongst NGOs there is the greatest portion of rented buildings NGOs (Figure 3.1.10). Most of the organizations studied noted that providing space for the center is a duty allotted to the community, often taking place in teacher's own house (e.g. NCHD, BECS, L&NFBED and various NGOs).

Figure 3.1.10. Ownership of center by organizational type



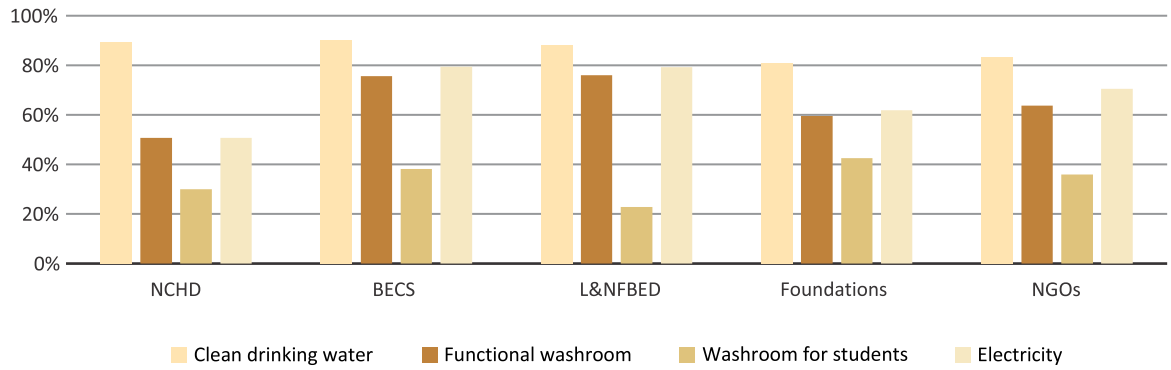
In terms of infrastructure 69% of the centers have a proper boundary wall and 89% of the classes take place indoors (Figure 3.1.11).

Figure 3.1.11. Center infrastructure by organizational type



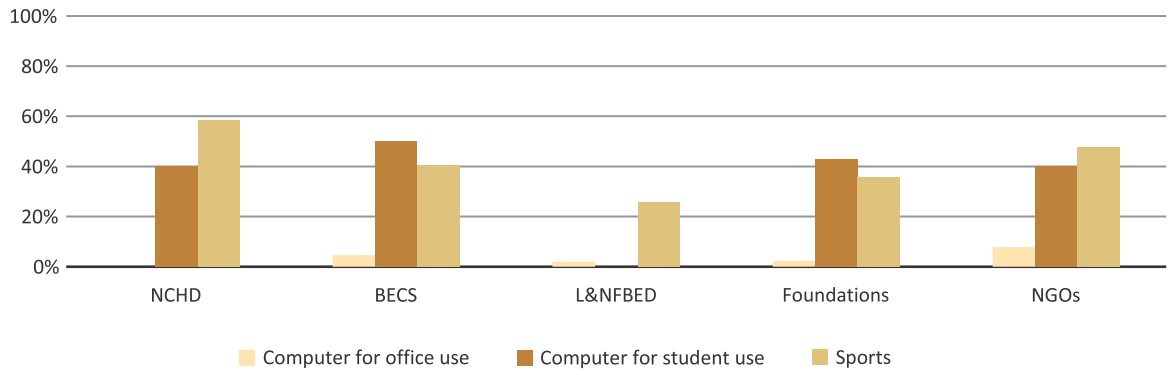
There is clean drinking water in 88% of the centers. Washrooms however seem to be an issue as only 67% of the centers have a functional washroom and only 34% have a separate washroom for the students. With regards to electricity, 70% of the centers have it. These trends are somewhat similar across organizational types except for NCHD where 50% of the centers do not have a functional washroom and electricity, which is lower than the average, and L&NFBED where over 75% have functional washroom and electricity, better than average (Figure 3.1.12).

Figure 3.1.12. Center Related Facilities by organizational type



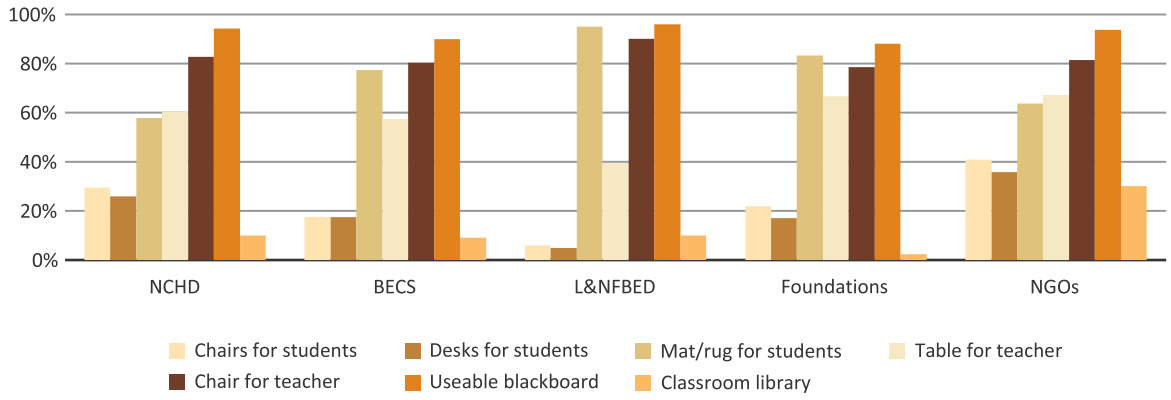
The centers are able to provide some sports activity to the extent of 40% of the cases (Figure 3.1.13). The availability of computers in the centers is very low, only 3% have a computer for office use and of these only 34% let the students use the computers. Such facilities are the least available in L&NFBED centers.

Figure 3.1.13. Additional center facilities by organizational type



Most of the programs have a floor-based classroom setting for students as mats or rugs are available in 74% of the centers whereas much fewer 23% and 21% have chairs and desks respectively available for students (Figure 3.1.14). This trend is most prominent in L&NFBED centers and least prominent amongst the NGOs where 36% and 40% of centers have desks and chairs for their students. On the other hand, 83% of centers provide chairs for teachers and 58% provide desks. These trends hold across organizational types. Finally 92% of the centers have a useable blackboard while only 12% have library or a reading corner for students as well. Trends are similar across organizational types except for NGOs where more classroom-based libraries are found (30%).

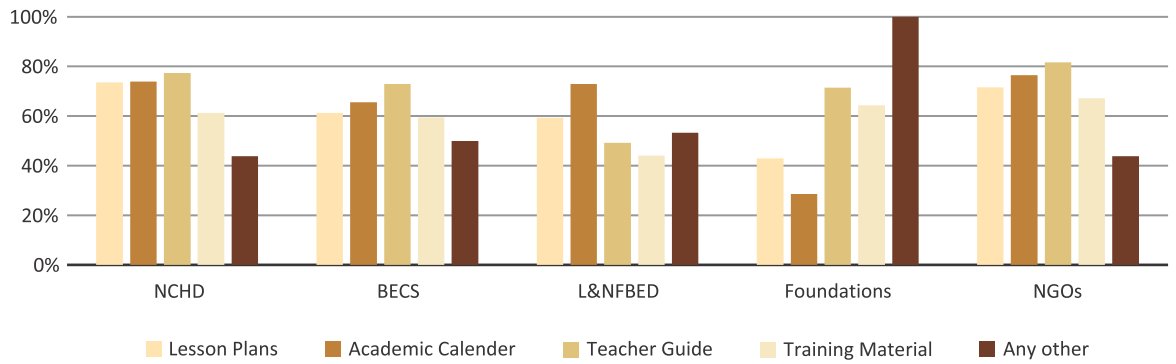
Figure 3.1.14. Classroom level facilities by organizational type



Teaching learning materials

Around 60% of the teachers are provided with teaching learning materials (TLM) from their implementing program. This trend is similar across organizational types, with the exception of the foundations, where only 32% reported obtaining TLMs (Figure 3.1.15). The teacher learning materials take the form of lesson plans, academic calendars, teacher guides and training materials. In the case of Punjab, it is clear that not all publicly supported centers receive the teacher guides developed by the Directorate of Staff Development (DSD), which would facilitate teachers in teaching the government textbooks.

Figure 3.1.15. Type of TLM for teachers by organizational type

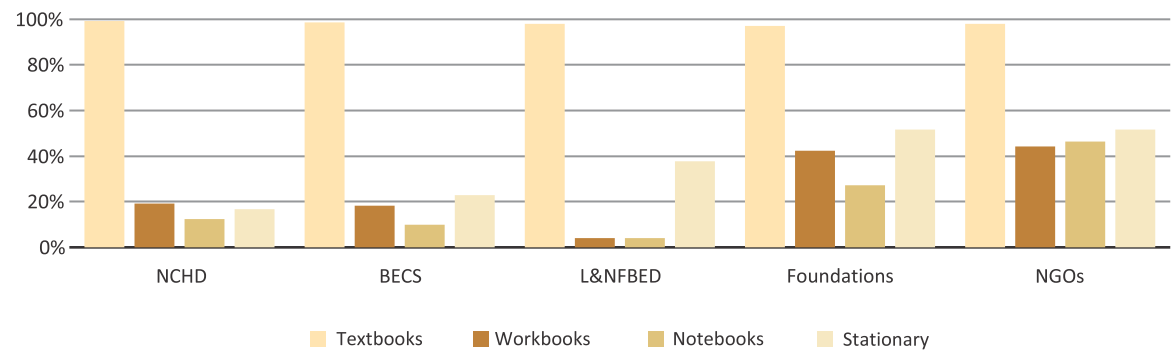


Almost all the teachers believe that the material provided from the program is helpful in teaching the textbooks in a better way. Whereas teachers in the Foundation centers believe that these TLM serves no use to them (77%). This could very well be due to the lack of TLM provided to such teachers.

Students are given TLMs in 89% of the cases according to teachers, with fewer Foundation centers, 79% reporting receiving such material. In 86% of cases it is the implementing organization that gives the TLM, while the rest of the students buy their own learning material and in a few instances it is provided by the community members or philanthropists.

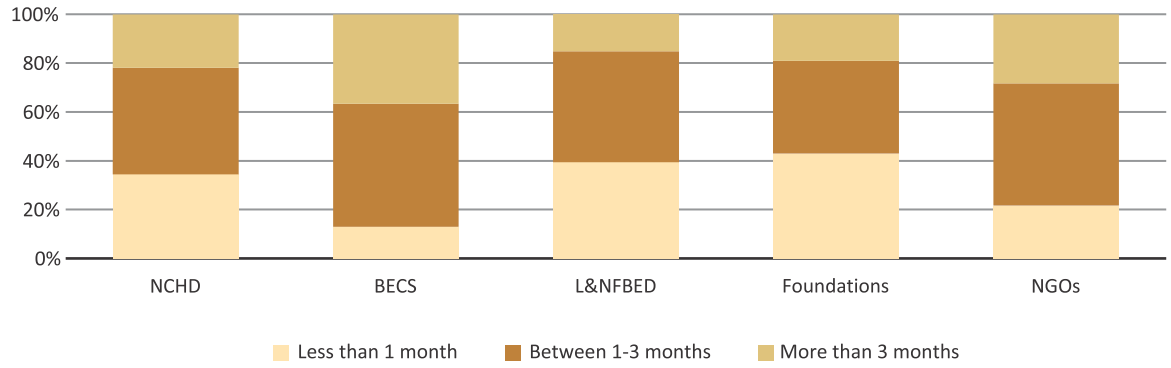
Of those cases where TLM is provided almost 100% provide textbooks, however there are fewer cases of other material provision (Figure 3.1.16). For example organizations provide workbooks in 22%, notebooks in 16%, and stationary in 31% of cases to students. A much larger percentage of NGOs (e.g. Bunyad, BRAC and HDF) and Foundations (e.g. BEF) as compared to other organizations provide learning material to the students.

Figure 3.1.16. TLM for students by organizational type



Textbook provision is delayed in 48% of the cases, with the most reported for BECS, 67% (Figure 3.1.17). The delay is mostly between 1-3 months, 48% of the teachers reported and it can go beyond 3 months in 29% of the cases.

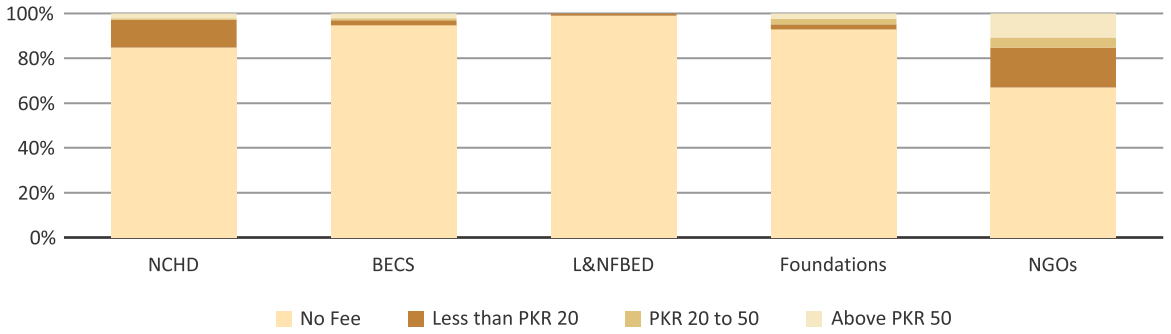
Figure 3.1.17. Delay in provision of Textbooks by organizational type



Program costs

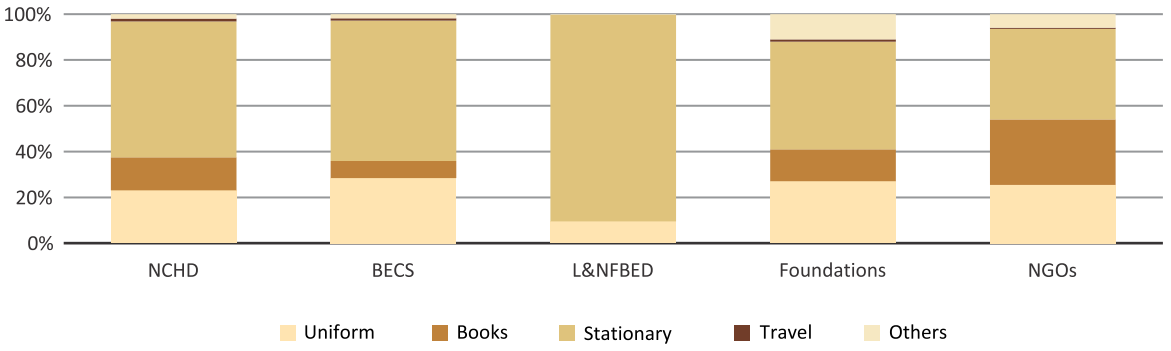
The vast majority of the programs offer education free of cost to the students (88%) according to both teachers and parents. However, some organizations charge a minimal fee, usually PKR 50 or less (Figure 3.1.18). Across organizations, this trend is more prevalent amongst NGOs where close to 40% charge a fee and of these some charge a fee of PKR 100 or more (e.g. Ahat and DAMEN) and some of the Foundations such as NEF charge a fee for grade 6 onwards.

Figure 3.1.18. Monthly fees charged by organizational type according to parents



Apart from monthly fees nearly 60% parents report that there are additional types of costs. The most significant expenditures include those on day-to-day stationary and uniform (Figure 3.1.19). In case of NGOs, more parents report purchasing textbooks as compared to others organizations. This contradicts some of the previous findings on TLM provision. About 20% of parents find that such costs are outside their ability to afford.

Figure 3.1.19. Type of Expenditure by organizational type

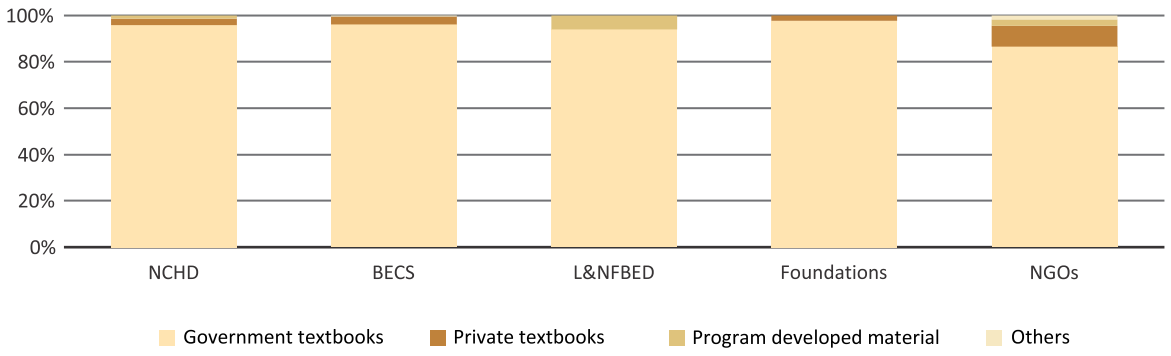


Academic approach

Curricula

Government run programs, NCHD, BECS, L&NFBED, follow the official government curriculum and examination patterns. This pretty much true of all organizations, as 94%, are currently using government developed textbooks (Figure 3.1.20). Only 6% of the teachers reported that they use privately developed textbooks or those developed by international NGOs and implementing organizations. The privately developed textbooks are mostly used in NGO run programs.

Figure 3.1.20. Type of textbook used by organizational type



JICA and L&NFBED non-formal material

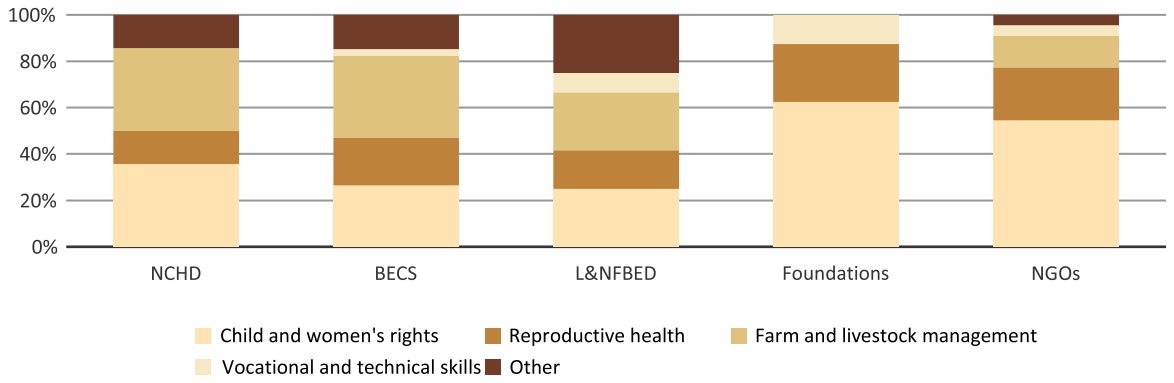
Mostly recently, L&NFBED Punjab in collaboration with JICA has developed standards, curriculum, materials and assessment mechanisms for non-formal education. This material has been separated into different packages corresponding with different levels of education in NFBE. An important aspect of these packages is that it ensures equivalency with formal education. To this end the material provided addresses the student learning outcomes contained in the national curriculum as well.

The material has been developed after an extensive review of NFBE material existing in Pakistan. The content and method of teaching recognizes of the vast body of knowledge children possess even before coming to the school and it focuses on the learning needs of NFBE students. The material has been designed to promote participation, confidence and motivation amongst students. The material contains child centered activities that lead to learning by doing and reflection and problem solving activities.

Currently, L&NFBED has piloted the material in 60 NFBE schools of 5 districts of Punjab and incorporated feedback of learners, teachers, community members and experts to improve the material.

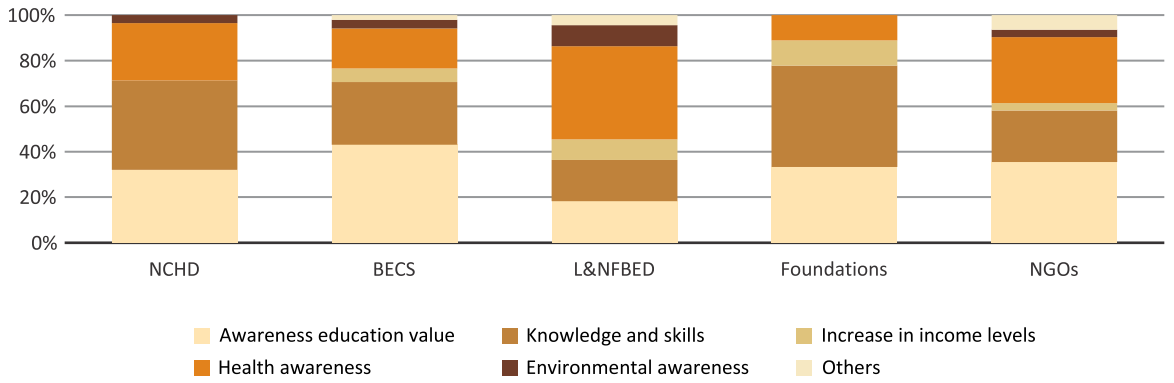
A key feature of NFBE programs is their use of contextually relevant content, 22% of the centers are using such material, specifically designed for students, teachers, parents and community members. The supplementary material in use at these centers include material on child and women's rights (40%), livestock and farm management (26%), and reproductive health (20%). Use across organizational types varies (Figure 3.1.21). Most of the centers have material on rights but the NGOs and Foundations have the most, 63% and 55% respectively. The government run programs NCHD, BECS and L&NFBED appear to have more material on farm and livestock management, between 25-36%. According to qualitative data, organization such as Ahat, HDF, NCHD, BECS have more of a health focus while the Sindh based NGO Magnet has a livelihoods focus and also have vocational centers for girls. Mostly these materials are in shape of flash cards, posters, games, small and big reading books and so on.

Figure 3.1.21. Supplementary contextual material in use by organizational type



Teachers believe that teaching this contextual material to students and sharing it with community and parents has increased the awareness and value of education as well as improved knowledge and skills according to 63% of teachers (Figure 3.1.22). It has also improved awareness on health related issues, this impact was most noted by L&NFBED, 41% of teachers.

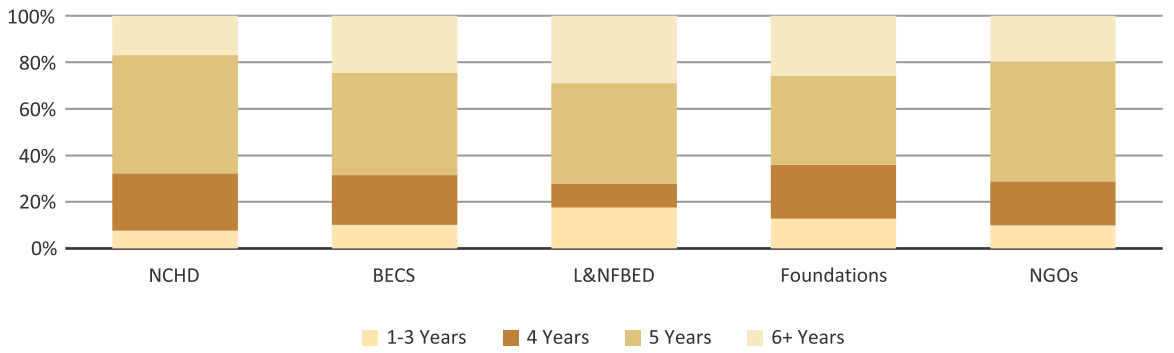
Figure 3.1.22. Teacher's perception of contextual material impact by organizational type



Duration, timings and flexibility

The literature suggests that one of the strengths of the NFBE approach is condensing the curriculum and covering it in shorter amount of time than what it takes in the formal education system. However, the data shows that the average length of the NFBE programs in Pakistan is 5 years as well. In some cases programs take 6 years due to the inclusion of pre-primary classes. A much smaller portion of the programs, such as those run by L&NFBED, complete their programs in 1 – 3 years (Figure 3.1.23).

Figure 3.1.23. Duration of primary cycle by organizational type



A hallmark of NFBE programs is their flexibility in terms of timings. However, the vast majority of NFBE programs studied, 96%, are operational in the morning shift, leaving only a nominal amount operating in the evening shifts. This has implications for the kinds of students who are able to attend the NFBE center, as those who are permanently employed may not be able to attend such centers.

Still many of teachers report that they do allow some flexibility when students can come to the center, allowing them to come late after completing chores or other work, and some allow flexibility in taking time off during harvesting season (e.g. BECS and NGOs such as BRAC, DAMEN, HDF, Magnet). Almost all organizations allow students to join the program any time of the year as well as to leave and rejoin, something that is not possible in the formal sector.

Instructional time

Similar to the formal school academic year, the NFBE year in majority of the programs starts in April and ends in March, teaching 5 hours a day. The school year is 252 days on average, which is higher than the formal public sector where the school year is approximately 200 days. NFBE schools also report taking fewer vacation days, for example they often do not take time off for summer vacations or they are not very long.

NFBE teachers are assigned fewer non-teaching duties, they report 10 days for such duties as compared to 50 days for public sector and 20 days for private sector teachers.[3] The average number of non-teaching duties for a teacher varies amongst organizational type, with the most found in NGO centers and least in Foundations (Table 3.1.7).

Table 3.1.7 : Average number of non-teaching days by organizational type

Organization	Average non-teaching days
NCHD	7
BECS	10
L&NFBED	6
Foundations	1
NGOs	14

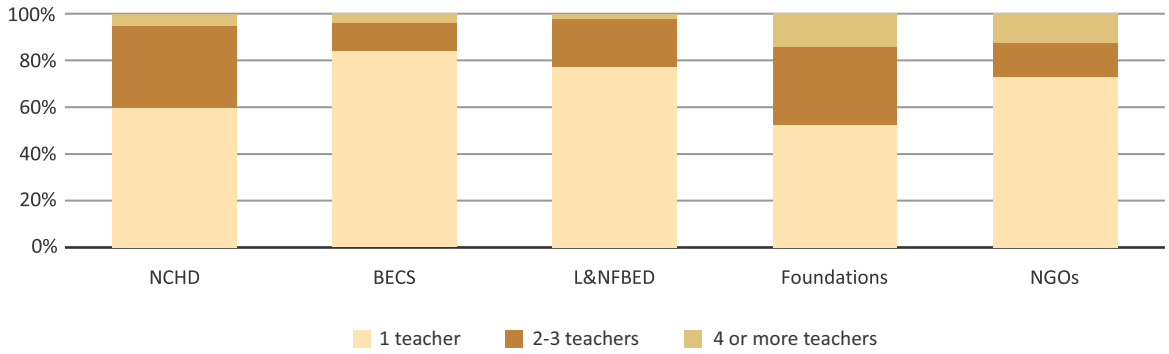
A rough estimate of the instructional time for teachers in each sector has been calculated to provide a sense of the amount of time teachers may spend teaching. This has been done calculating two figures, first taking the average academic days and multiplying it by the average teaching hours and second taking the average academic days minus the average non-teaching days and multiplying it by the average teaching hours. It is important to note this is just a rough estimate. It appears that for NFBE the instructional time in one academic year is between 1,210 to 1,260 hours, which is likely to be more than the public sector where it is estimated to be about 750 to 1,000 hours.

Teacher policies and workload

Teacher numbers and student teacher ratio

Predominantly, the centers are managed by a single teacher, 74%, followed by those with 2-3 teachers, 20%. This trend varies a bit across organizations, where NCHD and the Foundations have a larger percentage of centers with 2-3 teachers 35% and 33% respectively (Figure 3.1.24). Certain NGOs such as Read Foundation , EEF and PRSP have more than one teacher in some of their schools. Of course this is different from most government and private schools where there tends to be more teachers, although many government schools do have multigrade situation.

Figure 3.1.24. Number of teachers per center by organizational type



The student teacher ratio is 41:1 students to teachers in the non-formal sector, which is more than the public sector and much more so than the private sector (Table 3.1.8). Amongst NFBE providers the lowest ratio is found amongst NGOs and the highest in Foundations (Table 3.1.9).

Table 3.1.8: Student-teacher ratio at primary level

Sources: Non-formal: SAHE 2015; Public: AEPAM 2013-14; Private: Ilm Ideas 2014

Sector	Student-Teacher Ratio
NFBE	41
Public	34
Private	21

Table 3.1.9: Student-teacher ratio in NFBE organization wise

Organization Type	Student-Teacher Ratio
NCHD	40
BECS	42
L&NFBED	40
Foundations	51
NGOs	37

Workload

As mentioned previously teachers spend a fair amount of time in school in NFBE, they have longer academic calendars and fewer non-teaching duties. Most of the teachers in NFBE teach in multi-grade setting where a single teacher must teach all the grades. Those not teaching in multigrade setting appear to be more amongst the NGO centers for example in BRAC one teacher teaches one class.

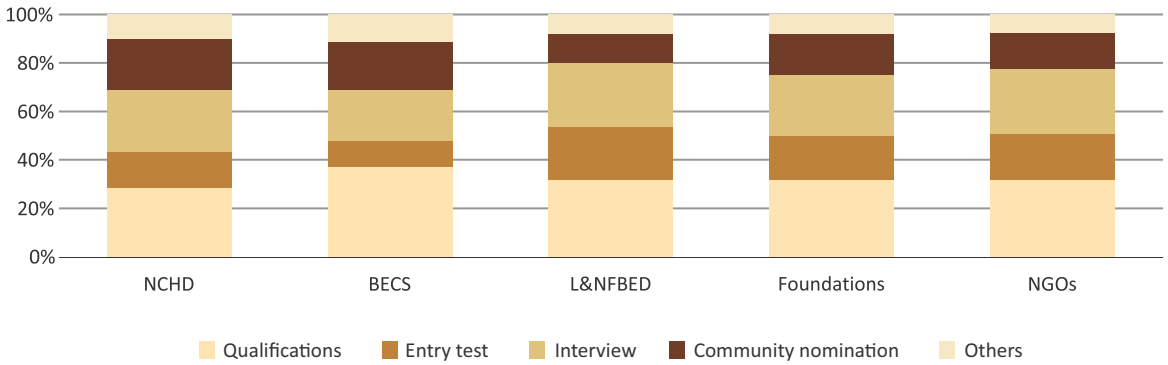
The vast majority of teachers, 95%, teach all subjects. About of half of teachers, 53%, report teaching 6 grades every day and 14% of the teachers teach 5 grades. For the grades teachers teach the most, about 2 hours on average per day, it appears that BECS, L&NFBED and Foundations focus on grade 5 and NCHD and NGOs focus on grade 1. This is in keeping with qualitative data which shows that teachers spend more time with terminal classes as they often have to pass an exam and with the younger children as they require more time to teach than older children.

Policies and processes

Only 32% of respondents noted that the position was advertised, most common was through newspaper and district office. Recruitment based on qualifications formed the largest part, followed by community

nomination, entry test, and interview, there is little variation across organizational types (Figure 3.1.25).

Figure 3.1.25. Recruitment criteria by organizational type



Most of the teachers, 69%, had received a formal contract/appointment letter from their implementing organization, while the rest of the teachers were already working but had not received any such formal contract or letter.

For the most part teachers note that leave is easy to obtain. About 68% of teachers had taken leave in the last month. Most common is leave between 1-3 days (48%), while a roughly similar percentage had taken leave up to a week (26%) and more than a week (26%). In 94% of cases salary is not deducted as a result of leave, L&NFBED had the most 10% reporting salary is deducted. In about 67% of cases there is a backup teacher in case of leave, with the least instances reported for NGOs (51%) and most L&NFBED (78%).

Salary

To put NFBE teacher salary into perspective, we look teacher compensation across the sectors. From this data it is clear public school teachers are paid more than NFBE and low-cost private school teachers, but latter two do fall within a similar range (Table 3.1.10).

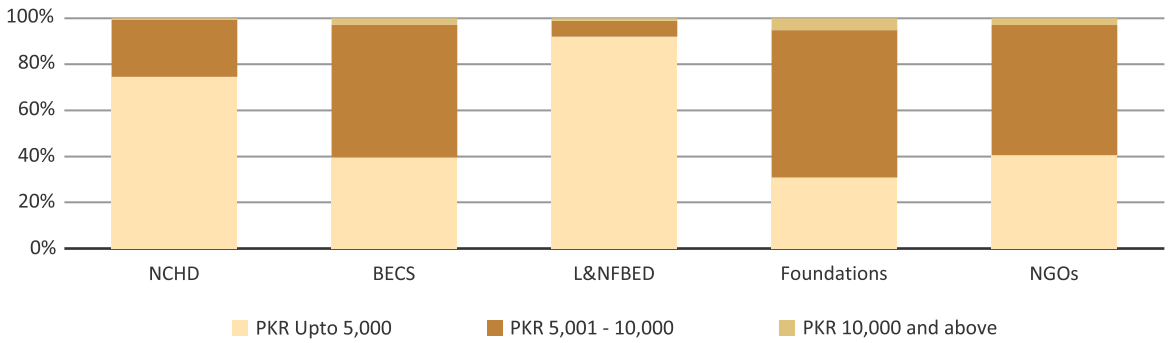
Table 3.1.10: Comparison of primary teacher monthly salary (PKR) across sectors

Sources: NFBE SAHE 2015; Public School Education Department, Punjab, 2011; Private All Pakistan Private Schools Association 2012-13

Sector	Minimum Salary	Maximum Salary
NFBE	2,500	7,000
Public[4]	6,200	17,600
Low-cost private[5]	3,000	8,000

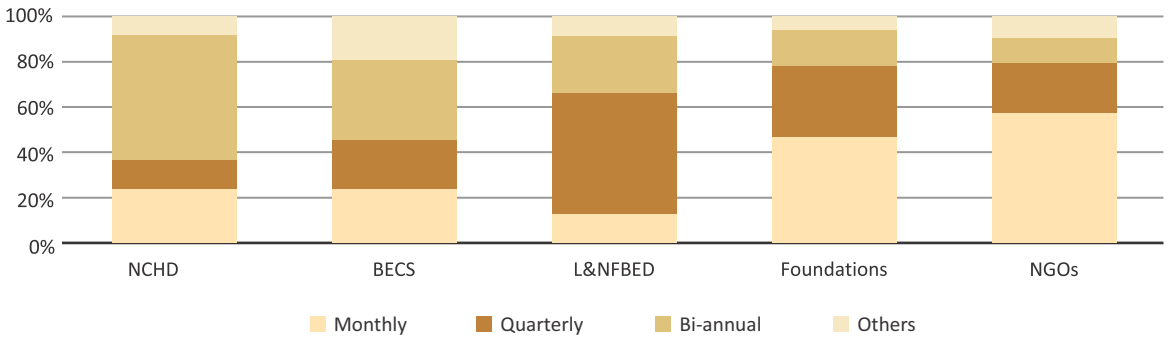
Within NFBE organization, there are slightly different pay scales for their teachers (Figure 3.1.26). NCHD and L&NFBED pays most of its teachers PKR 5,000 or less, whereas BECS pays most of its teachers between PKR 5,000 – 10,000, the Foundations and NGOs, a significant number close to 64% and 57% of the respectively, pay between PKR 5,000 to 10,000 a month to their teachers. Teachers are generally unsatisfied with their salaries and in several organizations salaries are not paid according to qualifications and this is point of dissatisfaction for many teachers.

Figure 3.1.26. Teacher monthly salary by organizational type



There is a great variation in the delivery of salary to the teachers across and within the programs as they pay teachers monthly, quarterly, biannually and even annually. Most of the teachers in NCHD receive their salaries bi-annually, while most of the L&NFBED teachers receive their salaries quarterly and NGOs teachers receive monthly salaries and for BECS and Foundation teachers it is a mix (Figure 3.1.27).

Figure 3.1.27. Provision of Salary by organizational type



Apart from the salary, few programs offer any benefits to the teachers. Only 6% of the teachers stated that they were entitled to medical and travel allowances and other bonuses. This was yet another area of dissatisfaction for teachers.

Program support and accountability

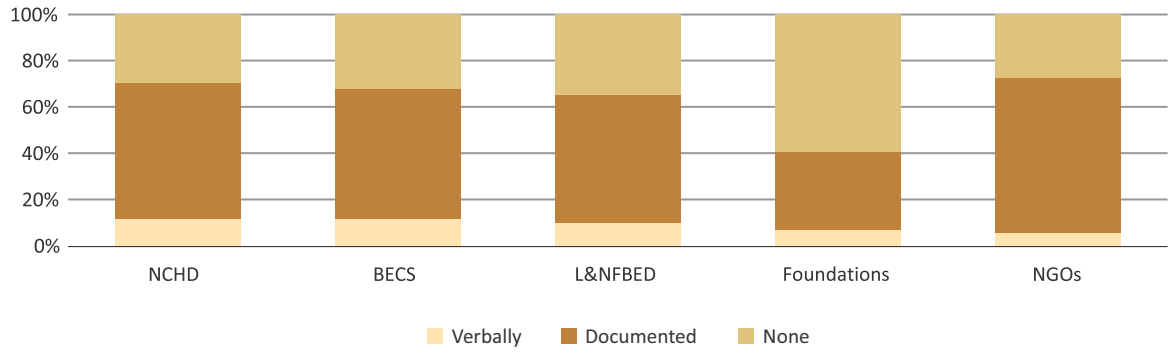
The support provided to teachers is a critical part of any educational system. Each organization has its own setup for providing program support, in some cases there is a great deal of support provided such as in several of the NGO run centers and in some cases not so much. Supervisors and trainers are often trained on difference between formal and non formal education, social mobilization, record keeping as well as teaching methodology, classroom management and assessment (there are often detailed manuals to cover such aspects).

Planning support

About 67% of teachers note getting some sort of support in breaking down the syllabus (Figure 3.1.28). This means about one-third of centers receive no support in this regard. Of these the Foundations appear to provide the least amount of support on syllabus breakdown (40% of centers), this finding is corroborated by qualitative data. Mostly syllabus breakdown is provided in documented form, usually through the Taleemi Calendar or teacher guide known as Raah-e-Amal. Programs such as NCHD, BECS, and L&NFBED as well as NGOs such as Bunyad, BRAC and HDF provide a teacher guide to the teachers, which contains the syllabus

breakdown and some provide monthly targets as well.

Figure 3.1.28. Breakdown of syllabus provided by organizational type



Professional development

Induction training

The professional development of the teachers seems to be important for all the programs. The majority of teachers, above 74%, had received induction training at the time of joining, the highest percent being amongst NGOs with 85% receiving induction training. The duration of induction training is mostly between 4-7 days for NCHD and L&NFBED while BECS and some of NGOs and Foundations have a longer 8-15 day training (Figure 3.1.29). Induction training appears to cover a range of topics equally across types of organizations such as planning, use of textbooks, teaching methods, assessment and so on (Figure 3.1.30). These training were largely arranged by government in the case of BECS, NCHD, L&NFBED and a significant portion of NGOs.

Figure 3.1.29. Duration of induction training by organizational type

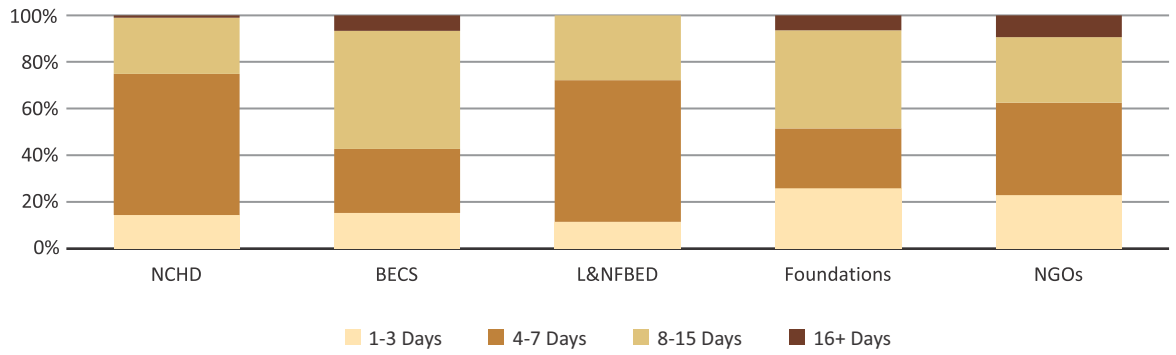
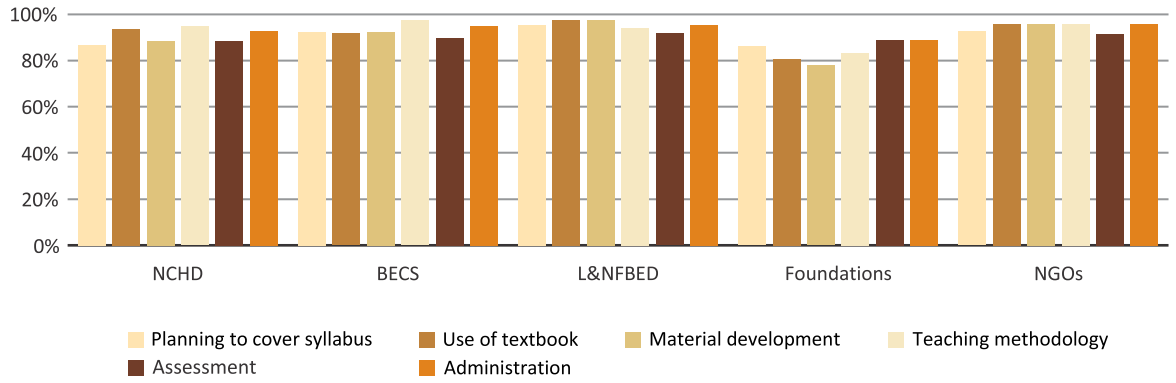


Figure 3.1.30. Topics covered in induction training by organizational type



Ongoing trainings

About 50% of respondents note receiving other trainings in addition to induction with the lowest amount being in the Foundations 33%. Again this finding is corroborated by qualitative data as well. The duration of these training are a bit shorter with more falling within 1 - 3 and 4 - 7 days again with the exception of BECS where a larger proportion of training is between 8 - 15 days (Figure 3.1.31). The majority of the trainings were conducted by trainers who possessed Masters degrees, 63%. BECS in Punjab has even used DSD trainers to provide training in one instance, however this has not been done systematically. Most popular training topics were on assessment, followed by content/use of textbooks, and then planning (Figure 3.1.32). L&NFBED teachers noted more training on assessment than the others, 42%.

Figure 3.1.31. Duration of other trainings by organizational type

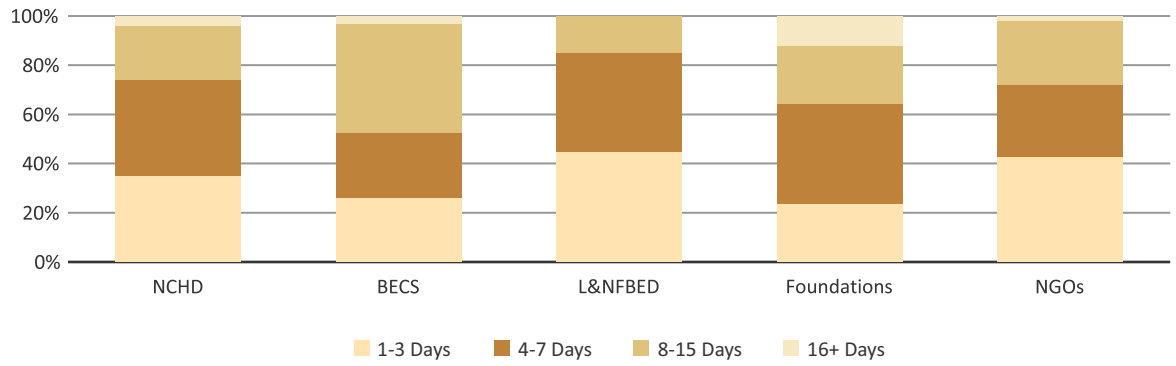
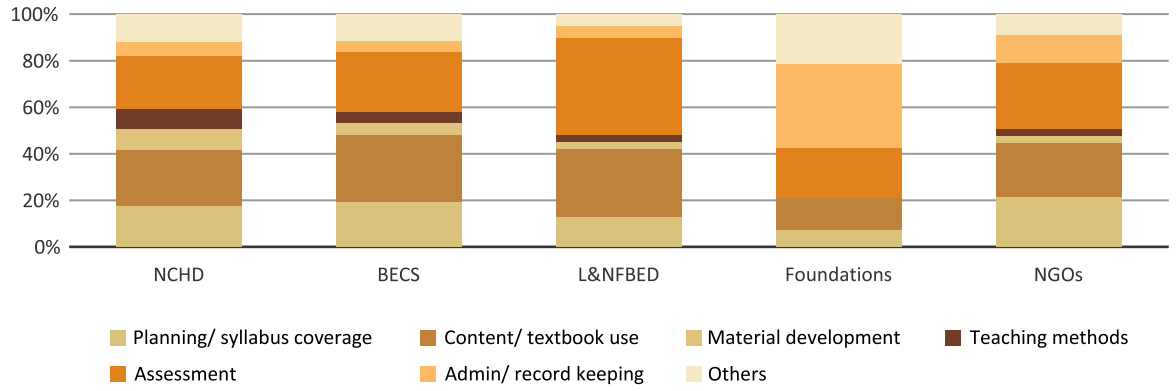


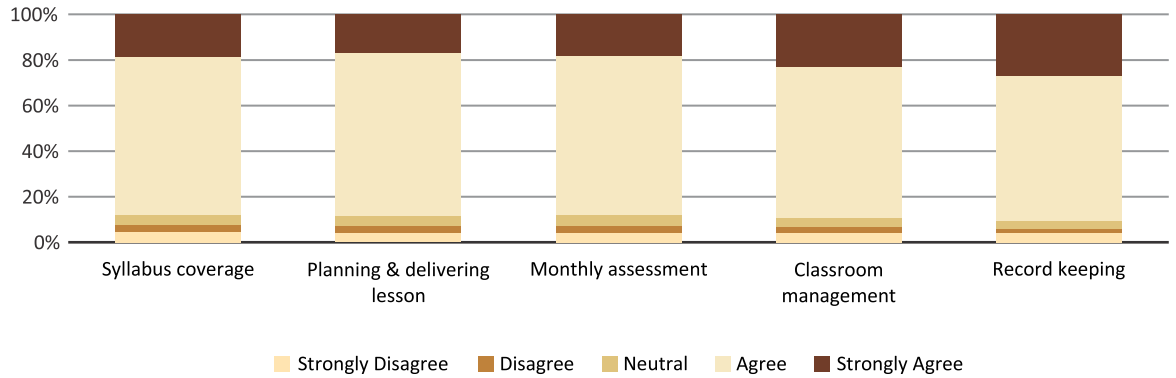
Figure 3.1.32. Topics covered in other training by organizational type



Views and satisfaction on trainings

With regards to what the trainings have helped teachers with, respondents appear to find these trainings for all aspects with close to 90% choosing agree or strongly agree (Figure 3.1.33). The strongest agreement across organizational type appears to with regards to the usefulness of training for classroom management, particularly multi-grade situations, and record keeping. From organizational types we find that more BECS and LNFBD respondents strongly agreed on the usefulness of the training for all aspects (20-30%).

Figure 3.1.33. Teacher views on usefulness of training

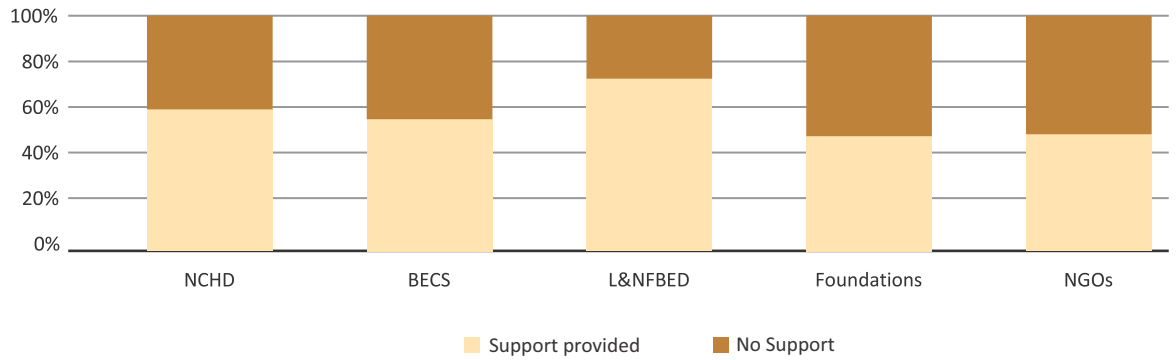


Although 90% of teachers note being satisfied with their content knowledge, an equally large proportion, 80%, also note requiring more training on content, particularly in English (44%), math (31%) and to a smaller extent science (18%). They note that the best way to improve content knowledge is through further training, peer support and library books (in order of importance).

Classroom support and mentoring

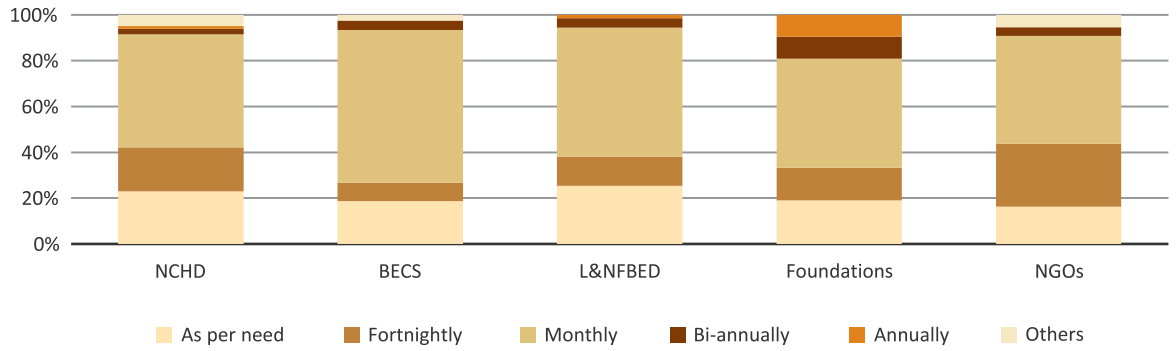
Teachers receive in-class mentoring in the form of pedagogical support and help regarding the content in 58% of cases (Figure 3.1.34). The support is predominantly provided by the program staff in 87% of cases, although in some cases teachers also get support from formal school teachers and family members teaching elsewhere. The support is mainly provided through project staff member visit to school in 58% of cases, although teachers also seek support by calling the project staff in 21% of cases and even personally visit the project office.

Figure 3.1.34. In-class mentoring or support by organizational type



The in-class support is provided on monthly basis in 58% of the centers, followed support as per need in 21% of the cases (Figure 3.1.35). These trends are fairy similar across organizational types except NGOs where there appear to be more fortnightly visits as well.

Figure 3.1.35. Frequency of support by organizational type



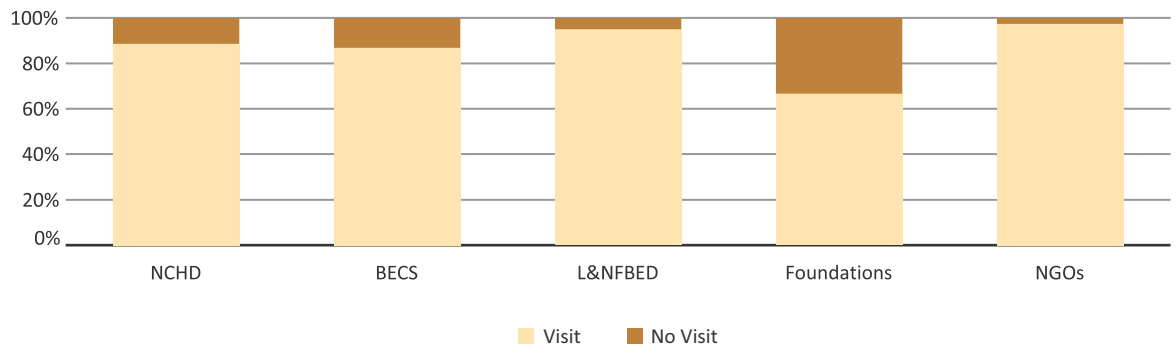
In the case of NCHD and BECS in-classroom support on teaching methods, planning and taking student tests is provided on a monthly basis through visits by the Markaz Coordinator or head teacher of the parent school in case of NCHD and center supervisors in the case of BECS. The effectiveness and frequency of this support varies. In the case of NCHD, several of the case study centers noted receiving such support, whereas in the case of BECS it appears to be sporadic with the exception of Punjab where the supporting NGOs are also playing a role. L&NFBED and the Foundations do not appear to be providing any in-classroom support.

From amongst the NGOs, BRAC program organizers visit schools twice a month. They have monthly action plans to follow and check for teacher content knowledge. On the basis of these visits they call teachers for 2 days refresher training. Bunyad also organizes need-based trainings on the basis of staff visits. HDF staff provides teaching feedback after visits on a regular basis.

Monitoring

Most programs appear to have a strong monitoring system in place with 89% of the centers receiving a monitoring visit during the last 12 months (Figure 3.1.36). Foundation centers appear to have fewer monitoring visits with only 67% reporting a visit, this is corroborated by EEF and NEF. Different departments and staff monitor the centers at different frequencies. In about half the cases program staff visit the centers and district education department office in 40% of cases on mostly a monthly basis. With BECS the partner NGOs provide monitoring support, especially since BECS has no district offices. This appears to be quite effective as several visits were reported per month in Punjab BECS centers.

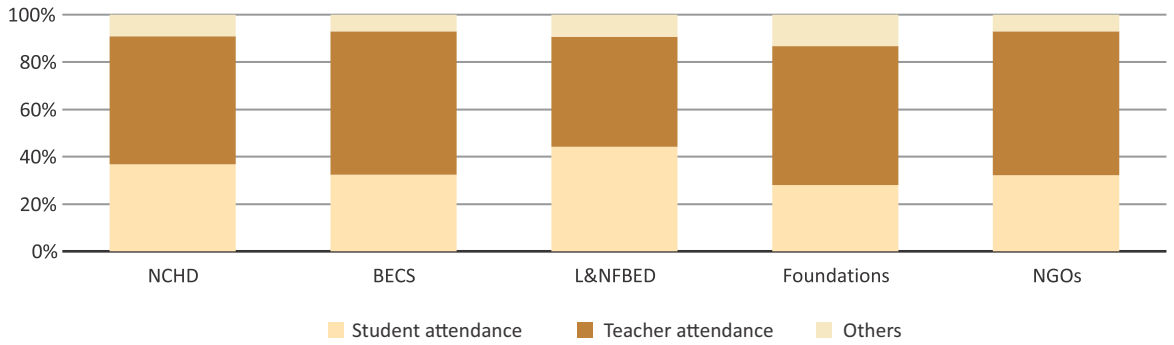
Figure 3.1.36. Monitoring visit in the last year by organizational type



Each department has its own monitoring criteria and means for evaluating the school performance. However, student and teacher attendance are the two main aspects that are monitored mostly by all the programs, 32% and 60% respectively (Figure 3.1.37). The other aspects include account books, cleanliness

of students, school facilities and community mobilization. Teachers also reported taking student tests or exams and preparing the result sheet is often part of monitoring visits.

Figure 3.1.37. Aspects monitored by organizational type



Take away points

In Pakistan there are four types of organizations running NFBE programs: those supported by the federal government (NCHD and BECS), provincial government (L&NBFED), provincial foundations (BEF, EEF, NEF) and those run by the NGOs. Amongst the government funded programs mechanisms have been put into place to coordinate with the formal education department. Such coordination mechanisms are critical to prevent of duplication of efforts and effective utilization of resources (i.e. opening schools in the same areas as formal government schools or other NFBE government supported centers). For example in Punjab alone there is the NCHD, BECS, L&NFBED and now PEF entering the arena of provision of NFBE. To ensure better coordination a provincial body may be needed and with that a mapping exercise should be conducted to ensure that centers are not opened in close vicinity of each other, as appears to be the case. Secondly, a stronger linkage with the formal education department appears to be required in some cases to ensure students can mainstream into the formal sector.

From the data it is clear that the NFBE sector caters largely to female students with 60% of the student population being female. The majority of students are within the normal age range for primary with only 12% of students over-age. This is not surprising as more than half of the students are admitted in grade 1. The typical center is located inside the community (84%). The centers are not necessarily opened in areas where no schools exist 69% had schools within 2 km as identified by program goals. But for girls and younger children distance is critical issue and even a distance of a kilometer can make a difference to parents.

The provision of facilities and materials by programs is fairly mixed by organizational type. In most cases the building is provided by the community. By and large most programs follow the government curricula. They also run a five year program and operate on a morning shift. This contradicts the assumption that NFBE centers are often providing accelerated learning and catering to a working population. They do however maintain flexibility in terms of timings and admissions, which is a typical feature of NFBE.

The majority of centers operate on a multigrade basis, running with a single teacher. Apart from this workload, the student-teacher ratio is often 1:40, which is fairly manageable. And unlike teachers in the public sector, NFBE teachers have very few non-teaching duties. Teacher salary on average is between PKR 5,000 to 6,000, which is comparable to low cost private sector teacher salaries but of course lower than public sector salaries.

Program support also appears to be mixed. Programs often provide support to teachers in terms of planning, about two thirds receive such support. They also provide professional development support with more organizations providing induction training (three-fourths) as compared to ongoing training (about half). Generally teachers are satisfied with the training received, but would like more trainings. A little more than half receive in classroom support usually on a monthly basis. The majority of programs monitor the centers often looking at teacher and student attendance.

Section 3.2: Teachers and Teaching

The second section explores the teachers and their teaching in the classroom. It begins by looking at teacher characteristics specifically their personal and professional background as well as their additional sources of income. Then it moves on to explore teacher reasons for working in NFBE centers as well as their motivation and satisfaction with the experience. Finally it turns to the teaching and learning practices in the classroom.

Teacher characteristics

Teacher personal background

The majority of teachers are female (76%). This trend is consistent across organizational type, with BECS and L&NFBED having more female teachers (Figure 3.2.1) and across regions. The average teacher age is 29 years. About half of the teachers are between the ages of 21 to 30 years, followed by one-thirds of the teachers who are between 31 to 40 years (Figure 3.2.2). The majority of teachers are married (65%). This trend is quite different from the trend one finds amongst low cost private schools where the majority of teachers are young and single. The majority of single teachers said they would continue teaching after they married. Its possible that being married is advantageous in the NFBE model given that centers are often run inside their homes.

Figure 3.2.1. Teacher gender by organizational type

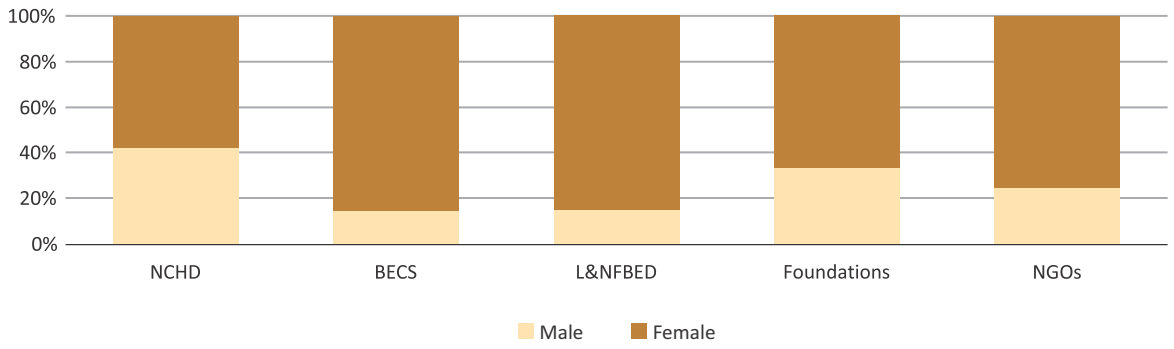
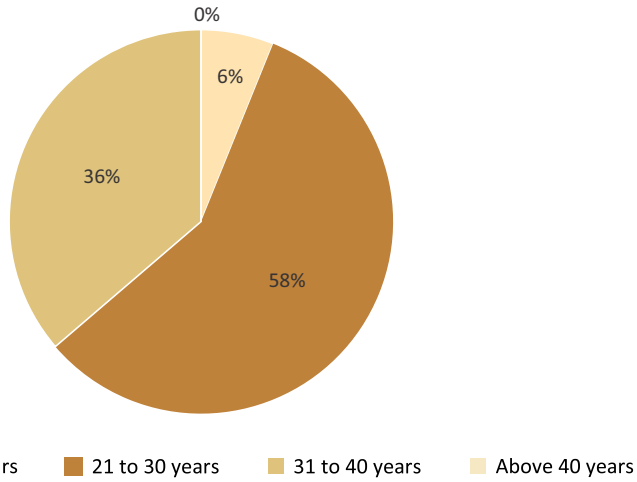


Figure 3.2.2. Teacher age

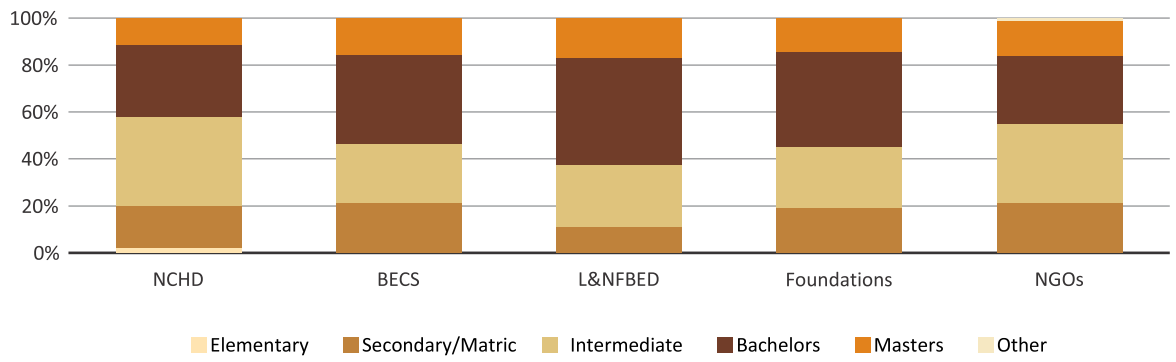


The vast majority of teachers (90%) are from the same community in which they teach, with similar trends across organizational types, but slightly more non-local teachers found in Sindh and Balochistan. A local teacher appears to be a key feature in NFBE centers in Pakistan. This characteristics helps in both attracting students to the center, as parents are often comfortable sending their children, particularly their daughters, to someone they know, and creating an in-built accountability mechanism as teachers are easily answerable to their own communities.

Teacher academic and professional background

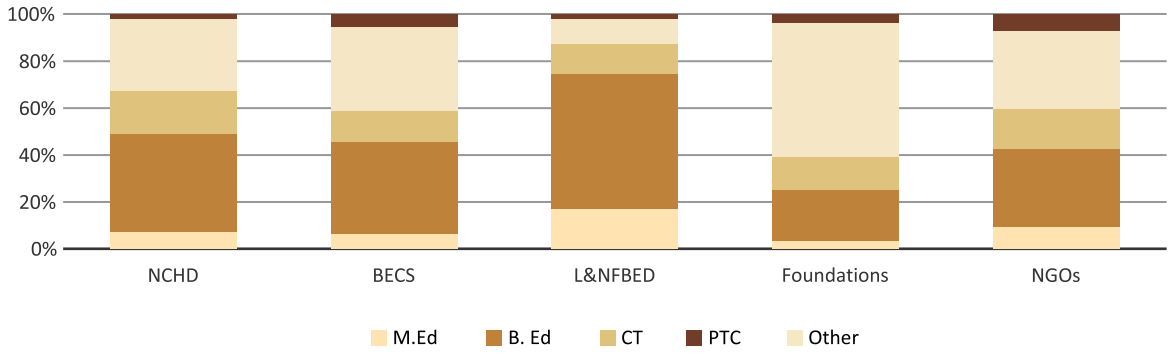
A large number of teachers have a Bachelors degree (36%), followed by Intermediate (30%) but there is a portion close to 20% that only have secondary education or Matric. Amongst the organizations L&NFBED, Foundations and BECS have a larger proportion of teacher with Bachelors degrees whereas NCHD and NGOs have more teachers with Intermediate qualifications (Figure 3.2.3). For NCHD the minimum teacher qualification requirement is Intermediate, there are some with lower qualifications but they form a smaller proportion 20%. The majority of teachers specialized in arts subjects in their highest qualification.

Figure 3.2.3. Teacher academic qualification by organizational type



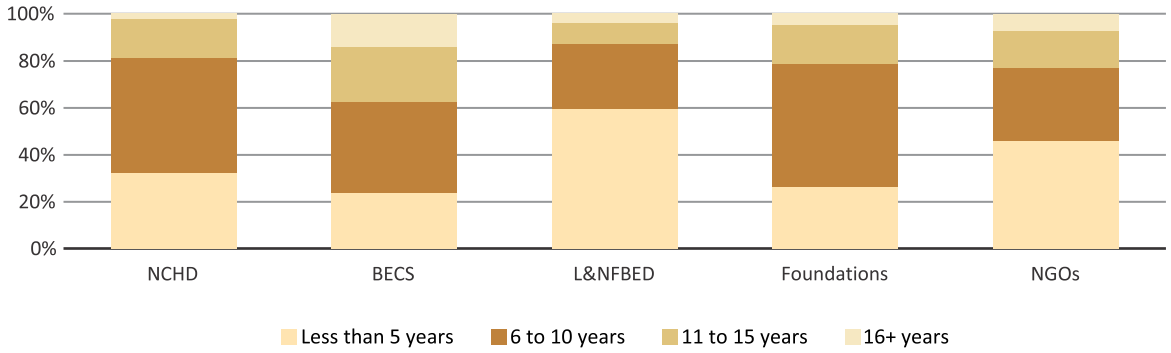
Only about 48% of teacher have a professional qualification, of these the most common is a B.Ed degree (40%) and the more basic Primary Teaching Certificate (PTC) (32%). This trend holds across organizational types except L&NFBED where a larger proportion of teachers have B.Ed. and Foundations where a larger proportion have PTC (Figure 3.2.4).

Figure 3.2.4. Teacher professional qualification by organizational type



The majority of teachers have between 1-5 and 6-10 years of teaching experience (Figure 3.2.5). A larger proportion of L&NFBED teachers have between 1-5 years, this is possibility due to the fact that this program is fairly new. About 50% of teachers have teaching experience working elsewhere, with many having worked at private schools (73%).

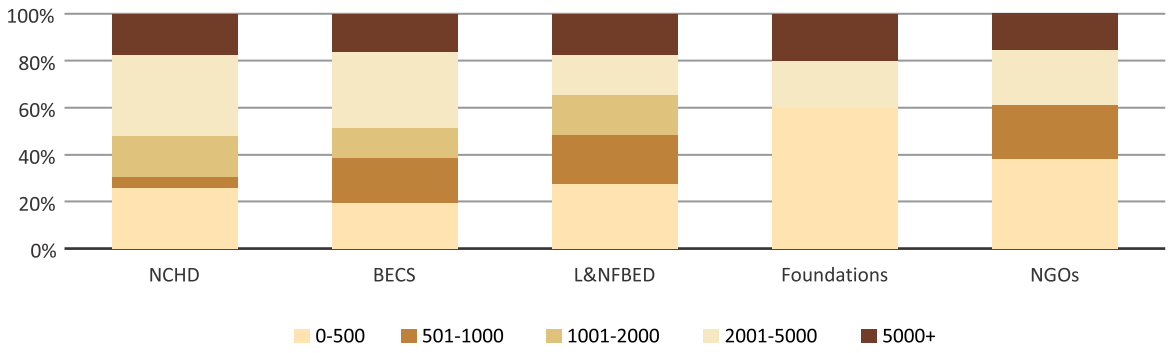
Figure 3.2.5. Teacher teaching experience by organizational type



Income generation

Teachers make about PKR 5,800 on average in salary in NFBE programs. Despite this, only 18% of teachers report providing private tuition. Of the different organizational types, the highest incidence was found amongst L&NFBED teachers, 34% of cases. The majority of teachers teach between 1 to 50 students. The majority of these teachers make less than PKR 2,000 a month from tuition. In the Foundations and NGOs the majority make less than PKR 1,000 whereas in NCHD, BECS, L&NFBED there is more variation with more teachers making up to PKR 5,000. (Figure 3.2.6).

Figure 3.2.6. Monthly earning from tuition by organizational type



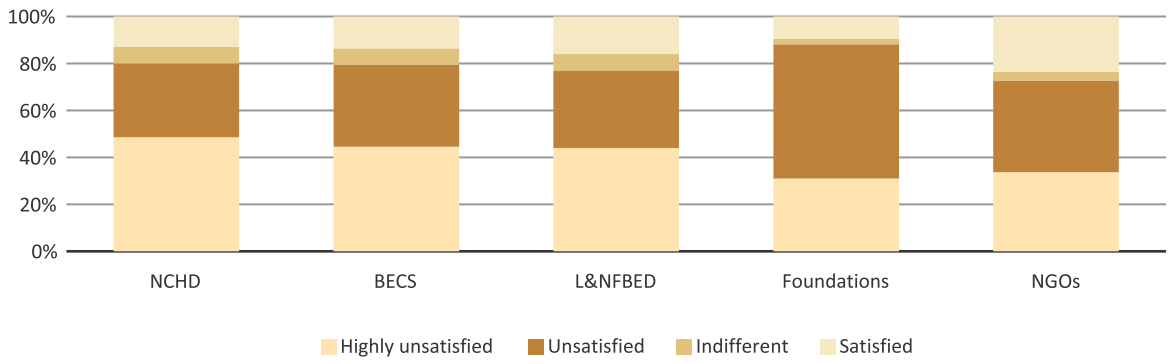
Teacher motivation

Choice and satisfaction

Teacher reasons for teaching at these NFBE centers appear to have a lot to do with the high status of the teaching profession itself, some teachers refer to it as a 'profession of prophets' while female teachers note that it is a respectable profession for women. Many note their choice to work in an NFBE center due to moral reasons such as obligation towards their communities, helping disadvantaged children, providing an opportunity to transform their lives and so on. The fact that these students are learning is a major motivating factor for teachers as well. However in several cases teachers state that they are working in the NFBE center due to lack of options. Often there are no other schools to work at. In some cases the teachers are clearly biding their time until a better job opportunity appears.

Across the board, teachers are unhappy with their salary, close to three quarters note being unsatisfied or highly unsatisfied (Figure 3.2.7). Teachers note that they would prefer a salary of PKR 10,000- 15,000 salary and some mention the need for bonuses and other compensation. In several cases, such as BECS, teachers are unhappy that the same salary is provided to teachers regardless of their qualifications. Finally the delay of delivery of salaries, such as in the case of NCHD and NEF (where they receive salaries about every 6 months) also makes teachers very dissatisfied.

Figure 3.2.7. Teacher's degree of satisfaction with salary by organizational type



Most teachers find the workload to be fine, particularly since there are few non-teaching duties but a few find the workload is too much for one teacher and an additional teacher would help in teaching in the multigrade situation. Others find the center infrastructure, lack of proper building and furniture to be a source of dissatisfaction, but again fewer cases.

For many teachers, the proximity of the center to their home or the fact that the center is run in their home and the flexibility of timings, is major reasons for their choice and satisfaction. For some female teachers, in KP and Sindh, this factor has made the difference between these teachers being able to work and not being able to do so, since other schools are much further away. Working at home is also advantageous as often teachers note that they can accomplish their household chores alongside teaching. In a few instances teachers are able to make use of support from their family members, for example one teacher's father, a retired government teacher, was providing support in teaching her class and in other cases they take over the class while the teacher is on leave.

Many teachers are satisfied with the ease with which they can get leave. There is no long procedure for obtaining leave, they often only have to phone their immediate supervisor and leave a person in their place. Several teachers are happy with the program support and their relationship with the organization (e.g. BECS

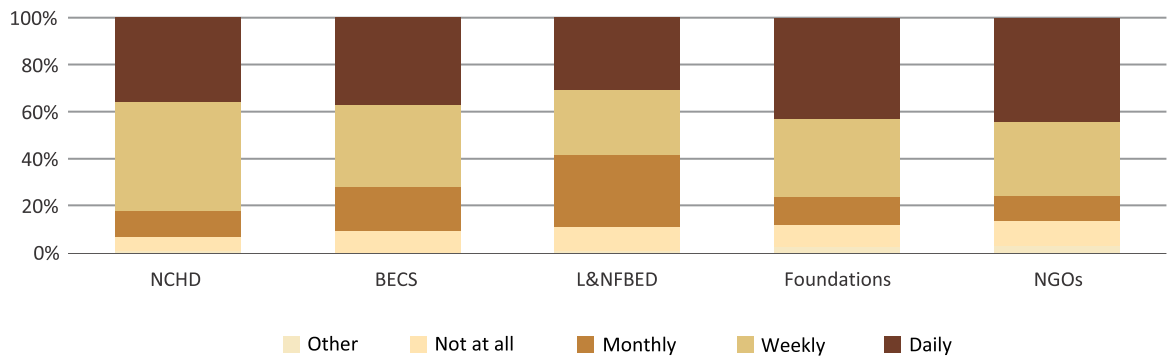
AJK, Sindh; Bunyad, DAMEN, BRAC), they find the appreciation useful too. Finally, and most importantly, when students learn and perform well, in some cases take a position in key exams such as PEC, teachers they feel this job is worth it.

Teaching and learning practices

Planning and preparation

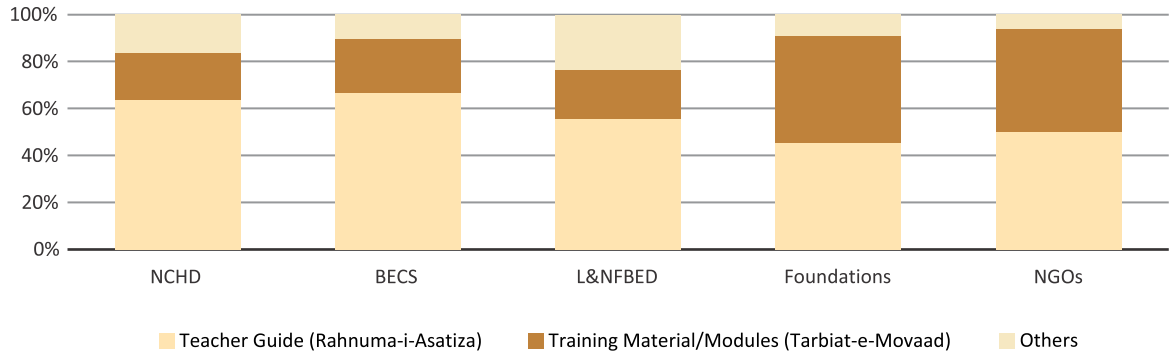
Generally teachers plan for their lessons, 90% of cases, and about half of the teachers document their lesson plans. The most common practice for lesson planning is daily or weekly, 38% and 36% respectively (Figure 3.2.8). The trend is the same across organizational types except for L&NFBED where a large proportion of teachers (31%) tend to plan on a monthly basis. These findings are corroborated by classroom observations which found that more than three-quarters of the teachers had some sort of lesson plan written or not and about half plan daily or weekly while the rest plan monthly. The observations also found that 70% of the teachers had linked the lesson plan to previous work, the majority followed their lesson plan well or to some extent and more than half of the teachers were able to effectively convey their objectives well.

Figure 3.2.8. Frequency of planning by organizational type



Teacher report receiving program support in planning their lessons in 44% of cases, with the least amount of support reported by Foundation teachers, 26%. The most common form of support is provided through the Teacher Guide (67%), this form of support is more common in NCHD and BECS centers (Figure 3.2.9). Apart from the teacher guide, 43% of the teachers received support in form of training material or other guides from the programs for lesson planning.

Figure 3.2.9. Type of support for lesson planning by organizational type



In cases where teachers do not receive any material to support them or where they find it is not applicable,

teachers note dividing the syllabus over the months themselves to come up with a plan (BECS and BEF teachers note doing so).

Classroom management

The classroom observation data shows that in two-thirds of the cases the majority of students were paying attention. This demonstrates that most of teachers had control over their classes. Teachers used more than one strategy to maintain student attention in close to half of the cases, with the most frequent being engaging students in an activity or asking questions as well as calling their name.

In multigrade situations, teachers essentially worked sequentially. They taught one class while those not being taught were assigned individual written work in about half the cases and a few assigned a monitor to supervise their work or assigned group work. When work was assigned the majority of students did do the work. Teacher usually make use of older children as monitors so they can help the younger children.

With regards to disciplining practices, 68% of surveyed teachers note using corporal punishment as a means for maintaining order in the classroom, these trend holds across organizational types. Further exploration found that 73% of teachers were subjected to corporal punishment as students, 77% feel it made them learn better and 66% agree or strongly agree that it made them a more disciplined person (Figures 3.2.10 & 3.2.11). Interestingly teachers do not necessarily agree that it is useful for disciplining their students, only 38% agree whereas about 51% disagree in some form. Teacher interviews reveal that many teachers are actually against corporal punishment and only some teachers only find it necessary due to the multigrade situation. In a few instances teachers point out that keeping a stick in the classroom is useful for maintaining discipline but otherwise they do not use it.

Figure 3.2.10. Teacher experience of corporal punishment by organizational type

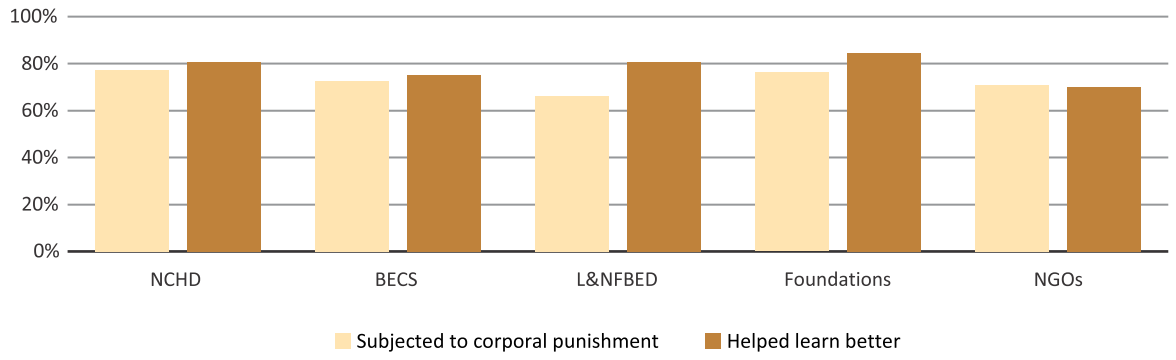
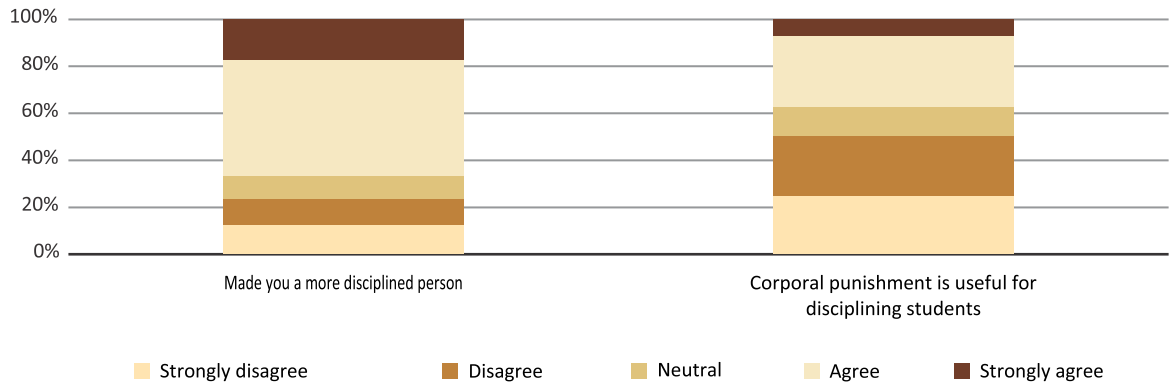
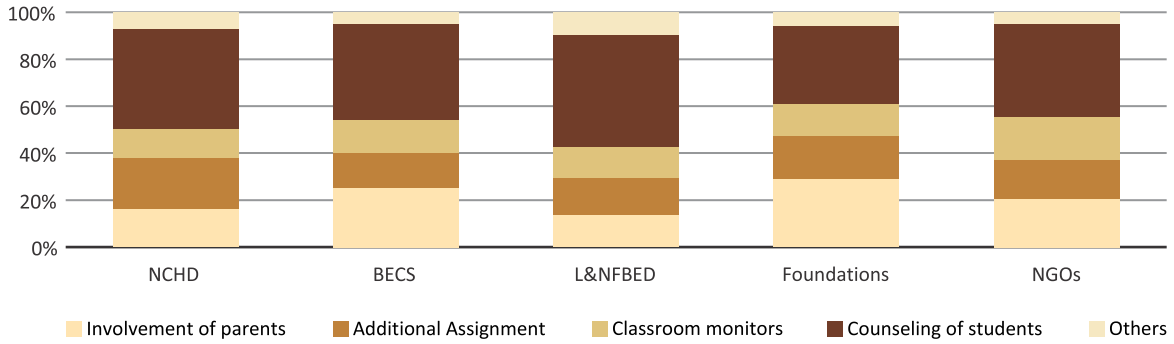


Figure 3.2.11. Teacher views on corporal punishment



When asked whether there are alternative disciplining mechanisms 96% said yes. Of these the most popular alternative would be counseling students 42%, followed by 31% using monitors and additional assignments and 21% felt involving parents would be useful (Figure 3.2.12).

Figure 3.2.12. Alternative to corporal punishment by organizational type

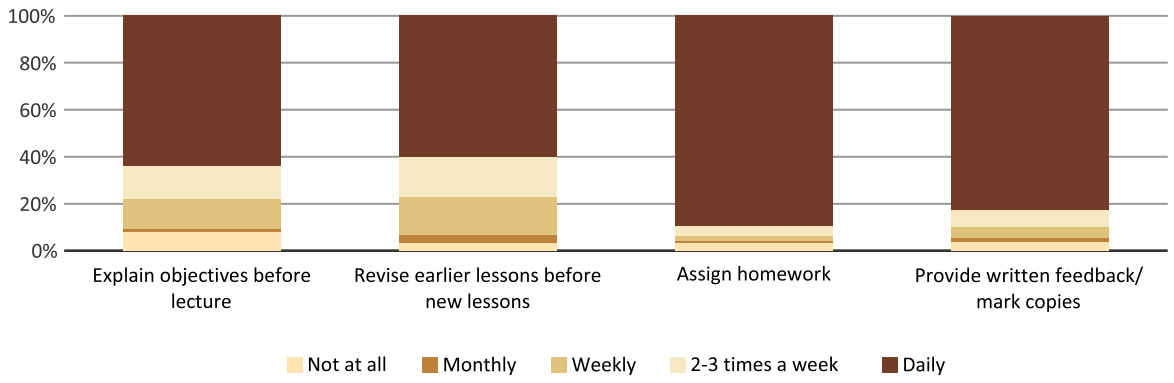


Instructional practices

How a teacher structures the lesson, introduces new topics, links it to previous knowledge and summarizes learning is very important. About two-thirds of teachers note explaining objectives of the lesson before beginning the lesson and revising earlier lessons before new lessons to ensure better understanding on a daily basis and another 30% do so a few times a week or weekly (Figure 3.2.13). An even larger percentage assign homework on a daily basis (90%) and provide feedback or mark copies on a daily basis (82%). These trends are the same across the organizational types.

These findings are mostly corroborated by the classroom observation data, teachers usually do introduce and explain the importance of new topics fairly well but fewer teachers were found to effectively link the topics to previously knowledge. They also often recapped the main points of the lesson well upon completing the topic. Teacher often provided written feedback was provided and more than half provided explanations of what a student did right or wrong as opposed to providing simple praise or scolding the student.

Figure 3.2.13. Frequency of different instructional practices



In terms of different teaching practices, teachers usually encourage questions to a great extent (84%), a smaller percentage use group work to a great extent (60%) and project work is usually not used very little (Figure 3.2.14). Once again these trends hold across organizational types, with L&NFBED using the least amount of project work.

In order to improve reading skills amongst students teachers encourage students to read aloud in class on a daily basis in close to 80% of all cases, this is followed by reading quietly and learning new words on a daily basis in close to 60% of cases (Figure 3.2.15). Comprehension appears to be something teachers do on a daily basis in only about half of the cases, but they do use it weekly. The trends are similar across organizational types with the exception of L&NFBED where learning new words and comprehension are not done as much daily as a few times a week or weekly (53% and 40% respectively).

Figure 3.2.14. Instructional strategies used according to teachers

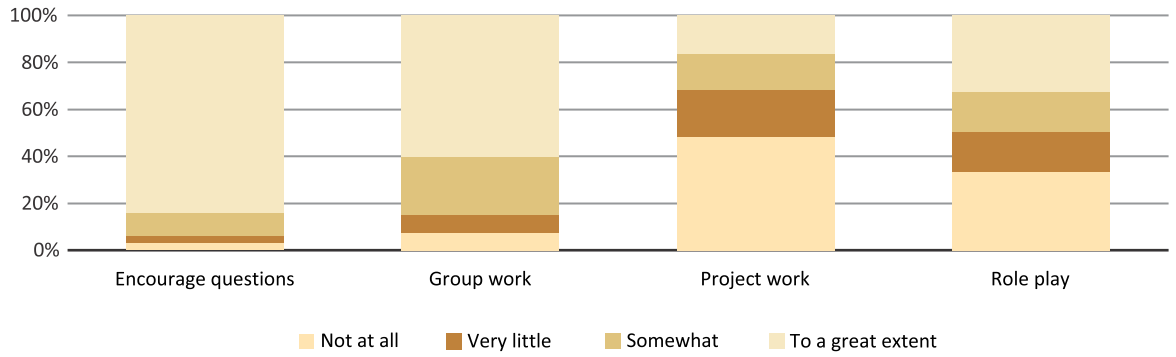
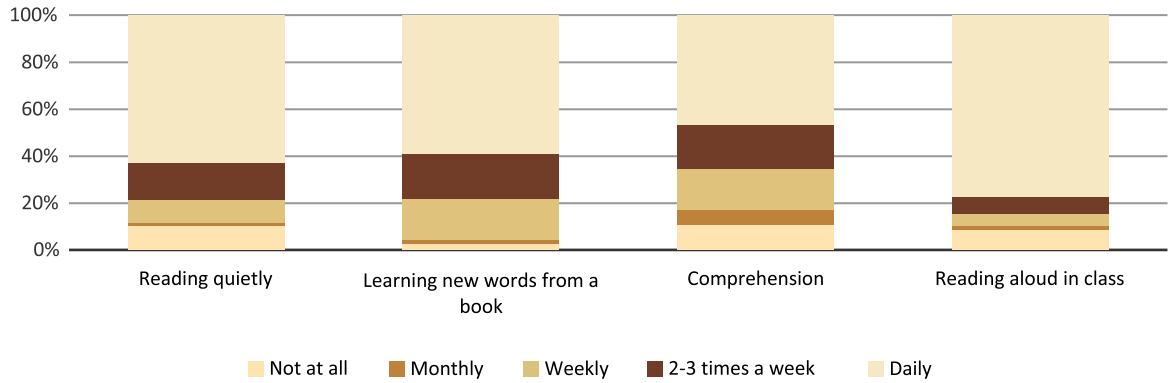


Figure 3.2.15. Strategies for improving reading practices

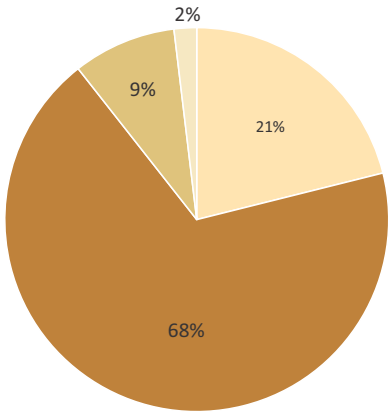


In terms of teaching practices observed, lecturing appears to be the most popular method followed by whole group recitation (i.e. students repeat after teachers). Many tried to explain new words or vocabulary, provide examples, and relate textbook content to local environment. Although teachers did ask questions, 'why' questions were only asked sometimes. Only half of the teachers made use of teaching learning materials, but that could be due to their unavailability.

Student-teacher interaction

Teachers are aware of student differences to a great extent in 64% of the cases. Teachers form different types of student groups in 84% of cases and of these the majority of teachers form groups on the basis of students' mental capabilities (Figure 3.2.16). These trends are similar across organizational types. According teacher interviews more teachers put kids in mixed ability level groups so they can learn from each other while others separate students by ability.

Figure 3.2.16. Basis for forming different student groups

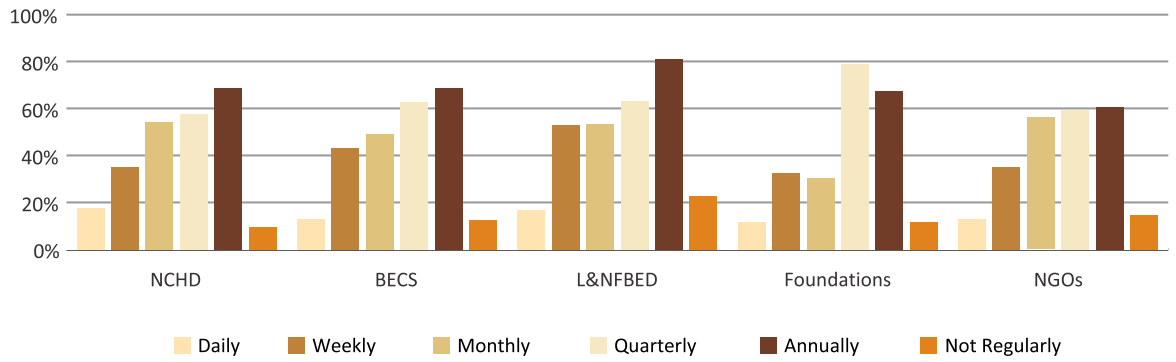


According to classroom observation teacher attitude towards the students was friendly to some degree in the majority of cases. They addressed a variety of students in the majority of cases and did not appear to favor either boys or girls over each other. Teachers assisted students who could not understand in two thirds of cases, yet only sometimes responded to their requests and students only sometimes asked questions on their own and many did not at all.

Assessment

About 60% of teachers note that they have a schedule for assessing students and most (76%) use both oral and written types of assessment. Generally teachers use both multiple choice and open-ended questions in their written assessment (80%). In terms of frequency of written tests, teachers note taking written assessments annually (69%), followed by quarterly (62%) and monthly (51%). This trend is somewhat similar across organizational types, with the exception of L&NFBED where there appear to be many more cases, 81%, of annual assessments (Figure 3.2.17).

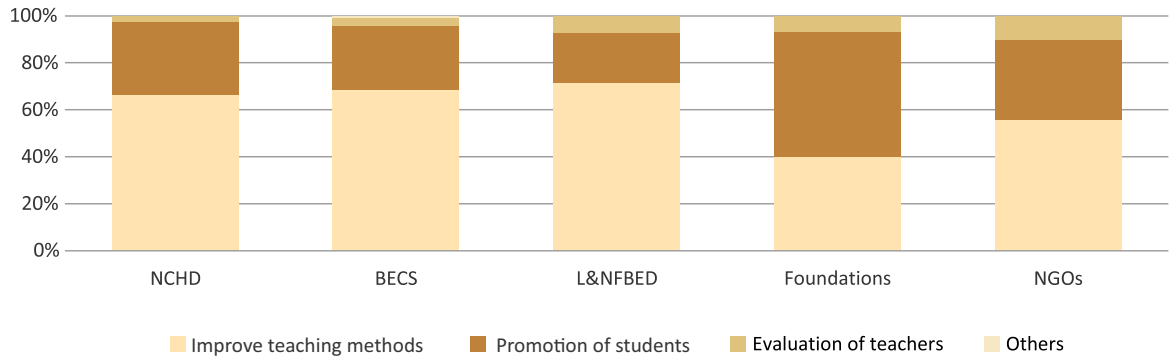
Figure 3.2.17. Frequency of written assessment conducted by teacher by organizational type



In terms of other staff conducting assessments about three-quarters of teachers respond that oral and written assessments are conducted by others (such as district education department or program staff), with the least occurrence of such practice, less than half reported, in Foundations. This is in keeping with previous trends of less staff visits. Data is usually shared by the implementing organization in 79% of cases and it is used to improve teaching methods in 65% of cases and promote students in 30% of cases. This trend holds across organization types except Foundations and to some extent NGOs where assessment data is

used to promote students in 53% of cases (Figure 3.2.18).

Figure 3.2.18. Use of assessment data by organizational type



Certificates are awarded to students on successful completion of a grade level in about 76% of cases, again Foundations are lagging with 58% of cases reporting such a practice.

Language use

The language primarily used in the classroom, according to the teacher, is most commonly Urdu (64%), followed by regional language (36%) while English is hardly used anywhere. However this varies across the provinces, in AJK and Punjab it is primarily Urdu (94% and 85% respectively), whereas regional languages are used more in the other regions to varying extents particularly Sindh where its used in 74% of cases (Figure 3.2.19). By organization L&NFBED (primarily in Punjab) use Urdu 86% and Foundations use Urdu the least amount 45%. In comparison the language used for explaining difficult concepts is predominantly local (77%) across the provinces (Figure 3.2.20). The language used by students amongst themselves is again mostly regional language except for in AJK where more speak in Urdu (Figure 3.2.21).

These findings are broadly corroborated by classroom observation where teachers use Urdu most frequently (66%) followed by regional language (about 30%) overall. The trend is similar for specialized vocabulary.

Figure 3.2.19. Language used primarily in classroom according to teacher by region

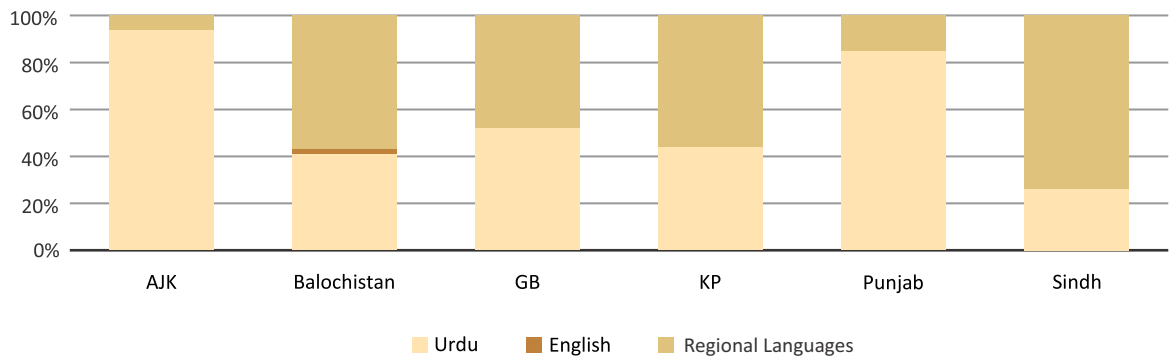


Figure 3.2.20. Language used to explain difficult concepts according to teacher by region

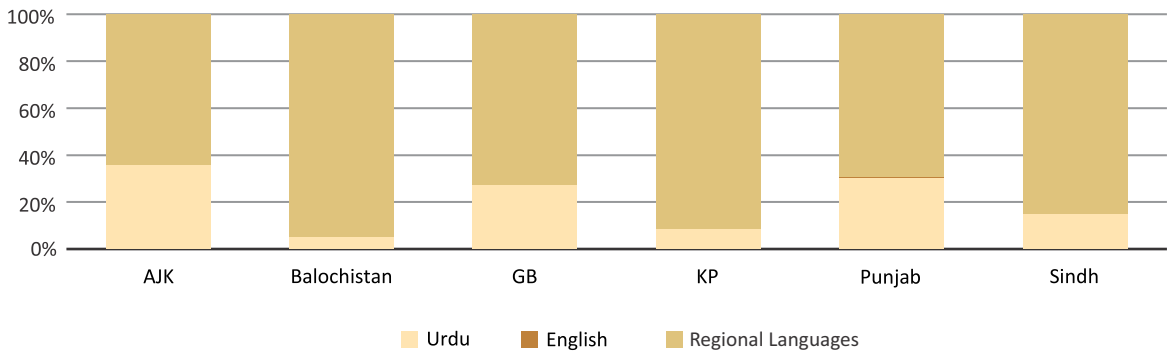
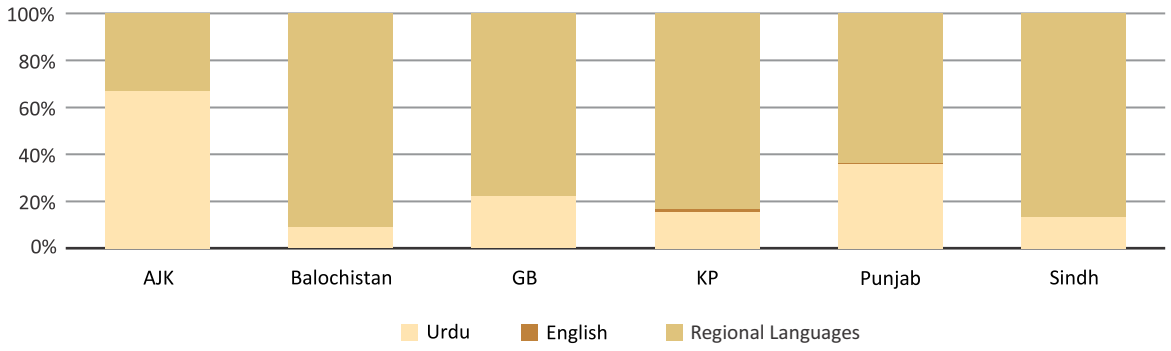


Figure 3.2.21. Language used by students according to teacher by region



Math and science textbooks are usually in Urdu (62%) followed by a portion in English and regional languages 19% each. We find that in Balochistan and Punjab these textbooks are mostly in Urdu (close to 90%), in AJK and KP textbooks are in English (above 75%), in Sindh its mostly regional language and in GB the situation is mixed (Figures 3.2.22 & 3.2.23). The social studies textbooks follow a different trajectory where most are predominantly in Urdu (77%), followed by regional language (20%), which is mostly found in Sindh (Figure 3.2.24).

Figure 3.2.22. Language of math textbooks by region

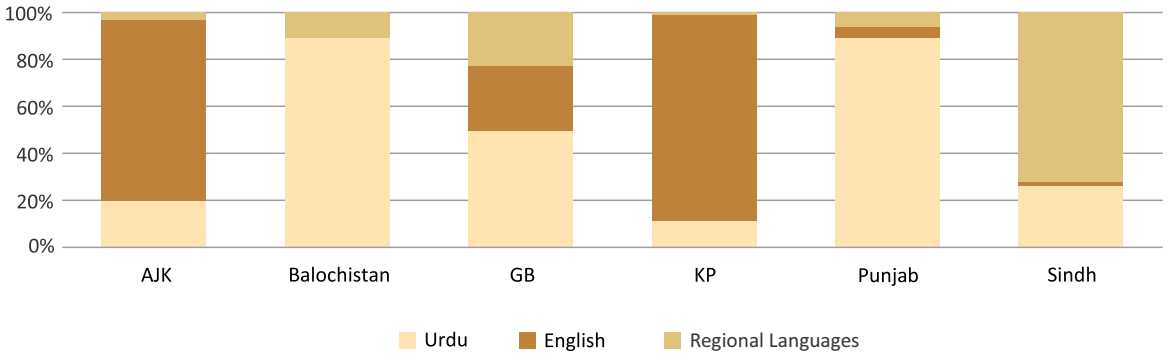


Figure 3.2.23. Language of science textbooks by region

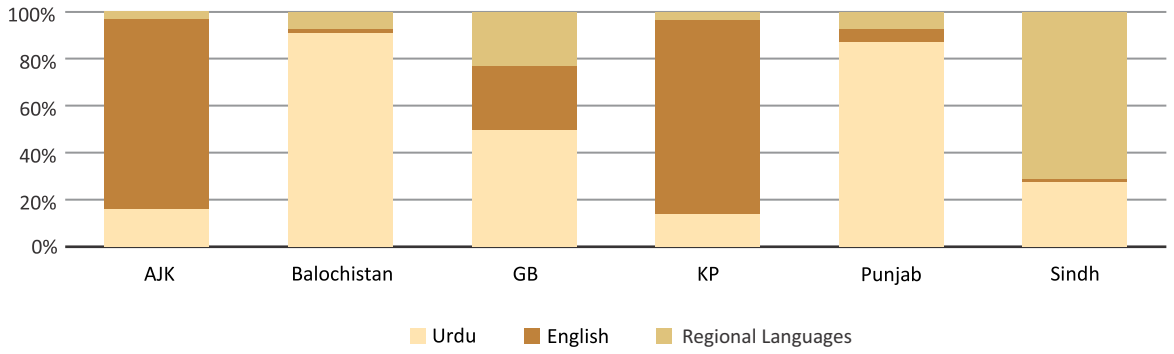
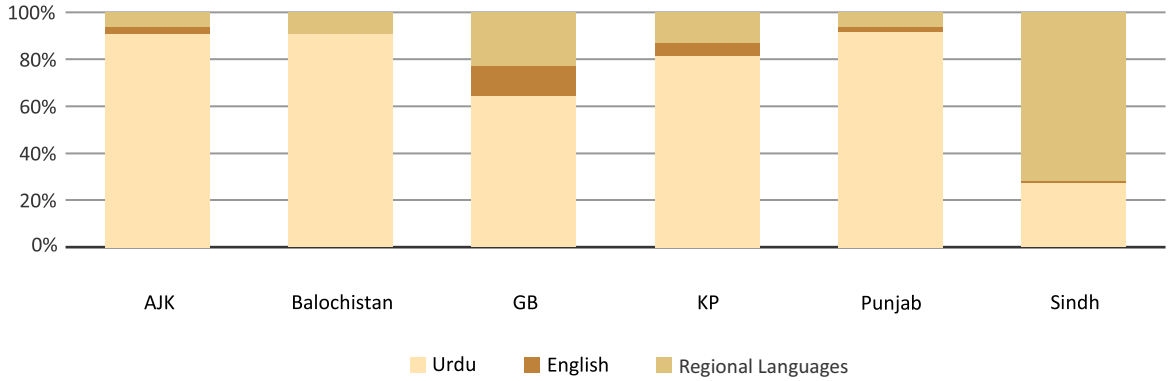
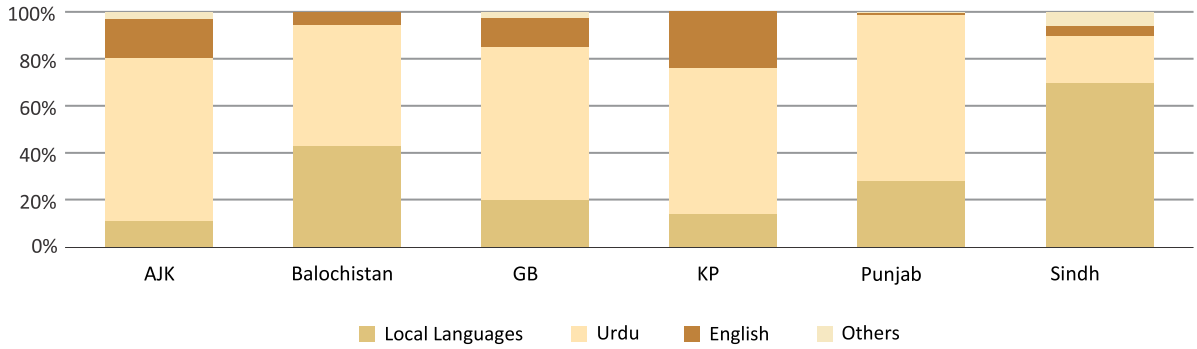


Figure 3.2.24. Language of social studies textbooks by region



Teachers feel that the medium of instruction most useful is Urdu (58%), followed by regional language (34%). This trend holds across organizational type and province (Figure 3.2.25).

Figure 3.2.25. Teacher views on language of instruction by region



Extracurricular activities

In terms of extracurricular activities, nearly 80% of students report playing games at school. Extracurricular activities include playing games like cricket, football and volleyballs. Given these games are more played by boys, therefore most of the girls participate in indoor games and other traditional games played in rural and remote areas.

Take away points

NFBE teachers are mostly female. However, unlike teachers in the low-cost private sector, NFBE teachers are not that young, with an average age of 29, and two-thirds of the teachers are married. By and large the teachers are from the same community, which is likely to be helpful in attracting students to the center as parents are often comfortable sending their children, particularly daughters, to someone they know. This also helps create an in-built accountability mechanism as teachers are unreservedly answerable to their own communities.

Most of the teachers have Bachelors and Intermediate degrees and about half have professional degrees as well. Half the teachers have experience teaching elsewhere, often in private schools. Despite the fairly low salary, only about 18% reports providing tuition.

Teacher reasons for teaching at these NFBE centers have a lot to do with the high status of the teaching profession in the local context and moral reasons such as obligation towards their communities or helping disadvantaged students. For some this is not their first option but they are working here due to lack of other options. Reasons for choice and satisfaction are usually proximity of the centers, flexibility of timings and ease of obtaining leave. Reasons for dissatisfaction are usually the salary, lack of qualification based salary and delays in receiving it. Teacher opinions are mixed with regards to workload and program support.

With regards to teaching and learning the data shows that the vast majority of teachers plan their lessons. In places where case studies were conducted, classroom observation data shows that teacher worked in a sequential manner in multigrade situations often assigning a monitor to manage the classes not being taught and using multiple strategies to maintain attention in the classroom. With regards to disciplining practices, 68% of teachers note using corporal punishment but only 40% agree it is useful for disciplining students. In fact many note that there are alternative disciplining mechanisms and say they only find it a necessity due to the multigrade situation.

In terms of instructional practices about two-thirds of teachers note explaining objectives of the lesson before beginning the lesson and revising earlier lessons before new lessons to ensure better understanding. In terms of different teaching practices, teachers usually encourage questions to a great extent (84%) and a smaller percentage use group work to a great extent (60%). In terms of teaching practices observed, lecturing appears to be the most popular method followed by whole group recitation.

In terms of assessment three fourths of the teachers use both oral and written assessments. Teachers note taking written assessments annually (69%), followed by quarterly (62%) and monthly (51%). About three-quarters of teachers respond that oral and written assessments are conducted by other staff and this data is used mostly to improve teaching methods and promote students. Certificates are awarded on successful completion of a grade level in about three-quarters of the cases.

The language primarily used in the classroom is Urdu (64%) followed by regional languages (36%). However, as to be expected the language used to explain difficult concepts and amongst students is predominantly the local language.

SECTION 3.3: Community

The community's role in education is widely recognized in the literature and with that many reform efforts have sought the support of the community in setting up schools in Pakistan. Community participation gains more importance in NFBE programs. To this end, communities are usually given a role in site selection, hiring of local female teachers as well as providing ongoing support via some sort of committee. At large, these committees or entities consist of teachers, parents and local notables vested with managerial and financial powers.

This section explores the communities where these NFBE centers exist. First it describes their characteristics, the profiles of families and students who attend NFBE centers, the learning environment and study habits and student work patterns. Second, this section looks at parental choice with regards to NFBE, their satisfaction with these centers, changes at the level of the community and their children and finally expectations for their kids. Finally, it explores community participation and how effective these communities are in delivering their role as well as parent –teacher interaction.

Community characteristics

Most of the schools are located in the rural areas, where primary schools are not close by and opportunities for girls are particularly limited. These are often financially deprived communities where the average income is fairly low. In some instances the centers cater to a particular community such as gypsies, brick kiln worker's communities or even carpet weavers who have not had access to education.

Family and student profile

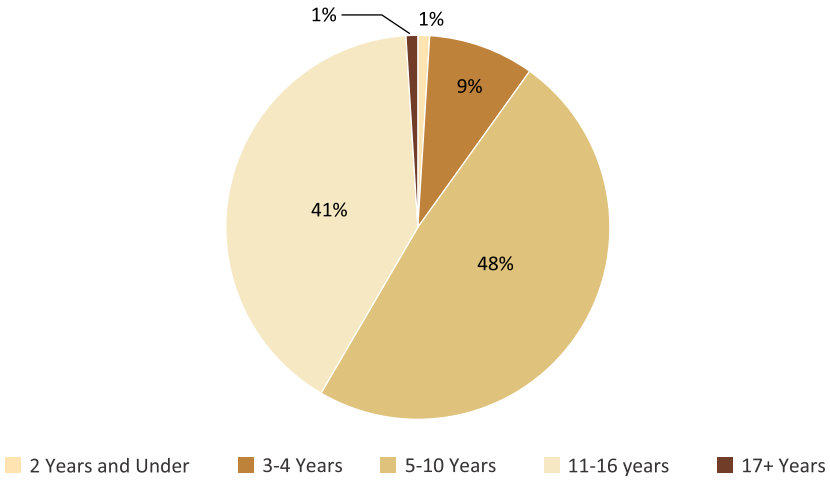
To gauge various characteristics of the family, the survey collected information from parents about themselves, the students in question (i.e. grades 3, 4 and 5) as well as other household members, particularly those between the ages of 3 to 16 years.

Household size, age, gender

The average household size is 7.8 members for those in the NFBE programs slightly higher than the national household size of 6.4 members. Overall, 53% households have up to 7 members. Province-wise break up shows that Punjab and KP have highest number of households with up to 7 members. GB and Balochistan have lowest number of households in this category. Overall gender-wise household data shows that on average there are 4 male and female members each in a family.

With regards to other children in the household, nearly 50% of all children fall in the age bracket 5 to 10 years, the primary school going age group, and 41% fall in the age bracket 11 to 16 years, the middle and secondary school age group (Figure 3.1.1). In terms of gender, 48% household members are boys and 52% are girls.

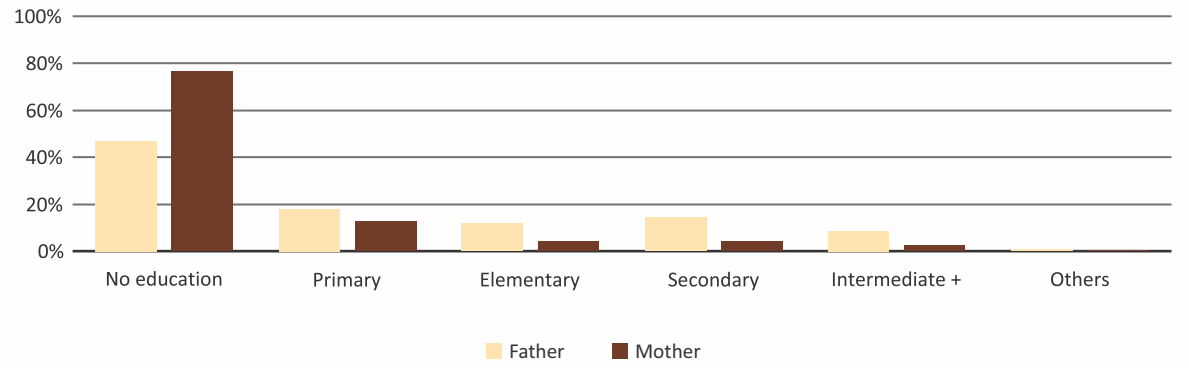
Figure 3.3.1. Age of other children in the household



Education status

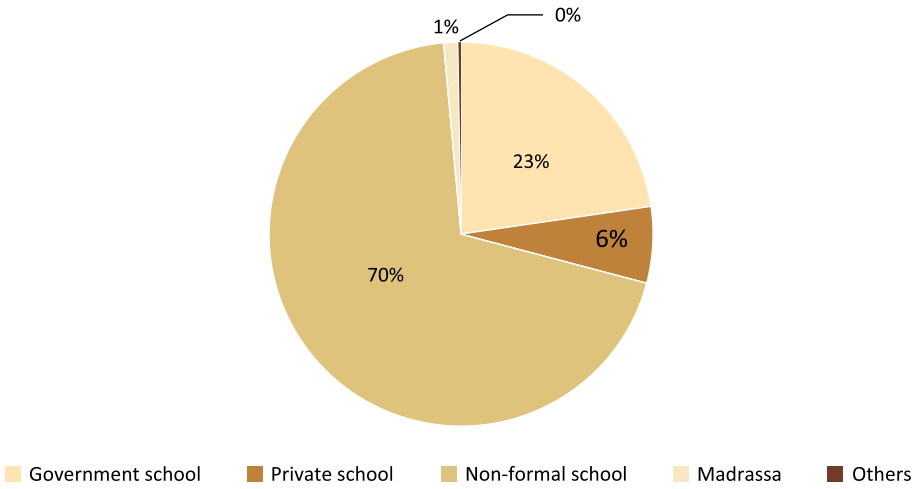
Generally parents report low levels of education for themselves (Figure 3.3.2). Nearly half of the fathers and more than three-fourth of mothers report that they have no education. Similarly, close to 30% fathers and 20% mothers have only completed primary and secondary level education. Parents in urban areas are much more likely to have higher levels of education than in rural areas.

Figure 3.3.2. Parent Education Level



In terms of other children in the household, 77% are currently enrolled in some sort of educational institution, 10% have dropped out of school and 14% have never been enrolled (although a portion of these may be those children not of school going age). This indicates a trend towards availing educational opportunities in the households surveyed and may indicate their awareness of educational importance and/or a preference to send children to school. The majority of other children are enrolled in non-formal centers (70%), followed by government schools (25%) and very few are in private schools (6%) (Figure 3.3.3). The proportion of enrolled students is higher in primary grades.

Figure 3.3.3. Other children in household type of institution attending

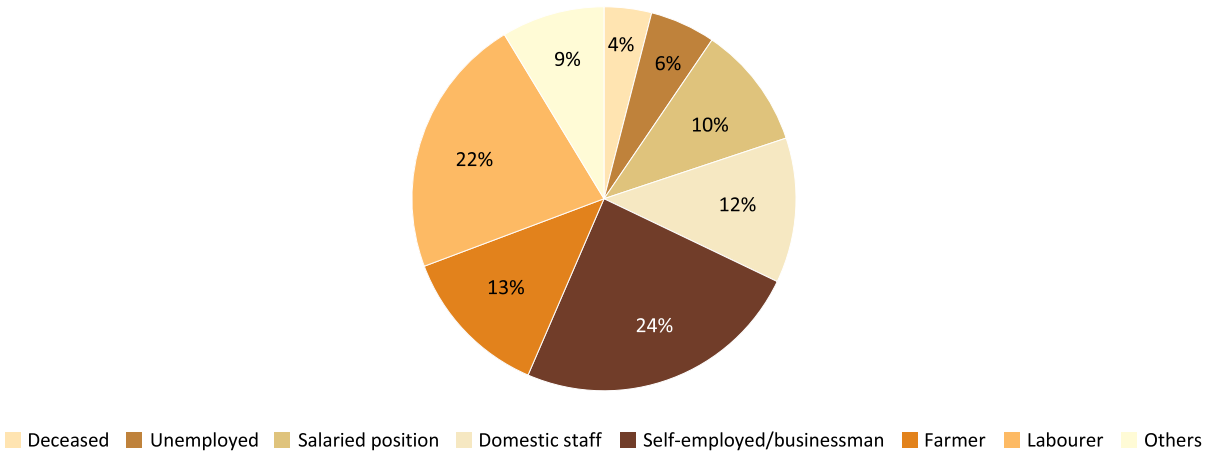


Occupation and income

Overall, most of the parents have reported single member earning households (85%), while 15%, have more than one earning members which is almost equal to the national level figure of 2.0 members per household. Female members, nearly 16%, are equally contributing to the income pool both as unpaid and paid family member.

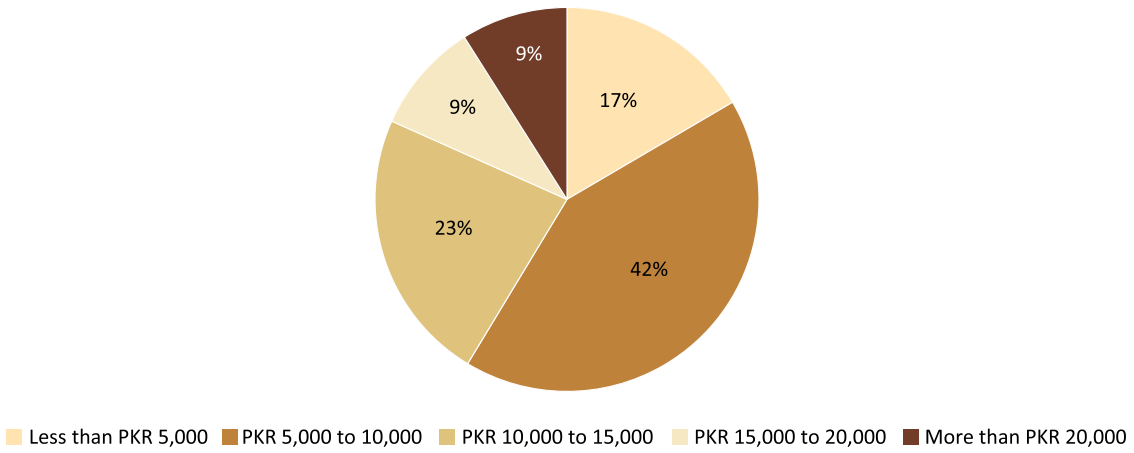
Type of occupation amongst fathers varies (Figure 3.3.4). Many fathers have reported business and self-employment as their occupation, 25%, this includes shop keeping and tailoring and daily wage work, followed by working as laborers 20% and in farming 15%. A small proportion, nearly 12%, are engaged in domestic work such as working as a driver, cook, peon, watchman, and so on and nearly 10% have reported doing jobs such as clerk, teacher and factory worker.

Figure 3.3.4. Fathers Occupation



It is evident from the type of occupations reported that most of them are associated with low income, 42% have monthly income level of PKR 5,000 to 10,000 followed by income level of PKR 10,000 to 15000, 23% (Figure 3.3.5). About 17% fathers have an income level of less than PKR 5,000 per month. On the higher end, approximately 20% fathers have a monthly income of PKR 15,000 and above.

Figure 3.3.5. Father's monthly income



Most of the mothers (nearly 80%) are housewives, therefore did not report any income generation activity (Figure 3.3.6). Among others, nearly 6-10% are engaged in self-owned business and labor related services. Of all the earning mothers, approximately 60% are earning less than PKR 5,000 per month, followed by 30% who are earning PKR 5,000 to 10,000 per month (Figure 3.3.7).

Figure 3.3.6. Student Mother Occupation

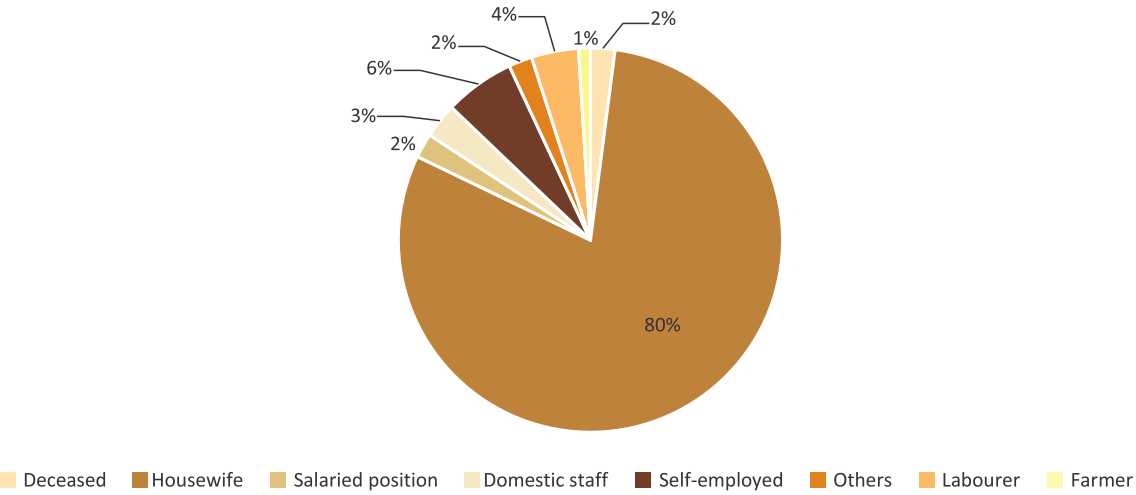
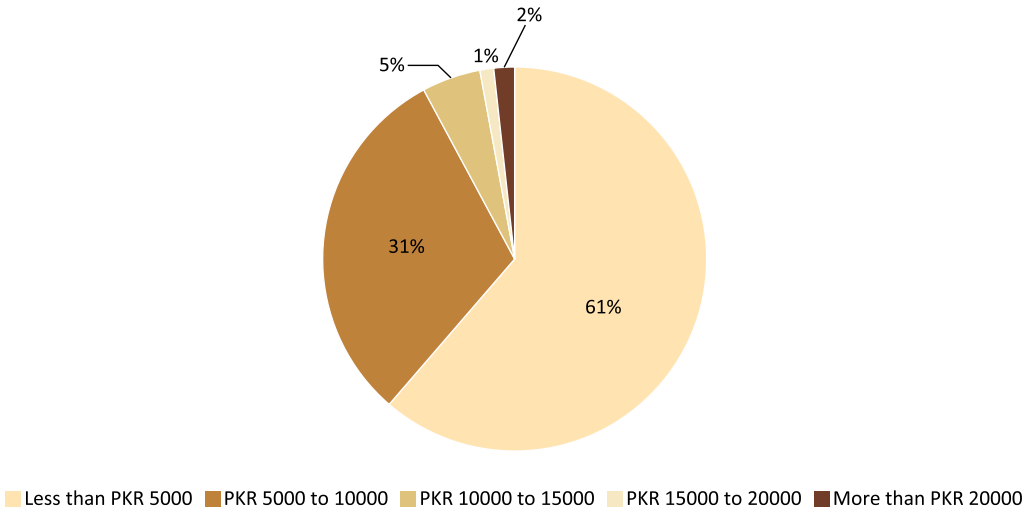


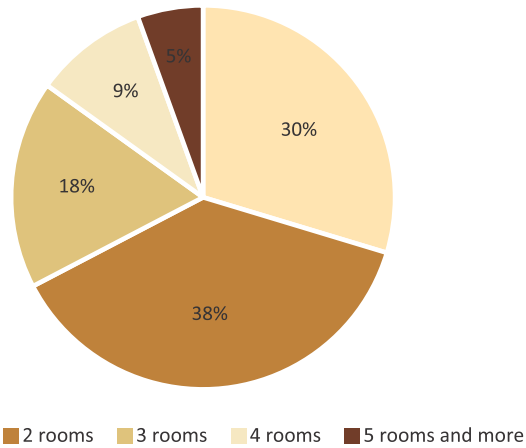
Figure 3.3.7: Mother Monthly Income



House and assets

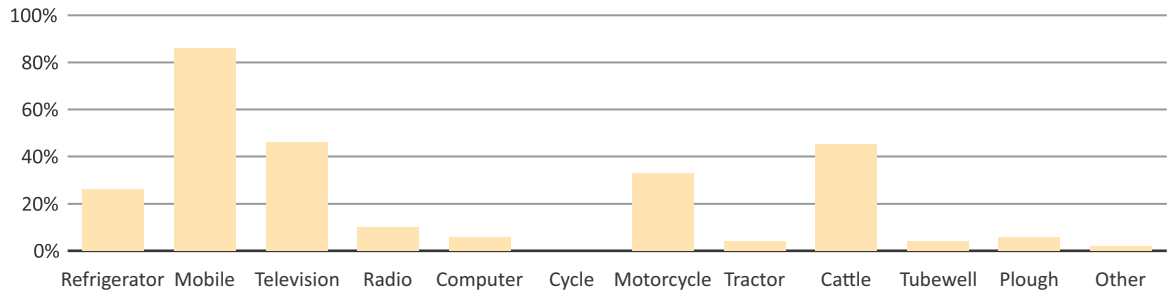
A large majority (90%) of the parents reported that they own their house or dwelling and of these 60% report having a pacca type house as compared to kacha type house. On average, those living in the either pacca or kacha type house, have up to two rooms and only 18% have 3 rooms in a house (Figure 3.3.8).

Figure 3.3.8. No. of rooms in house



The types of assets that households possess vary across the holding distribution (Figure 3.3.9). The majority of households have a mobile phone (86%), followed by about half having a television and farm animals. A smaller proportion, about one third have a motorcycle and a refrigerator. By organization type, there is no noticeable variation evident for different type of assets.

Figure 3.3.9. Household Assets



Residence and language

Nearly 9% parents have reported that they do not belong to this community and migrated for multiple reasons. Migration due to work, posting or business and work accounts for a significant proportion of those who migrate, while marriage is another important reason.

Overall only 2% of parents have report communicating in Urdu at home, the vast majority of the households use regional languages. By organizational type, close to 5% parents who are associated with L&NFBED and Foundation schools have reported use of Urdu at home.

Student health and disabilities

Nearly 35% children in Pakistan have low weight as compared to age.[6] Among the NFBE students sampled, the average weight of both boys and girls is almost equal, 28 kg and the average height of boys is 47.5 inches and girls 47.0 inches.

Using students' height and weight their body mass index (BMI) can be calculated (kg/(height in meters)^2). This information can be used to determine the health of the students. The Center for Disease Control and Prevention (CDC) provides guidelines:[7] the students having a BMI lower than 5th percentile are categorized as underweight, under 85th but above 5th percentile as healthy, between 85th and 95th percentile as overweight and lastly above 95th percentile as obese. According to these guidelines the majority of the students, 80%, have healthy BMI (Figures 3.3.10 & 3.3.11). There is almost no variation in the BMIs of boys and girls. While about 11% of students were found overweight, 5% of the students were underweight and 5% are obese.

Figure 3.3.10. BMI of NFBE boys by age

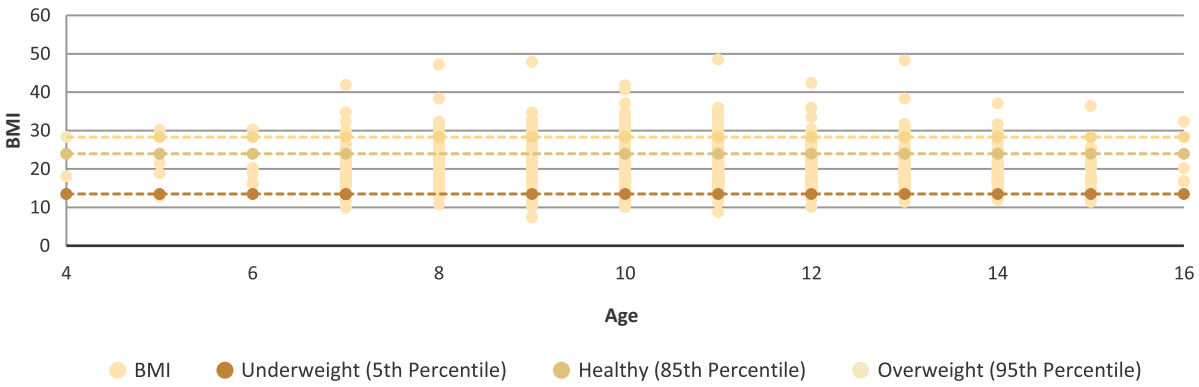
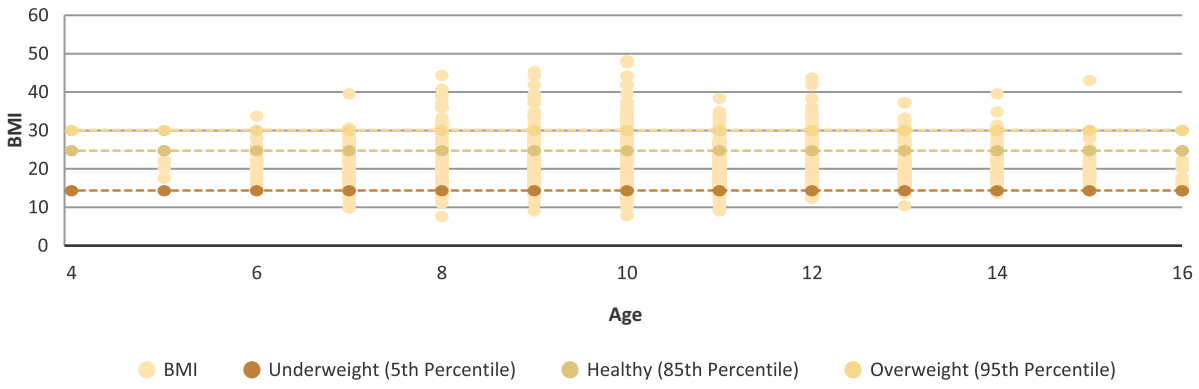


Figure 3.3.11. BMI of NFBE girls by age



Generally, children with disabilities are excluded from mainstream education opportunities. In NFBE as well, only a small proportion of parents, 6%, report that their child is suffering from physical, visual and mental disabilities. We find that nature of disabilities are specific to visual and hearing impairments followed by mental problems and some note learning disabilities such as stuttering and dyslexia.

Student working patterns

As originally envisioned, NFBE programs are meant to target those underprivileged children and youth who have either no access to formal primary schools, or have missed the chance to enroll at the appropriate time or are working children. Contrary to our assumptions, however, only 3% students enrolled in NFBE centers reported working for earning purposes. Given that the number of students reporting that they work, is very small, it is important to note the trends mentioned here may not reflect the larger population.

Almost all of these students work after school hours so there is no conflict with school. But the majority reported that their center timings are not flexible to their work hours, which may in itself limit the kind of student body these centers attract, meaning those who are not fully employed.

In terms of number of working hours per week, there is a lot of variation. Students work anywhere between 5 – 20 hours per week. Of these working children, we find a majority is working in the fields or farms particularly in sowing and harvesting seasons followed by working from home. Students who work again have a fair amount of variation in income. A large proportion of students are earning PKR 1000 or less. When asked whether their earnings are utilized for educational purposes or not, fewer students spend their income on studies or related expenditure, they either appear to be contributing in to other household expenditures or do not spend at all.

Learning environment and study habits

Reading habits

The vast majority of students, 90%, report studying and reading at home by themselves. In this respect, reading material provided by the teacher can be useful. However, most of the students, 81%, reported that their teacher never provided them any reading material other than textbooks to study at home.

Nearly 40% children note having someone read or tell a story aloud to them. The proportion of students who are read to is slightly higher amongst grade 3 students than grades 4 and 5 in cases such as L&NFBED and NGOs (Figure 3.3.12). Almost all the students who reported that a story is read out to them, express enjoying listening. Most children listen to stories in their local language, 65%, however more frequent use of

Urdu is found in the case of Punjab and AJK, with more than 50% reporting its use to tell a story (Figure 3.3.13).

Figure 3.3.12. Read to or told a story by grade and organizational type

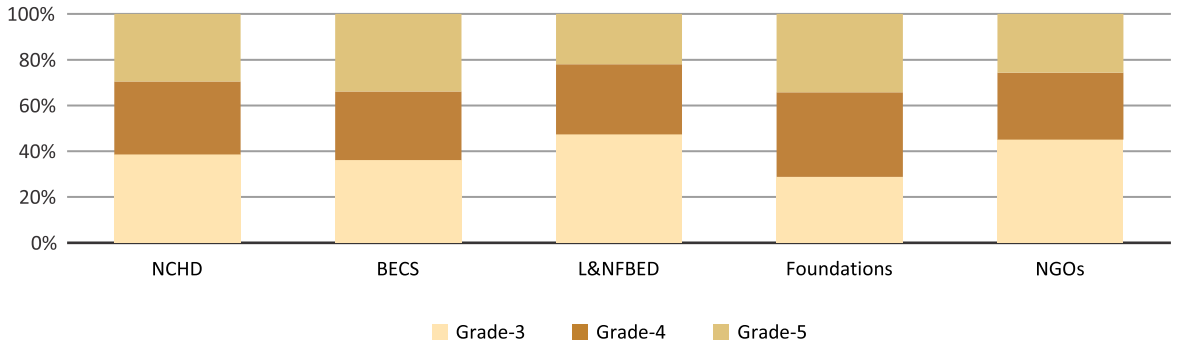
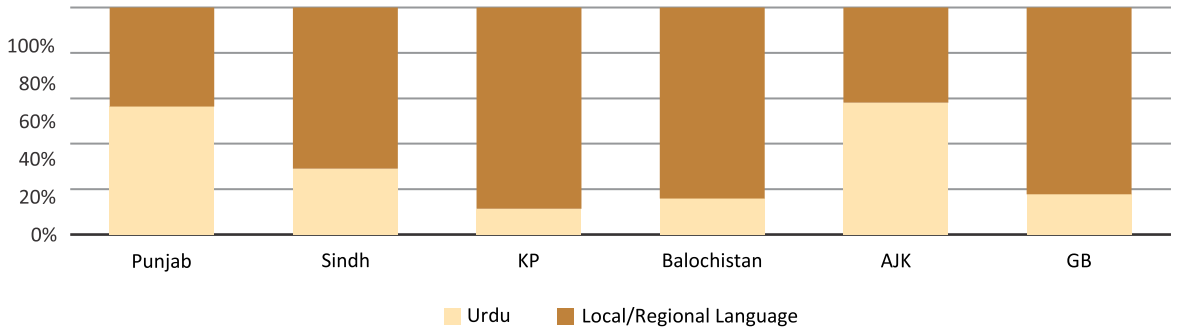


Figure 3.3.13. Language story is told in by region

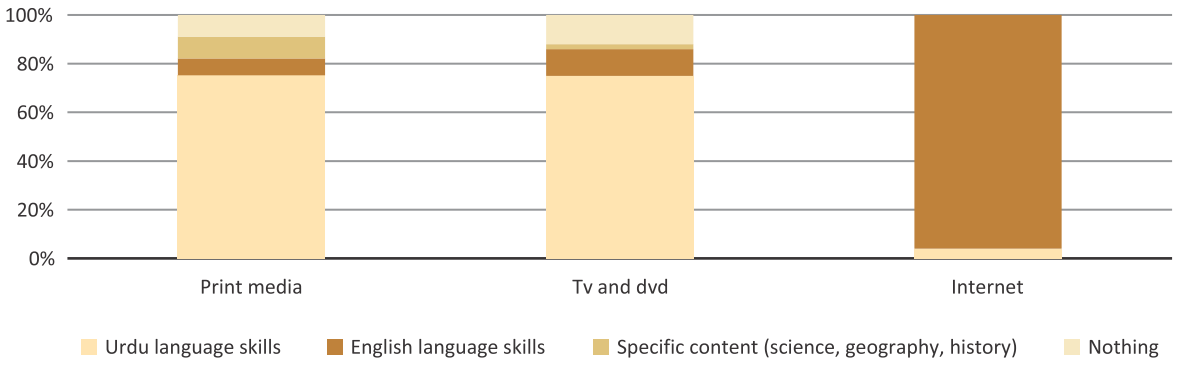


Media access and habits

Students' reading and viewing habits with regard to print media (storybooks, newspapers, magazines) and electronic media (television, computer etc.) were also gauged in the survey. More students appear to have access to a TV or DVD player (41%) than internet (20%) or print media (39%). Students have access to TV at home in 50% of the cases while most of the students have access to print media at home, 81% of cases. Nearly 55% children reported viewing television content.

According to the majority of parents, print and electronic are better for learning and improving Urdu language skills (Figure 3.3.14) Whereas almost all parents of the students having internet access recognize its usefulness for improving English language skills.

Figure 3.3.14. Benefits of different type of media according to parents



Homework

Teachers assign homework frequently, almost all the students report receiving homework assignment every day of the week. Although the amount of time spent daily depends on the amount of homework. According to students, more than 50% of students spend less than one hour doing homework per day and about two-thirds spend one hour doing homework and a nominal amount spend any more time (Figure 3.3.15). While according to the parents, students spend more time on homework (Figure 3.3.16). More than 50% of students spend one hour on study followed by 30% students spending 2 hours on studies at home.

Figure 3.3.15 Time spent doing homework by organizational type according to students

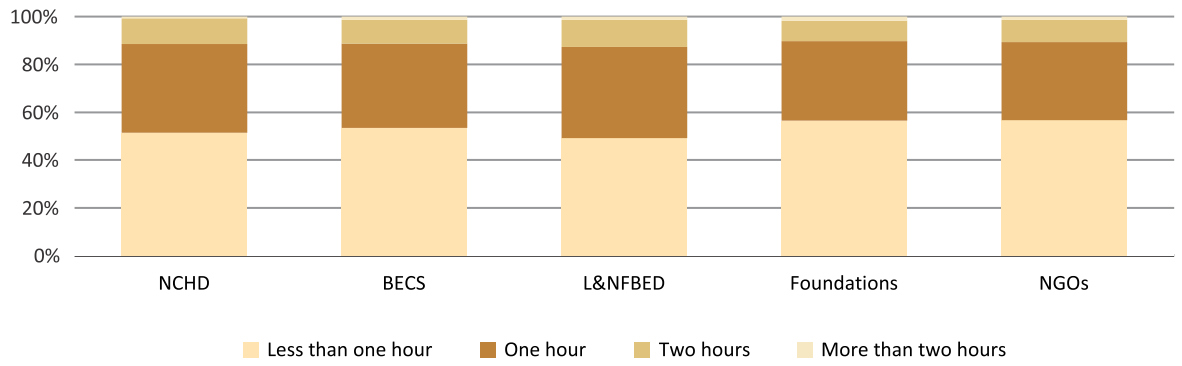
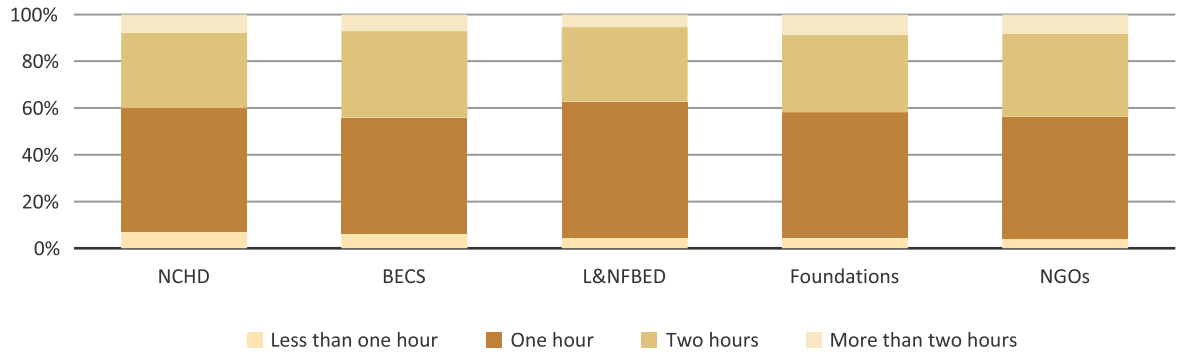
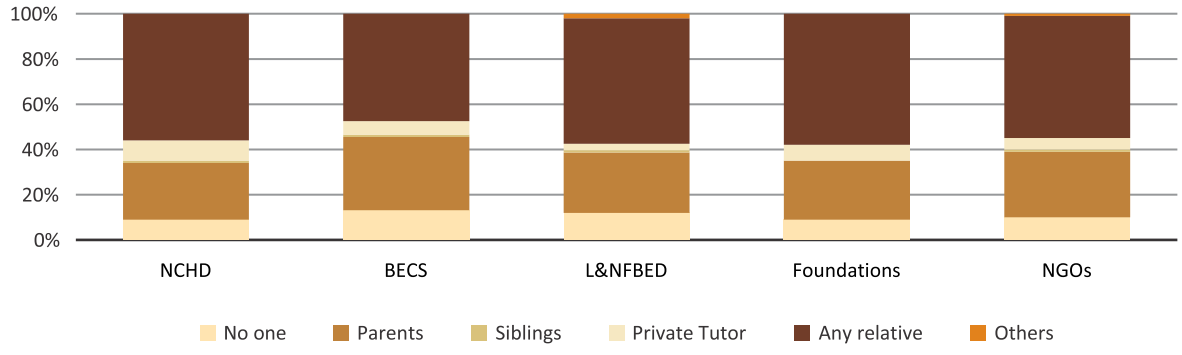


Figure 3.3.16 Time spent doing homework organization wise- Parents data



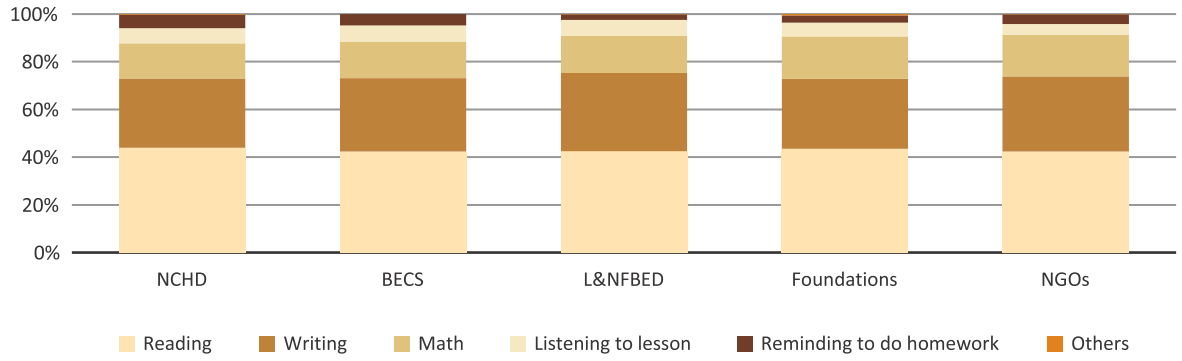
Nearly 90% of the students reported that they receive some assistance in doing their homework. It appears that assistance is provided by a relative in more than half the cases, which is to be expected since many parents noted having no education (Figure 3.3.17). This is followed by parents who account for close to 30% of the assistance. Interestingly there are fewer reports of private tutors assisting students, but it is also possible the tutor may be a relative as well.

Figure 3.3.17. Source of assistance for doing homework by organizational type



With regards to type of help provided in doing homework, 40% of the students get support in reading, 30% in writing while only 15% in solving mathematical problems (Figure 3.3.18).

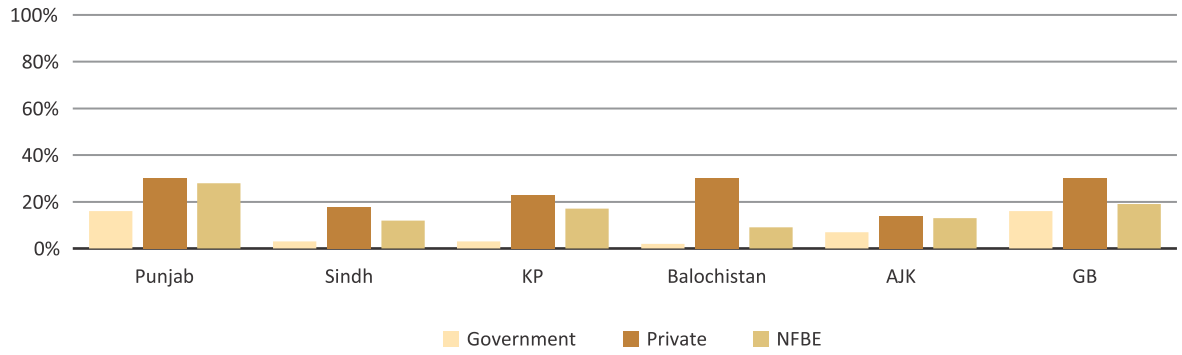
Figure 3.3.18. Type of homework support by organizational type



Private tuition

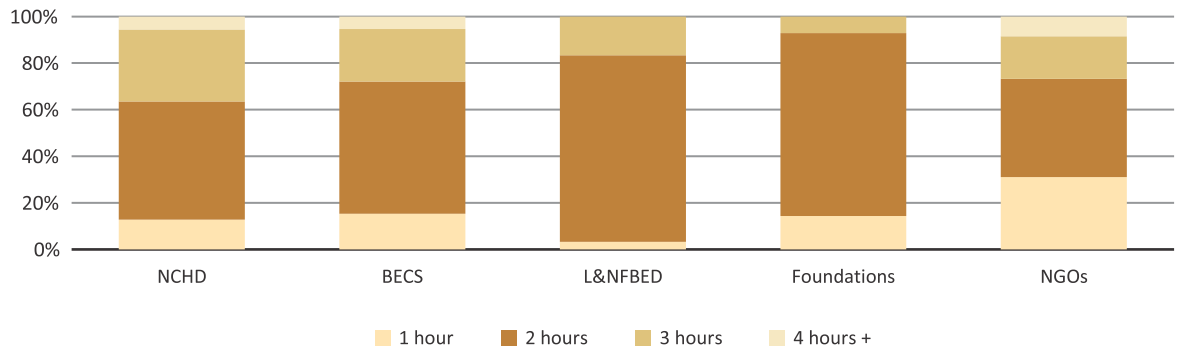
The incidence of private tuition in Pakistan among children studying in both public and private schools is high.[8] A very interesting question then is to what extent do NFBE children engage in private tuition as compared to their counterparts. Nearly 16% children of 3-16 years age cohort in rural Pakistan take tuitions[9] and in the case of NFBE, 14% parents and 22% of 5-16 years age group students report taking private tuition. The private tuition patterns of NFBE students is similar to those of private school students, the instances of taking it are greater than government school students across the regions (Figure 3.3.19). In terms of grades, more grade 3 students, 42%, are taking paid tuition than grades 4 and 5. In terms of cost, according to ASER, students pay on average PKR 293 per month while in NFBE they pay on average PKR 184 per month. For NFBE this is over and above what they pay as NFBE centers are generally free otherwise.

Figure 3.3.19. Children taking paid tuition by type of school and region
Source: Government and private sector - ASER 2014 and NFBE - SAHE 2015



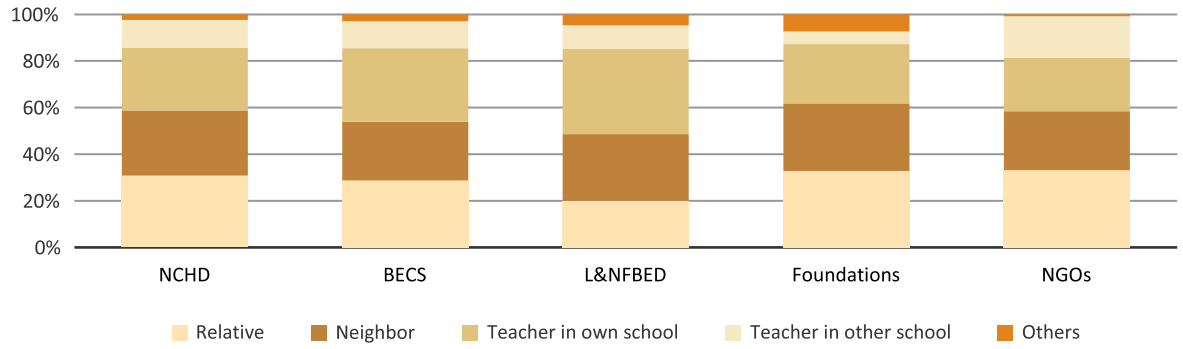
The amount of time in a day spent on private tuition is most frequently 2 hours, with 80% of L&NFBED and Foundation students spending this amount of time (Figure 3.3.20). In cases of NCHD, BECS and NGOs there is a small portion above 25%, of students who spend 3 hours or more in private tuition.

Figure 3.3.20. Amount of time in a day spent in tuition by organizational type



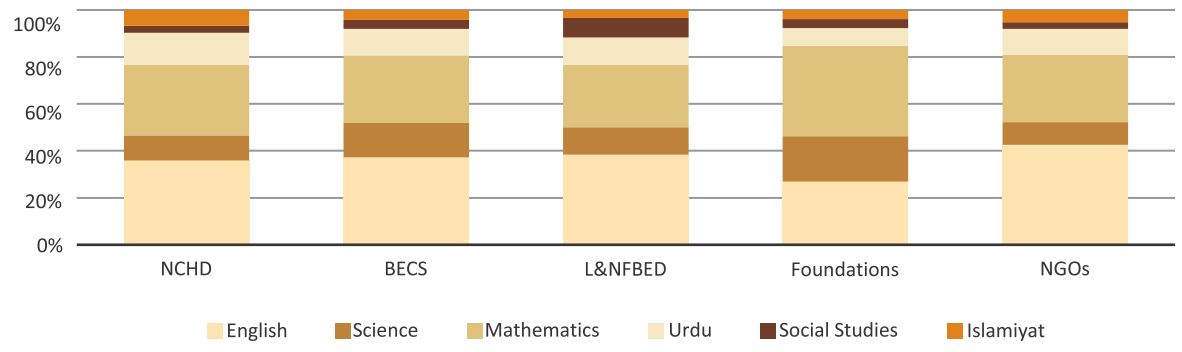
We looked at who these tutors are. We find that private tuition is most commonly provided by teachers, both those from their own school or other schools (47%), followed by relatives and neighbors about 30% each (Figure 3.3.21).

Figure 3.3.21. Tuition provider by organizational type



Further insights into the dynamics of private tuition shows that the vast majority, 38% of the students, are taking tuition for English while much smaller amounts are taking tuition for science, math and Urdu (Figure 3.3.22). The only difference from this trend appears to be for Foundations where more students are taking tuition for the other subjects and a bit fewer in English.

Figure 3.3.22. Tuition subjects by organizational type



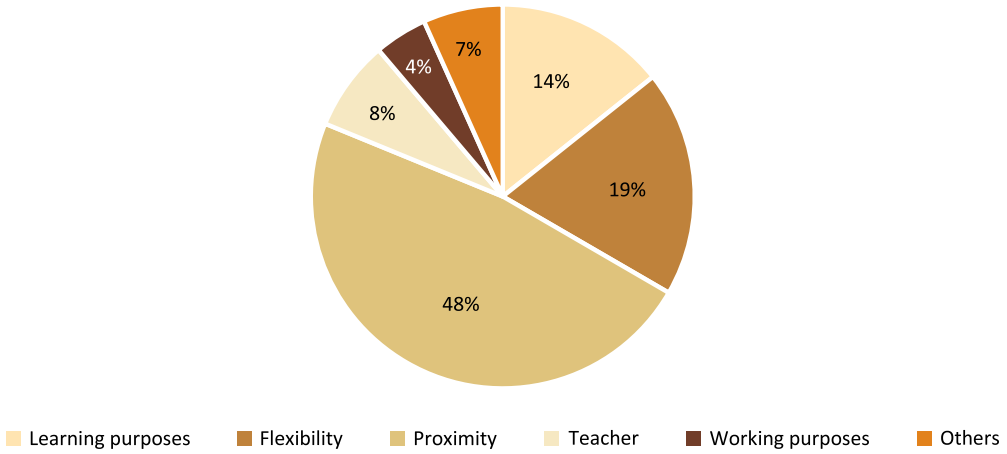
NFBE choice, change and expectations

A key factor to keep in mind while reading this section is that the majority of centers cater to girls in the community and communities that have a lower income.

Reasons for choosing NFBE

The majority of the parents, close to half, rank proximity to home as their top reason for choosing NFBE centers and more often girl's parents do so (Figure 3.3.23). Nearly 20% send their children due to the flexibility of NFBE centers in terms of their daily timings, admission timing and particularly their lack of an age limitation. Finally the learning goals, such as obtaining a certificate or the ability to move on to the formal school, account for 14% of parental choice. The qualitative data sheds further light on parental choice.

Figure 3.3.23. Reasons for choosing NFBE according to parents



Proximity

According to the qualitative data as well, the location of the school in the community is noted as a primary driver for parents choosing NFBE centers. In many instances, parents point out that younger children and especially girls cannot travel to other schools. Some community members note that they would not have been sending their girls to school if there was no school in the community. Therefore proximity matters in terms of safety and security. For other parents, it is the expense of transportation, since the government school is very far from this community, which they cannot afford.

Flexibility

Some parents pointed out that the school timings are flexible as compared to other types of schools. This flexibility made it easier for children, especially girls, to help and support in household chores first and later attend the school.

Affordability

Although this factor was not noted in the quantitative data, the majority of the parents mentioned the lack of fees as an important reason for sending their children to these NFBE centers. A large majority said that before the NFBE center opened, children were attending government or private schools but now they are sending their girls to NFBE center which is mostly free. Interestingly several parents are of the view that

private schools provide better quality education than government schools but they cannot afford them, therefore NFBE is a better choice.

Teacher characteristics

In many instances, the teacher is local and more often than not referred to as relative of students who belong to the same biradari (tribe) or caste. In case of girls education, a majority of parents have frequently pointed out that a female teacher is an important factor in educating their girls.

Teacher accessibility

The parents appreciated the school teacher and program staff efforts to keep them informed about their children's education. Community members reported that government school teachers compared to NFBE teachers are not as cooperative as they rarely coordinate with parents to share child progress. Teacher some time support parents in case they are unable to purchase books and other stationary items.

Teaching and program quality

Most of the time, teacher was referred to as hard working, honest and devoted to teaching. Parents feel the teacher pays extra attention to the students and their learning differences. While in contrast, government school teachers are viewed as irregular and pay less attention to the students. Some feel teachers in other schools are only concerned with their salaries.

Some parents said this school and its teaching is better because there are no summer and winter vacations and children attend this school throughout the year. They drew comparison between NFBE and government school teacher in terms of contact time, teaching methodology and discipline. In couple of instances, parents pointed out that small class size and discipline were plus points.

Perceived changes

A variety of changes since these NFBE centers have opened can be observed in these communities. One is at the level of the community itself, their attitude towards education in general and for their girls. Another level is the change parents see in their children. Both have been discussed in this section.

Attitudes towards education

Over time the attitudes towards education and the NFBE centers have changed in these communities. In almost all the places, the community was initially hesitant when organizations approached the village elders to set up the centers. Among these, female members of the community appeared to be more receptive as compared to male members. As one parent put it, “We are not literate but it is out great wish that our children get higher education. Now we understand that illiteracy/ ignorance is same like one is blind and can't see or understand the world”.

In communities where NFBE school has been running for more than a decade and people are relatively more literate and parents feel they face less social hurdles in educating their children. Still, in certain number of communities, there are certain members, such as grandparents of children, who are reluctant to send girls to this center. In such cases, parents especially mothers were sending them without informing or taking them onboard.

Changes in students

When it comes to changes in their children, parents tended to highlight behavioral changes related to

practical like rather than those related to academic skills. For example many parents noted that their children had become more respectful, had better manners, were more truthful, spoke in a more respectful manner and did not roam around in the streets. Several parents also noted more religious behaviors such as regularly offering prayers and reading the Quran.

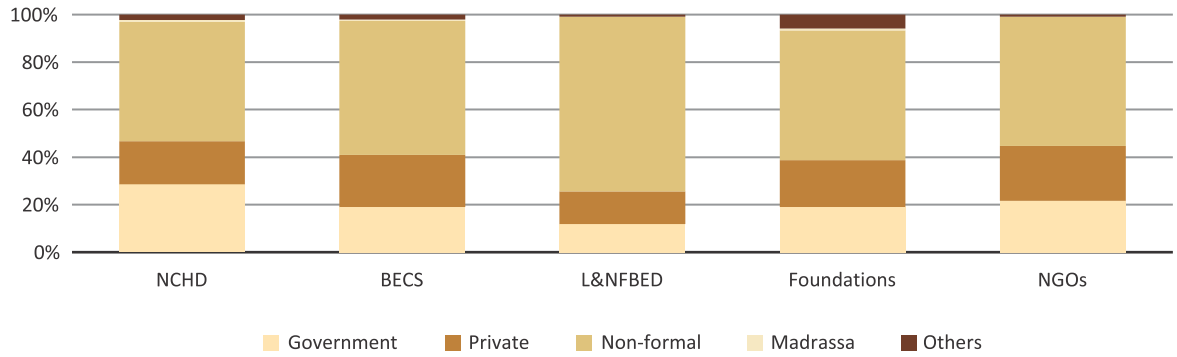
Most of the parents reported observing an immense difference in their child's behavior towards caring for their health and hygiene. In terms of practical skills some parents pointed out that now their children can easily read doctor's prescriptions, name of medicine, marketing or sign boards and so on. Of these some noted that this is still insufficient in terms of availing better economic opportunities. A few parents did mention learning new skills such as how to read and solve math problems.

In terms of study habits, many parents pointed out that their children do not waste time. Once they come at home from school, they take a bath, have their meals and then do their homework. Before enrolling in this school, they used to roam in the streets all the time. But now they spend fair amount of time on doing homework and other learning activities.

Satisfaction with NFBE

In terms of long-term benefits of NFBE, the majority of parents (more than 98%) find it is useful and will be helpful in their child's future. With regards to ideal type of schooling for their child, the majority feels that non-formal education is best suited for their child, close to 60%, but the rest feel public or private school would be better, 20% for each respectively (Figure 3.3.24). In addition, more than 95% of all parents report that they would suggest NFBE to other community members, friends and relatives. This demonstrates parents overall satisfaction with the NFBE centers.

Figure 3.3.24. Parents view on the ideal type of schooling by organizational type



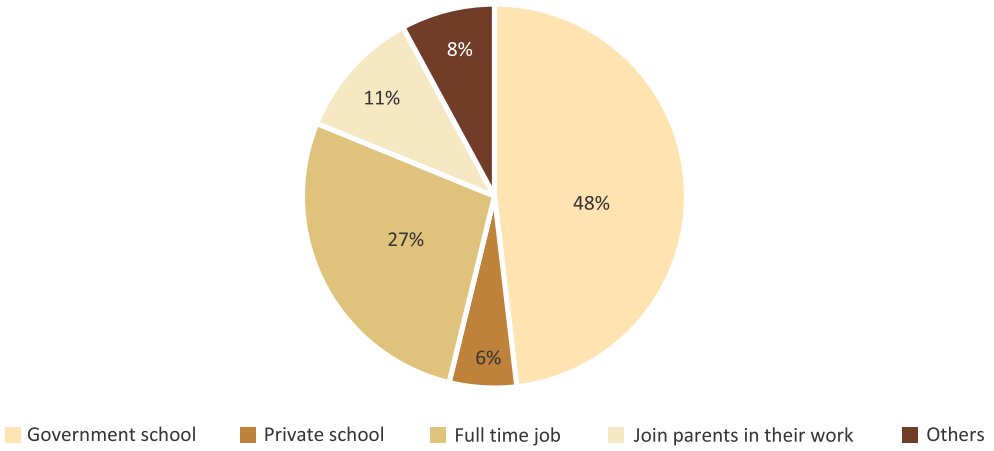
Nearly all the parents (95%) noted that their child likes to go to the center. Parents provided different reasons, the most common being the friendliness of the teacher (40%) followed by the proximity of the school, its location in the neighborhood (27%) and the fact that their child has friends in the same school (20%), there is little variation across organizational type.

Expectations for students

After their children complete their primary education about 50% want their children to go to a government school, while very few want them to go to a private school (Figure 3.3.25). This reflects affordability concerns of parents found in the qualitative data as private schools tend to require greater fees and government schools are by and large free. Nearly 30% parents expect their children to do full time job after attending primary. Across regions, a large majority of parents AJK and Punjab expressed that their child will

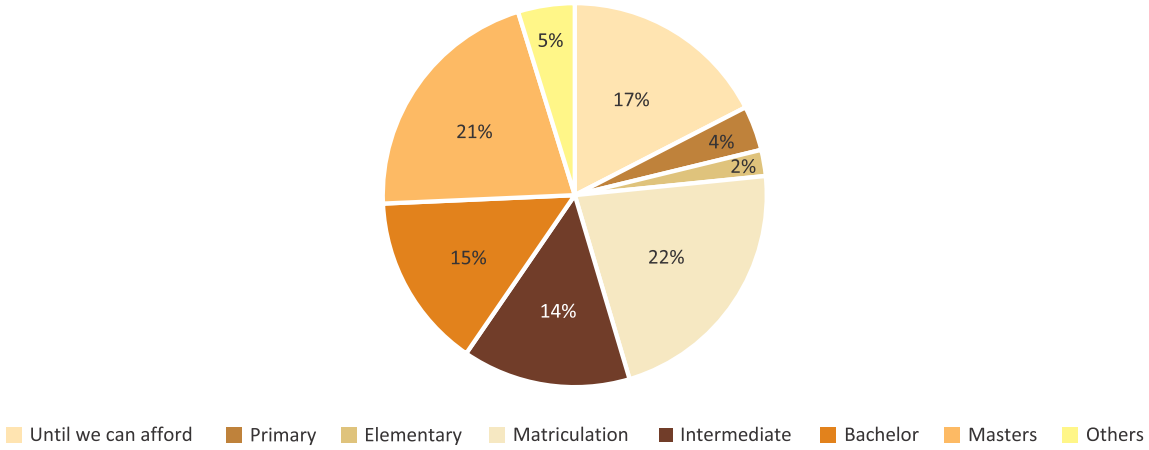
join formal government school after completing primary from NFBE, while parents expectation towards full time job is comparatively high in Balochistan, GB, Sindh and KP .

Figure 3.3.25. Parent expectations for children after completing primary education



In terms of what level parents want their children to study to, we find that 22% want their child to study till Matriculation followed by 21% wanting them to go up to the Masters level (Figure 3.3.26). Although majority of the programs offer free of cost education to the students, still, financial cost and other opportunity costs of earning have implications as 17% mention affordability as an important factor in determining the highest education level for their child.

Figure 3.3.26. Highest level of education expected by parents



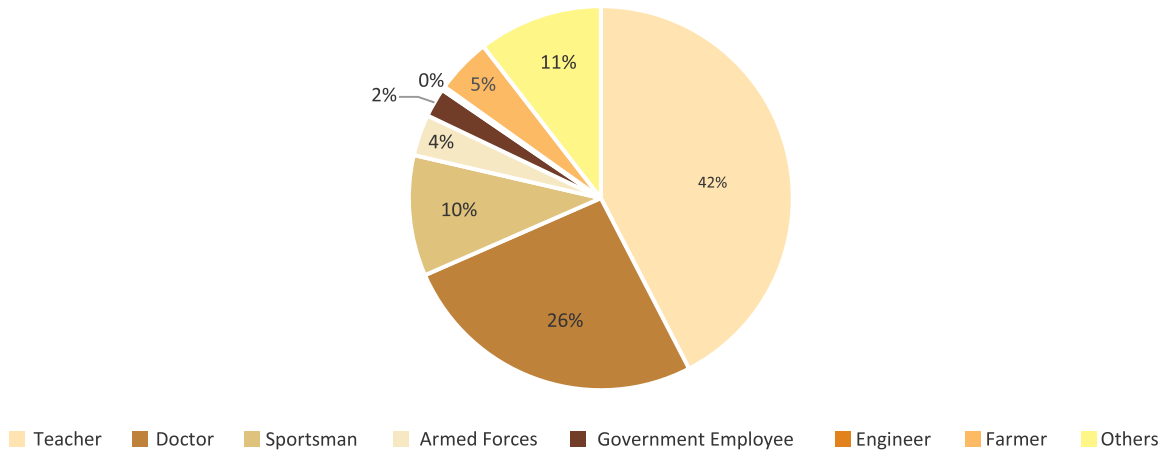
To shed further light on parental and community expectations for their children, the qualitative data indicates that many communities are interested in upgrading the existing NFBE center as a possibility for continuing education. A wide majority noted that the existing NFBE centers should be upgraded to elementary or even matriculation level. In a few instance, the community noted that if the center keeps on performing well, they are willing to upgrade it from their own resources. And in other instances communities noted that they would be glad if this school is adopted by government and no fee is charged from them.

In the case of girls education, communities noted that NFBE schools are particularly suited for girls and upgrading the school would resolve any issues they face in pursuing their education. As noted in many

places, communities would not be comfortable sending their daughters to schools that are further away. And they are quite aware that the lack of such opportunities limit their abilities to pursue their education.

The survey also explored student expectations for their future careers. The majority see themselves becoming teachers, about 40%, followed by doctors, approximately 25% (Figure 3.3.27). Interestingly, about 10% of students would like to become sportsmen while only a few students want to join the armed forces, government job, engineering profession and farming.

Figure 3.3.27. Student perspectives on future career



Community participation

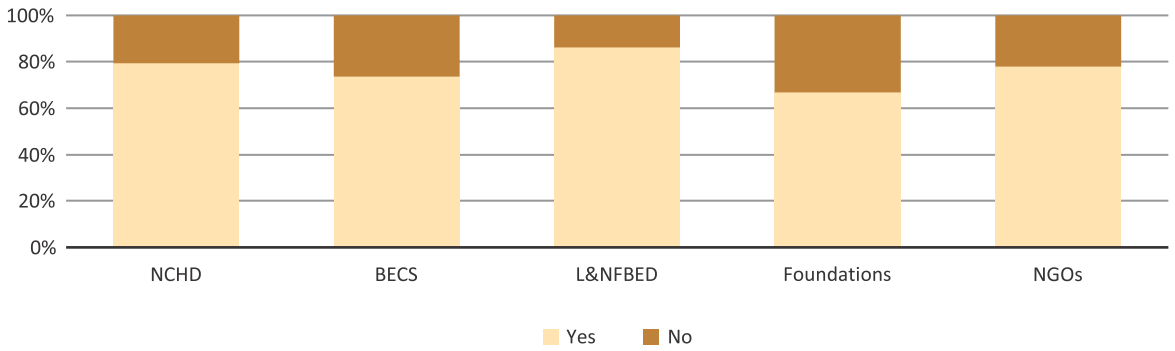
Community organization and support

In all programs the communities are expected to play an important role in the NFBE centers. As mentioned in the program section, from the initial stages of school establishment communities are expected to provide space for the center and identify a teacher who can run it. Communities are also expected to continue to support the center in different ways. Many programs spend time on mobilizing the community, forming committees and supporting the conduct of meetings. For example in the case BRAC, a network of field mobilizers has been established to develop and maintain a communication bridge between communities and its concerned relevant organization where these NFBE centers are setup.

Committee existence and composition

In NFBE programs there is often a formal mechanism for engaging and coordinating with the community. Teachers in this survey reported that nearly 80% of centers across organizations have such a formal mechanisms (Figure 3.3.28). However, nearly one-third of Foundation centers report the absence of such a coordination mechanisms at the community level.

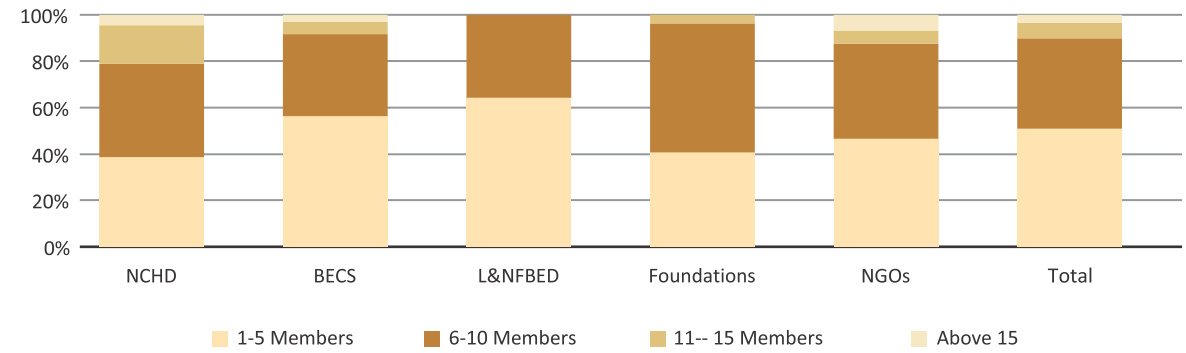
Figure 3.3.28. School community coordination mechanism by organizational type



Committees take various names in Pakistan such as school management committee (SMC), parent teacher association (PTA) or village education committee (VEC). The majority of teachers mentioned the VEC as the type of committee. NCHD, Foundation and NGO assisted centers reported more instances of the PTA and SMCs. This often happens where the centers have some linkages or associations with formal schools.

In almost all organizations, parental representation on committees is high. In some cases, parents continued on the committee even when their child left the school. Many of the committee members are female. On average, each committee has five members. Across organizations we generally find that there are more centers with committees with 1-5 members followed by those with 6-10 members (Figure 3.3.29). There are fewer centers with committees that are larger than 11 members. On the face of it, larger membership could mean more representation of the community.

Figure 3.3.29. Number of community committee members by organizational type

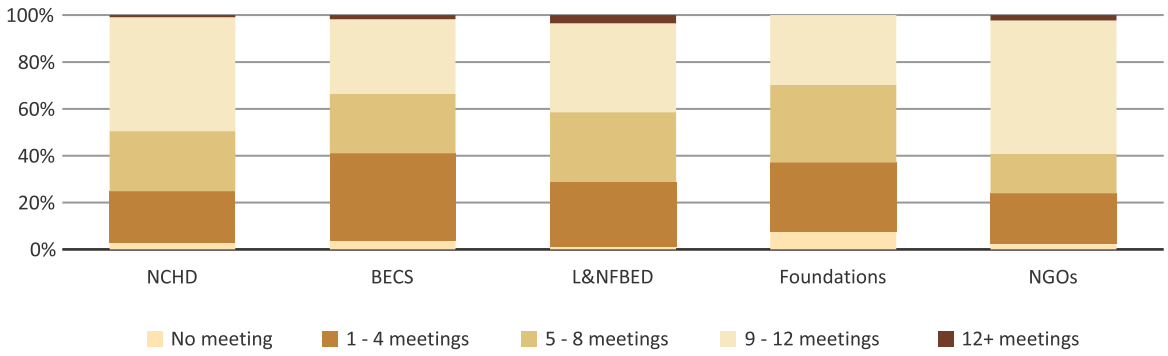


The survey also found that in centers that have been from over five years and with relatively more experienced teachers tend to have more number of members in the committee as compared to those centers that have been established in the last five years and have less experienced teachers. It is possible that more experienced teachers are better at engaging the community than less experienced teachers.

Committee meetings, role, activities

The frequency of meetings varies by organizational type (Figure 3.3.30). It appears that more of the committees from NGO and NCHD centers met more frequently, about 50% or more met close to every month in the last year. Amongst BECS, L&NFBED and Foundation centers more committees appeared to meet every other month or quarterly. The meetings are documented in most of the cases (77%) with NCHD having the most instances of documented meetings (84%).

Figure 3.3.30. Committee meeting frequency by organizational type

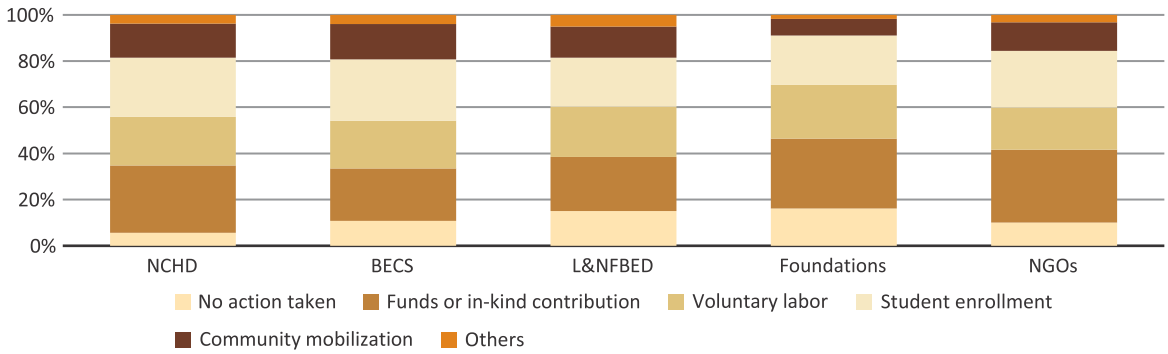


Each organization has defined the role of the community. To this end, each organization instructs the teacher to display the role of committee in the school. The data shows that one-third of teachers do so in the case of NCHD, BECS and NGO centers, while close to 20% of teachers do so in the case of L&NFBED and Foundations. Based on this, it is possible that not all committee members are aware of their roles but unlikely as many committee members would rely on word of mouth to learn their duties.

The greatest obstacle committees face in performing their functions smoothly, according to program staff, is lack of training. But the quantitative dats shows that over 70% teachers report committees recieving some orientation on fullfilling responsibilites from their respective organizations. It is possible that the nature of training required is different from what is provided.

With regards to the actual activities performed by the committee, it appears communities are mostly active, 88% of teachers report some sort of activity and qualitative data corroborates this finding. Only a small portion of teachers indicate that committees have not taken any actions or made any contribution towards school, with the most being amongst L&NFBED and Foundations, above 15% of cases (Figure 3.3.31). Committees appear to be most active in providing funds or in-kind contribution (i.e. providing land, infrastructure, paying utility bills and getting donations) and providing voluntary labor, close to half of the centers do so. This is followed by an emphasis on ensuring student enrollment or attendance, 25% of cases. In addition to playing role in school's managerial functions, three quarters of the committee members also visit the classroom on occasional basis.

Figure 3.3.31. Actions taken by community for school by organizational type



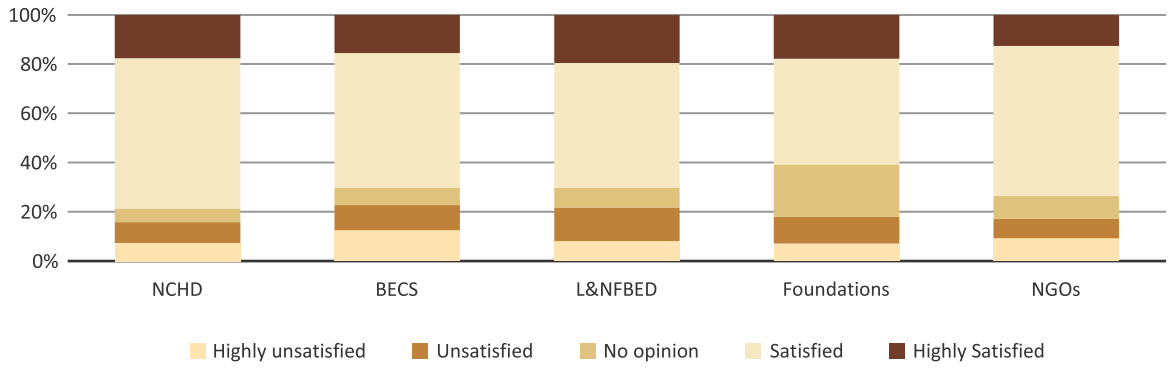
The qualitative data corroborates these findings. The teachers and committee members note that committees are often involved in school management tasks. They are also often involved in tasks related to student enrollment and attendance, ensuring student regularity and so on . Most of the times committees

visit, they come by themselves, but they also visit when the teachers call them.

Teacher and community satisfaction

In line with the high level of committee activity we find that the majority of teachers, nearly 70% are either satisfied or highly satisfied with the role of community. These trends are almost the same across organizational types (Figure 3.3.32). There is some variation in Foundation centers, where more teachers note being neutral or having no opinion about the community role, this may relate to the fact that there are some centers where committees are not active. In the qualitiative interviews teachers view committees as suportive.

Figure 3.3.32. Teacher satisfaction with community role by organizational type

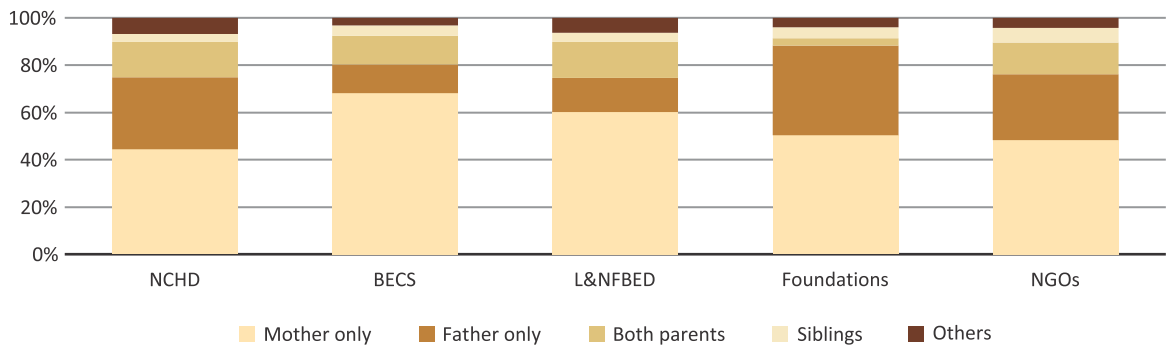


By and large the qualitative indicates that the community believes the center to be their school. The VEC members remarked that they perform their responsibilities of their own accord in addition to helping when the teacher calls them.

Parent –teacher relationship

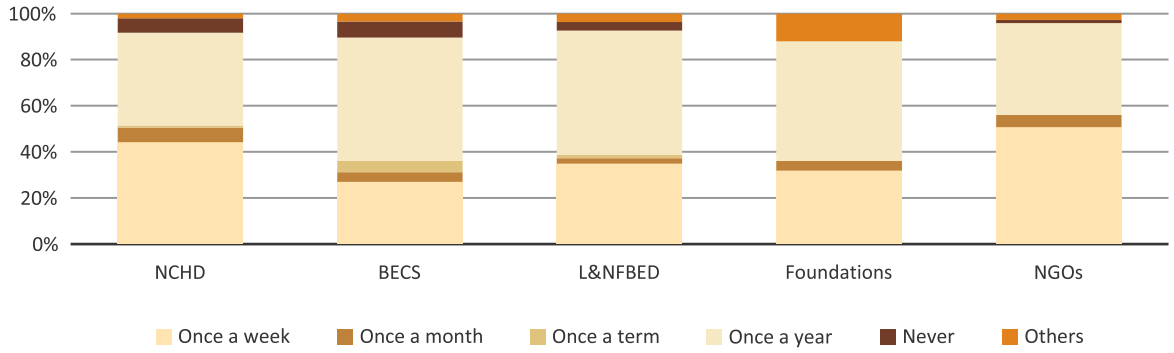
The survey explored parent – teacher relationship from both perspectives. According to the parents, the majority (90%) have met with their child's class teacher about their progress. In most cases, 87%, the teacher reports academic progress to them but even in cases where it is not reported to them the majority again say they ask the teacher about their children's progress themselves. Most of the time it is the mothers who interact with the teacher, 57%, followed by fathers, just over 20%. This trend appears to be more prominent amongst BECS and L&NFBED centers, whereas in NCHD, Foundations, and NGOs more fathers are involved (Figure 3.3.33).

Figure 3.3.33. Family member responsible for maintaining contact with school by organizational type



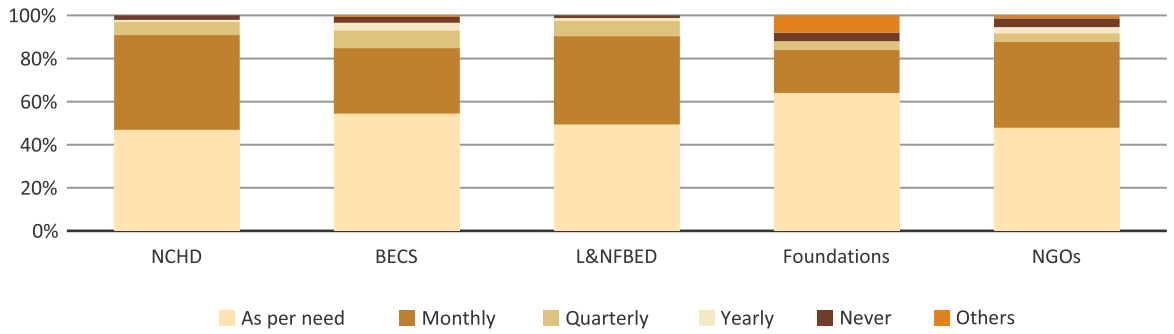
According to teachers, the majority of parents, 95%, ask about their children's progress to some level of frequency. Some parents ask more frequently (once a week, month or semester) for example 50% of NGOs and NCHD parents, while among organizations such as L&NFBED, BECS and Foundations, more than half of parents ask about performance once a year (Figure 3.3.34).

Figure 3.3.34. Frequency of parents asking about student performance by organizational type



The survey also gauged how active teachers were in meeting with parents. About half of teachers call parent-teacher meeting according to the need, particularly amongst Foundation centers and about one-third call parents on a monthly basis (Figure 3.3.35). Most common needs reported by teachers are student daily attendance, sharing progress of students and to learn more about the child so that they can work together to improve child's academic progress. As a result of call, on average about half the parents show up to the meetings.

Figure 3.3.35. Frequency of parent-teacher meeting by organizational type



From all this data it is clear that there is generally a significant amount of interaction between teachers and parents in NFBE centers and this interaction is initiated on both sides.

Take away points

The majority of households are single member earning, with fewer mother's earning an income (only about 20%). The majority of father's have an income of between PKR 5,000 to 10,000 (42%) followed by an income level of PKR 10,000 to 15000 (23%). It is clear from this data that many families are earning close to or below minimum wage. Only about two-thirds of families live in a pacca house as opposed to kacha. In terms of assets while most households have a mobile phone, only half own a television or cattle and only one-third own a refrigerator or motorcycle. Interestingly despite the low income of the households very few students, 3%, report working for earning purposes. This again corroborates the assumption that NFBE centers in

Pakistan do not generally cater to students who are working.

The majority of parents are not educated, with only about a third of fathers and fewer mothers completing primary or elementary education. The majority of other children in the household, 76%, are enrolled in some sort of educational institution and many are in NFBE centers themselves. This indicates a trend towards education in these families.

In terms of study habits, most of the students report reading at home by themselves. Teacher assign homework and usually students spend about 1-2 hours on homework daily. The majority of students receive support in doing their homework, usually provided by a relative. About 19% of students seek out tuition, usually provided by teachers or relatives and often for English.

In term of parents reasons for choosing NFBE centers the majority of parents note proximity and flexibility as key reasons. Many community members point out that they would not be sending their daughters to school if it was not for this center. In fact having a local and female teacher are also key reasons for sending girls. Affordability is also an important factor as is the perceived quality of school as the teacher is seen as hardworking and accessible.

The communities note a great change in their attitudes towards education over the years especially for girls. Amongst their children they notice positive changes particularly in their behavior and practical skills such as being able to read a prescription or sign boards. Communities are quite satisfied with the centers and find it is the most suitable option for their children. More than half of the parents want their children to go on to complete their education but most would prefer government schools since they are free.

In NFBE programs, communities are expected to play a role from the time the centers are established and then continue to support the school. In 80% of cases there is a formal mechanisms for engaging with the community or community committee. About 88% of committees are active, and about half are involved in providing funds or in-kind contribution and voluntary labor, while the rest support in ensuring student student enrollment or attendance. In terms of parent-teacher interaction, both parents and teachers note meeting with each other to report or ask about academic progress. Usually mothers are responsible for maintaining contact with the schools. In fact many committees have high members of females. Teachers appear to be satisfied with both community support and parental interaction in most cases.

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[1]Government of Punjab (2013)
[2]Data on per child cost in the Foundation run NFBE centers was not available.
[3]SAHE & Alif Ailaan (2014)
[4]For PST teachers falling in grade/BPS-9 without the fringe benefits.
[5]For schools charging fee less than PKR 1,500 per month.
[6]UNICEF (2015)
[7]CDC (2004)
[8]Aslam & Mansoor (2011)
[9]Ibid

Chapter 4

Student Performance in NFBE

Student Performance in NFBE

Introduction

Along with understanding the different approaches to NFBE in Pakistan, the study also sought to gauge student proficiency in the NFBE sector. To this end the study tested students in grades 3, 4 and 5 in language (Urdu, Sindhi or Pushto), English, mathematics and general knowledge using the ASER test tools.

The ASER tools seek to assess levels of student proficiency in key subjects.[1] These tools have been designed for all ages between 5 to 16 years. They test students on the basis of grades 1 and 2 curricula, assuming that a child should have acquired sufficient reading fluency and comprehension and basic numeracy skills after two years of schooling. These tools seek to establish the highest level at which the child can comfortably do different tasks in different subjects. Responses are analyzed on the basis of different proficiency levels with level one being the beginner level and level five being high proficiency.

This chapter presents the results of the analysis of student test results. The first part provides a comparative analysis of student performance on ASER tests by sector. The following sections delve further into performance of NFBE students. The second provides an overview of performance by key demographics. The third, fourth and fifth sections explore the relationship between performance and factors related to the program, teacher and teaching and community and families.

Student performance by sector

Data from this study has been used to compare the performance of students in the NFBE sector to their counterparts who have been tested on ASER tests as well.

Language proficiency by sector

Interestingly, 51% of the students studying in NFBE centers are able to read a story whereas only 37% of the students in government and 34% in private schools are able to do the same (Figure 4.1). Similarly, 10% of the students in government schools and 14% in private schools are at the beginner level compared to a mere 4% in NFBE centers. As far as the bonus questions were concerned (which gauged comprehension skills), most of the students, from all three of the categories, are able to do them.

When we look at student performance by grade level, as to be expected, we find a greater number of students at the highest proficiency level in the language test (who can read a story) in grade 5, followed by grades 4 and 3 across sectors (Figure 4.2). For example 70% of NFBE students in grade 5 are at the highest proficiency level as compared to only 33% in grade 3. These trends are consistent across the sectors but the difference is slightly less pronounced in government and private sectors.

Figure 4.1. Percentage of students by Language proficiency levels and school sector

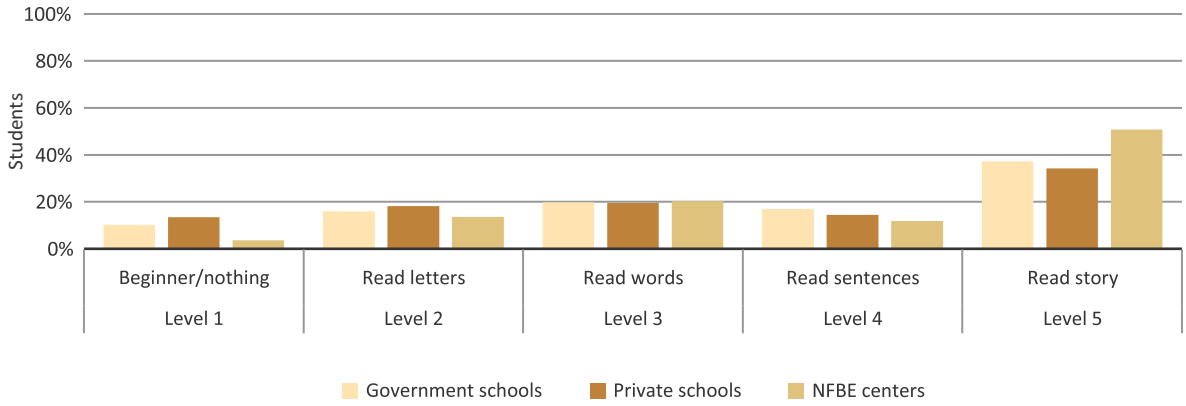
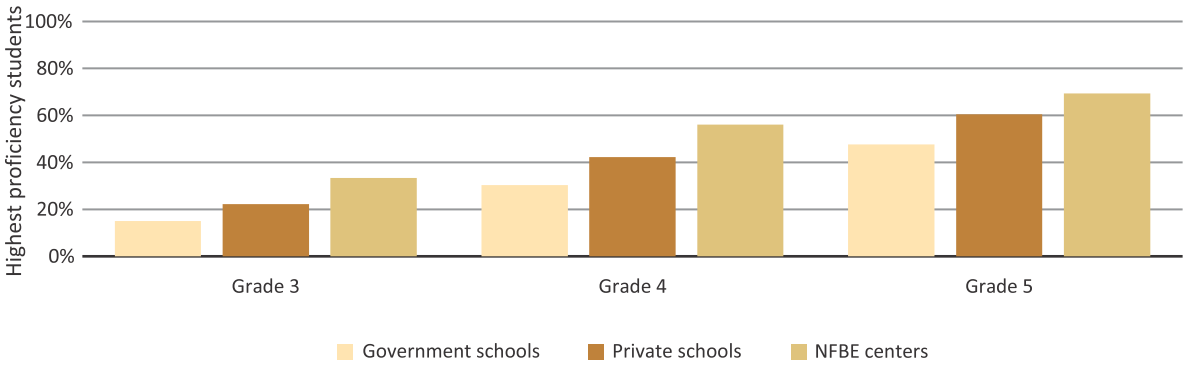


Figure 4.2. Percentage of students at highest proficiency level in Language by school sector and grade



English proficiency by sector

In the English test, the students of government and private schools generally perform slightly better than their counterparts in NFBE centers, with more students being able to read a sentence in English in the former two (Figure 4.3). While slightly more NFBE students appear to fall at the second highest level, being able to read words in English. With regards to the bonus questions where students had to translate words and sentences into Urdu, interestingly enough, about the same amount of students, 77% in government schools, 78% in private schools and 74% of in NFBE centers, are able to understand the meanings of simple words. However, when it comes to understanding the meaning of sentences, the proportion of the government and private schools students who can do so, 81% and 84% respectively, is about twice the amount of those studying in NFBE centers, 44%. Hence, as a whole, government and private school students seemed to perform better than NFBE students in the English test.

Across grades, as before, we find a greater percentage of students at the highest proficiency level in English (those who can read sentences) in grade 5 as compared to the lower grades but the differences are less pronounced as in language test with the greatest difference found in the private sector (Figure 4.4).

Figure 4.3. Percentage of students by English proficiency levels and school sector

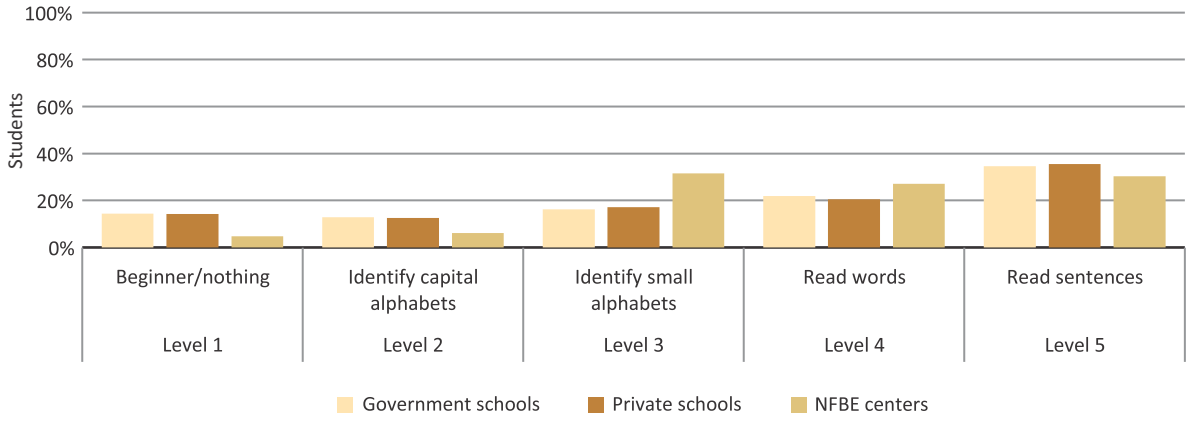
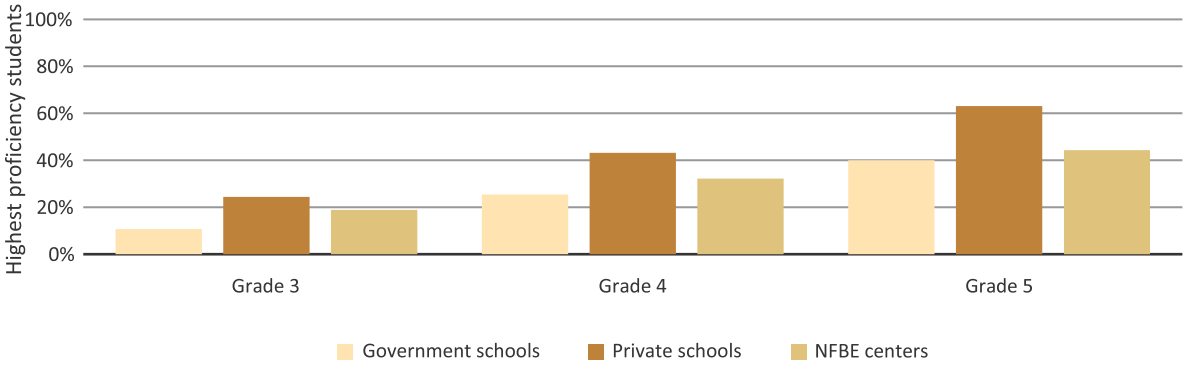


Figure 4.4. Percentage of students at highest proficiency level in English by school sector and grade



Math proficiency by sector

In the math test, the difference between government and private schools student performance and that of NFBE students is the greatest, with the former two outperforming the NFBE sector by a wider margin (Figure 4.5). For the highest level of proficiency, division, more government and private school students are proficient, 33% and 31% respectively, as opposed to NFBE students 11%. Similar to the language test, around 11% of government and 13% of private students are at a beginner level as opposed to a nominal 4% of NFBE students. The majority of NFBE students, 49%, fall at the lower level of proficiency, being able to recognize numbers between 10 to 99.

Across the grades we find a greater percentage of students at the highest proficiency level in the math test (those who can do division) in grade 5 as compared to lower grades but this trend is more pronounced for government and private sectors as compared to the NFBE sector (Figure 4.6).

Figure 4.5. Percentage of students by Math proficiency levels and school sector

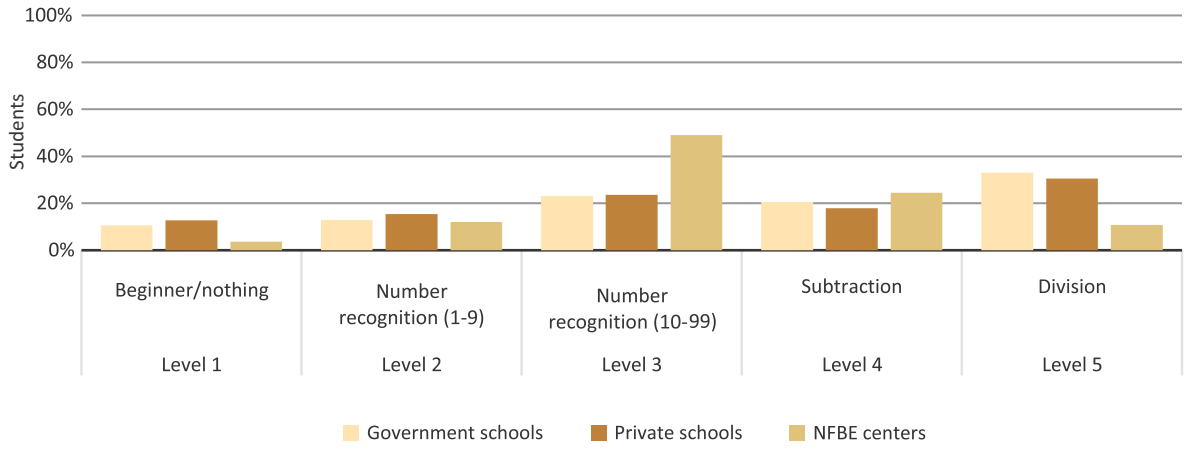
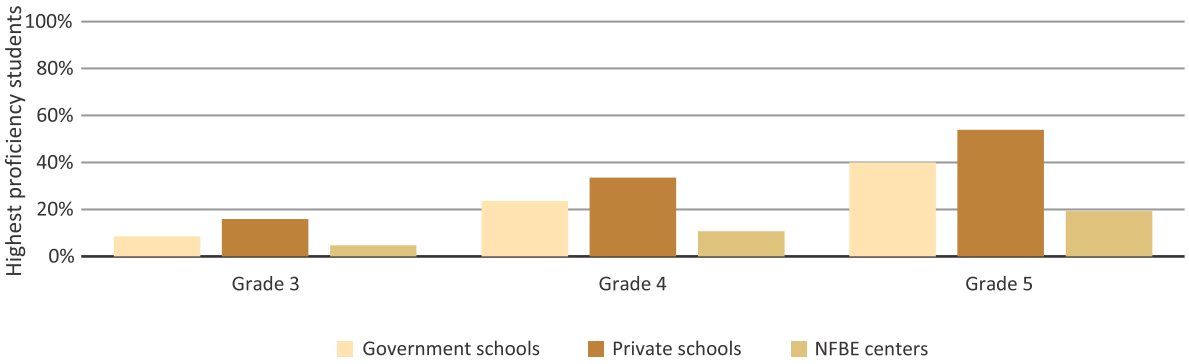


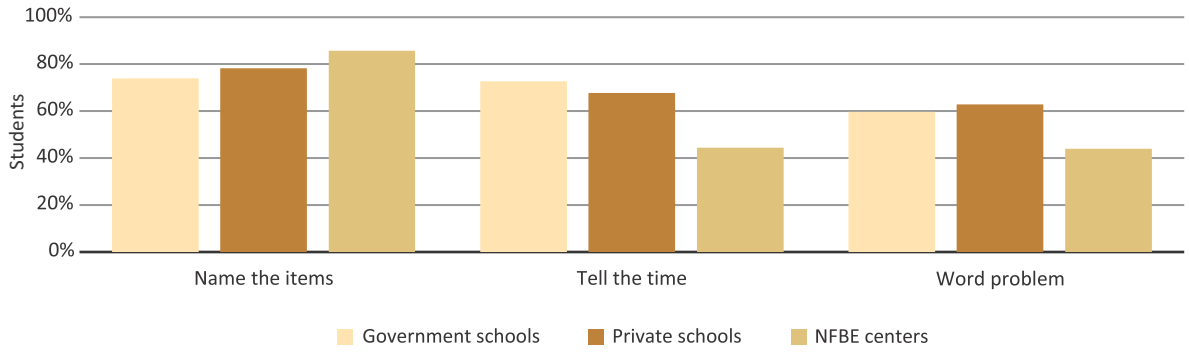
Figure 4.6. Percentage of students at highest proficiency level in Math by school sector and grade



General knowledge performance by sector

In the general knowledge tests, NFBE students perform poorer than in the previous tests (Figure 4.7). Although 86% are able to name the items as opposed to 74% of government and 78% of private school students, only 44% are able to tell the time or do word problem while many more students in government and private schools (between 16 to 29%) are able to perform these tasks.

Figure 4.7. Percentage of students by General knowledge performence by school sector



Student performance within NFBE: A snapshot

This section provides a snapshot of student performance in the NFBE sector by key indicators.

Proficiency by region

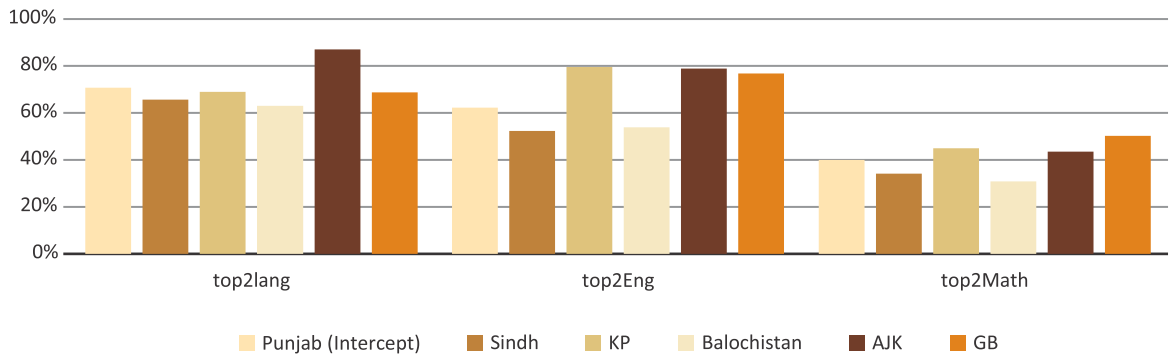
A regression analysis has been performed to compare the test results across different provinces and understand their significance. For this purpose a dummy variable, Top2 (or high proficiency), has been generated for each of the tests. High proficiency is equal to 1 for students who fall in the top 2 proficiency levels and 0 for those students who fall in the lower levels for each test. This technique provides for a better comparison between different regions. Here, the province of Punjab is taken to be the base group (intercept) to compare it with how students from other regions have performed, on average.

Overall, the analysis shows that test performances vary quite conspicuously across regions (regression results have been reported in Table 4.1 and Figure 4.8). As expected from the previous studies, the students from Sindh perform consistently poorly in almost all of the tests in comparison to students in Punjab. However, the situation in Khyber Pakhtunkhwa (KP), Azad Jammu & Kashmir (AJK) and Gilgit-Baltistan (GB) is quite different since their students are able to perform better than the students in Punjab in most of the cases. For example, in the language test AJK students show the best performance, with 78% of the students having high proficiency levels. In the English test KP, AJK and GB students showed the best performance, with 72%, 71% and 69% respectively having high proficiency levels. And in the math test GB students showed the best performance, with 45% having high proficiency levels.

Table 4.1 : Regression results for student high proficiency by test and region

Dependent variable	Punjab (intercept)	Sindh	KP	Balochistan	AJK	GB
Top2 language	63.7%***	59.1%**	62.1%	56.7%	78.4***	61.9%
Top2 English	56.0%***	47.1%***	71.6%***	48.5%**	71%***	69.1%***
Top2 math	36.0%***	30.7%***	40.5%**	27.8%***	39.2%	45.2%***
				***p<0.01	**p<0.05	*p<0.10

Figure 4.8. Percentage of students in high proficiency levels of each test by region

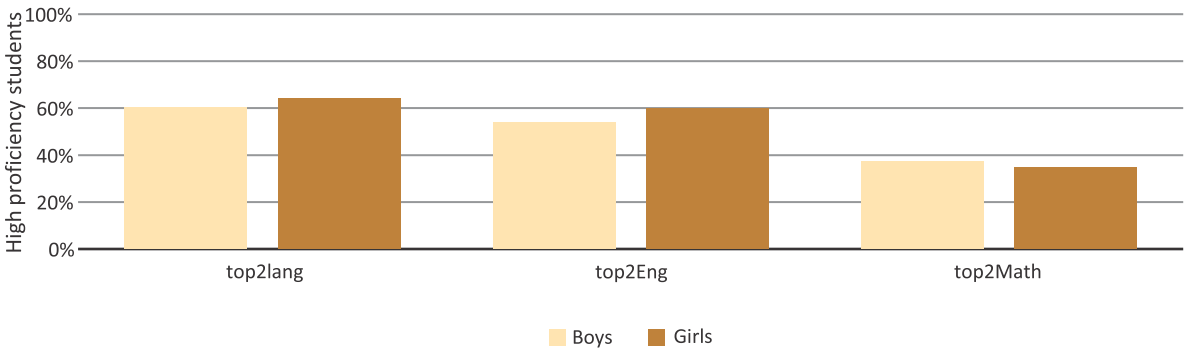


Proficiency by gender

A regression analysis was also performed to check for differences in test performances among students by gender. In keeping with expected trends, girls have performed better than boys in language and English tests (Figure 4.9). In language girls have performed better than boys by about 4% and in the English test they

have performed better by about 6%. On the other hand, boys have performed better in math test by about 3%.

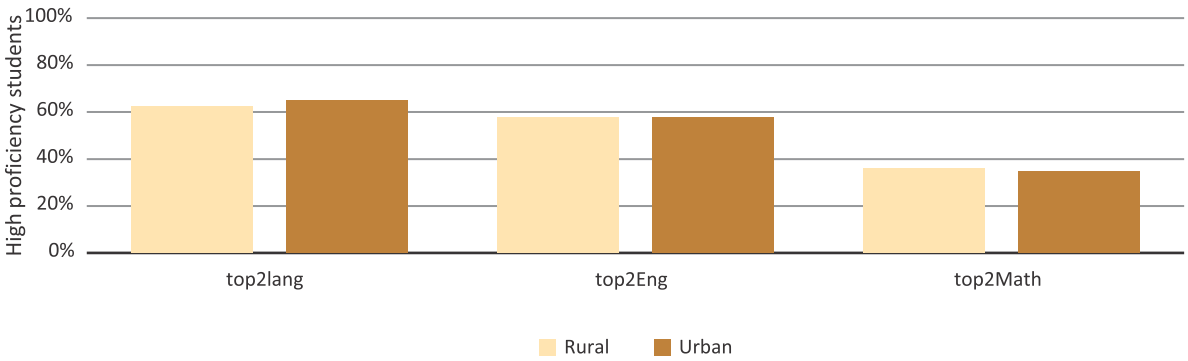
Figure 4.9. Percentage of students in high proficiency levels of each test by gender



Proficiency by rural-urban location

A regression analysis was also performed to check for differences in test performances among rural and urban students. Normally, one would assume that urban students are likely to perform better than rural students due to access to better facilities and opportunities in the case of the former. However, surprisingly, the results fail to show any significant difference on any of the tests, rural and urban students perform quite close to each other in all three tests (Figure 4.10).

Figure 4.10. Percentage of students in high proficiency levels of each test by location



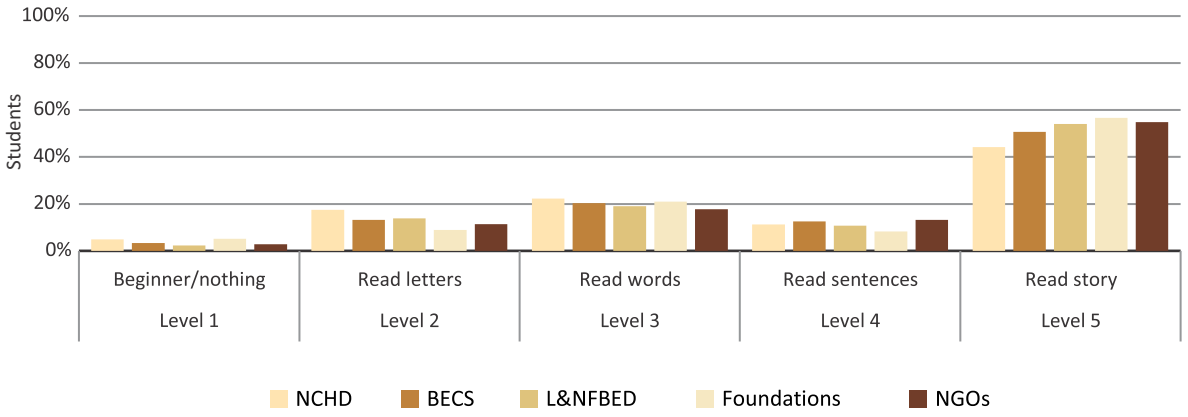
Student performance by program factors

Proficiency by organizational type

Proficiency by organizational type and subject

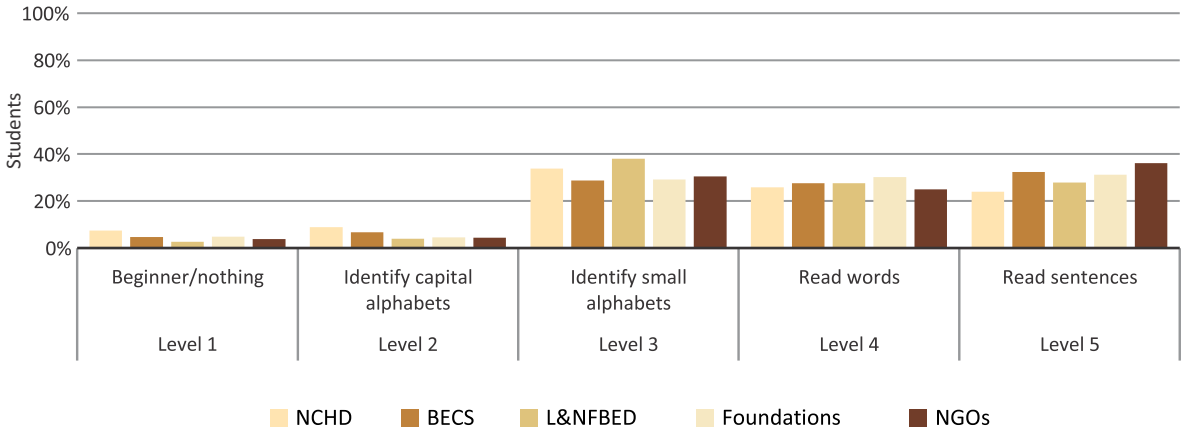
A critical aspect of this analysis is reviewing student performance by the different type of organizations. Starting with the language test, on the basis of a simple comparison the evidence of student performance differences across organizational types is not very strong except between NCHD and NGOs, where NGOs are ostensibly performing better than NCHD (Figure 4.11). For example, about 55% of NGO students could read a story (highest proficiency) as compared to about 44% of NCHD students. BECS, L&NFBED and Foundation centers fall in the middle in terms of performance.

Figure 4.11. Percentage of students by language proficiency levels and organizational type



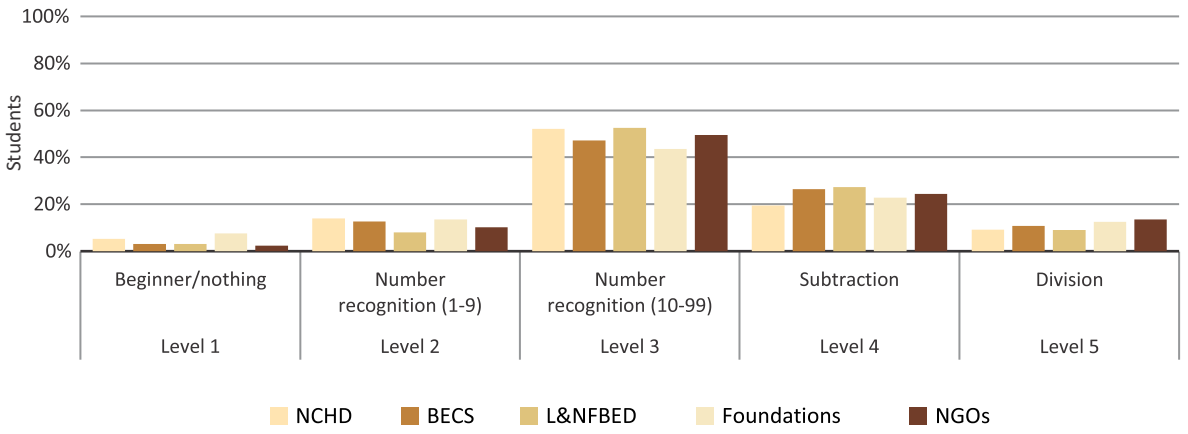
In the English test, the differences are quite sharp at each proficiency level (Figure 4.12). For example, at the beginner/nothing level, the percentage of students ranged from about 3% to 8. For the high proficiency level of sentences, once again the trend is similar, only 24% of NCHD students could attain that level compared to about 36% of NGO students.

Figure 4.12. Percentage of students by English proficiency levels and organizational type



In the math test, yet again, the NGO students seem to perform better relative to other organizations and NCHD student performance is poorer compared to other organizations (Figure 4.13).

Figure 4.13. Percentage of students by math proficiency levels and organizational type



Regression analysis

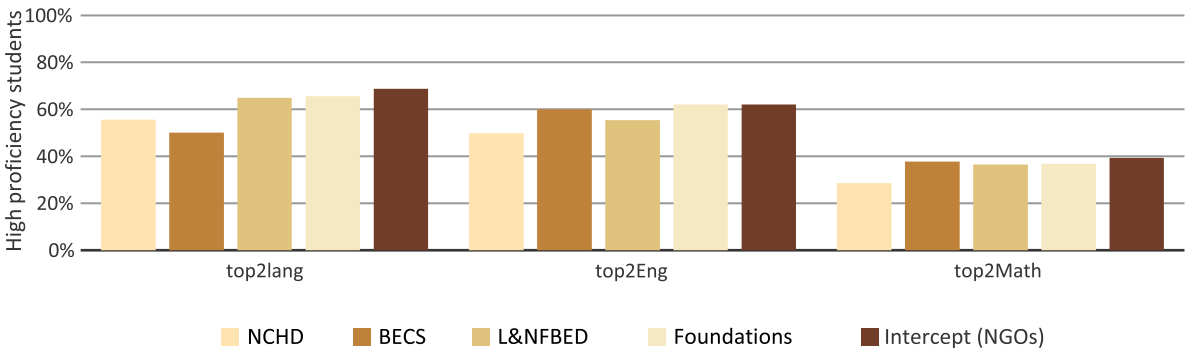
Though the NGO sector seems to perform considerably better on the basis of a simple comparison, a regression analysis has also been performed to compare the results across different organizations and understand their significance. As before the dummy variable, Top2 (for those falling the top two levels of each test), has ben generated. Here the NGO has been taken to be the base group (intercept) in order to compare it with the performance of all other type of organizations.

These results are quite similar to what was predicted by the preceding analysis (for regression results see Table 4.2 and Figure 4.14), students in the NGO schools are outperforming those in other organizations' schools. In the case of the language test, about 69% of students are likely to fall in top 2 levels (i.e. who can read sentences and tell a story) compared to students in NHCD, BECS, L&NFBED and Foundation centers. Similarly, in the English test, NGO students also took lead as about 62% of students fall in the top two levels as opposed to other organizations, which range from 50% to 62% of students. However, students in Foundation centers came at par with NGO students in this test. Despite the fact that student performance on Math tests is comparatively lower, NGO students again outdid the rest as about 40% of NGO students fall in top 2 levels as compared to other organizations, which range from 29% to 38% of students.

Table 4.2 : Regression results for student high proficiency by test and organizational type

Dependent variable	NGOs (Intercept)	NCHD	BECS	L&NFBED	Foundations
Top2 language	68.8%***	55.6%***	50.1% ***	64.9%	65.6%
Top2 English	62.1%***	49.9%***	60%	55.4%**	62.1%
Top2 math	39.3%***	28.6% ***	37.7%	36.5%	36.8%
			***p<0.01	**p<0.05	*p<0.10

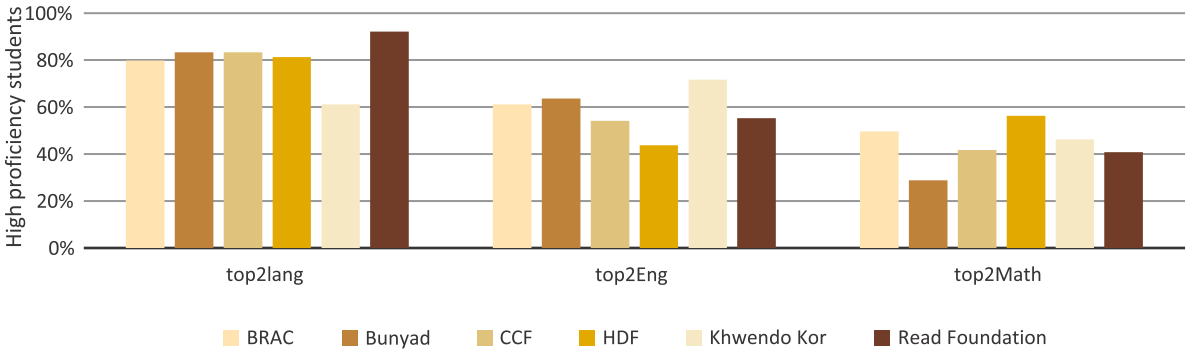
Figure 4.14. Percentage of students in high proficiency levels of each test by organizational type



Proficiency by NGO

Going one step further, the analysis explored student proficiency in selected NGOs. We find that these NGOs performed better than the average score for all NGOs by subject. In language several NGOs had above 80% high proficiency students, Read Foundation had 90% students, and in math several had above 40% (Figure 4.15). In English only BRAC, Bunyad and Khwendo Kor appear to be performing better than the NGO average.

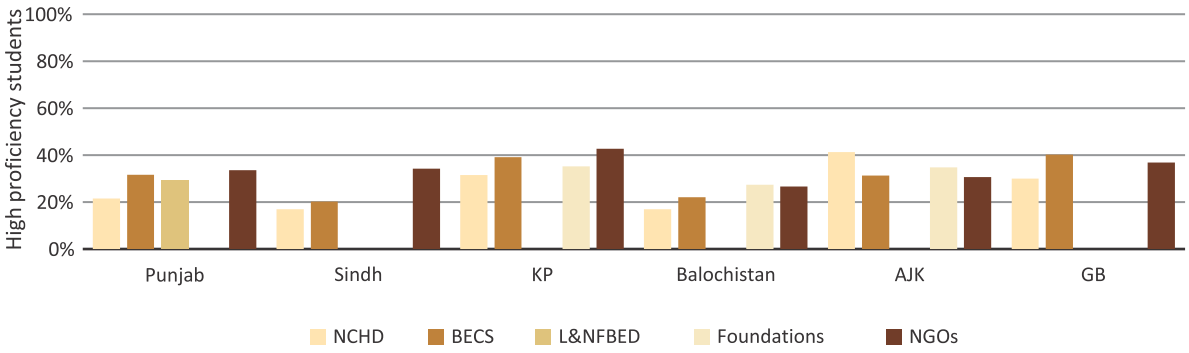
Figure 4.15. Percentage of students in high proficiency levels of each test by selected NGOs



Proficiency by organizational type and region

It is also quite interesting to see how different organization's schools perform within and across the regions. The previous trends are somewhat reflected in this analysis. For this analysis the amount of students with high proficiency across the subjects was determined. In each of the major four provinces, students of NGO centers perform better while students of NCHD centers perform on the low end of the spectrum (Figure 4.16). The situation is different in AJK and Gilgit-Baltistan where students of NCHD and BECS centers perform the best respectively. Interestingly in Sindh, although the performance is low across provinces, the NGO students appear to be doing substantially better, this performance may be attributed to NGOs such as BRAC.

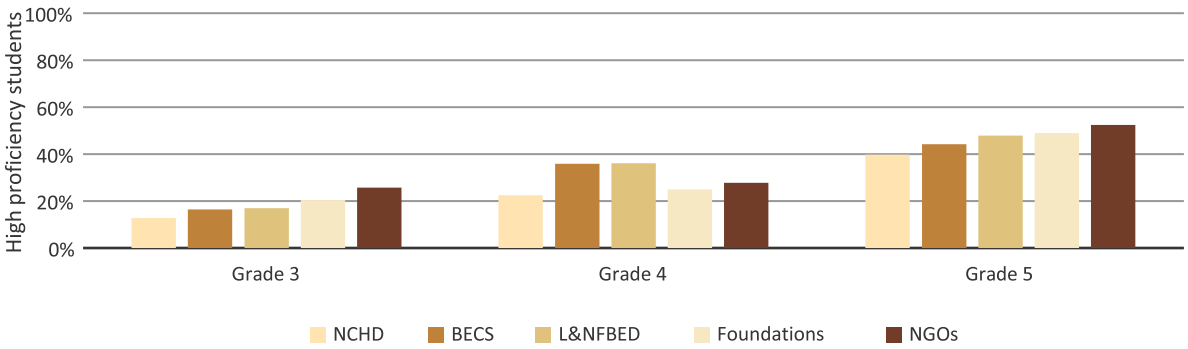
Figure 4.16. Percentage of students with high proficiency by organizational type and region



Proficiency by organizational type and grade

As expected, the higher grades generally have a higher percentage of students with high proficiency in all subjects on average (Figure 4.17). In grades 3 and 5, NGO centers manage to have the most students with high proficiency (proportionately), relative to other types of organizations. In grade 4, L&NFBED and BECS centers have the most students with high proficiency.

Figure 4.17. Percentage of students with high proficiency by organizational type and grade

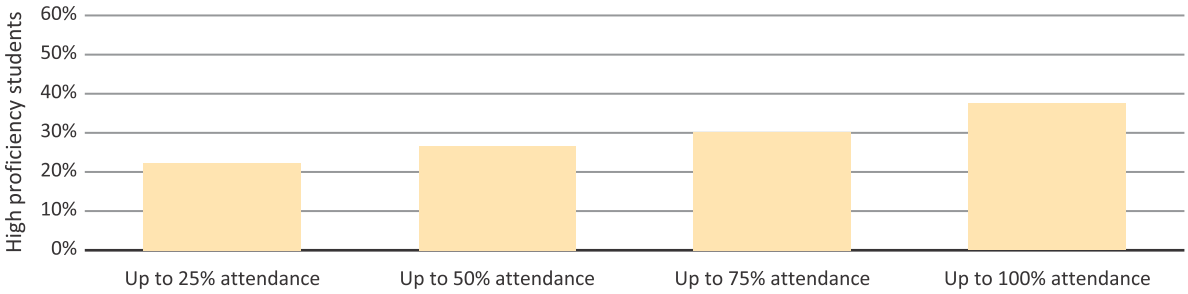


Proficiency by program characteristics

Student attendance

Centers with a higher daily attendance rate of students have a higher proportion of students with average high proficiency, approximately 15% difference between those centers where there is 100% attendance as compared to those where only a quarter attend (Figure 4.18). Hence, this may imply that attendance plays a role in shaping a child's learning and performance or this may be an indicator of the quality of the center itself (i.e. those centers with low attendance may also just be those centers where quality is poor).

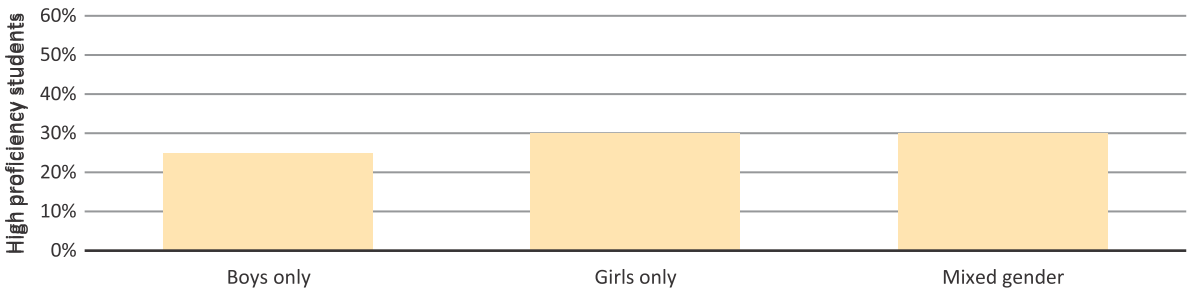
Figure 4.18. Percentage of students with high proficiency by daily attendance rate of students



Center gender and location

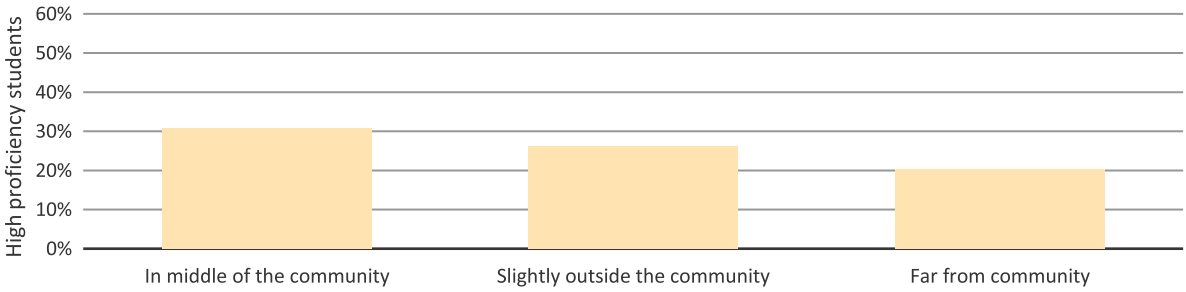
Student performance was cross-tabulated against gender of the center. Quite interestingly, the proportion of high proficiency students studying in 'boys only' centers is approximately 5% lower than both 'girls only' and co-educational centers (Figure 4.19).

Figure 4.19. Percentage of students with high proficiency by center gender



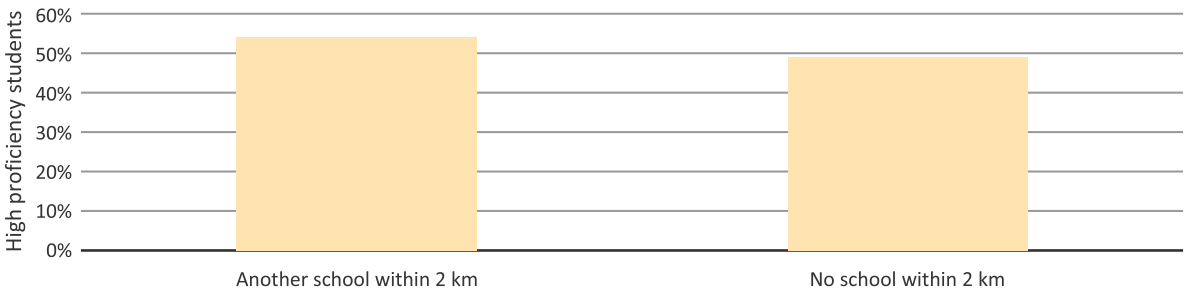
In terms of location of the center, it is clear that more students (10%) from schools located in the middle of the community (i.e. easily accessible), as opposed to those whose centers are outside the community or far away, have high proficiency levels (Figure 4.20).

Figure 4.20. Percentage of students with high proficiency by center location



When comparing the proportion of high proficiency students by the presence of another school within a 2 km radius, we find that a slightly larger proportion of students have high proficiency when there is another school in the vicinity, 5% (Figure 4.21). This puts a question mark on any assumptions that student performance could be due to the lack of schooling options within the community, that is all students in the community go to the only school available.

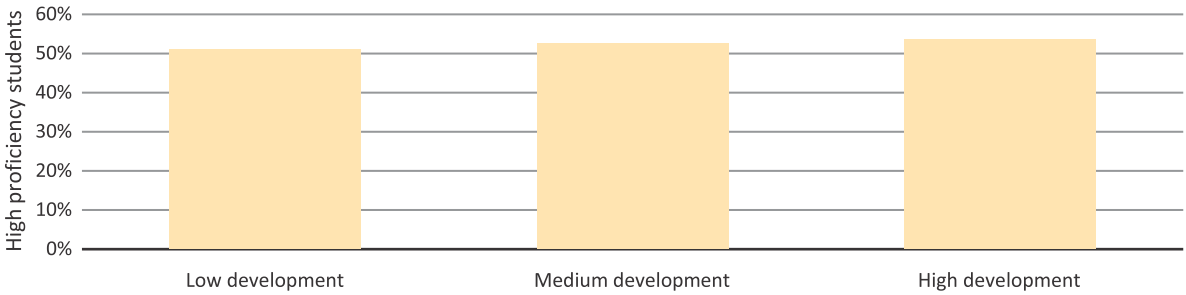
Figure 4.21. Percentage of students with high proficiency by presence of another school within 2km radius



Program provision and costs

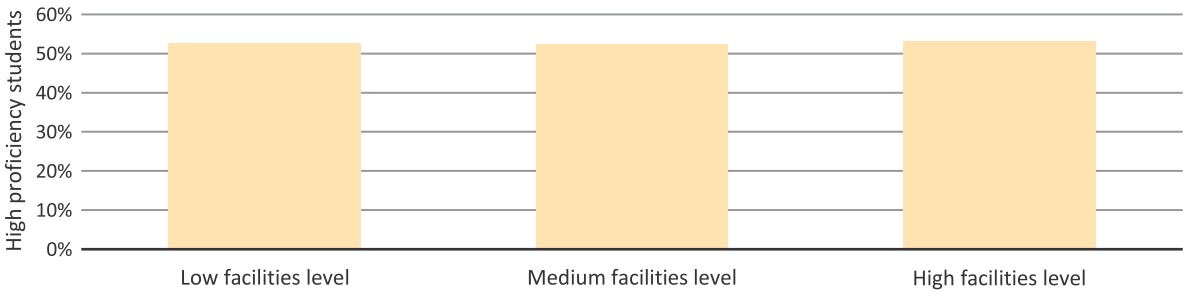
It is also insightful to see how the infrastructural development level in the center affects student performance. As the survey data had various indicators on infrastructural development, a principle component analysis was used to develop an infrastructural development index, which was categorized as high, medium or low infrastructural development. The variables included in this index are availability of a boundary wall, building, constructed classroom, washroom, playground and computer. The results clearly illustrate that the high proficiency is positively related to infrastructural development, but the difference in amount of students between each level of development is nominal, not more than 2.6% (Figure 4.22).

Figure 4.22. Percentage of students with high proficiency by infrastructural development level



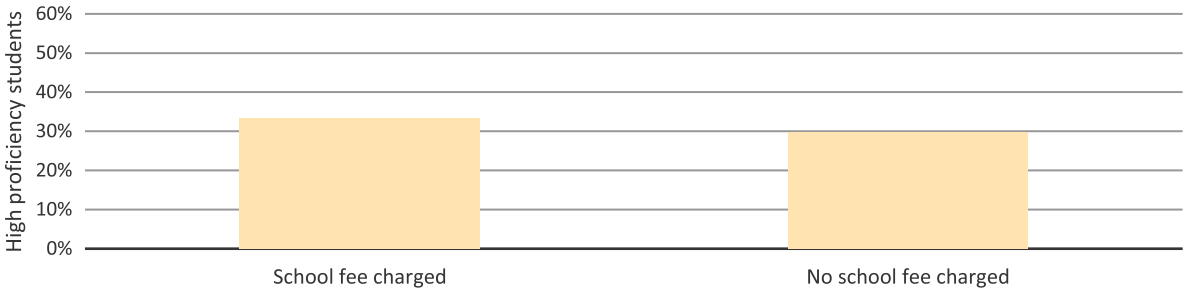
In order to understand the relationship between classroom facilities and student performance, a principle component analysis was used to develop a classroom facility index, which was categorized as low, medium, high as well. The index included variables on availability of chairs and tables to students and teachers, black or white board, library corner and geometry apparatus. Classroom facilities are also positively associated with student performance, but yet again the difference in amount of students between each level of development is nominal, not more than 1.6% (Figure 4.23).

Figure 4.23. Percentage of students with high proficiency by classroom facilities level



There is a positive relationship between NFBE centers that charge a tuition fee and student performance. In NFBE centers where tuition fee is charged, the percentage of high proficiency students is higher than those centers where no tuition fee is being charged, but the difference is once again nominal 3.6% (Figure 4.24). This could imply that a tuition fee charging center is either better in terms of quality education or perceived to be better than a free one thus attracting better students.

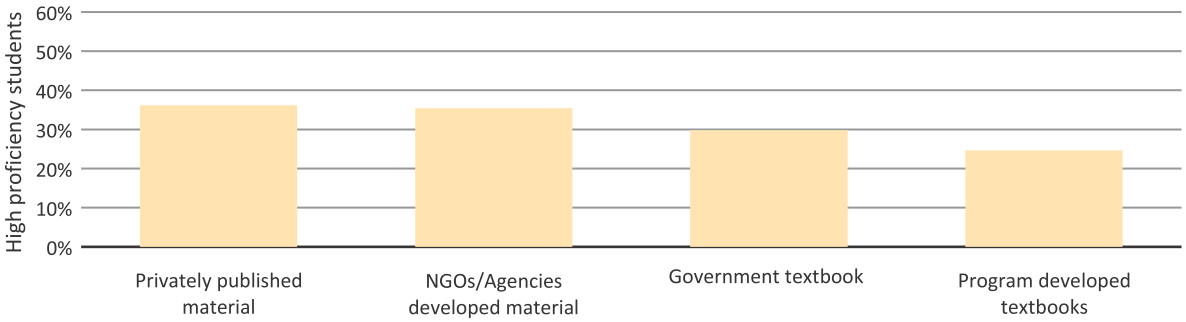
Figure 4.24. Percentage of students with high proficiency whether school fee is charged



Academic approach

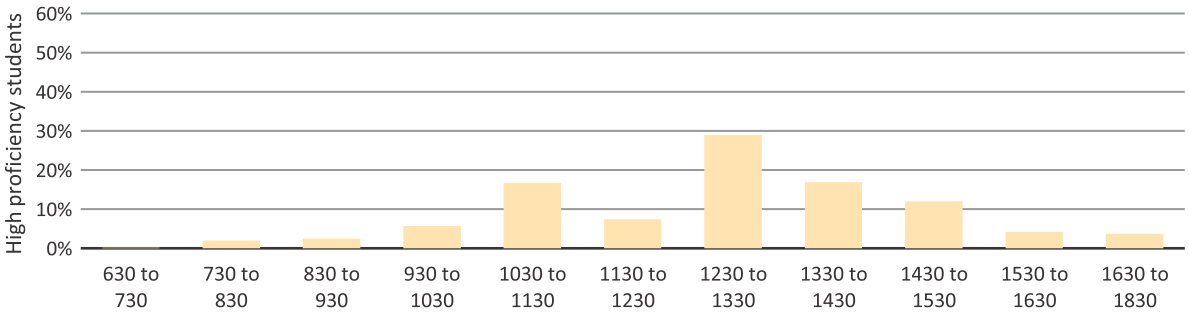
In the NFBE centers, four main types of textbooks are in use. Those centers using privately published and NGO/agency developed textbooks appear to have a higher percentage of students with high proficiency, 36% and 35% respectively, as compared to government textbook board and program developed textbooks, 30% and 25% respectively (Figure 4.25).

Figure 4.25. Percentage of students with high proficiency by textbook type



The effect of instructional time on students with high proficiency across organizational types has also been explored. From the previous chapter we know that average instructional time in NFBE centers is 1200 to 1250 hours per year. Instructional time appears to have a mixed effect on performance, when it is between 1030 to 1430 hours per year, instructional time relates to more students with high proficiency levels across organizations, particularly when it is 1230 to 1330 hours (Figure 4.26). Whereas when it is anything below or above this amount, it relates to a lower amounts of students with high proficiency.

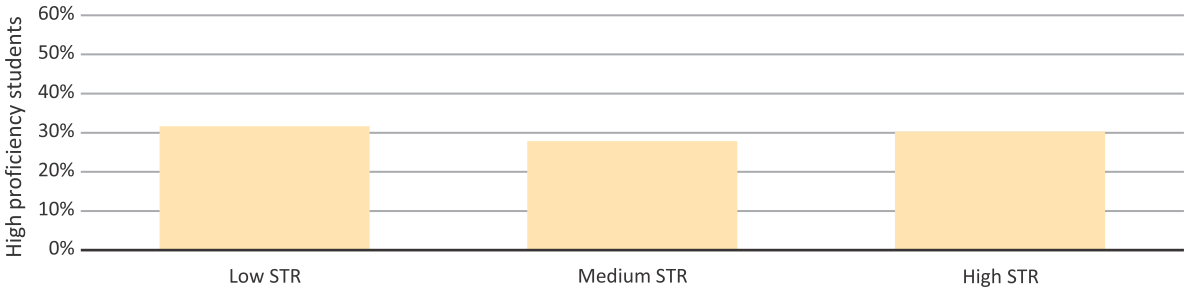
Figure 4.26. Percentage of students with high proficiency by instructional time in hours per year



Teacher policies and workload

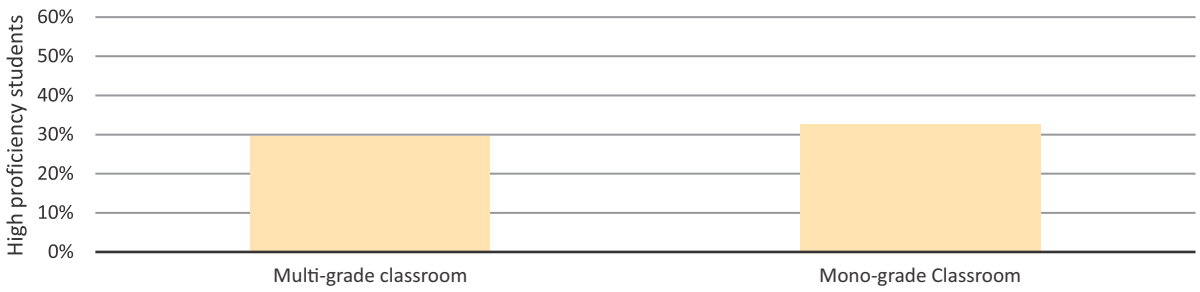
Interestingly there is an insignificant effect of student teacher ratio (STR) on the percentage of students with high proficiency (Figure 4.27).

Figure 4.27. Percentage of students with high proficiency by student-teacher ratio



The impact of teacher workload on student performance was explored. The vast majority of teachers in NFBE centers teach in a multigrade setting. This has a negative, albeit small, association with the proportion of high proficiency students. Of the students studying in a multi grade setting, 30% are high proficiency whereas almost 33% of students in a mono grade setting are able to perform at the same level (Figure 4.28).

Figure 4.28: Percentage of students with high proficiency by whether multigrade setting



On a similar note, there is a difference in performance by the teachers who teach all subjects and those who do not teach all subjects, a difference of 6% for those who do not teach all subjects (Figure 4.29). Finally, we know that only a small amount of NFBE teachers are expected to perform non-teaching duties. It appears that having non-teaching duties has a negative association with the proportion of high proficiency students, there is a 10% difference in the percentage of students (Figure 4.30).

Figure 4.29. Percentage of students with high proficiency by whether teacher teaches all subjects

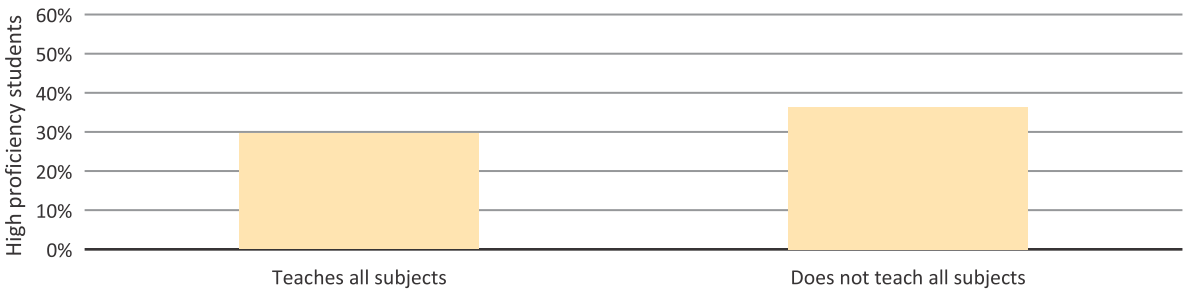
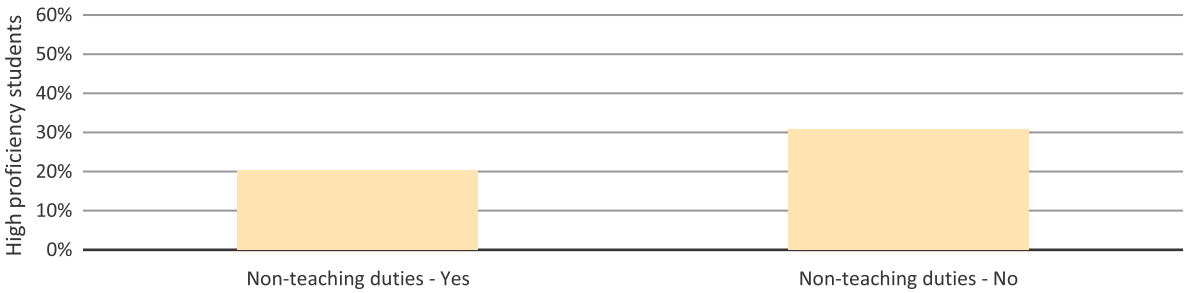
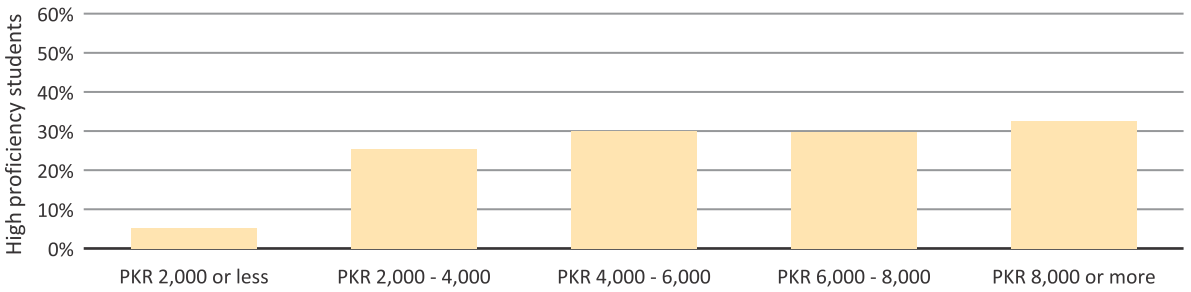


Figure 4.30. Percentage of students with high proficiency by whether teacher has non-teaching duties



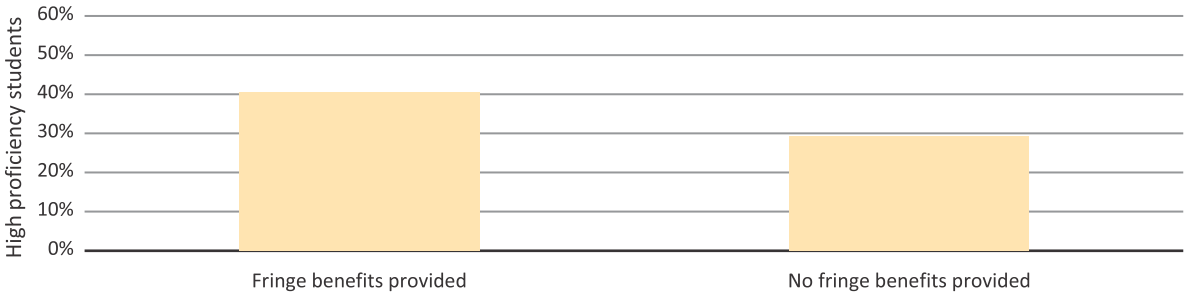
The data show a positive relationship between teacher salary and the proportion of students with a high proficiency. However there is not a gradual difference, rather a sharp 20% difference in the proportion of students between those teachers who earn between PKR 2,000 to 4,000 and those who earn PKR 2,000 or less (Figure 4.31). After that the differences are very slight as the salary increases.

Figure 4.31. Percentage of students with high proficiency by teacher salary



When looking at fringe benefits, although the proportion of teachers who receive such benefits are very small, the results show that teachers who receive fringe benefits (such as bonuses or medical benefits) have a higher proportion of high proficiency students than those who do not get such perks (Figure 4.32). Interestingly the difference is quite high 11%. This indicates that such benefits are likely to shape teacher motivation even more than salary it seems, and consequently student performance.

Figure 4.32. Percentage of students with high proficiency by whether teacher has fringe benefits

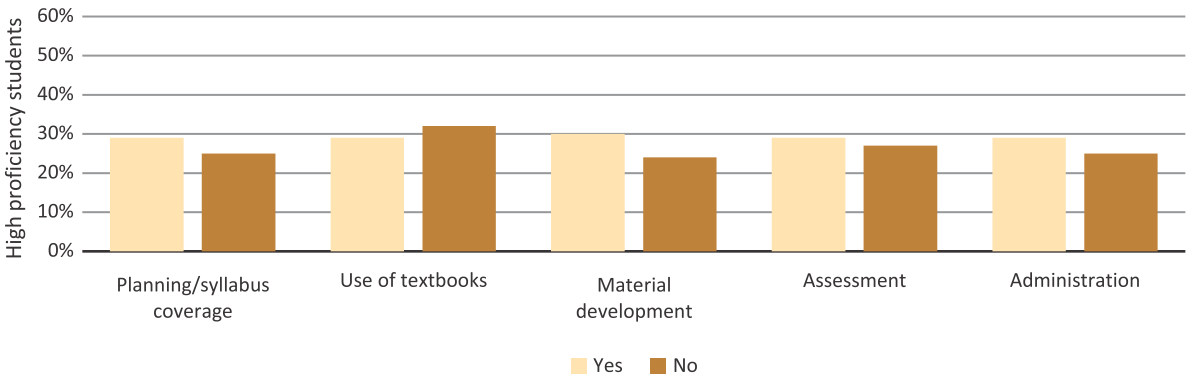


PROFICIENCY BY PROGRAM SUPPORT AND ACCOUNTABILITY

Professional development

The vast majority of programs, 90%, provide teachers with training on a variety of topics and the majority of teachers find such trainings to be quite useful in augmenting their skills. Hence, these trainings were tabulated against high proficiency students to determine the affect, if any, on performance due to these trainings. The results show that most of the trainings do have a positive impact on student performance (Figure 4.33). The percentage of students with high proficiency was nominally greater, between 2 to 4.5%, amongst those whose teachers received trainings in syllabus planning, material development, assessment and administration. Oddly training relating to the use of textbooks depicts a different picture, a negative relationship between those who receive this training and the proportion of high proficiency students.

Figure 4.33. Percentage of students with high proficiency by whether different teacher trainings provided



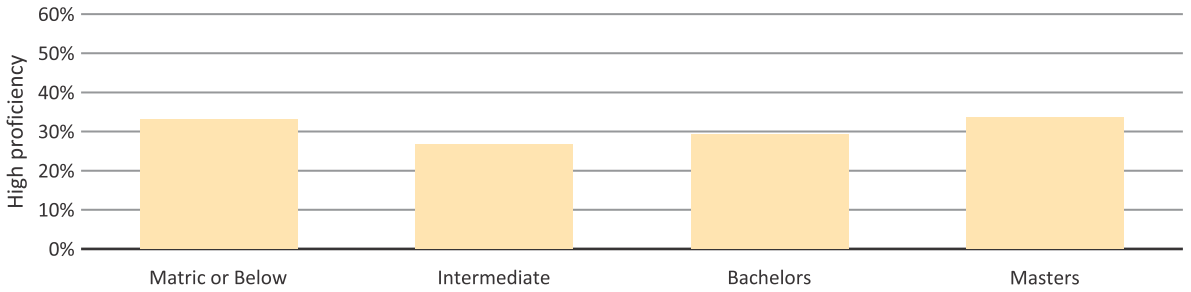
Student performance by teacher factors

Proficiency by teacher characteristics

Academic and professional background

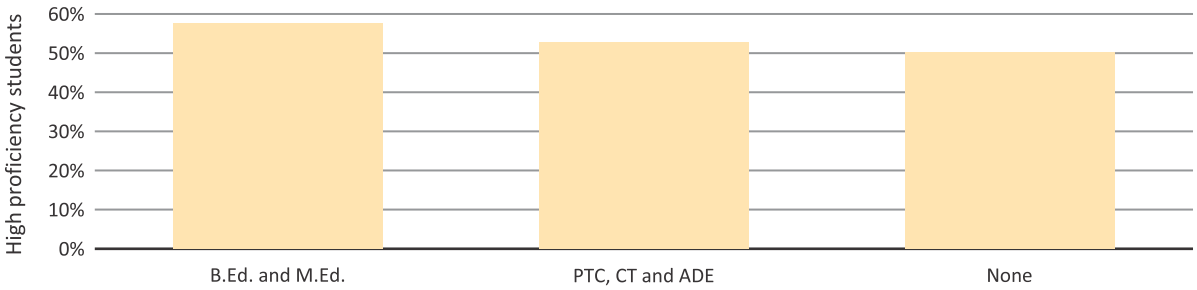
Teacher education seems to have an unexpected relationship with the percentage of students with high proficiency. Teachers with matric (grade 10) or below education have a higher percentage of students with high proficiency as opposed to teachers having intermediate (grade 12) qualifications. However, after intermediate, the direction of the relationship becomes positive with the proportion of students with high proficiency increasing with the formal education level, differences though are fairly nominal (Figure 4.34).

Figure 4.34. Percentage of students with high proficiency by teacher academic qualification



In terms of teacher's professional qualifications results indicate a positive relationship between them and student performance. Results indicate that the proportion of students with high proficiency is about 58% in the case where teachers have either an M.Ed or B.Ed compared to about 53% who have PTC, CT and ADE and 50% of teachers have no professional qualification (Figure 4.35). The differences between the higher professional qualification and none is about 8%.

Figure 4.35. Percentage of students with high proficiency by teacher professional qualification

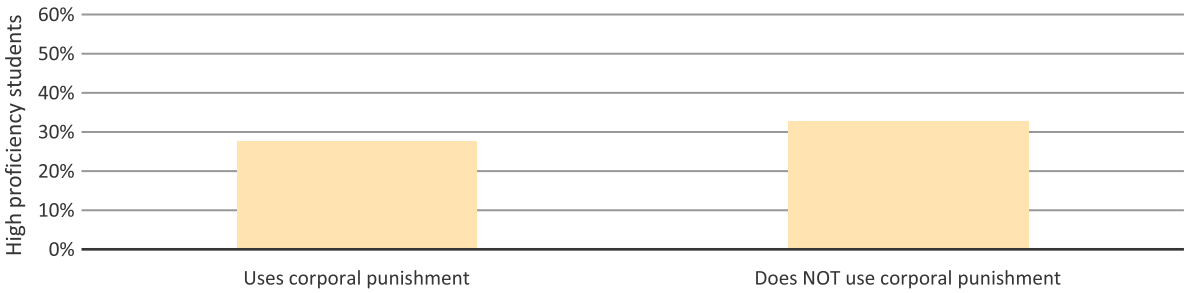


Proficiency by teaching and learning practices

Classroom management

The use of corporal punishment by teachers appears to have negative relationship with student performance. Of the students whose teachers use corporal punishment, 28% have high proficiency, while those whose teachers do not use corporal punishment, 33% have high proficiency (Figure 4.36). However, there is the issue of reverse causality, namely it is possible that it is the low performing students who get the punishment to begin with.

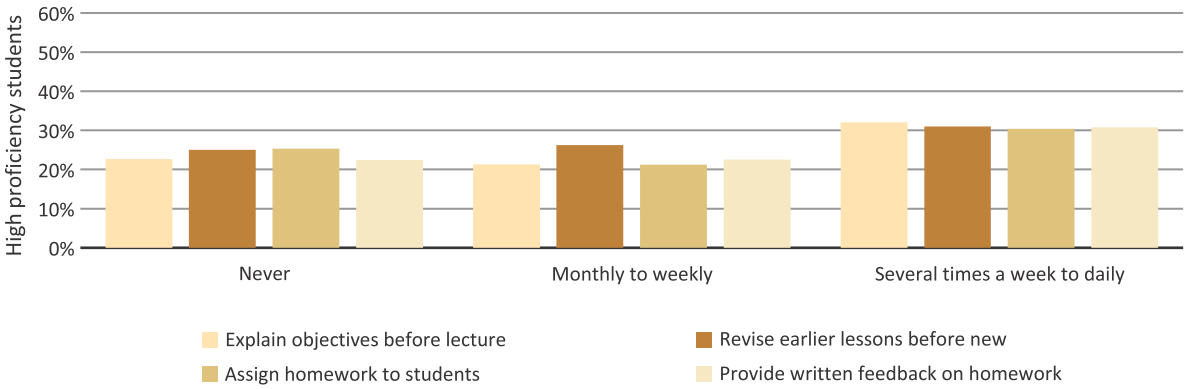
Figure 4.36. Percentage of students with high proficiency by whether teacher uses corporal punishment



Instructional strategies

Teaching practices have been cross tabulated with high proficiency. It is no surprise that the highest proportion of students with high proficiency are from classrooms where teachers use the following practices more than once in a week to daily: Explaining objectives before lecture, revising earlier lessons prior to learning new lessons, assigning homework to students and provide written feedback on homework (Figure 4.37).

Figure 4.37. Percentage of students with high proficiency by frequency of key instructional strategies

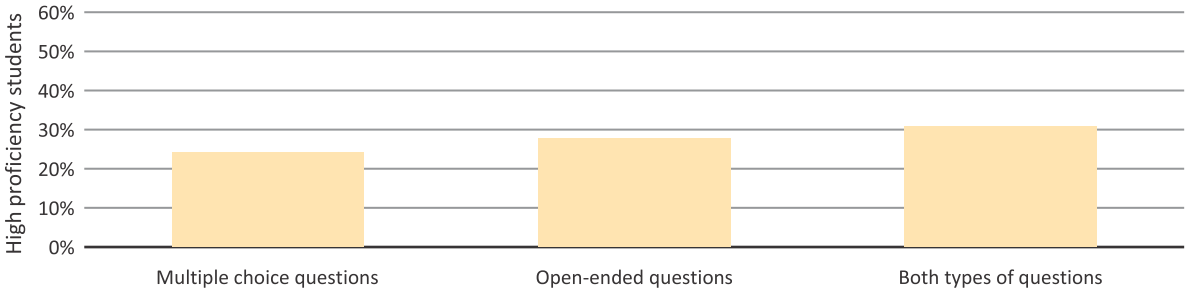


Assessment

On cross tabulating the regularity of oral and written assessments conducted with proportion of high proficiency students, we find that there is a positive relationship, there are approximately 4% more high proficiency students when oral and written assessments are conducted regularly.

Moreover, a cross tabulation of the type of questions in written assessment and high proficiency leads us to infer that the written assessments using both open ended and multiple choice questions lead to the highest proportion of students with high proficiency, followed by those written assessments with open ended and finally multiple choice written assessments (Figure 4.38). A difference of 6% between written assessment with both question types and those with only multiple choice questions is found.

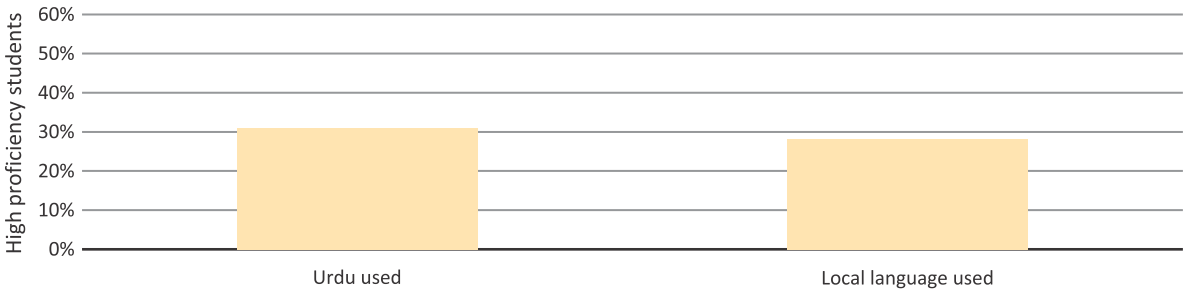
Figure 4.38. Percentage of students with high proficiency by type of questions in written assessments



Language

The cross-tabulation between the language mostly used at school and high proficiency students shows that the percentage of students with high proficiency in classrooms where Urdu is mostly used is nominally higher than those classrooms where the local language is used, a difference of 3% (Figure 4.39).

Figure 4.39. Percentage of students with high proficiency by language used most in class



Student performance by community factors

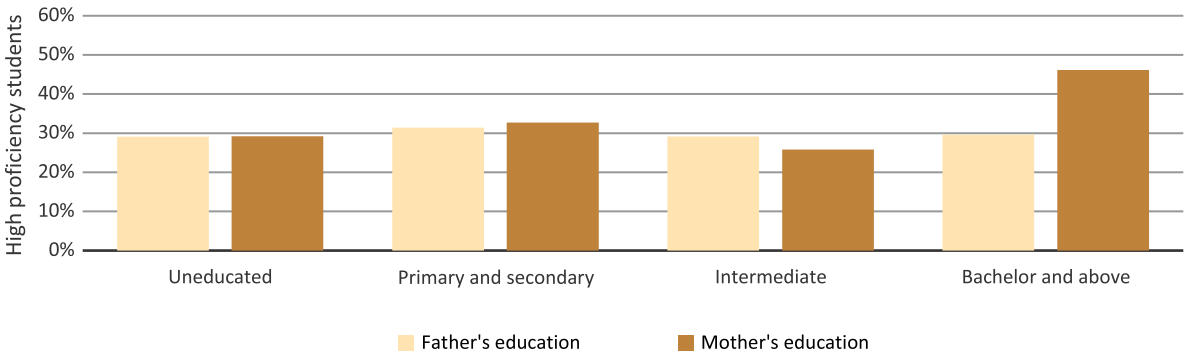
Proficiency by community characteristics

Family and student profile

The data shows that there is no relationship between father's education level and the percentage of students with high proficiency (Figure 4.40). On the other hand, mother's education level has a positive relationship with student performance. There is an anomaly at intermediate level, but it can be ignored as a very small amount of students have mothers with intermediate level education. Otherwise between the

highest level of education, Bachelor's degree, and no education there is a 17% difference in the amount of students with high proficiency. These results are in keeping with most research, which shows that mother's education has considerable impact on children's performance.

Figure 4.40. Percentage of students with high proficiency by parents education level



Students with fathers who work as a teacher or clerk (salaried position) or businessman are more likely to have high proficiency as compared to students whose fathers are unemployed, this difference albeit is small almost 4% (Figure 4.41). As fathers are primary earner for the household, with fewer mothers reporting work, it is not surprising that their income is positively related to student performance, there is a 10% difference in the amount of high proficiency students between the highest income level and the lowest (Figure 4.42).

Figure 4.41. Percentage of students with high proficiency by father's occupation

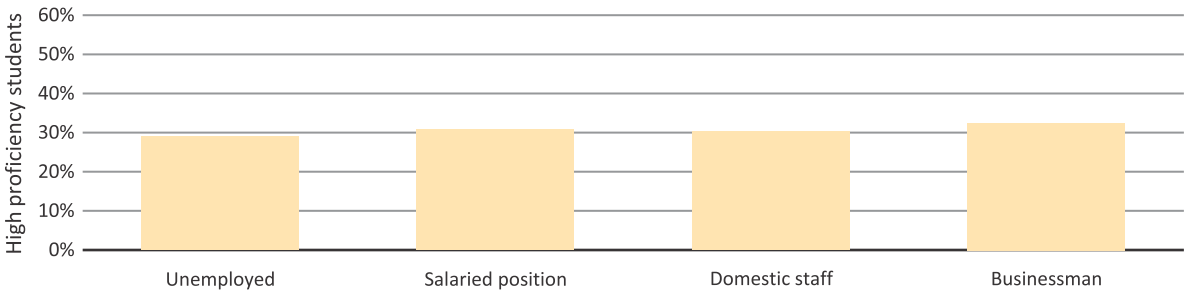
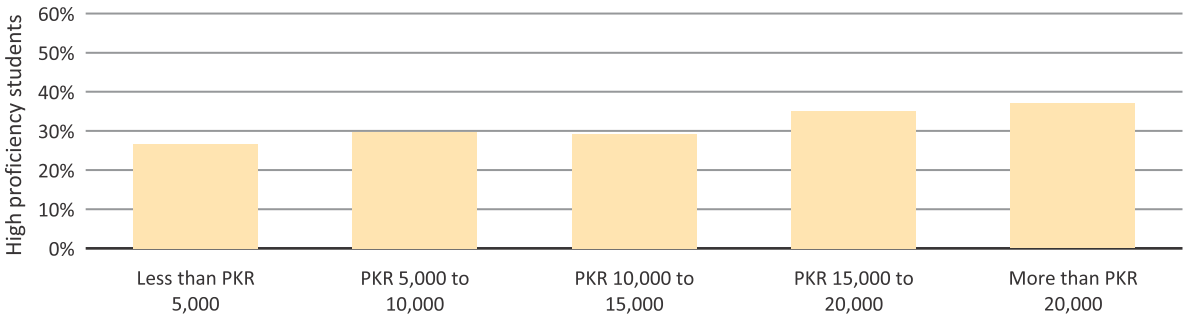


Figure 4.42. Percentage of students with high proficiency by father's income level



The majority of mothers report not working (more than 80%) and of those that do their income is PKR 5,000 and less. Hence, it is not surprising that the relationship between mother's occupation or income level and the amount of high proficiency students is not conclusive (Figure 4.43 and Figure 4.44).

Figure 4.43. Percentage of students with high proficiency by mother's occupation

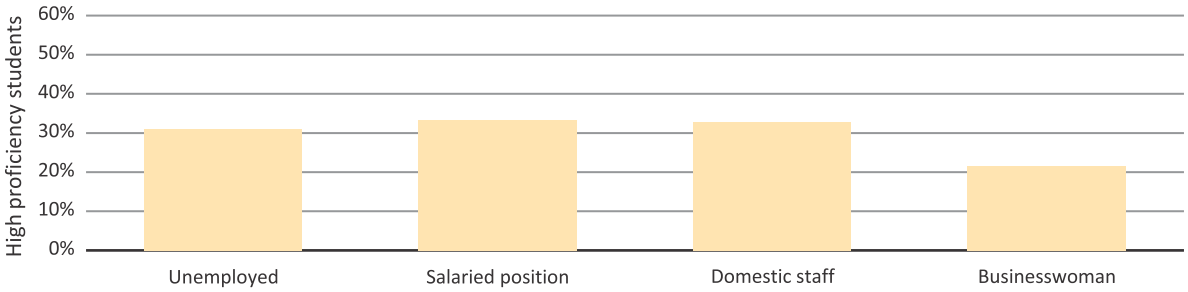
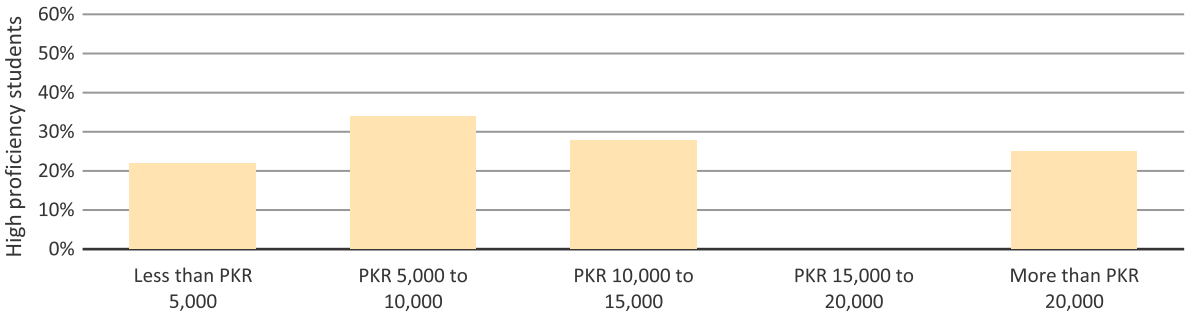


Figure 4.44. Percentage of students with high proficiency by mother's income level



A household asset index was developed using principal component analysis. The index included various household assets such as the availability of mobile, refrigerator, television, radio, computer, cycle, motorcycle, tractor and cattle. The distribution of high proficiency and low proficiency students was explored by household asset index. It was expected that high proficiency students are likely to have higher asset holding compared to low proficiency students. However, the results show that there is no significant difference between the asset holding of the two groups.

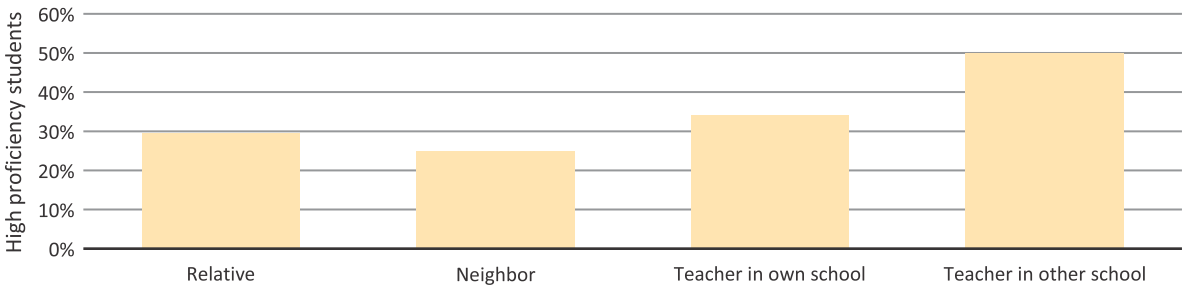
Interestingly students whose families are from the same community are more likely to have high proficiency as compared to those who are from another community, there is almost a 9% difference (Figure 4.45).

Figure 4.45. Percentage of students getting High proficiency by whether family is from community

Learning environment and study habits

Students are more likely to have high proficiency if they are getting tuition from a teacher of another school followed by a teacher in their own school , followed by getting tuition from a relative or neighbor (Figure 4.46).

Figure 4.46: Percentage of students with high proficiency by person who provides tuition

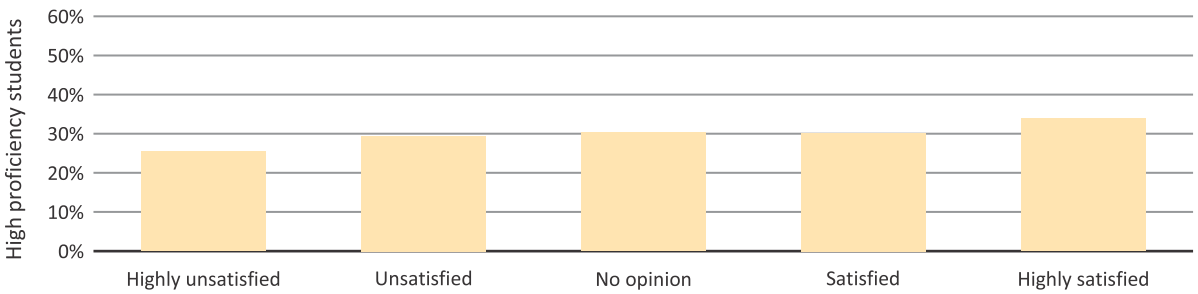


Proficiency by community participation

Community organization and support

The teacher's view about community support appears to have a positive relationship with student performance, that is those that are highly satisfied with their community support have more high proficiency students and those that are not satisfied have a lower proportion of high proficiency students (Figure 4.47).

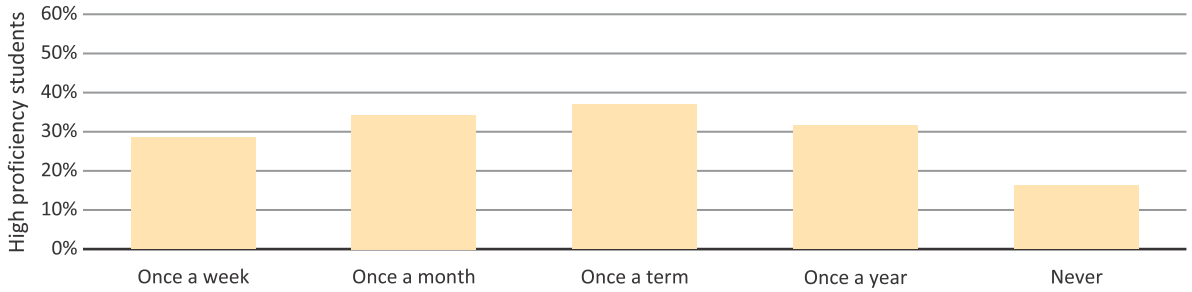
Figure 4.47. Percentage of students with high proficiency by teacher satisfaction with community participation



Parent-teacher relationship

The relationship between parent inquiry about children's performance and student performance appears to have a mixed effect. For those parents who inquired once a term about their children's performance there is the highest proportion of high proficiency students followed by those who inquired once a month and those who inquired once a year (Figure 4.48). What is clear though, is that for those parents who never inquire there is the least amount of students with high proficiency, a difference of about 12 to 20% depending on the level of frequency.

Figure 4.48. Percentage of students with high proficiency by frequency of parent inquiry about child's performance



Take away points

Across the sectors we find that NFBE students are performing reasonably well. In language, in fact, NFBE students are performing better, with many more students being at the highest proficiency level as compared to government and private sector students. In English government and private school students perform slightly better, but the proportion of NFBE students in the higher levels of proficiency are still quite close to the other sectors. In math, there is the most marked difference, with far fewer NFBE students at the higher proficiency levels as compared to the other sectors.

By region we find that students in KP, AJK and GB are performing the best, Punjab appears to be in the middle and Balochistan and Sindh performance is at the lower end. Interestingly, contrary to what one may assume, there is not much difference in performance between urban and rural locations.

By organizational type we find some consistent differences, namely NGO students appear to be performing better than NCHD students across the subjects with BECS, L&NFBED, and Foundation students falling in the middle. Delving deeper into organizational performance across the provinces, we find this trend is reflected with some notable differences. Although NCHD performance is the lowest across the regions, it is the best in AJK. Student performance in Sindh is fairly poor but the NGOs in Sindh appear to be doing much better than the rest.

When exploring the programmatic factors, an important factor appears to be the location of the center, that is there is a 10% difference in the proportion of high proficiency students between those centers that are within the community than those that are at a distance. This bolsters the previous findings that the local nature of the center is a critical element in quality. Another important factor is student attendance. There is a 15% difference between those centers where there is 100% attendance as compared to those where only a quarter attend. Although this may very well be an indicator of the quality of the center itself.

In terms of what the program or organization provides to the centers, infrastructure or facilities have a positive relationship with student performance, but this is a very small difference. School fee also has a positive, albeit small, relationship with student performance, that is where tuition fee is charged there are more students with high proficiency. But this may also be a perception issue, with parents assuming an affordable fee to be a proxy for quality.

In terms of the academic approach, those centers using privately published or NGO/agency developed textbooks appear to have a higher percentage of students with high proficiency. This may have implications for the choice of curricula and materials in these schools. Instructional time, which we noted previously appears to be greater in the NFBE sector compared to the government sector, has an interesting effect on student performance. There appears to be a certain range of about 1030 to 1430 hours per year in which instructional time has an impact on student performance, anything below or above has less of an effect.

As to be expected when it comes to teacher workload, teachers who teach in multigrade setting, have to teach all subjects, perform non-teaching duties have a lower proportion of high proficiency students. The latter is the most marked with a 10% difference. While we find that teacher-student ratio does not show much of an effect.

Teacher characteristics, such as academic qualification and professional qualifications, both appear to have an effect on student performance. In terms of teacher practice, those teachers who use corporal punishment have fewer students with high proficiency. Although it is not clear if this is the result or cause, since it may be that students who perform better receive less corporal punishment. Teachers who use

instructional strategies such as explaining objectives before the lecture, linking them to previous lessons, giving homework and providing feedback on written work on a daily to weekly basis appear to have slightly more students who are at a high proficiency level.

Finally when it comes to the family profile, it is clear that mother's education rather than father's education has more of an effect on student performance. While it is the father's occupation and income rather than the mother's that has an impact. This is to be expected as most of the NFBE mother's do not report working. There is also a positive relationship between parents who ask about their children's performance and student performance as opposed to those who do not. In terms of community participation, where teachers are satisfied with community support there appears to be a greater proportion of high proficiency students.

From this analysis it is clear that certain factors that explain variation in student performance have a lot to do with where these centers are located and the characteristics of the communities and families of these students, factors that are beyond the control of the programs. Still some programmatic factors have been highlighted which policy makers can focus on.

[1] ASER Centre (2014)

Chapter 5

Discussion & Recommendations

Discussion & Recommendations

Discussion of findings

The non-formal basic education sector has the potential to serve as a supplement to the efforts being made by the state in meeting its commitment under Article 25-A to provide education to all children between the ages of 5-16 years. At a minimum it can serve as an interim strategy for providing out-of-school children with the essential skills of basic literacy and numeracy as well as open up the possibility of accessing mainstream education at higher grade levels, subsequently. It could also be a significant provider for early grades primary education.

Despite the lack of serious policy focus on NFBE, in Pakistan there are approximately 28,000 NFBE centers catering to close to 1.0 million students across the country. There are four types of organizations running NFBE programs: those supported by the federal government (NCHD and BECS), provincial government (L&NFBED), provincial foundations (BEF, EEF and NEF) and those run by the NGOs. Going by our survey, the per child cost per month ranges from approximately PKR 200 to PKR 500. This suggests that NFBE is a cost effective alternative.

The NFBE sector caters largely to female students with 60% of the student population being female. The typical center is located inside the community and usually opened in a teacher's home. The centers are not necessarily opened in areas where no schools exist as identified by program goals, but for girls and younger children distance is a critical issue and even a distance of one kilometer can make a difference to parents.

'Localness' in the sense of the center being literally a neighborhood phenomenon in most cases appears to be strength in more ways than one. A number of parents whose views were sought for this study made it clear that in the absence of such a proximate center, they would not seek education for their children, particularly daughters. Equally, the teacher though usually not well qualified, is mostly a local resident and a member of the community. This provides both a degree of comfort to parents in terms of sending their daughters and makes the teacher more likely to feel a greater obligation to do her best and be accessible to the parents.

The majority of students in NFBE centers are within the normal age range for primary with only 12% of students over-age. The majority of programs are often not accelerated following the standard five year duration for completing the primary cycle. Thus NFBE programs may not be catering to out-of-school children or those who are steadily engaged in work. However many programs are flexible in terms of when students can join during the school year and more importantly flexible in terms of timings. This means that for students who have other responsibilities, such as household chores or seasonal work, they can accomplish them before coming to school or drop-out for a while and rejoin when possible.

The study finds that roughly half the students complete the program cycle equivalent to grade 5. Many parents are satisfied with NFBE and would like their children to continue with their education after completing primary preferably at a government school. Several programs have taken initiatives to enable students to mainstream, with NCHD's approach of linking feeder schools to parent schools, government primary schools, standing out in this regard.

For the teachers, although the salary is perceived to be low, a source of satisfaction and motivation is their

ability to work in their homes. They can accomplish household chores as they teach and they have the flexibility to leave someone in their place if leave is needed. The workload appears to be manageable to most, despite being multigrade in most situations, with a student-teacher ratio of 1:40. And unlike teachers in the public sector, NFBE teachers have very few non-teaching duties.

Programmatic support is found to be effective where teachers receive support from program staff in the division of syllabus and lesson planning and they are well trained in multigrade situations. Such support takes the shape of materials, ongoing professional development and in-classroom support. Most of these findings mirror what we know about supporting good teaching in the public sector. Additionally, given that programs seek to engage communities from the stage of establishing the center, it is no surprise that communities are often very engaged with the centers. This and the local nature of the school and teacher means that the dynamic between center and community is often one of mutual support and respect.

A significant proportion of the children seem to have learning levels that compare somewhat favorably with their counterparts in government and private sector schools. Surprisingly, they are doing better than both in terms of being able to read a story in a given language (Urdu, Sindhi or Pushto), other than English. At the initial grade levels a better grasp of any one language has greater significance by way of cognitive development and learning ability than acquiring a smattering of English. Even in terms of the latter they do not appear to be significantly worse off. The substantial learning deficit is in Math. Of course, these are comparisons on the very low end of the quality scale and better or worse needs to be understood in context.

Interestingly, there is lack of significant difference between urban and rural areas in student learning outcomes. Of course, some of this may simply be due to the availability of better, more motivated teachers in one location, urban or rural, compared to another. Since even teachers with a simple Matriculation are not particularly worse off compared to more qualified counterparts in the field, the urban-rural difference appears more comprehensible. In some ways, of course, the quality differentials mirror heterogeneity in the public sector where the level of development in a given area is not necessarily a predictor of school quality.

Recommendations

It is clear from the findings that there is a place for NFBE as a supplement to the formal sector in ensuring the provision of education to children in Pakistan. The recommendations in this section will deal with both the ways for making this a better, more viable option and the means for making NFBE more effective.

Ensure greater linkage between the NFBE and formal education sectors

Coordination between sectors and utilization of resources

An essential part of utilizing NFBE as a supplement to the formal sector is to ensure there is greater coordination between the two sectors not least for ensuring students can mainstream into the formal sector. In this regard NCHD has setup a very effective system with its feeder and parent schools. Other publicly supported NFBE programs could stand to learn from this.

Secondly, greater coordination is needed to ensure there is no duplication of resources both between the formal and NFBE sectors and among NFBE providers. For example in Punjab alone there is the NCHD, BECS, L&NFBED and now PEF entering the arena of NFBE; this is in addition to the existing publicly supported government schools and the publicly supported low-cost private schools run by PEF. In this scenario a GIS mapping of existing schools and centers may be needed, as recommended by both the National Education

Policy 2009 and the Punjab Education Sector Plans. Students in this sector should be registered and EMIS should collect relevant data on them.[1] It appears that such a process is underway with the Japan International Cooperation Agency (JICA) collaborating with the Punjab Government in this regard. Work in this arena needs to move forward. In addition, a coordinating mechanism and strategy for opening schools will be needed to ensure that such information is used effectively.

Addressing the early grades at NFBE centers

As the data indicates the NFBE centers appear to be functioning well for the level they are catering to, that is the primary level. The study also found that parents who were satisfied with the quality of education available at the NFBE center demand that education at the middle and high school levels be made available at the very same center in the neighborhood. However, this does not seem to be a feasible option in our context. First, in terms of teacher qualifications, as the data indicates with NFBE student performance in Math there is clearly a limitation on what NFBE teachers can teach; going to a higher level does not seem possible. Secondly, in terms of resources, government elementary and high schools cannot be established in each and every neighborhood. Third is the size of the center, which once again relates to resources. Given that this model is predicated on one teacher teaching in a multigrade situation, for the most part, going beyond a certain size (i.e. more than the average of 40) can create problems. It is clear from the data, that teachers begin to face difficulties in teaching large numbers and hiring more teachers means more resources. As elsewhere, the school bus should be as much a part of the educational landscape as the school building, and parents should be able to safely transport their children to and from well-resourced middle and high schools. Such schools cannot be replicated at the neighborhood or village level.

What seems most appropriate then is for the early stages of primary education to be taken care of at the local level in NFBE centers. This could prove to be advantageous in two ways: Currently, given the understandable emphasis on Early Childhood Education (ECE) there is a large number of pre-primary students[2] and early graders in public sector schools. These children are usually ignored and left largely to their own devices by teachers whose attention is largely focused on the higher grades. To begin with, children at pre-primary, grades 1 and 2 can easily be taught at a local well-supported NFBE center. In this respect, the NCHD approach with feeder schools at the local level taking care of educating children up to the grade 2 level before they are inducted into a mainstream school, may have something to offer. Early grade education at the NFBE centers would allow for the children to get better care and experience education in the important early stages in a congenial environment more supportive of learning. At the same time it would relieve pressure, particularly on the many two-teacher schools where multi-grade teaching is the norm,[3] allowing them to concentrate on the higher end of the primary cycle.

Create standards and provincial-level strategies for the NFBE sector

Develop provincial-level strategies

The policy actions outlined in the provincial education sector plans are a step in the right direction. However more work is needed to develop provincial level NFBE strategies. This can be done by conducting a detailed sector analysis, developing a detailed database of programs, identifying reform support areas, devising a monitoring and evaluation mechanism, allocation of budget and developing a detailed action plan. An important aspect of this would be to identify one coordinating body in the province responsible for such strategy development. How this is actually worked out is a matter of some deliberation, given that in each province there is a different administrative arrangement with regard to the NFBE sector.

Create academic standards for NFBE

Once again if the NFBE centers are to play a role in supplementing the formal sector, there must be some standardization amongst the programs and between the sectors. For this, as recommended by the National Education Policy 2009, there is a need to develop standards for national equivalence for all types of NFBE programs, so students can transfer between different NFBE programs and the formal sector and their standard of learning is recognized. In the Asia-Pacific region, several countries such as India, Indonesia, Philippines and Thailand have adopted 'equivalency programs' utilized for this very purpose. Best practices from these programs can be adopted. Standards for NFBE programs can include the minimum requirements for provision of basic facilities to centers, qualification of teachers, pre-service teacher training, curriculum and assessment criteria.

Secondly, a standard multi-grade NFBE curriculum with guidelines for teacher training and sample teaching and learning material for use by NFBE programs is needed. Provinces can then use this as it stands or adapt for their unique provincial needs. The curriculum developed by JICA for Punjab, which is an outcome of various country level experiences and approaches being used in Pakistan, is one such possible option.

Ensure effectiveness and quality in the NFBE sector

Maintaining proximity, flexibility and localness

Proximity, flexibility and a local female teacher are critical factors for making the NFBE centers good viable options for parents to send their children, especially daughters, to school. Therefore NFBE centers should continue to be built inside the community. In fact programs may need to revisit their distance criteria of 1.5 to 2 km and consider making centers even more proximate to the communities they serve as even this distance may be too much for the students they serve (i.e. girls and younger children). Secondly, a few NFBE programs do operate on fixed timings; it is clear that flexibility allows for those students who have additional responsibilities, whether at home or elsewhere, to discharge them and still attend school. These aspects of the centers should be maintained.

Providing effective support to teachers

Since a multi-grade setting is the norm in NFBE, professional development and continuous in-classroom support, must address this aspect. In addition division of the syllabus, both in terms of planners and other material, is needed. Providing continuous in-classroom support is a critical feature, as is to be found in the formal sector. Certain NGOs (such as BRAC, Bunyad, HDF and Khwendo Kor) appear to have very effective teacher support models that are worth studying and learning from.

The issue of course remains taking any of these ideas to scale. In this regard greater collaboration across the sectors may be needed. For example in the case of BECS, utilizing local NGOs to support monitor the centers appears to be a viable strategy. For professional development publicly supported programs have used existing public teacher training institutions, such as DSD in the case of Punjab and PITE in the case of Balochistan. Such support needs to be continuously provided and made part of a system of support.

Develop an exit strategy

There must be an exit strategy linked to short term plans to provide alternative education.[4] All stakeholders, including teachers, students, parents, community and the government should be familiar with the timeframe of a given program and the expected date of its closure. On their part donors should ensure the

funds needed for the target group of learners to mainstream into the formal system. In Pakistan, too, the issue of an exit strategy has been the subject of some debate between donors and other stakeholders. One assumption, not borne out by experience has been that after some years of support the relevant communities, recognizing the value of education, will take charge of the non-formal centers. Of course, this does take place but by way of exception rather than the rule. Why this has not happened more often will require further research. Going by anecdotal evidence, in many cases poverty and the consequent inability of the community to pay even the low teacher salaries appears to be an obstacle to sustainability. The only viable option in our context appears for the government to factor in donor, NGO or community-supported NFBE initiatives into their overall education policy planning. The government should assume responsibility for sustaining the center in accordance with an agreed timeframe. Given the nature of the enterprise, donors and NGOs cannot be expected to sustain interventions by way of NFBE on scale and in perpetuity. It is after all the obligation of the state to ensure that all children of relevant age get an education. This is an obligation that the government has underlined by the introduction of Article 25-A into the Constitution.

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In conclusion, going by the findings of this study, the non-formal education sector has the potential to offer significant support to the state's efforts to provide education to all children in the relevant age group. It has particular promise in terms of providing basic literacy and numeracy to the poorest and most marginalized children. And, not least, it may offer a distinct advantage in terms of education in the early grades to those whose access to public schools may be limited due to distance and to private schools on grounds of affordability.

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[1]Government of Pakistan (2009) & Government of Punjab (2013)
[2]NEMIS & AEPAM (2014) – Pakistan has reached a pre-primary gross enrolment rate of 66.4% (in 2012-13) for 3-5 year olds.
[3]IDEAS (2013) – 36.2% of schools in Punjab were found to engage in multi-grade teaching.
[4]Baxter & Bethke (2009)

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Appendices

Appendix A: Working group members

Name	Organizational Affiliation
Abbas Rashid	SAHE
Abid Hussain Gill	JICA
Ayesha A. Awan	SAHE
Faisal Bari	IDEAS
Muhammad Farooq Naseer	IDEAS/Lahore University of Management Sciences (LUMS)
Irfan Awan	SCSPEB
Irfan Muzaffar	ESRC
Mariam Bibi	Khwendo Kor
Muhammad Azhar	SAHE
Sadiqa Salahuddin	IRC
Shazia Ashraf	SEF
Zohra Sohail	IDEAS
Sector Experts	Provincial level

Appendix B: List of some organizations visited during study

Organization Name
Al Muslim Welfare Society
Anjuman Behbood Awam
Anjuman Falah-o-Behbood
Anjuman Farogay Taleem
Association For Gender Awareness & Human Empowerment (Agahe)
Aurat Moawan Aurat
Awami Development Organization
Baahoo Welfare Organization
Balochistan Education Foundation (BEF)
Basic Education Community Schools (BECS)
Bangladesh Rural Advancement Committee (BRAC) Pakistan
Bunyad Foundation
Childcare Foundation (CCF)
Cholistan Development Authority (CDA)
Citizen Commission For Human Development (CCHD)
Council For Insani Behbood
Dahi Taraqeeati Council (DTC)
Development Action for Mobilization & Emancipation (DAMEN)
Elementary Education Foundation (EEF)
Golden Welfare Society
Grass-Root Organization For Human Development (Godh) Pakistan
Human Development Foundation (HDF)
Human Resource Development Organization (HRDO)
Idara Bara-i- Samaji-o-Moashi Taraqqi
Ijtimai Tarqiati Council (ITC)
Islah Foundation
Jaag Development Organization
Khwendo Kor
Literacy and Non Formal Basic Education Department (L&NFBED)
MAGNET
Millat Welfare Society
Muslim Hands
Muslim Welfare Society
National Commission for Human Development (NCHD)
National Education Foundation (NEF)
National Rural Support Programme (NRSP)
Pak Public Development Society Balochistan (PPDS)
Pakistan Academy of Social Science (PASS)
Pakistan Fisher Folk Forum (PFF)
Pakistan Institute of Labour Education and Research (PILER)
Police Welfare Community Schools
Punjab Rural Support Program (PRSP)

Organization Name
Read Foundation
Sanjh Foundation
Sarhad Rural Support Programme (SRSP)
Sayya Foundation
Social Organization For Advancement Of Community Health (SOACH)
Social Youth Council Of Patriots (SYCOP)
Women Development Organization
Zia Welfare Council

Institute of Development and Economic Alternatives (IDEAS) was established in 2012 with a vision to strengthen the economic and social foundation of democracy in Pakistan by producing rigorous quality research. The objective is to identify, through research, pivotal opportunities of policy reform, both in terms of feasibility and impact, and subsequently use that knowledge for advocacy and policy engagement.

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The Society for the Advancement of Education (SAHE) is a non-governmental organization established in 1982 by a group of concerned citizens and academics. It builds on the belief that educational justice entails not just access to school, but to quality education, for all children in Pakistan. SAHE works through an extensive network, the Campaign for Quality Education (CQE), to conduct collaborative research and evidence-based advocacy on key issues to influence educational reform.

Society for the
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