India:
What makes an effective teacher?

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Executive Summary

Decades of research make it clear: teachers make a difference in student learning. In fact, Stanford University economist Eric Hanushek (1992) has noted that the difference between a good and a bad teacher can be a full level of achievement in a single school year. Given the strength of these findings, nations around the world recognize that in order to improve educational outcomes and equity they must focus on effectiveness of teachers. A critical step toward achieving that goal is for individual countries to identify the competencies required for effectiveness and use them to inform teaching standards, pre-service teacher preparation, professional development programs and performance evaluations. To make an impact, those systems and processes will need to be based on a common understanding, within each country, of what it means to be an effective teacher.

Oxfam’s international study of teacher competences and standards concludes that in order to build that common understanding, it is “absolutely necessary that the question as to what is considered a quality educator is investigated among stakeholders” (Bourgonje & Tromp, 2011, p. 145). Giving stakeholders a voice not only allows us to understand how they think and feel about a topic; it provides an opportunity to help frame important policy decisions that directly impact their lives. Pearson is therefore surveying students, teachers, principals, education researchers, policymakers, and parents in 23 countries regarding their perceptions of what it takes to be an effective teacher. Pearson is comparing the views expressed by these stakeholders with both current government teaching standards and research on effective teaching.

“The quality of an education system cannot exceed the quality of its teachers.”

BARBER & MOURSHED, 2007
Executive Summary

This report, the second in the series, summarizes the results of the survey conducted in India, where the government has been working to provide a high quality education to all children, yet still faces significant struggles in developing and training teachers to deliver high quality instruction. In the global report, 23 participating countries are compared not only across stakeholder groups, but by country as well.

The Survey

To learn the top qualities education stakeholders in India seek in their teachers, we administered surveys across five cities—Bangalore, Mumbai, Delhi, Kolkata, and Chennai. The stakeholder groups include:

- Students ages 15-19
- Parents of K-12 students
- K-12 teachers
- K-12 administrators
- Education researchers and policymakers

Respondents were asked to list, in their own words, between 3 and 15 qualities that they feel are most important in making an “effective” teacher and to indicate what type of teacher, by subject(s) and grade level(s), they were thinking about while creating their list. The survey did not define “effective” for respondents, other than that it meant “good,” allowing respondents to define what an effective teacher meant for themselves. We developed a coding system to categorize responses, based on prior research about competencies of effective teachers. This coding scheme was reviewed by teachers, principals, education policymakers, and researchers and revised iteratively as additional responses were coded, resulting in a final list of 32 categories.

The Most Important Qualities of Teachers in India

We found remarkable consistency in how the groups of surveyed stakeholders responded when they were asked to list between 3 and 15 of what they believed to be the most important qualities or competencies of effective teachers. The most common response across the full sample was that effective teachers need to build trusting, compassionate Relationships with their students. It was also the most common response when comparing government and private schools; primary, secondary, and senior secondary grade levels; and males and females.

The second and third most common responses across all stakeholder groups were Knowledge of Learners, and Professionalism. Knowledge of learners is a broad category that encompasses teachers’ understanding of the learners who they are teaching and their use of that knowledge to guide how they teach. Popular responses included knowing child psychology, understanding students’ backgrounds, and adapting instruction to meet the needs or interests of each student. Professionalism was expressed as being reliable, responsible and punctual.
When the responses of all stakeholder groups are combined, the other seven categories in the Top 10 qualities or competencies mentioned were in descending order:

- The ability to *Make Content and Ideas Clear* for learners
- A *Patient, Caring and Kind* personality
- Emphasis on supporting student development of *Non-Cognitive Skills* (non-academic) (e.g., 21st Century Skills)
- *Subject Matter Knowledge*
- *Teaching Skills/Pedagogical Practices*
- Ability to motivate and *Engage Learners* in their learning
- Ability to create a safe, productive learning environment (*Classroom Management*)

Eight of the Top 10 most frequent responses for each group of stakeholders were shared by all groups. Moreover, the responses of stakeholders associated with public and private schools were also remarkably similar: they shared the same Top 10 response categories. For grade levels, results were somewhat more variable but still, the Top 10 categories of responses were the same.

### Most Important Qualities of Teachers in India

<table>
<thead>
<tr>
<th>Rank</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ability to Develop Trusting, Productive Relationships</td>
</tr>
<tr>
<td>2</td>
<td>Knowledge of Learners</td>
</tr>
<tr>
<td>3</td>
<td>Professionalism</td>
</tr>
<tr>
<td>4</td>
<td>Ability to Make Ideas and Content Clear</td>
</tr>
<tr>
<td>5</td>
<td>Patient, Caring, Kind Personality</td>
</tr>
<tr>
<td>6</td>
<td>Emphasis on Developing Students’ Non-Cognitive Skills</td>
</tr>
<tr>
<td>7</td>
<td>Subject Matter Knowledge</td>
</tr>
<tr>
<td>8</td>
<td>Teaching Skills/Pedagogical Practices</td>
</tr>
<tr>
<td>9</td>
<td>Ability to Engage Students in Learning</td>
</tr>
<tr>
<td>10</td>
<td>Classroom Management</td>
</tr>
</tbody>
</table>
The categories of qualities mentioned most often across the entire sample reflect how strongly education stakeholders in India value dispositions of character (responsibility, trustworthiness) and care (relatedness, responsiveness) in their teachers. These dispositions are built into the teaching standards and expected roles of teachers in India, and there is research that supports the link between these dispositions, effectiveness, and learner outcomes. All but absent in the responses (less than 2%) were the importance of knowledge and use of assessment to evaluate and track student progress, and the ability to plan learning activities. This is particularly troublesome for educators, education researchers, and policymakers, given the central role of assessment in supporting student learning.

Implications

The greater emphasis placed on teacher dispositions, such as caring, kindness, passion, effort, and professionalism, than on teaching skills may reflect the belief that without these critical dispositions, subject knowledge and pedagogical skills are insufficient to foster effective learning. While the majority of the qualities of effective teachers identified in this survey are reflected in the government’s standards of effective teaching, this research identifies several qualities that are not mentioned: confidence and self-efficacy; intelligence and critical thinking; and challenging students and setting high expectations and believing that all children can learn. Ultimately, the survey results reaffirm the notion that, at its foundation, teaching is about trusting relationships between teachers and learners that foster learner success, as these communities define it.

Using These Results to Improve Teaching Practice in India

We recommend that the results of this survey be used to inform and guide the definition of what it means to be an effective teacher in the teaching and learning culture of India. Moreover, the results can inform discussions about teacher preparation, hiring, training, and evaluation in India, particularly in light of the problems in these areas documented by research.

Given the stakeholders’ emphasis on the importance of teacher-student relationships, teacher training programs could place greater emphasis on dispositions that stakeholders believe are essential for effectiveness, such as patience, passion, and responsibility. The programs could assess these qualities in candidates, counsel candidates on career fit and provide training to improve teaching dispositions in future teachers. As other researchers have noted, focusing on improving the social relationship that is at the heart of student learning should lead to improvements in a wide range of student outcomes in schools.
Likewise, training programs may want to emphasize the knowledge and skills that were mentioned less frequently but have been shown to be critical to effective teaching and student learning, such as classroom management and organization, updated subject knowledge, assessment of learner progress, and reflective practice.

While this research identifies many different qualities and competencies of effective teachers, we caution against using the results to generate a checklist approach under the misguided belief that there is a single winning pattern of competencies to be an effective teacher. Finally, it cannot be overstated that to be effective teachers, the work conditions and environment, first and foremost, must be well managed; school context and community culture have a profound influence on the way different teacher roles and competencies are understood, prioritized, and practiced.

“We caution against using the results to generate a checklist approach.”
Overview

What makes an effective teacher? By whose definition? With the global focus on improving the quality of the teaching workforce, identifying the qualities of an effective teacher, and the accompanying competencies required, is a critical first step. Many countries are in the process of developing or revising their teacher evaluation systems, teaching standards, pre-service teacher preparation, and/or in-service teacher training programs. To make an impact, those systems and processes will need to be based on a common understanding of what it means to be an effective teacher, with a set of standards reflecting the expected knowledge, skills, attributes, and other competencies. An important decision for preparing, training, and evaluating teachers is how the standards are developed and by whom (e.g., Bourgonje & Tromp, 2011; OECD, 2013).

Oxfam’s international study of teacher competences and standards concludes that it is “absolutely necessary that the question as to what is considered a quality educator is investigated among stakeholders” (Bourgonje & Tromp, 2011, p. 145). It is often the case that those who are most directly impacted by the set of competencies and standards—e.g., the teachers themselves, their students, students’ families, and school principals—have little say in defining which features of effective teachers are valued most.

In response to these concerns, we undertook this study to understand what key stakeholders in school systems from around the world value as the most important qualities of an effective teacher. Our focus was to compare the perspectives of the following sources regarding these qualities:

1. Key education stakeholders (students, parents, teachers, principals, education researchers and policymakers);
2. The government (reflected in national teaching standards); and
3. Research on effective teaching

This report summarizes what we found in India.¹

¹ There are 23 countries participating in this survey, listed in Table A1 in the Appendix of this report.
Our Study

We engaged the India branch of Nielsen, an international marketing research firm, to collect the survey data from the six stakeholder groups (see Figure 1). Individuals with expertise in the Indian education system reviewed the survey wording and the sampling plan.

Along with demographic items—e.g., respondent’s city, gender, school, or job experience—participants responded to two key items:

1. List a minimum of 3 and a maximum of 15 of the most important qualities of an effective (good) teacher.
2. Indicate the type of teacher you are thinking of as you create the list.

For the second part, we provided a matrix of grade levels and subject areas taught. This allows us to examine whether the list of qualities differs for different grade levels and subject areas. It is important to note: *we did not provide a list of qualities for respondents to endorse*; we asked them to list their own, in their own words, so as not to influence results.

Figure 1. Key stakeholders surveyed

![Figure 1. Key stakeholders surveyed](image-url)
The study was driven by the following set of research questions:

1. **What do different stakeholder groups regard as the most important qualities of an effective teacher?**

2. **Do these qualities differ by context?**

3. **How do these qualities align with teaching standards and research on teacher effectiveness?**

**Figure 2** summarizes the methods we used for data collection. More detailed information is in the Appendix of this report, including data collection and sampling methods (Tables A1 and A2); areas surveyed (Figure A1); and coding of survey responses (Table A4) and who we surveyed (Figures A3 – A7).

- Locals helped with survey wording
- Neilsen India developed the sampling plan
- Neilsen India conducted computer assisted telephone interviews (CATI) and in-person interviews
- Neilsen India conducted data quality checks per ESOMAR* guidelines
- Pearson trained data coders and conducted random quality checks

*Note: ESOMAR is an international organization that promotes the value of market and opinion research to inform decision-making. Their guidelines for ensuring high quality data and rigorous methodology are found at www.esomar.org
India’s Education System

India is comprised of 28 States and seven Union Territories that are divided further into Districts. Education is organized individually within each State (Bourgonje & Tromp, 2011). Much of the information about India’s education system refers to changes made since Independence (1947). Statistics from 1950–2012 indicate that the number of educational institutions has increased dramatically across India, as have enrollments. Previously, girls, the Scheduled Castes (SC), and the Scheduled Tribes (ST) had little access to education, but their proportions in schools today have significantly increased. For example, girls are nearing parity with boys in the primary grades through higher education: by Senior Secondary (XI–XII), there are 89 girls for every 100 boys (MHRD, 2014b). Gender parity has also been an issue for teachers, with women being outnumbered by men (see Figure 3).

Nationwide, education is overseen by the Ministry of Human Resource Development (MHRD) via the Department of School Education & Literacy, and the Department of Higher Education. The management systems for schools are divided into government run, government aided (private aided), and private unaided. Although private schools exist in India, what they can teach and how they operate is regulated. Since 1950, the proportion of private, unaided schools has increased while the proportion of government funded schools has decreased (MHRD, 2014a). Private, unaided schools tend to be urban and enroll more boys and upper castes (Ramachandran et al., 2006).

Grade schools in India are divided into Primary through Senior Secondary institutions. Secondary education includes two years of high school as well as vocational colleges. Figure 3 shows important statistics for India’s education system.

A high value is placed on education as a means for developing human capital in India to become globally competitive. The vision of the MHRD is to support equitable access to excellent education for all. India’s 2009 Right to Education Act declares schooling is free and compulsory for all children, ages of 6 to 14.

However, the quality of education remains problematic, particularly in the government run school system, and for historically disadvantaged groups, i.e., SC and ST students. Education statistics indicate a high drop-out rate overall (see Figure 4), and even higher rates for SC and ST students. Overall, the drop-out rate for grades I-X is 47.4% (MHRD, 2014b). For SC students, the rate is 50%, and for ST students, it’s 62.4%. Boys have a higher drop-out rate for all groups. India has the largest number of children out of school globally. Research in India documents higher teacher absenteeism in government schools (39%), which is linked to poorer student achievement (Young Lives, 2013).

Indian schools are often described as having a strong focus on academic subjects, with little room for creativity and few or no extra-curricular activities. Schooling methods are characterized as emphasizing rote learning and memorization, at the expense of independent or creative thinking. There is a strong focus on examinations from an early age. Yet, according to international assessments of student performance, India’s school system does not seem to be preparing students well in the areas they emphasize. India’s poor

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2 It is important to note that government schools are run by the central or state governments or by local bodies. Different types of schools cater to a widely different clientele.


4 For example, see http://india.angloinfo.com/family/schooling-education/school-system/
performance on PISA (Programme for International Student Assessment) in 2009 ranked it 71st of 73 nations, sparking widespread public concern about the education system. Moreover, the education system does not appear to prepare students well with 21st Century Skills.

**Teacher Preparation**

The National Council for Teacher Education (NCTE), formed in 1993, is the academic authority responsible for setting minimum qualifications for teachers in India, as well as norms and standards for both content of and admission into teacher education courses (MHRD, 2015). Once employed, teachers can continue to receive in-service training by enrolling in Teacher Training Institutions. At the national level these include the National Council of Education Research and Training (NCERT) and the National University on Educational Planning and Administration (NUEPA). Training can also occur through other organizations within the states and districts.

In 2009 the NCTE published the *National Curriculum Framework on Teacher Education (NCFTE)*, outlining teacher preparation and curriculum changes that accommodate the pedagogical shift envisioned in the 2005 *National Curriculum Framework* and the 2009 *Right of Children to Free and Compulsory Education Act (RTE).* The NCFTE outlines three broad curricular areas for teacher education:

<table>
<thead>
<tr>
<th>Curricular Areas</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations of Education</td>
<td>Learner Studies, Contemporary Studies, Educational Studies</td>
</tr>
<tr>
<td>Curriculum &amp; Pedagogy</td>
<td>Curriculum Studies, Pedagogic Studies, Assessment &amp; Evaluation Studies</td>
</tr>
<tr>
<td>School Internship</td>
<td>Develop the practice of teaching within the context of the role of the teacher and continued engagement with learners and schools while developing a range of professional teaching skills</td>
</tr>
</tbody>
</table>

The qualifications and requirements needed to become a teacher in India are dependent on grade level of focus and type of school (see Table A5, Appendix). The preparation for all teachers within their specific Education degrees, as dictated by the NCTE, seems to encompass the ideals of the NCFTE and includes courses within the three curricular areas of the common core curriculum, including a school internship (NCTE 28.11.2014 gazette).*

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Despite the NCTE qualifications, requirements do not seem to be strictly enforced. A 2013 study by Young Lives\(^8\) revealed that “while 82% of the teachers in government schools in our survey held professional teaching qualifications, only 57% of teachers in private schools were professionally qualified. Worse still, 13% of teachers in government schools and 12% in private schools held only secondary or senior secondary qualifications.” This may reflect that many schools violate the RTE Act and hire untrained and contracted individuals for less pay rather than professionally trained permanent staff. In addition, the quality of the in-service training provided to teachers via Teacher Training Institutions is highly variable. These statistics could also reflect the deficit of qualified teachers in India, providing more reasons for schools to hire unqualified individuals. As of March 2015, India was short 500,000 teachers, and over 600,000 needed training to meet the requirements of RTE.\(^9\)

**Teaching Standards**

In 2009, the NCTE published the NCFTE setting forth guidelines for teachers that are not mandatory by law. The NCFTE is largely used as the guiding framework for teaching and teacher education curriculum development across all of India (Bourgonje & Tromp, 2011).

The envisioned role of teachers and training standards are presented in Tables 3 (pp. 33 of this report) and A6 (Appendix) in this report.

**Challenges to Developing Effective Teachers in India**

It is clear from research, education policy literature, and traditional as well as social media, that confidence in India’s teachers is generally low. Concerns about teachers and teaching in India include but are not limited to:

- **Poor student academic performance in reading, math and science** on international (PISA 2009) and national (ASER) exams in both government and private schools (ASER, 2015).\(^10\)

- **Teacher absenteeism**, estimated at 25% on any given day and linked with poor student academic performance (Kingdon, & Banerji, 2009; 2010), as well as poor use of instructional time. In a study involving observations of teachers in three states, Ramachandran et al., (2004) found that only 25 minutes per day were used for actual instruction.

- **Variable preparation training**, particularly for para-teachers (limited contract teachers) who are hired to save costs and/or cover gaps due to teacher shortages, particularly in rural schools.

- **Poor subject matter knowledge.** In math, for example, only 28% of teachers could correctly solve a 4th or 5th grade area problem, and only 25% could solve a 5th grade percentage problem (Kingdon, G., & Banerji, R., 2009; 2010).

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\(^8\) Young Lives conducts international research on childhood poverty. See http://www.younglives.org.uk/


\(^10\) For example, see blog by Harvard Professor and International Development expert Lant Pritchett http://ajayshahblog.blogspot.com/2012/01/first-pisa-results-for-india-end-of.html accessed September 15, 2015
Our survey research was conducted within a wide range of teaching and learning contexts in India, some to which these concerns apply, some less so. It is important that the system in which teaching and learning takes place is considered when defining what a teacher should know and be able to do. As research demonstrates, in “well-ordered” schools, teachers can take on the many roles expected of an effective teacher, while in schools struggling for resources, strong leadership, and so on, teachers may struggle just to manage classrooms, and sometimes, to show up to work. Therefore, when asking individuals to share what they value most in their teachers, we cannot forget about the education system and the context in which these responses occur. Results of this study should be considered with that context in mind.

“\nIt is important that the system in which teaching and learning takes place is considered when defining what a teacher should know and be able to do.\n”
What We Learned

The main purpose of this survey was to elicit from a variety of key stakeholder groups what qualities they believe are most important for a teacher to be effective.\(^{11}\) Stakeholders included 212 students, 146 parents, 159 teachers, 60 principals, and 35 education researchers and policymakers, with equal representation from each of the five cities surveyed. Students were all Senior Secondary level, and most were male, lived in an urban area, and attended private/government aided schools. For parents, slightly more females responded; more than half had some sort of post-secondary schooling and sent their children to private/government aided schools. The teachers, principals, education researchers, and policymakers were generally experienced and all were trained in India. For teachers and principals, demographics were less reflective of the Indian population regarding the proportion representing government and private schools. More detailed information about each stakeholder group is in the Appendix (Figures A3–A7).

We asked survey participants to list a minimum of 3 and maximum of 15 most important qualities of an effective teacher. The median number of responses was 5 for the entire sample, and for each group except researchers and policymakers, who tended to provide more responses (median = 7).\(^{12}\)

*A description of how we developed the coding categories and a description of each can be found in Table A3 in the Appendix.*

A key question driving this study was whether there were important differences in the qualities that different groups of education stakeholders value for a teacher to be regarded as effective, as reflected in our first two research questions (page 9). Therefore, we compared the results by five stakeholder groups (we combined education researchers and policymakers due to the small numbers); government and private schools; grade levels; and gender of respondents.

\(^{11}\) Because the term “effective” implies a person who is successful at producing an intended outcome, we let the stakeholders determine what the term “effective” meant to them with respect to teachers and teaching.

\(^{12}\) On average, participants varied from the mean number of responses by about 2.
To compare what stakeholders viewed as the qualities of an effective teacher with the national teaching standards and research on teacher effectiveness, we conducted an extensive review of the research literature and India’s National Curriculum Framework on Teacher Education (NCFTE) for teachers, 2009 (NCTE, 2009). We focused on international research aimed at identifying a set of competencies that could be applied globally for K-12 teachers, and on studies conducted specifically with teachers in India.

**Top 10 Reported Qualities of An Effective Teacher**

In India, the Top 10 endorsed qualities across the stakeholder groups are illustrated in the heat map in Figure 5. The color spectrum ranges from red to green—the lowest to highest frequency of endorsement. To ensure a high response rate, we did not ask participants to prioritize or rank order the qualities they listed. Therefore, we report the frequency by which each category was endorsed, for the overall sample (“All”), and by stakeholder group. Although there were some differences between the five groups, their Top 10 lists were similar.

![Figure 5. Top 10 most important qualities of an effective teacher](note: A description of each category is found in Table A4 in the Appendix. These are the Top 10 qualities for the entire sample, with frequencies by stakeholder group. Red reflects the lowest and green the highest frequency of endorsed categories.)
How do Stakeholder Groups Compare to Each Other?

Table 1 illustrates the top 3 reported qualities of an effective teacher for the overall sample, and how those qualities were ranked, based on frequency of reporting, for each of the stakeholder groups.

<table>
<thead>
<tr>
<th></th>
<th>Relationships</th>
<th>Knowledge of Learners</th>
<th>Teaching Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students</td>
<td>1st</td>
<td>5th</td>
<td>4th</td>
</tr>
<tr>
<td>Parents</td>
<td>2nd</td>
<td>1st</td>
<td>3rd</td>
</tr>
<tr>
<td>Teachers</td>
<td>1st</td>
<td>3rd</td>
<td>2nd</td>
</tr>
<tr>
<td>Principals/</td>
<td>2nd</td>
<td>5th</td>
<td>1st</td>
</tr>
<tr>
<td>Administrators</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education Researchers and Policymakers</td>
<td>1st</td>
<td>4th</td>
<td>6th</td>
</tr>
</tbody>
</table>

Table 1. Stakeholder group rankings of top 3 qualities of an effective teacher for overall sample

Ability to Develop Trusting, Productive Relationships

It is clear from the results of this survey that stakeholders in India highly value the teacher’s ability to cultivate trusting, productive Relationships and relate to as well as mentor students. Relationships with students was reported either first or second most frequently across all five stakeholder groups. As our word cloud illustrates, understanding students, treating them equally, and helping them to overcome problems were some of the most common descriptors (see Figure 6). The importance of these relationships is further emphasized by the fifth most commonly reported category, referring to a teacher’s patient, caring, and kind disposition. As one student from Kolkata wrote, the teacher should be “Caring in nature so students feel the warmth which will help them to communication [sic] with the teacher.” Similarly, a Mumbai teacher wrote, “He must have friendly nature with each and every students [sic] so that every student in class can approach him easily.”

Researchers have documented the link between learning outcomes and strong, collaborative relationships between teachers and learners (e.g., Zins et al., 2004; Singh & Sarkar, 2012; Gelbach et al., 2012). In a study by Gelbach and colleagues (2012) with middle school students and teachers in the United States, the
researchers found that as teacher/student relationships improved, teachers interacted more frequently with the students, and students finished the semester with higher grades. Moreover, the achievement gap between under-served and well-served students was reduced by 65 percent.

Teaching is characterized as a complex relationship between the educator and the learner, where teachers “know and respond with intelligence and compassion” to learners and their learning (Rogers & Raider-Roth, 2006). Barber (1995) refers to this relationship as part of the “unknown universe” of teaching:

...that crucial part of education that is to do with the classroom interaction of learner and teacher and with the extraordinary ability of teachers to generate sparks of learning, even in the most inauspicious of circumstances (p. 76).

Bransford et al. (2007) note that teachers need to be able to build productive, trusting relationships with students to create a safe, positive and productive teaching and learning environment.

**Knowledge of Learners**

The second most commonly reported quality of an effective teacher for the entire sample was Knowledge of Learners. This is a broad category that includes knowledge of the cognitive, social, and emotional development of all learners. Such knowledge includes an understanding of how students learn at a given developmental level; how learning in a given subject area typically progresses (e.g., learning progressions or trajectories); awareness that learners have individual needs and abilities; and an understanding that instruction should be tailored to meet each learner’s needs. This broad set of competencies appears often in the research on effective teaching, underscoring the notion that...
instructional practices should align with what learning science tells us about how humans learn (e.g., Clark & Mayer, 2011; Dunlosky et al., 2013) and that “one size does not fit all” in teaching and learning (e.g., Bransford et al., 2007; Klem & Connell, 2004; Leu, 2005; OECD, 2013; Bourgonje & Tromp, 2011).

In India, there were numerous comments that teachers needed to attend to the learning needs of all, including the “weak” or “dull” students, and ensure their progress. Respondents also frequently mentioned that teachers needed to “clear the basics,” or ensure mastery of the foundational knowledge, for all students, before moving forward. Figure 7 illustrates survey responses regarding this category.

**Professionalism**

Professionalism was the third most frequently reported characteristic of an effective teacher for the entire sample, and valued most by the educators (principals and teachers) in this study. This category has to do with workplace practices and responsibility as a professional (e.g., being respectful and honest). Being disciplined, polite, and punctual were some of the most common descriptors used, as well as knowledge of the rules and regulations for teachers.

In a study comparable to ours, Ramachandran et al. (2006) asked educators in Rajasthan to define a motivated teacher. They found that administrators valued obedience and predictability: Low absenteeism; discipline; record keeping; collection and supply of educational data; utilization of funds; and providing learning exercises and grading them were most valued. For parents and community members, a teacher who came to school regularly, stayed for the required amount of time, did not use excessive force (beating, abusive language), and taught with enthusiasm was regarded highly. The focus of these and our survey results on teacher professionalism is notable in light of documented problems in India’s education system including high teacher...
absenteeism and poor use of instructional time, both of which have been linked to poor student learning (e.g., Kingdon & Banerji, 2009; 2010; Ramachandran, 2004). The word cloud (Figure 8) illustrates the features for this category.

Figure 8. Teacher’s professionalism

She is punctual during the time of her lecture & never gets angry.
Student, Mumbai

Regular(ly) attending the classes.
Parent, Delhi

...equality to be instilled in students by being punctual herself always.
Teacher, Kolkata

The next most important qualities making up the Top 10 list for the sample show more variability across the groups (see Figure 9). These qualities include sets of skills and knowledge specific to teaching as well as more general traits important for those in helping professions. Figure 9 illustrates how each of the five stakeholder groups compares on these seven qualities.

Figure 9. Top 4-10 qualities of an effective teacher
Ability to Make Ideas and Content Clear

The fourth most commonly reported quality across the entire sample was the ability to Make Ideas and Content Clear (see Figure 10). This broad area addresses a teacher’s ability to make ideas and/or material clear and easy to understand, including orally and in written form. In the research literature, this is an essential skill for all teachers (e.g., Bransford et al., 2007; Harley et al., 2000). Of all the stakeholder groups, students reported this competency most frequently. Figure 10 illustrates the features of this category.

Patient, Caring, Kind Personality

“Patient, Caring,” defined as personality characteristics related to being a compassionate person, particularly with learners, is the fifth most frequently reported quality for the full sample (third for principals and students). There is a significant body of research indicating that teacher dispositions are strongly related to student learning and development (Schulte et al., nd.). Several key dispositions include a caring attitude and sensitivity to student differences. There is also research on the impact of work environment, dispositions and burnout in teachers. Kokkinos (2007) found that work environment stressors, particularly management of student misbehavior and time constraints, were associated with emotional exhaustion and burnout in primary school teachers. In such situations, teachers are more likely to be emotionally detached and to become more cynical toward their students in order to avoid subsequent stress. However, dispositions such as sociability were found to function as buffers. Figure 11 illustrates respondents’ ideas in this category.
Emphasis on Student Non-Cognitive Skills

The teacher’s emphasis on students’ Non-Cognitive Skills and Subject Matter Knowledge were reported at about equal frequency across the sample. Non-cognitive skills was mentioned most frequently by teachers. This category focuses on teaching the skills, attitudes and beliefs required to be successful in college and/or a career, and career guidance for learners. An emerging body of research focuses on what are commonly called “non-cognitive skills” and/or “21st century skills” and their link to academic and career success (Lipnevich & Roberts, 2012). A popular response in this category was that teachers should offer students “extra-curricular” support beyond the traditional academic subjects (see Figure 12).
Subject Matter Knowledge

Subject Matter Knowledge includes expertise in a given content or subject area as well as knowledge of the curriculum, learning objectives and/or standards in that content area (e.g., Leu, 2005; Bransford et al., 2007; CEPPE, 2013). Research supports the need for both subject matter and curriculum knowledge for effective teaching, along with strong pedagogical content knowledge. In fact, research linking teacher subject matter knowledge in math to student learning lead the National Mathematics Advisory Panel in the United States to conclude:

Teachers must know in detail and from a more advanced perspective the mathematical content they are responsible for teaching and the connections of that content to other important mathematics, both prior to and beyond the level they are assigned to teach (U.S. Department of Education, 2008, p. 38).

Concern about India’s teachers’ subject matter knowledge, particularly in math, has been documented in popular media as well as in research. This is an area of particular concern in rural, poor states, where it has been tied to poor student academic performance (e.g., see Kingdon & Banerji, 2010). Subject matter knowledge was most frequently reported by education researchers and policymakers (it was 2nd most frequent of their Top 10). Figure 13 highlights the features of responses in this category.

“SUBJECT MATTER KNOWLEDGE”

Must be a master in a particular field.
Student, Kolkata

Teacher should have subject knowledge in depth.
Teacher, Bangalore

Complete subject knowledge regarding topics or subject he loves to teach.
Parent, Mumbai

Figure 13. Teacher’s subject matter knowledge
Teaching Skills/Pedagogical Practice

The Teaching Skills category reflects specific teaching/pedagogical practices or methods, including those related to specific subject matter, and is sometimes referred to as general pedagogical knowledge (e.g., Turner-Bissett, 1999). There is a great deal of research on how specific teaching practices improve student learning. There are multiple reports from a variety of organizations globally that document research-supported instructional practices that support student learning. Practices such as collaborative learning, peer-instruction, problem-based learning, and other active learning strategies are some examples.

Although some respondents included specific teaching methods for a given content area (e.g., math), most were general statements about teaching practices, such as providing clear or “practical” examples to help students understand the material, or “clearing the doubts” of students before moving on. In fact, responses from the educators were often general and unsophisticated in terminology, such as “don’t just read books,” and “clear the doubts of all learners” before moving on. Interestingly, this category was most mentioned by students, and least mentioned by education researchers and policymakers, as well as principals. Figure 14 highlights the features of responses in this category.

Figure 14. Teaching skills/pedagogical practices

“TEACHING SKILLS/PEDAGOGY”

When the class teacher teaches lesson, it stays longer in the student’s mind if the same is explained along with a story.
Teacher, Bangalore

Teacher should strive to make children excel in maths and teach them simple ways of solving problems.
Parent, Chennai

After completing the topics he asks each every [sic] student questions about the topics.
Student, Mumbai
**Engaging Students in Learning**

The ninth most frequently mentioned quality across all stakeholders is the teacher’s *Ability to Engage and Motivate Students to Learn.* Researchers talk about three types of engagement that are required for students to learn: cognitive, emotional, and behavioral (Fredricks, 2014). Research-supported ways to increase student engagement include making the learning activities meaningful for the students; helping students to believe they can master the learning; nurturing students’ sense of control over their own behaviors and goals; having students work collaboratively to learn; building positive teacher-student relationships; and focusing on mastery learning instead of grades and exam scores (James, 2014).

Responses primarily focused on making content interesting and the teacher’s ability to motivate students to learn. *Figure 15* highlights the features mentioned most in this category.

---

**Figure 15. Teacher’s ability to engage students in learning**

---

“ENGAGING LEARNERS”

Involving student into different ideas of subject to create interest.
Teacher, Kolkata

The teacher should be able to get the class completely involved.
Student, Delhi

Teacher should know how to make the subject interesting.
Parent, Kolkata
Managing the Classroom Learning Environment

The tenth most frequent, most valued quality of an effective teacher across the entire sample is categorized as *Classroom Management*. Research describes this category as the ability to manage classroom routines, student behavior, and time to create a productive learning environment in which learning time is maximized (e.g., Shulman, 1986; Bransford et al., 2007; Bourgonje & Tromp, 2011). These are critical teaching skills that are directly linked to student learning. The extent to which teachers can create a productive learning environment dictates the students’ opportunity to learn in that environment. Chaotic, disruptive environments reduce the instructional time, and therefore, the opportunity to learn.

In this survey sample, many of the responses had to do with the teacher managing student behavior. Common sentiments included that the teacher should be strict and maintain student discipline, but they should not scold or beat the students. These results are consistent with a survey conducted in India, where parents characterized a “motivated” teacher as one who did not beat or scold the students (Ramachandran, 2006). Figure 16 highlights the most common responses in this category.

**Figure 16. Classroom management**

“CLASSROOM MANAGEMENT”

- **Strict and firm when required.**  
  Parent, Kolkata

- **Teachers should maintain the decorum of students in class.**  
  Teacher, Bangalore

- **They [teachers] should strictly guide them [students] in doing their daily activities.**  
  Student, Chennai
Do Responses Differ by Stakeholder Group?

The first research question driving this study was whether the five different stakeholder groups differed in the qualities they valued most in an effective teacher. Figures 5 and 9 show how stakeholder groups compare on the Top 10 list for the entire sample, but not on their own Top 10 lists. Figure 17 below compares the Top 10 most valued qualities for each stakeholder group. Notably, the categories in the Top 10 list for the entire sample apply to each of the five group’s Top 10 list as well, with few exceptions. Researchers and policymakers also value an Always Learning mindset for the teacher (8th on their list) as well as the teacher’s Qualifications (tied for 10th on their list, with Classroom Management). Always Learning refers to a continuous improvement mindset, in which individuals are constantly evaluating their own practice and looking for ways to improve. This type of professional mindset is associated with expertise in a wide range of fields and not limited to teaching. Qualifications refers to a teacher’s academic degrees and job preparation. No other stakeholder group had these two qualities in their Top 10 list. Additionally, Teaching Skills (described in Figure 14) was in the Top 10 list of for all stakeholder groups but the researchers and policymakers.

<table>
<thead>
<tr>
<th>Research &amp; Policymakers</th>
<th>%</th>
<th>Parents</th>
<th>%</th>
<th>Principals</th>
<th>%</th>
<th>Students</th>
<th>%</th>
<th>Teachers</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships</td>
<td>14.6</td>
<td>Know Learners</td>
<td>16.0</td>
<td>Professional</td>
<td>17.1</td>
<td>Relationships</td>
<td>15.1</td>
<td>Relationships</td>
<td>15.3</td>
</tr>
<tr>
<td>Subject Matter</td>
<td>8.9</td>
<td>Relationships</td>
<td>14.4</td>
<td>Relationships</td>
<td>13.6</td>
<td>Make Ideas Clear</td>
<td>10.7</td>
<td>Professional</td>
<td>10.0</td>
</tr>
<tr>
<td>Make Ideas Clear</td>
<td>7.9</td>
<td>Professional</td>
<td>9.8</td>
<td>Patient, Caring</td>
<td>10.2</td>
<td>Patient, Caring</td>
<td>9.4</td>
<td>Know Learners</td>
<td>9.8</td>
</tr>
<tr>
<td>Know Learners</td>
<td>7.3</td>
<td>Make Ideas Clear</td>
<td>8.8</td>
<td>Make Ideas Clear</td>
<td>7.4</td>
<td>Professional</td>
<td>8.6</td>
<td>Patient, Caring</td>
<td>7.9</td>
</tr>
<tr>
<td>Engaging</td>
<td>7.3</td>
<td>Patient, Caring</td>
<td>6.9</td>
<td>Know Learners</td>
<td>6.4</td>
<td>Know Learners</td>
<td>7.8</td>
<td>Non-Cognitive Skills</td>
<td>7.1</td>
</tr>
<tr>
<td>Professional</td>
<td>6.3</td>
<td>Non-Cognitive Skills</td>
<td>5.6</td>
<td>Subject Matter</td>
<td>6.4</td>
<td>Teaching Skills</td>
<td>7.2</td>
<td>Make Ideas Clear</td>
<td>6.5</td>
</tr>
<tr>
<td>Non-Cognitive Skills</td>
<td>6.0</td>
<td>Engaging</td>
<td>5.4</td>
<td>Non-Cognitive Skills</td>
<td>5.4</td>
<td>Subject Matter</td>
<td>5.6</td>
<td>Teaching Skills</td>
<td>5.9</td>
</tr>
<tr>
<td>Always Learning</td>
<td>6.0</td>
<td>Class Mgt</td>
<td>5.1</td>
<td>Engaging</td>
<td>4.6</td>
<td>Class Mgt</td>
<td>5.4</td>
<td>Engaging</td>
<td>5.9</td>
</tr>
<tr>
<td>Patient, Caring</td>
<td>4.7</td>
<td>Subject Matter</td>
<td>4.8</td>
<td>Teaching Skills</td>
<td>3.8</td>
<td>Non-Cognitive Skills</td>
<td>5.3</td>
<td>Subject Matter</td>
<td>5.8</td>
</tr>
<tr>
<td>Class Mgt</td>
<td>4.1</td>
<td>Teaching Skills</td>
<td>4.7</td>
<td>Class Mgt</td>
<td>3.6</td>
<td>Engaging</td>
<td>3.0</td>
<td>Class Mgt</td>
<td>3.7</td>
</tr>
<tr>
<td>Qualifications</td>
<td>4.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 16. Top 10* qualities of an effective teacher by stakeholder group

Note: We provide the Top 11 for researchers and policymakers, who reported two categories equally frequently in tenth place.
Do Responses Differ by Context?

The second research question driving this study was whether the qualities most valued in an effective teacher differed by context. We compared responses by the type of school (Government and Private), grade level (primary, secondary) and subject matter. All stakeholder groups except education researchers and policymakers indicated whether they or their children went to public (government funded) or private schools. Figure 18 compares the Top 10 qualities valued by those from government and private schools. Categories are color coded for ease of comparison.

![Figure 18. Top 10 qualities by type of school](chart)

Note: Categories are color coded for ease of comparison. Education researchers and policymakers were not asked to indicate government vs. private school and therefore their data are not included. Private includes aided and unaided private schools.
## Figure 19. Top 10 reported qualities by grade level

<table>
<thead>
<tr>
<th>Grade</th>
<th>Primary (N=96; 16%)</th>
<th>%</th>
<th>Secondary (N=236; 38%)</th>
<th>%</th>
<th>Senior Secondary (N=280; 46%)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships</td>
<td>16.4</td>
<td>%</td>
<td>Relationships</td>
<td>16.2</td>
<td>Relationships</td>
<td>13.2</td>
</tr>
<tr>
<td>Knowledge of Learners</td>
<td>11.6</td>
<td>%</td>
<td>Knowledge of Learners</td>
<td>9.5</td>
<td>Professional</td>
<td>10.9</td>
</tr>
<tr>
<td>Professional</td>
<td>10.2</td>
<td>%</td>
<td>Make Ideas Clear</td>
<td>9.3</td>
<td>Knowledge of Learners</td>
<td>10.0</td>
</tr>
<tr>
<td>Non-Cognitive Skills</td>
<td>7.4</td>
<td>%</td>
<td>Professional</td>
<td>8.6</td>
<td>Patient, Caring</td>
<td>9.1</td>
</tr>
<tr>
<td>Engaging</td>
<td>7.1</td>
<td>%</td>
<td>Patient, Caring</td>
<td>8.0</td>
<td>Make Ideas Clear</td>
<td>8.9</td>
</tr>
<tr>
<td>Make Ideas Clear</td>
<td>5.9</td>
<td>%</td>
<td>Subject Knowledge</td>
<td>6.3</td>
<td>Subject Knowledge</td>
<td>6.0</td>
</tr>
<tr>
<td>Patient, Caring</td>
<td>5.7</td>
<td>%</td>
<td>Teaching Skills</td>
<td>6.2</td>
<td>Non-Cognitive Skills</td>
<td>5.9</td>
</tr>
<tr>
<td>Teaching Skills</td>
<td>5.5</td>
<td>%</td>
<td>Non-Cognitive Skills</td>
<td>5.3</td>
<td>Teaching Skills</td>
<td>5.2</td>
</tr>
<tr>
<td>Class Mgt</td>
<td>5.2</td>
<td>%</td>
<td>Class Mgt</td>
<td>5.1</td>
<td>Engaging</td>
<td>4.4</td>
</tr>
<tr>
<td>Subject Knowledge</td>
<td>3.8</td>
<td>%</td>
<td>Engaging</td>
<td>4.4</td>
<td>Class Mgt</td>
<td>4.0</td>
</tr>
</tbody>
</table>

What We Learned

As Figure 18 illustrates, government and private schools shared the same Top 10 responses. For grade levels, results were somewhat more variable. Figure 19 shows the results for the Top 10 categories across the sample, by grade level. Teacher focus on developing students’ Non-Cognitive Skills and Engaging Students in Learning were more frequently reported for primary school teachers, whereas a Patient, Caring personality and Make Ideas Clear was reported more frequently for secondary teachers.

We were unable to make meaningful comparisons between content areas taught due to the high number of content areas and low number of responses representing them, even after combining conceptually similar areas. In the global report, where data are available from all 23 countries, the sample sizes make it possible to make these comparisons.

We also compared the responses of males and females because in India, gender parity in teaching has been an issue. Interestingly, the Top 10 list remains the same for both genders and they both report the same qualities in their top five and bottom five of their Top 10 lists (see Figure 20).

<table>
<thead>
<tr>
<th>Female (N=277; 45%)</th>
<th>%</th>
<th>Male (N=335; 55%)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships</td>
<td>15.4</td>
<td>Relationships</td>
<td>14.3</td>
</tr>
<tr>
<td>Professional</td>
<td>9.7</td>
<td>Knowledge of Learners</td>
<td>10.5</td>
</tr>
<tr>
<td>Knowledge of Learners</td>
<td>9.3</td>
<td>Make Ideas Clear</td>
<td>10.1</td>
</tr>
<tr>
<td>Patient, Caring</td>
<td>8.6</td>
<td>Professional</td>
<td>10.1</td>
</tr>
<tr>
<td>Make Ideas Clear</td>
<td>6.9</td>
<td>Patient, Caring</td>
<td>7.8</td>
</tr>
<tr>
<td>Teaching Skills</td>
<td>6.5</td>
<td>Subject Knowledge</td>
<td>5.8</td>
</tr>
<tr>
<td>Non-Cognitive Skills</td>
<td>6.3</td>
<td>Non-Cognitive Skills</td>
<td>5.6</td>
</tr>
<tr>
<td>Subject Knowledge</td>
<td>5.9</td>
<td>Teaching Skills</td>
<td>4.9</td>
</tr>
<tr>
<td>Engaging</td>
<td>4.9</td>
<td>Engaging</td>
<td>4.6</td>
</tr>
<tr>
<td>Class Mgt</td>
<td>4.7</td>
<td>Class Mgt</td>
<td>4.5</td>
</tr>
</tbody>
</table>

Figure 20. Top 10 qualities by gender
The biggest differences in most valued qualities occurred between the five sites we surveyed. **Figure 21** shows how their Top 10 lists compare.

<table>
<thead>
<tr>
<th></th>
<th>Bangalore (N=123)</th>
<th>%</th>
<th>Chennai (N=134)</th>
<th>%</th>
<th>Mumbai (N=122)</th>
<th>%</th>
<th>Delhi (N=115)</th>
<th>%</th>
<th>Kolkata (N=118)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships</td>
<td>14.3</td>
<td>10.6</td>
<td>15.2</td>
<td>8.8</td>
<td>14.9</td>
<td>7.8</td>
<td>10.5</td>
<td>5.9</td>
<td>11.9</td>
<td>7.8</td>
</tr>
<tr>
<td>Teaching Skills</td>
<td>20.5</td>
<td>15.2</td>
<td>15.8</td>
<td>8.1</td>
<td>12.3</td>
<td>11.9</td>
<td>5.7</td>
<td>11.9</td>
<td>9.4</td>
<td>7.8</td>
</tr>
<tr>
<td>Make Ideas Clear</td>
<td>5.7</td>
<td>5.7</td>
<td>7.4</td>
<td>5.7</td>
<td>6.5</td>
<td>5.7</td>
<td>4.7</td>
<td>5.7</td>
<td>4.6</td>
<td>5.7</td>
</tr>
<tr>
<td>Class Mgt</td>
<td>4.8</td>
<td>6.0</td>
<td>5.7</td>
<td>4.2</td>
<td>4.7</td>
<td>4.2</td>
<td>4.7</td>
<td>4.2</td>
<td>4.8</td>
<td>4.7</td>
</tr>
<tr>
<td>Engaging</td>
<td>4.4</td>
<td>4.1</td>
<td>4.0</td>
<td>4.1</td>
<td>3.4</td>
<td>4.1</td>
<td>3.4</td>
<td>4.1</td>
<td>3.9</td>
<td>4.1</td>
</tr>
<tr>
<td>Subject Knowledge</td>
<td>3.8</td>
<td>3.7</td>
<td>3.7</td>
<td>3.2</td>
<td>3.7</td>
<td>3.2</td>
<td>3.7</td>
<td>3.2</td>
<td>2.6</td>
<td>3.2</td>
</tr>
<tr>
<td>Dedication</td>
<td>2.4</td>
<td>1.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
<td>2.5</td>
</tr>
</tbody>
</table>

**Figure 21.** Top 10 qualities by city
Do Survey Responses Align with Teaching Standards and Research?

The third research question driving this study was whether stakeholders’ values regarding effective teachers align with India’s teaching standards and how survey responses and teaching standards compare to what research tells us about effective teachers and teaching. Research on competencies of effective teachers is broad and often country-specific; therefore, we focused primarily on studies identifying competencies to be applied globally to grade school (K-12) level teachers.

India’s teaching standards are essentially a set of guidelines, published by NCTE (2009), that are designed to share a vision of the teacher’s role. They include statements completing the phrase “We need teachers who...” Table 2 aligns these statements with our survey results.

### India’s NCFTE 2009 Vision of Teacher Roles: “India needs teachers who...”

<table>
<thead>
<tr>
<th>India's NCFTE 2009 Vision of Teacher Roles: “India needs teachers who...”</th>
<th>Survey Results</th>
</tr>
</thead>
</table>
| Care for children and love to be with them (5, 11); understand children within social, cultural & political contexts (24); develop sensitivity to their needs and problems (11, 12); treat all children equally (5, 11). | 5 – Patient, Caring personality  
11 – Ability to build productive, trusting relationships, relate to, & mentor students  
12 – Knowledge of how students learn & develop; personalize learning  
24 – Cultural competence; respect for diversity |
| Perceive children not as passive receivers of knowledge (12, 20); augment their natural propensity to construct meaning (6, 12); discourage rote learning (20); make learning a joyful, participatory & meaningful activity (6). | 6 – Engaging; Motivating students to learn  
12 – See above  
20 – Pedagogy knowledge, skills & methods |
| Critically examine curriculum & textbooks (1, 7); contextualize curriculum to suit local needs (12, 24). | 1 – Subject matter knowledge  
7 – Ability to plan lessons; organized  
12 – See above  
24 – See above |
| Do not treat knowledge as a ‘given’, embedded in the curriculum and accepted without question (14, 16). | 14 – Mindset & passion for continuous learning & challenging oneself to improve  
16 – General intelligence; analytical & critical thinker |
| Organize learner-centred, activity-based, participatory learning experiences-play, projects, discussion, dialogue, observation, visits (12, 20) and learn to reflect on their own practice (14). | 12 – See above  
14 – See above  
20 – See above |
| Integrate academic learning with social & personal realities of learners (12, 20), responding to diversities in the classroom (24). | 12 – See above  
20 – See above  
24 – See above |
| Promote values of peace, democratic way of life, equality, justice, liberty, fraternity, secularism & zeal for social reconstruction (11, 19, 24, 28, 31). | 11 – See above  
19 – Religious, spiritual, &/or moral person  
24 – See above  
28 – Focus on political purpose of teaching & education in one’s country  
31 – Prepare students for the future, for college & career success, 21st Century Skills |

Note: Numbers reflect the coding numbers from Table A4 in the Appendix.
India’s 2009 NCFTE Guidelines for Teacher Preparation “This can only be achieved...with opportunities to...”

<table>
<thead>
<tr>
<th>Understand the self and others, one's beliefs, assumptions, emotions &amp; aspirations (11, 12, 14); develop the capacity for self-analysis, self-evaluation, adaptability, flexibility, creativity &amp; innovation (3, 14).</th>
<th>Survey Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 – Creative, innovative</td>
<td></td>
</tr>
<tr>
<td>11 – Ability to build productive, trusting relationships, relate to, &amp; mentor students</td>
<td></td>
</tr>
<tr>
<td>12 – Knowledge of how students learn &amp; develop; personalize learning</td>
<td></td>
</tr>
<tr>
<td>14 – Mindset &amp; passion for continuous learning &amp; challenging oneself to improve</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Develop habits &amp; the capacity for self-directed learning; have time to think, reflect, assimilate &amp; articulate new ideas (14); be self-critical (14) &amp; to work collaboratively in groups (18).</th>
<th>Survey Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>14 – See above</td>
<td></td>
</tr>
<tr>
<td>18 – Collaborator; ability to get along with colleagues</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Engage with subject content (1), examine disciplinary knowledge &amp; social realities; relate subject matter with the social milieu of learners (12, 20) &amp; develop critical thinking (31).</th>
<th>Survey Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 – Subject matter knowledge</td>
<td></td>
</tr>
<tr>
<td>12 – See above</td>
<td></td>
</tr>
<tr>
<td>20 – Pedagogy knowledge, skills &amp; methods</td>
<td></td>
</tr>
<tr>
<td>31 – Prepare students for the future, for college &amp; career success, 21st Century Skills; develop the whole child</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Develop professional skills in pedagogy (20), observation, documentation, analysis &amp; interpretation (13), drama, craft, story-telling &amp; reflective inquiry (14, 20).</th>
<th>Survey Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 – Knowledge &amp; use of assessment</td>
<td></td>
</tr>
<tr>
<td>14 – See above</td>
<td></td>
</tr>
<tr>
<td>20 – See above</td>
<td></td>
</tr>
</tbody>
</table>

Note: Numbers reflect the coding numbers from Table A4 in the Appendix.

*a* "This" refers to the teacher roles in the previous Table 3

### Table 3. Competencies for effective teachers aligned with survey results

India’s Right of Children to Free and Compulsory Education Act, 2009 also specifies the duties of and expectations for teachers (see Table A6 in the Appendix).
All stakeholder groups endorsed the importance of teachers building trusting relationships and relating well to students.

The key research questions driving this study were

1. whether there were important differences in the qualities that different groups of education stakeholders value for a teacher to be regarded as effective;

2. whether context made a difference in the qualities most valued; and

3. the extent to which the qualities most valued aligned with the national teaching standards and with research on effective teachers and effective teaching.

Regarding research questions 1 and 2, we hypothesized that we would find important differences between what is valued by stakeholder groups (parents, students, etc.); for primary and secondary level teachers; for government and private school teachers; and perhaps, by males and females. However, we were surprised by the consistency in findings. All stakeholder groups endorsed the importance of teachers having trusting Relationships and relating well to students; only in Delhi was this critical quality reported less than first or second most frequently. Moreover, the Top 10 lists for each group we compared—five stakeholder groups, government and private schools, grade levels, and gender—were remarkably similar; in nearly all cases, the categories were the same, although they varied in frequency of reporting.
Regarding research question 3, in general, we found that the survey responses were aligned quite well to India’s teaching standards and to research on effective teachers and effective teaching practices. Researchers note that in order to support student learning, teachers need a complex array of knowledge and skills, based on what we know about how humans learn. Moreover, these requirements are changing in light of the types of knowledge and skills that nations and today’s learners require to survive and succeed (Darling-Hammond, 2006; Greenhill, 2010; OECD, 2013). Bransford et al. (2007) broadly define the areas of knowledge and attending skills required for effective teachers as:

- Knowledge of learners and how they learn and develop within social contexts.
- Knowledge of subject matter and curriculum goals.
- Knowledge of teaching, including subject matter, diverse learners, use of assessment, and classroom management.

To that broad list, 21st Century Knowledge and Skills in Educator Preparation and other reports have added knowledge and use of technology, as well as broader dispositions and professional skills including (but not limited to) general intelligence and analytical thinking; strong communication skills; leadership; collaborative learning; and continuous reflection on one’s own practice to learn and improve (Greenhill, 2010).

In our study in India, it was surprising to find that a small percentage (< 10%) of responses from the education professionals—teachers, principals, education researchers and policymakers—included specific knowledge and skills that are well understood to enhance student learning. For example, only 5.8% of responses mentioned anything related to the teacher’s subject matter and curriculum knowledge; only 5.6% mentioned features related to teaching/pedagogical skills and practices; 1.9% included use of assessment to monitor student progress; and 0.6% addressed the ability to plan learning activities. Moreover, the responses from educators often used unsophisticated language regarding specific teaching skills, failing to use the terminology of their profession.

It is unclear if the infrequent endorsement of these categories by educators in this study is due to lack of training in or familiarity with at least some of these areas, or for other reasons. It is clear from research, education policy literature, and traditional as well as social media that confidence in some of these teacher competencies in India is generally low. As noted earlier in this report, concerns about teachers and teaching in India include poor subject knowledge; teacher absenteeism; poor use of instructional time; and variable training.

These concerns highlight the importance of strong teacher preparation and ongoing professional development in the knowledge and skills required to support and enhance student learning.

There were several areas where the survey results did not align with the teaching guidelines, roles and expectations in India as outlined in the
What Surprised Us

aforementioned NCTE documents. These survey responses, although low in frequency (< 1.0% of the total responses), do align with what research tells us are important competencies of an effective teacher and highlight potential gaps in teacher training in India.

Qualities mentioned in the survey but not found in India’s teaching guidelines include:

- Focusing on the learning process itself, especially Deeper Learning (32) of content. India’s school system is known for focusing heavily on exams, and far more survey respondents, from all stakeholder groups, mentioned helping students score well on exams (e.g., offering regular practice).

- Providing a Challenging, rigorous curriculum (27) for all students, in the belief that all are capable of learning (e.g., Creemers, 1996; Sammons, 2006). India’s documents address adapting instruction to meet the needs of each learner, but they don’t directly address establishing high expectations for all learners, or the belief that all children can learn, both of which reflect dispositions of effective teachers (e.g., Usher et al., 2003).

- The ability to integrate Technology (4) into instruction is not directly addressed in the aforementioned documents. Ability to integrate technology into teaching and learning is considered to be a necessary skill for 21st century educators and learners (e.g., Greenhill, 2010).

- Teacher contribution to the profession and taking on Leadership (10) roles. The importance of teacher leadership for professional growth is well documented (e.g., Darling-Hammond, 2006; Greenhill, 2010; OECD, 2013).

- Fluency in English (23). Various sources suggest that the majority of the population is not fluent, yet the language of business and government in India is English. Private schools are taught in English and government schools are attempting to do the same, despite a lack of qualified teachers (Aula, 2014).

Implications

In education research and policy circles, India’s education system is characterized as in need of significant improvements, particularly in government schools and rural areas. Poor student performance on international as well as national tests indicate that a large percent of students are not able to compete globally in reading, math or science knowledge and skills. As a result, teachers are frequently blamed, and there is a “crisis of confidence” in India’s teachers (Ramachandran et al., 2006). Indeed, low teacher motivation is characterized as a national issue.

In light of these issues, it is heartening that the surveyed education stakeholders seem to value teacher dispositions of care (Relationships; Patient, Caring) and character (Professionalism) first and foremost, along with teaching-specific knowledge and skills. The importance of these dispositions may reflect an underlying belief that without them, a teacher’s subject matter knowledge and

---

13 For example, see http://blog.dictionary.com/china-india/ for an estimate of English proficiency in India.
pedagogical skills will do little to help students learn and succeed. Research tells us that when teachers create a safe and supportive learning environment, students are more motivated and consistently engaged. Creating a climate where students feel cared for, that they belong, and where they are free to take risks and make mistakes as they learn new material, is critical for productive learning to occur. As Figure 22 illustrates, it may be that these dispositions serve as a foundation for effective teaching—i.e. the base of the pyramid—supporting the requisite professionalism and teaching-specific knowledge and skills. In combination, these three domains of teacher qualities or competencies cultivate productive student learning.

In the Young Lives study in India, Singh and Sarkar (2012) similarly conclude that “what the teacher does and believes, rather than what the teacher knows, is what ultimately counts for their students.”

In a study comparable to ours, researchers asked educators in Rajasthan to define a motivated teacher, and concluded from their results:

Children were nowhere in the picture, nor were the teaching and learning process. Learning was incidental to the mountain of data they gathered and fed into the system. Enrollment, attendance, mid-day-meal distribution and participation in training programmes and workshops... had become indices of education (Ramachandran et al., 2006, pp. 33–34).
Data from our study paint a different picture about the hopes and aspirations of education stakeholders in India. In our study across five major cities in India, children, as well as the teaching and learning process, were by no means incidental. All stakeholder groups emphasized the importance of caring, supportive relationships with teachers, understanding the needs of the learners, and making ideas and content clear for learners to understand. These dispositions are built into India’s teacher preparation and standards guidelines, and research supports the link between these critical dispositions, teacher effectiveness, and learner outcomes.

“Creating a climate where students feel cared for, that they belong, and where they are free to take risks and make mistakes as they learn new material, is critical for productive learning to occur.”
What Our Findings Mean for India

Bourgonje and Tromp (2011) argue that it is critical to formulate a clear definition of teacher effectiveness to meet the goal of placing an effective teacher in every classroom. “Effectiveness” in any field is defined as the ability to produce expected outcomes. The results from this survey can serve as a starting point for developing a shared definition of valued outcomes and therefore, effectiveness as it relates to teaching. The data reflect what stakeholders value most regarding the qualities of an effective teacher. Research on effective teaching supports the majority of these values, and for the most part, results align with the teaching roles envisioned in NCFTE 2009 and the Right of Children to Free and Compulsory Education Act, 2009. This is a good starting point.

The emphasis of Indian stakeholders on the ability of teachers to build productive, trusting relationships and serve as a mentor with students, suggests important areas for teacher preparation, professional growth, and evaluation. Similar statements can be made for other sets of knowledge and skills valued by the survey respondents and supported by research for improving student learning. Low endorsement rates by education professionals (teachers, principals, education researchers and policymakers) regarding critical knowledge and skills for teachers also suggests potential areas in need of emphasis for training and development. Some potential areas for teacher training, development and evaluation include:

- **Dispositions:** Focus on what are often referred to as “non-cognitive” factors, including social-emotional intelligence, to support teachers in building trusting relationships and a productive learning environment to enhance student learning. These skills have been linked to academic achievement and career success, and globally, business leadership training is now incorporating a focus on these kinds of skills to build successful leaders. In a post in The Atlantic, popular author and educator Jessica Lahey (2014) notes that “if we can figure out how to improve the social relationship that is at the heart of much of students’ learning, we should be able to improve a vast constellation of student outcomes in schools.”

"The value of our study is to use these results to shape critical discussions around reviewing teacher training, hiring, and evaluation."
What Our Findings Mean for India

- **Content knowledge**: Ongoing, teacher-driven, collaborative, often "just-in-time" training to update relevant subject-matter knowledge. Materials can be obtained online, from peers, and/or from external subject knowledge experts such as scientists, engineers, etc. Knowledge transfer from the training to the classroom can be supported by a subject matter expert coach. Research tells us that when teachers work with coaches, they implement 95% of what they learn in training sessions, whereas those who do not work with coaches implement about 10% of the training (Joyce & Showers, 2002).

- **Pedagogy**: Training in specific pedagogical practices aligned with how humans learn and develop, supported by research (when available), and driven by specific learning goals and objectives. Knowledge transfer can be supported by peer observations and modeling by a subject-matter expert coach. Training in learner-centered, active learning strategies can help teachers shift focus from rote learning and exam scores to deeper learning and knowledge transfer.

- **Planning instruction/learning activities**: Training on how learners learn specific content, e.g., common learning sequences or progressions, and common misconceptions students hold in specific content areas. Effective training in these areas can help teachers to improve instructional planning; develop effective learning activities aligned to individual student needs; understand how to monitor student progress; and focus on the learning process versus passing exams. Lesson planning should be collaborative, with teachers in job-alike subject areas, and vertical (i.e. with teachers of lower and higher grade levels in the same subject areas).

- **Assessment**: Training in the use of assessment for monitoring learner progress and facilitating learner control of their learning. Assessments aligned with the aforementioned learning progressions will help to integrate lesson planning and instructional practices. Research suggests that only 15% of teachers in government schools in India review student work (Young Lives, 2013), and providing students with ongoing feedback about their progress is linked to student achievement.

- **Features of teacher training**: Training that is teacher-driven, collaborative, job-embedded (versus single workshops, a.k.a. “one and done”), and supported by coaching or mentoring are research-supported features of effective training for improving practice. Training that emphasizes reflective practice focused on examining teaching practices and the impact on learning, has also been demonstrated to positively impact teacher training and student learning outcomes (e.g., see McDougall et al, 2007).

Another important area of support for India's teachers is the development of a school climate and culture that supports effective teaching and learning. Kokkinos (2007), along with other researchers, found that work-related stressors can negatively influence teachers' relationships with students, among other important outcomes, and strategies focused on improving school climate and culture can make a difference. Some potential areas include:
What Our Findings Mean for India

- **Acknowledging and rewarding excellence in teaching.** Research shows that when workers are not recognized for their contributions, and rewards are not based on merit, they become demoralized, less productive and more likely to quit (e.g., see OECD, 2014). This can help to address the well-documented concerns about absenteeism, low teacher morale, and a focus on compliance in India’s schools.

- **Identifying teacher leaders in the building, recognizing their contributions, and leveraging their talents to support their peers to improve practice.** Teacher leadership helps to improve morale and raises the level of instructional excellence in schools where teachers share ideas and successful practices, and support each other. Given the variability in teacher preparation in India, and the difficulty in recruiting teachers, strategies that support the development and retention of existing faculty are critical.

- **Fostering productive teacher teams who are given protected time for examining instruction and learning outcomes, and developing strategies for improvement.** This is a well-documented means for enhancing teacher professional growth and improving learner outcomes (e.g., Gallimore et al., 2009; Saunders et al., 2009). Stronger teachers can help support their less skilled peers.

**Important Considerations**

It is important to note that like all research studies, this one has limitations in what we can interpret and conclude from the data we collected. We gathered data in five different regions of India, from six stakeholder groups representing government and private (aided and unaided) schools, using a variety of methodologies. However, we cannot claim that this sample accurately represents the views of all members of each stakeholder group across India. Moreover, because we asked respondents to generate their own lists of the qualities, their responses reflect what came to mind at the time of the survey. If given a list of qualities of effective teachers to prioritize, results might be different.

Moreover, we caution against using these survey results to inform a checklist approach to defining effective teaching. Rodgers and Raider-Roth (2006) argue that teaching should not be reduced to a list of behaviors and skills that takes us further away from a clear understanding of what it means to teach. Teaching involves a multitude of factors that occur in a variety of ways, with many moving parts, and there is no single winning pattern of knowledge, skills, dispositions, and so on. Yet, as noted throughout this report, research indicates some common practices and shared understandings of what it means to be effective as a teacher. Results from our survey in India reaffirm the notion that at its foundation, teaching is about relationships between teachers and students that ultimately foster student success, as these communities define it.
Finally, in light of our survey results and their potential use for driving teacher preparation, hiring, training, and/or evaluation, it cannot be overstated that to be effective teachers, the work conditions and environment, first and foremost, must be well managed (Ramachandran et al., 2006; Pretorius, 2013). As others have noted, school context and community culture have a profound influence on the way different teacher roles and competencies are understood, prioritized, and practiced (e.g., Harley et al., 2000; Bourgonje & Tromp, 2011; Taylor, 2012). As Ramachandran et al., (2006) explain:

> Regardless of the number of training programmes and pedagogy-related interventions, the ability of teachers to retain children in school is constrained by overall infrastructure and facilities. Poor working conditions (read poor infrastructure) is a big issue. This is particularly marked if we have to assess physical infrastructure against the stipulated norms of the education system (Ramachandran et al., 2006, p. 16).

In light of these concerns, we hope that the results of this study—reflecting the opinions of a wide array of education stakeholders, from five different regions across India, representing government and private (aided and unaided) schools—will be used to inform and guide the definition of what it means to be an effective teacher in the context of the culture in which teaching and learning occur.

“We hope that the results of this study will be used to inform and guide the definition of what it means to be an effective teacher.”
Executive Summary

India: What Makes an Effective Teacher?

Sources


## Table A1. Participating countries

<table>
<thead>
<tr>
<th>Participating Countries</th>
<th>Data Collection Agency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vietnam</td>
<td>Cimigo</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>Helme Consulting</td>
</tr>
<tr>
<td>Singapore</td>
<td>Nielsen India</td>
</tr>
<tr>
<td>Japan</td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td></td>
</tr>
<tr>
<td>India</td>
<td></td>
</tr>
<tr>
<td>South Africa</td>
<td></td>
</tr>
<tr>
<td>USA</td>
<td>Dashboard Marketing Intelligence</td>
</tr>
<tr>
<td>Canada</td>
<td></td>
</tr>
<tr>
<td>Mexico</td>
<td></td>
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<tr>
<td>Argentina</td>
<td></td>
</tr>
<tr>
<td>Brazil</td>
<td></td>
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<tr>
<td>England</td>
<td></td>
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<tr>
<td>Germany</td>
<td></td>
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<tr>
<td>Poland</td>
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<tr>
<td>Finland</td>
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<tr>
<td>Qatar</td>
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<tr>
<td>Saudi Arabia</td>
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<td>Iran</td>
<td></td>
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<tr>
<td>Turkey</td>
<td></td>
</tr>
<tr>
<td>Morocco</td>
<td></td>
</tr>
<tr>
<td>Egypt</td>
<td></td>
</tr>
</tbody>
</table>
### Targeted sampling quotas for India

<table>
<thead>
<tr>
<th>Target Group</th>
<th>Sub-Group</th>
<th>Location</th>
<th>Urban</th>
<th>Semi-Urban/Suburbs</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students (age: 15-18 years)</td>
<td>Grade X – XII</td>
<td>Delhi, Mumbai, Kolkata, Chennai, and Bangalore</td>
<td>P*: 75</td>
<td>P: 75</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>G*: 25</td>
<td>G: 25</td>
<td></td>
</tr>
<tr>
<td>Total: Students (40 per city)</td>
<td></td>
<td></td>
<td>100</td>
<td>100</td>
<td>200</td>
</tr>
<tr>
<td>Parents</td>
<td>Primary (I-V)</td>
<td></td>
<td>P: 15</td>
<td>P: 15</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Secondary (VI-X)</td>
<td></td>
<td>G: 10</td>
<td>G: 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior Secondary (XI-XII)</td>
<td></td>
<td>P: 15</td>
<td>P: 15</td>
<td>50</td>
</tr>
<tr>
<td>Total: Parents (30 per city)</td>
<td></td>
<td></td>
<td>G: 10</td>
<td>G: 10</td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>Primary (I-V)</td>
<td></td>
<td>P: 15</td>
<td>P: 15</td>
<td>50</td>
</tr>
<tr>
<td></td>
<td>Secondary (VI-X)</td>
<td></td>
<td>G: 10</td>
<td>G: 10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior Secondary (XI-XII)</td>
<td></td>
<td>P: 15</td>
<td>P: 15</td>
<td>50</td>
</tr>
<tr>
<td>Total: Teachers (30 per city)</td>
<td></td>
<td></td>
<td>G: 10</td>
<td>G: 10</td>
<td></td>
</tr>
<tr>
<td>Principals/ Head Masters</td>
<td>Primary (I-V)</td>
<td></td>
<td>P: 5</td>
<td>P: 5</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Secondary (VI-X)</td>
<td></td>
<td>G: 5</td>
<td>G: 5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Senior Secondary (XI-XII)</td>
<td></td>
<td>P: 5</td>
<td>P: 5</td>
<td>20</td>
</tr>
<tr>
<td>Total: Principals/ Head Masters (12 per city)</td>
<td></td>
<td></td>
<td>G: 5</td>
<td>G: 5</td>
<td></td>
</tr>
<tr>
<td>Education Researchers/ Professors teaching in Pedagogy major at university/ college/ institute (5 per city)</td>
<td></td>
<td></td>
<td>25</td>
<td></td>
<td>25</td>
</tr>
<tr>
<td>Education Policymakers (relevant government functionaries within the education departments; 5 at national level and 1 per city)</td>
<td></td>
<td></td>
<td>10</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Total: Education Researchers/ Policymakers (5 – National and 6 per city)</td>
<td></td>
<td></td>
<td>35</td>
<td></td>
<td>35</td>
</tr>
<tr>
<td>Total Sample Size: Educator Effectiveness Survey</td>
<td></td>
<td></td>
<td>595</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table A2. Targeted sampling quotas for India
Appendix

Descriptions of Study Methods

Nielsen collected data from five regions in India. Figure A1 shows the proportion of responses from each region.

![Figure A1. Areas surveyed in India](image)

<table>
<thead>
<tr>
<th>% of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delhi</td>
</tr>
<tr>
<td>Kolkata</td>
</tr>
<tr>
<td>Mumbai</td>
</tr>
<tr>
<td>Bangalore</td>
</tr>
<tr>
<td>Chennai</td>
</tr>
</tbody>
</table>

How We Surveyed

Nielsen India used two methods for data collection with the different stakeholder groups:

<table>
<thead>
<tr>
<th>Target Respondents</th>
<th>Data Collection Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>High School Students</td>
<td>Face-to-face interviews using Computer Assisted Personal Interviewing (CAPI)</td>
</tr>
<tr>
<td>Parents of Children</td>
<td></td>
</tr>
<tr>
<td>Teachers</td>
<td>Telephone interviews via CATI (Computer-Assisted Telephone Interviewing)</td>
</tr>
<tr>
<td></td>
<td>A mixture of Face-to-face interviews using Computer Assisted Personal Interviewing (CAPI) and telephone interviews via CATI</td>
</tr>
<tr>
<td>School Leaders</td>
<td></td>
</tr>
<tr>
<td>Education Researchers &amp; Policymakers</td>
<td></td>
</tr>
</tbody>
</table>
We specified quotas for government (public) and private school responses, and for preschool, primary and secondary schools (see Table A2). Data quality was monitored by random quality checks, voice recordings, and onsite monitoring for a sub-sample (5-15%) of the interviews.

Who We Surveyed

In total, we surveyed 612 respondents. Table A3 compares the proportion of survey respondents representing government versus private/aided schools, and different types of institutions (grade levels), based on the most recent national education statistics from the MHRD (2011-2012).

<table>
<thead>
<tr>
<th>Type of School</th>
<th>India Education Statistics 2011-2012</th>
<th>Our Survey Students</th>
<th>Our Survey Parents</th>
<th>Our Survey Teachers</th>
<th>Our Survey Principals</th>
<th>Our Survey Researchers &amp; Policymakers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government</td>
<td>55%-Primary; 33% Secondary</td>
<td>27%</td>
<td>34%</td>
<td>43%</td>
<td>48%</td>
<td>N/A</td>
</tr>
<tr>
<td>Private/Aided &amp; Unaided</td>
<td>&lt; 10% Primary; 22-26% Secondary</td>
<td>72%</td>
<td>64%</td>
<td>56%</td>
<td>48%</td>
<td>N/A</td>
</tr>
<tr>
<td>Primary (I-VIII)</td>
<td>85%</td>
<td>N/A</td>
<td>38%</td>
<td>29%</td>
<td>10%</td>
<td>6%*</td>
</tr>
<tr>
<td>Secondary (IX-X)</td>
<td>9%</td>
<td>28%</td>
<td>41%</td>
<td>36.5%</td>
<td>32%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Sr. Secondary (XI-XII)</td>
<td>6%</td>
<td>70%</td>
<td>38%</td>
<td>31%</td>
<td>57%</td>
<td>23%</td>
</tr>
<tr>
<td>Post-Secondary</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>63%</td>
</tr>
</tbody>
</table>

*Includes Kindergarten

Table A3. Survey respondents vs. India 2011 census data

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14 We aimed for a total sample size of 595: see the sampling plan in Table A2 in the Appendix.
Figure A2 shows the grade levels represented by the respondents in the survey. All students were Secondary or Sr. Secondary (IX-XII). “Other” generally refers to post-secondary school levels, reported by researchers and policymakers.

![Figure A2. School types represented by survey respondents](image)

Figures A3 – A7 summarize key characteristics of each of the surveyed groups. For the students, the vast majority who responded were male, lived in an urban area, and attended private/government aided schools. Thirty percent (30%) were in secondary school and 70% were in upper secondary (grades XI-XII). Ages ranged from 11-22, and the median was 16.¹⁵

![Figure A3. Surveyed student characteristics](image)

¹⁵ The survey plan specified 15-19 year olds; however, we have data from seven students < 15 years old (one 11, one 12, and five 14 year olds).

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For parents, slightly more females responded, and half attended government aided schools as children. About 60% had some sort of post-secondary schooling, therefore, on average, this sample was better educated than the general population of India. Most (64%) send their children to private/government aided schools, suggesting that this sample is generally economically advantaged.

The teacher respondents represented a wide range of experience, from 1 month to 34 years on the job, and the median of 10 years suggests that on average, these were experienced teachers. All were trained in India, and more private/aided schools and females were represented than would be expected given India’s education statistics.
The surveyed principals also represented a range of experience, from 1 to 38 years on the job, with a median of 13.5 years. This suggests that on average, this is an experienced group of principals. Their demographics were less reflective of the Indian population regarding proportion representing government versus private schools. Like the teachers, all were trained in India. An equal number of male and female principals participated.

The education researchers and policymakers we surveyed were all trained in India and had a median of 10 years of experience at their current job, suggesting that on average, this was an experienced group of individuals. There was equal representation by males and females, and the majority were researchers.
Coding Survey Responses

We created a coding scheme for all responses. As a starting place, we used research about the competencies of effective teachers as a guide. Teachers, principals, education policymakers and researchers with expertise in teacher effectiveness then reviewed the list and provided feedback. As our research team coded more responses, we updated and revised the list, aiming for categories that were not so broad as to be unhelpful, and not so specific as to be too complex for comparisons across stakeholder groups and countries. Our final list and a description of each category is below in Table A4.

We measured interrater agreement using Fleiss's Kappa statistic, specifying 0.75 or higher as the goal. We trained raters until they could meet this requirement.

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Subject Knowledge</td>
<td>Mastery or expertise in one's content or subject area. Includes knowledge of the curriculum, learning objectives and/or standards in the given subject area</td>
</tr>
<tr>
<td>(2) Dedication</td>
<td>Dedication, passion, or commitment to one's work as a teacher; commitment to help all learners succeed</td>
</tr>
<tr>
<td>(3) Creativity</td>
<td>Qualities indicating the ability to think creatively, adapt, or embrace new ideas or teaching styles; includes being innovative</td>
</tr>
<tr>
<td>(4) Technology</td>
<td>Familiarity and/or fluency with and ability to use technology for teaching &amp; learning; keeping current or up-to-date with technology</td>
</tr>
<tr>
<td>(5) Patient, Caring Personality</td>
<td>Positive personality characteristics, e.g., patient, caring, kind, fair, humorous, friendly</td>
</tr>
<tr>
<td>(6) Engaging</td>
<td>Ability to make class fun and/or engaging and motivates learners to learn</td>
</tr>
<tr>
<td>(7) Planning</td>
<td>Ability to effectively plan lessons as well as being organized more generally; ability to organize the learning for the learner</td>
</tr>
<tr>
<td>(8) Class Management</td>
<td>Ability to effectively manage classrooms, learner behavior, and time for learning; develop classroom routines to maximize learning time; create a productive learning environment</td>
</tr>
<tr>
<td>(9) Make Ideas, Content Clear</td>
<td>Ability to present information in a clear, accessible manner</td>
</tr>
<tr>
<td>(10) Leadership</td>
<td>Qualities related to being a leader, e.g., decision-making skills, visionary, influential etc.</td>
</tr>
<tr>
<td>(11) Relationships</td>
<td>Ability to understand and establish trusting, productive relationships with learners; includes a mentoring role</td>
</tr>
<tr>
<td>(12) Know Learners</td>
<td>Understand how learners learn and develop, cognitively, socially, and emotionally, and adapt content to meet the needs of a range of learners/diverse learner populations, including those with special needs; attend to the individual needs of learners</td>
</tr>
<tr>
<td>(13) Use of Assessment</td>
<td>Assessment literacy, including the ability to develop and/or use assessments (both formal and informal) to evaluate learning, provide feedback to learners from the assessments, and/or monitor or track learning progress</td>
</tr>
<tr>
<td>(14) Always Learning</td>
<td>Willingness/passion/desire to learn and develop, to challenge oneself to improve, reflect on own practice, &amp; accept constructive criticism. Includes desire to stay updated on relevant knowledge and skills in their field; engaging in ongoing professional development</td>
</tr>
<tr>
<td>(15) Belief in Self</td>
<td>Confidence in oneself</td>
</tr>
</tbody>
</table>

Table A4. Coding categories of characteristics/competencies of effective teachers
<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(16) <em>Intelligence</em></td>
<td>General intelligence and/or being well-informed; a strong general fund of knowledge (not specific to the content being taught); critical thinking, analytical and problem-solving abilities</td>
</tr>
<tr>
<td>(17) <em>Professionalism</em></td>
<td>Workplace professionalism and responsibility (e.g., honesty, loyalty, punctuality); awareness of and compliance with rules and policies of the education system</td>
</tr>
<tr>
<td>(18) <em>Collaborative</em></td>
<td>Ability to work well with colleagues; shares knowledge and skills with colleagues; cooperative and works with others to improve as a team</td>
</tr>
<tr>
<td>(19) <em>Moral</em></td>
<td>Good moral character or general ethics; principled; can include religiosity and spirituality</td>
</tr>
<tr>
<td>(20) <em>Teaching Skills</em></td>
<td>Knowledge and use of various pedagogical/teaching techniques, general as well as specific to a given content area; pedagogical content knowledge</td>
</tr>
<tr>
<td>(22) <em>Qualifications</em></td>
<td>Possessing necessary preparation and credentials for teaching the grade levels and subject matter</td>
</tr>
<tr>
<td>(23) <em>English Fluency</em></td>
<td>Having the knowledge and skills to teach English to non-native speakers</td>
</tr>
<tr>
<td>(24) <em>Cultural Competence</em></td>
<td>Knowledge, appreciation and respect for different cultures and backgrounds; tolerant, unbiased regarding different learner backgrounds</td>
</tr>
<tr>
<td>(25) <em>Families</em></td>
<td>Ability to communicate and build relationships with learners’ parents and families; includes families in learner’s education</td>
</tr>
<tr>
<td>(26) <em>Research</em></td>
<td>Ability to conduct and understand research; studying one's own practice and the impact on learners (e.g., action research, lesson study)</td>
</tr>
<tr>
<td>(27) <em>Challenging</em></td>
<td>Belief that all learners can learn; maintaining a challenging, rigorous curriculum for all learners</td>
</tr>
<tr>
<td>(28) <em>Political context</em> and/or beliefs</td>
<td>The teacher as part of a political system in which education serves a specific role or purpose; reinforces political beliefs (especially in closed societies); or holds specific political beliefs (e.g., democratic, communist)</td>
</tr>
<tr>
<td>(31) <em>Non-cognitive skills</em></td>
<td>Focus on teaching learners the skills required to be successful in college and/or a career, e.g., learning how to be an independent learner, how to work collaboratively with others; also known as 21st Century and/or “non-cognitive” skills. Includes career guidance for learners</td>
</tr>
<tr>
<td>(32) <em>Deep Learning</em></td>
<td>Values the learning process and focuses on “deeper” learning and knowledge transfer vs. rote learning (memorization of and ability to recall facts) and exam scores</td>
</tr>
<tr>
<td>(21, 29, 30) “Other”</td>
<td>Either odd responses (e.g., “eccentric,” “well-traveled”) or responses too general to code, e.g., “experienced” or “effective” (essentially repeating the question).</td>
</tr>
</tbody>
</table>

Table A4. Coding categories of characteristics/competencies of effective teachers (continued)

Note: Numbers reflecting coding system the research team used for survey responses, and checking alignment with teaching standards and research.
### Education Level | Minimum Qualifications
--- | ---
**Primary** | Senior Secondary (or equivalent) with at least 50% marks and:
(1) 2 year Diploma in Elementary Education (D.El.Ed.); or
(2) 4 year Bachelor of Elementary Education (B.El.Ed.); or
(3) 2 year Diploma in Education (Special Education)
AND
Must pass the Teacher Eligibility Test (TET)

**Upper Primary** | B.A./B.Sc. and 2 year D.El.Ed.; or
B.A./B.Sc. with at least 50% marks and 1 year Bachelor in Education (B.Ed.); or
Senior Secondary (or equivalent) with at least 50% marks and 4 year B.El.Ed. or B.A./B.Sc. Ed. or B.A. Ed./B.Sc. Ed.
AND
Must pass the Teacher Eligibility Test (TET)

**Secondary** | 4 year degree of B.A.Ed./B.Sc.Ed.
Graduate/Post-Graduate from recognized University with at least 50% marks in either Graduation or Post-Graduation (or equivalent) and B.Ed.

**Senior Secondary** | Post-Graduate from recognized University with at least 50% marks (or its equivalent) and B.Ed. or B.A.Ed./B.Sc.Ed.

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Note: All Education degrees must be recognized by the NCTE with the exception of Special Education degrees, which must be recognized by the Rehabilitation Council of India (RCI).

Some Primary and Upper Primary school teachers are exempt from the minimum qualifications if they were appointed before September 3rd, 2001.

Primary and Upper Primary data from NCTE Notification 23.08.2010

Secondary and Senior Secondary data from NCTE Notification 12.11.2014

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Table A5. Teacher preparation requirements in India
<table>
<thead>
<tr>
<th>Duties &amp; Expectations</th>
<th>Survey Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professionalism (punctuality, regular attendance)</td>
<td>17 – Professionalism, duties &amp; responsibilities</td>
</tr>
<tr>
<td>Delivering the intended curriculum within the intended timeframe</td>
<td>17 – Professionalism, duties &amp; responsibilities</td>
</tr>
<tr>
<td>Assess student progress &amp; adapt instruction accordingly</td>
<td>13 – Knowledge &amp; use of assessment</td>
</tr>
<tr>
<td>Keep parents/guardians apprised of student’s progress &amp; needs</td>
<td>25 – Communication with parents, families</td>
</tr>
<tr>
<td></td>
<td>13 – See above</td>
</tr>
<tr>
<td>Conformity with the values enshrined in the Constitution</td>
<td>28 – Political beliefs</td>
</tr>
<tr>
<td>Instruction in the child’s mother tongue (“as far as practicable”)</td>
<td>No direct alignment with survey response categories (closest is 24 – Cultural competence, respect for diversity)</td>
</tr>
<tr>
<td>Developing the whole child; focusing on student-centered teaching practices</td>
<td>31 – Prepare students for the future, for college &amp; career success, 21st Century Skills; develop the whole child</td>
</tr>
<tr>
<td>Making the child “free of fear, trauma and anxiety” and helping the child to express views freely</td>
<td>11 – Ability to build productive, trusting relationships, relate to, &amp; mentor students</td>
</tr>
</tbody>
</table>

Table A6. Teacher duties and expectations from India’s Right of Children and Comulsory Education Act, 2009