A teacher is a critical, some would argue the most focal, input in a child’s educational experience. A motivating teacher can inspire, encourage and stimulate a child by transforming even the most insipid and lifeless subjects into magical texts. History is full of examples where individuals who have gone on to achieve great things and changed the course of history itself attribute their success to a motivational teacher. It should logically follow, therefore, that a dull and uninspiring teacher has the potential to also dangerously alter the course of a child’s life.

Academics, researchers and policy-makers alike also recognise the importance of teachers in meeting more policy-oriented goals. Teachers are deemed crucial in meeting the demands of universal education for all children and, increasingly, it is acknowledged that improving teacher effectiveness is one of the most crucial elements in ensuring that this education is of a sufficiently high quality. Research evidence to date also confirms that teachers are the most important institutional factor in determining student outcomes. The improvement of teacher quality is not only necessary to ensure better student outcomes but is also important in acquiring consequent gains in student learning that have the potential to translate into massive economic gains that will benefit the country as a whole. Consider the following example: in a recent research paper, a prominent Education Economist from the US, Eric A. Hanushek, places a significant monetary value to the improvement of teaching quality in the US (Hanushek, 2011). In his estimate, the author argues that a teacher who is one standard deviation above the mean in effectiveness would generate annual marginal gains of $400,000 in terms of present value of future student earnings and potentially more when other conditions change. In this research he also suggests that if the bottom 5-8 percent of teachers in the US were replaced with ‘average’ teachers, this could potentially improve US ranking in maths and science achievement to near the top in terms of international achievement rankings. The present value of this move is estimated to be worth around $100 trillion. Whilst these figures are representative of the US and not the developing world, they are indicative of providing a view of the significant potential benefits of teacher quality improvements in a country like Pakistan because the levels of teaching quality are potentially far lower to start off with as compared to the US.

What we do know about teacher quality in Pakistan paints a grim picture. Whilst Pakistan has made positive strides in relation to quantity of education achieved over the last few decades, education indicators in Pakistan regarding both quantity but particularly the quality of education have highlighted some key remaining concerns. Participation rates (particularly at higher education level), resourcing (particularly the lack of trained teachers) and academic results are comparatively low in relation to other countries within the region as well as internationally. These concerns with the quality of education in Pakistan have been attributed to the low quality of teaching within the country. Some authors perceive teaching at primary level as the last choice of government service in Pakistan and put forward the argument that therefore average and below average candidates tend to seek to join the teaching profession. In addition to this, it is also well known that recruitment and transfer/deployment is driven more by political economy than real merit. Low levels of teacher subject matter knowledge are also widely reported and this has been coupled with indications of dwindling levels of motivation linked to the low social status of the profession, lack of a structured promotions mechanism and poor working conditions.

Research in rural schools in Pakistan by Behrman et al. that looked at which schooling inputs are important for student outcomes found that increasing exposure to teachers and improving teacher quality are both likely to have higher returns than those investments that improve physical infrastructure and equipment. In addition to this if teachers are differentially effective then the teachers to whom a child is exposed can really matter to a child’s educational attainment and can end up countering or reinforcing social and family influences and, in some cases, further increase inequity in educational opportunity for many children.

However, measuring teacher quality is a complex task because of the wide array of competencies and skills that teachers require. It depends on many observable as well as unobservable characteristics as well as intangible factors such as classroom interactions and motivation. Teacher quality in the very narrow sense has been defined by Eide et al. as the ability of a teacher to produce growth in their students’ achievement. However, it is universally recognised that teacher quality is far wider than this and
must include an evaluation of their ability to improve a much wider array of student outcomes of an intellectual, social, physical and emotional nature and not just simply test scores. Teacher quality encompasses a range of competencies and skills. As already indicated, policy makers have tended to focus on improving the most measurable indicators of what is believed to encompass teacher quality. These include academic qualifications, years of training and experience. This is despite the fact that formal qualifications and measureable resumé characteristics of teachers (experience, degrees held, certification etc.) seldom predict effectiveness in raising student achievement. This is not to say that observable 'resume' characteristics are not important from an educational policy-making perspective. Academic qualifications for instance are thought to proxy for teacher ability. Trained teachers are believed to behave differently in classroom settings than untrained teachers. Thus, while these resume characteristics alone do not make an effective teacher, it is also evident that someone possessing six years or less of schooling or not having any formal training may not be prepared to teach primary school students. Highly acclaimed education systems of the world such as South Korea have been credited with attracting the best graduates into the profession and, whilst high academic records are not necessarily indicative of effective teaching, there is evidence that persistent entry of less intellectually capable people into the teaching force is likely to compromise the quality of teaching, with resultant negative implications for student outcomes. Setting minimum national qualifications and training requirements is therefore one way of differentiating between those who are certified to teach and those who are not. However, these measures are also almost entirely the only ones widely used by Ministries of Education and other bodies to recruit teachers and for their career progression.

ASER 2013 data provides a unique opportunity to identify the extent to which the 'observable' characteristics of teachers across rural and parts of urban Pakistan are meeting the 'minimum' qualification levels needed to make an effective teacher. Whilst it is impossible to draw any causal inferences from these simple descriptives, a quick glance at the data indicates that a significant majority of teachers are 'qualified' both in terms of their education levels as well as in terms of their professional training. Why then, do we not see a translation onto better student learning? As mentioned previously, teacher 'quality' encompasses a wide range of factors. One of those is clearly teacher 'effort'. This, in turn,
What then do we make of the picture so far? While there are obvious differences (by region, by province etc.), in 'teacher quality' as measured by qualifications and training levels, it seems that teachers in the country are reasonably well 'equipped' in terms of their educational and professional qualifications. And while they are absent, the absence levels are not so high so as to raise alarm bells. Why then do we see such poor learning levels among children in the country? Firstly, the fact that we have these descriptive pieces of evidence in no way establishes a causal relationship. Secondly, and perhaps more importantly, numerous other factors come into play in determining the relationship between teacher quality and student learning. In particular, the ASER 2013 data (as well as data from previous years) quite clearly indicates substantial incidence of multi-grade teaching in rural schools across the country. Multi-grade teaching has become a common strategy to deal with issues of teacher shortages and absences particularly in remote rural areas in several developing countries. Many agree that when it is a pedagogical choice that is accompanied with teacher training and learning materials that support this style of teaching, multi-grade teaching can be as if not more effective as mono-grade teaching. However in many developing countries multi-grade teaching has arisen due to necessity and not choice and therefore is rarely accompanied by the teacher training and resources to make this an effective teaching methodology. It is clear from the ASER data that multi-grade teaching is a widely occurring practice in various parts of the country. At the national level, for instance, 48% (15%) of children studying in class 2 (class 8) in rural government schools were studying in a multi-grade setting. In private schools, on the other hand, while the incidence of multi-grade teaching was lower in class 2 (30%), it was significantly higher in class 8 (37%). The high incidence of multi-grade teaching in rural Pakistani schools provides one potential indication of why children's learning outcomes are so poor despite apparently qualified and trained teachers. The fact of the matter is that the practice of multi-grade settings is based on teacher absences and shortages (i.e. out of necessity) rather than based on the choice of how best to address children's learning needs. As a consequence, teachers are ill-equipped in terms of their training preparation for how to teach children of different ages and grades into one class.

Improving 'teacher quality' in Pakistan needs to be a multi-pronged approach. One thing, however, is clear. Given that improving teacher effectiveness is a policy amenable strategy, improving weak teaching may be the most effective means of raising school quality across the developing world (Glewwe and Kremer, 2006) and Pakistan is no exception.
Education in itself is a fundamental human right, a bedrock of development that contributes to all social, economic and environmental dimensions, leading to gains for generations to come. The dividends that result from investments in education are immeasurable. However, for these benefits to accrue, all girls and boys must have education opportunities both in and outside of school and should be acquiring meaningful learning that leads to mastery of skills.

Since 2000, the efforts to achieve the MDGs have yielded unprecedented progress in both the developed and the underdeveloped countries. While growth is noticeable, the sad reality is that the achievements have been uneven; constrained by trends in demography, urbanization, health, economic and shifting global realities. Gender inequalities and socioeconomic disparities persist especially amongst nomadic populations, geographically remote groups, and the socially and economically disadvantaged (EFA Agenda for South Asia, 2013). More than 57 million children continue to be denied their right to primary education due to the failure to reach the marginalized (EFA Global Monitoring Report, 2012). Failure to address the structural disparities linked to wealth, gender, ethnicity, language, disability and other markers of disadvantage is holding back progress towards Education for All and fuelling wider processes of social exclusion. Children and adolescents from the poorest households are at least three times more likely to be out of school than children from the richest households (MDG Report, 2013).

According to the analysis of household survey data carried out by The Global Initiative on Out-of-School Children, 23.8 million primary and 15.6 million secondary-age children are out of school in Bangladesh, India, Pakistan and Sri Lanka (UIS and UNICEF, 2010). The total number of out-of-school children in these countries is 39.4 million, out of which 53% are girls (UNESCO, 2010). Even in sub-Saharan Africa, over half of all out-of-school children, girls are more likely to be out of school than boys. Poor rural girls in particular face multiple disadvantages through gender discrimination and poverty which bar them from enrolling and lead to dropouts at greater rates than boys (The Global Compact on Learning: Policy Guide).

Where economic and gender disparities are preventing millions of girls and boys from even attending school, those who are attending often leave both primary and secondary levels without acquiring the basic knowledge, skills, and competencies. According to estimates in the 2012 EFA Global Monitoring Report: At least 250 million primary-school-age children around the world are not able to read, write or count well enough to meet minimum learning standards, including girls and boys who have spent at least four years in school. In Pakistan, large disparities in learning achievement exist and are heavily influenced by the type of school students attend and their family backgrounds. ASER (The Annual Status of Education Report) data reflects such inequalities very clearly. Shocking results from ASER Pakistan (2012,2013) have shown that the vast majority of pupils between 5-16 years old have not even achieved what is expected of a grade 2 student in language and mathematics. This is coupled with widespread social and gender disparities in educational outcomes reflected by creating an ASER wealth index with the help of household indicators tapped during the survey. Learning levels of children juxtaposed against the wealth status of households will provide a snapshot of the current status of learning inequalities and demonstrate how these have narrowed/widened in comparison to last year.

**ASER WEALTH INDEX: FINDINGS**

In order to determine differences in learning levels arising from inequalities, an ASER composite wealth index has been constructed by integrating the significant household indicators mentioned in the survey form. These

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1. Household indicators used: Type of house (Type of house is a categorical variable with kutchा given the value 1, semi-pucca equals 2, and puccа equals 3), house owned (Dummy equaling 1 if the house is owned, 0 otherwise), electricity connection (Dummy equaling 1 if the house had electricity, visible wires and fittings, 0 otherwise), mobile (Dummy equaling 1 if anyone in the house has a mobile, 0 otherwise) and television (Dummy equaling 1 if the household has a television, 0 otherwise).

2. It factorizes variables by creating a weighted combination of the input variables in the following manner e.g. $F_i = a_1X_1 + a_2X_2 + ...$

In order to select factors, eigen values from a principal component analysis are used and the factor coefficient scores are created. Further, the indicator values are multiplied by the coefficient scores and added to come up with the wealth index. The index is then divided into groups/quartiles to categorize the population according to their wealth status.
indicators measure the economic potential and achieved levels of income and wealth of a household. ASER wealth index has been developed by using principle component factor analysis procedure in the STATA software. Using this methodology, ASER 2013 national data (138 rural districts of Pakistan) has been divided into 4 categories/quartiles (i.e. poorest, poorer, richer, and richest) thereby representing the entire population of Pakistan in a socio-economic context.

The results depicted by ASER Wealth Index (2012 and 2013) are no different. The results reveal that the richest quartile has the highest percentage of children enrolled (83%) whereas the poorest quartile has the lowest enrollment rate (59%). A strong correlation between wealth and enrollment is established as we move along the wealth index. Moreover, socio-economic background is also found to be influencing gender inequity. The males and females belonging to the poorest quartile are particularly disadvantaged as depicted by the lowest enrollment rates. The highest enrollment of males and females is again in the richest quartile (86% and 80% respectively). The most alarming trend is that of female's enrollment which not only decreases across all quartiles but also is lower than the enrollment rate of male population.

The findings also illustrate that children, particularly girls, from poor households face a much greater risk of being out of school. The percentage of out of school females is higher than the overall national rural results and is highest in the poorest quartile. Fifty-three percent females are out of school in the poorest quartile as compared to 20% females in the richest quartile. A lower percentage of males are out of school when compared to females but they also follow the same pattern i.e. the highest percentage of out of school males are in the poorest quartile (33%) and the lowest percentage of out of school males are in the richest quartile (14%).

Given the disparities in enrollment and out-of-school children, ASER 2013 results further strengthens the stance that socio-economic factors are adversely affecting the learning levels of children in Pakistan. The graph clearly indicates that the learning levels of children are directly related to their wealth status. Children falling in the 'richest' quartile have the highest learning levels in Urdu/Sindhi/Pashto, English, and Arithmetic whereas the children in the poorest quartile have the lowest learning levels. It can also be seen that the gap between the 'richest' and the 'poorest' quartile appears to be increasing whereas the gap between the 'poorer' and the 'richer' quartile is decreasing (when compared to the last year’s results); thereby, leading to be divide between the rich and the poor.

Following the overall national trends, a gender-wise analysis was also conducted in order to determine the differences in learning levels of males and females. Males
and females falling in the richest income group are better able to perform the language and numeracy tasks than children falling in low income groups. However, the learning levels of the females are lower when compared to the learning levels of males across all quartiles in both language and arithmetic competencies. Fifteen percent of the poorest females can read a story in Urdu/Sindhi/Pashto as compared to 21% poorest males. Similarly, 12% poorest females can do two-digit division sums and 13% can read sentences in English whereas 19% of the poorest males can read sentences in English and do two-digit division sums.

Similarly, 42% of the richest females can read a story in Urdu/Sindhi/Pashto, 41% can read sentences in English and 36% can do two-digit division sums whereas 44% richest males can read a story in Urdu/Sindhi/Pashto, 43% can read sentences in English and 39% can do two-digit division sums.

Incidence of paid tuition was another factor that was investigated to assess whether it is strongly associated with learning achievement and also positively affected by wealth status. The findings show that a higher percentage of children (94%) belonging to the richer income group are taking tuition as compare to the children belonging to the poorest income group (43%). The households with better wealth status are able to spend significantly more on their children’s education, improving their opportunities for better quality schooling as reflected by the variations in learning levels. The learning level of richest children taking paid tuition are far better (54%) when compared to 39% of the poorest children taking tuition (can read a story in Urdu/Sindhi/Pashto). Similar trends can be seen in the English and Arithmetic skills of children across all quartiles establishing that the children of the lowest quartiles are particularly disadvantaged as only a limited set of educational opportunities is available to them.

The current education status of Pakistan as demonstrated by ASER 2013 clearly sheds light on how disparities created by differences in wealth status are jeopardizing the future of millions of children. Education is at risk, requiring targeted action and a focus on access to equitable quality education and learning for all. If Pakistan has to achieve the goal of universal primary education by 2015, then the government must redouble its efforts for reaching the marginalized and improving the learning outcomes. In shaping education for the future, efforts to expand enrollment at all levels must be accompanied by policies emphasizing on inclusive approaches and overcoming inequality. Reforms such as an increasing access and improving affordability for excluded groups by lowering cost barriers, changing attitudes to girls’ and women's place in society, offering financial incentives for school participation, bringing schools closer to marginalized communities, targeting financial and learning support to disadvantaged schools, and providing intercultural and bilingual education etc. have the potential to not only remove the flaws present in our education system but may also turn Pakistan into a true democratic and liberal society in the coming years.