

England: What makes an effective teacher?

SERIES 9 OF 23



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Executive Summary



Katherine McKnight, PhD Pearson

Lacey Graybeal, Jessica Yarbro, & John Graybeal George Mason University 66 The quality of an education system cannot exceed the quality of its teachers.

BARBER & MOURSHED, 2007

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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, preservice 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 learners, 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.

This report, the ninth in the series, summarizes the results of the survey conducted in England. 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 England seek in their teachers, we administered surveys across the country (see Figure A1 in the Appendix). The stakeholder groups include:

- · Students ages 15-19
- Parents of primary and secondary students
- Primary and secondary teachers
- Primary and secondary administrators
- Education researchers and policymakers

Respondents were asked to list, in their own words, between three and fifteen 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 England

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 primary and secondary grade levels, private and public schools, and males and females.

The second and third most common responses across all stakeholder groups were a patient, caring and kind personality and ability to engage and motivate learners. *Patient, Caring* and kind personality addresses positive personality characteristics, particularly associated with compassion and empathy, all of which facilitate and support in building the relationships with students that the stakeholders value most. *Engaging* focuses on the teacher's ability to engage learners in the content and their learning, and to motivate them to learn.

Most Important Qualities of Teachers in England

- 1 Ability to Develop Trusting, Productive Relationships
- 2 Patient, Caring, Kind Personality
- 3 Engaging Students in Learning
- 4 Subject Matter Knowledge
- 5 Knowledge of Learners
- 6 Professionalism
- 7 Classroom Management
- 8 Ability to Make Ideas and Content Clear
- 9 Dedication to Teaching
- 10 Teaching Skills/Pedagogical Practices

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:

- Deep content or Subject Knowledge
- Knowledge of Learners and how they learn
- Professionalism, e.g., responsibility, trustworthiness, knowledge of rules and regulations
- Ability to create and manage a productive learning environment (Classroom Management)
- Ability to Make Ideas and Content Clear to enhance understanding and learning
- Dedication to teaching and students' success
- Teaching Skills and pedagogical methods

Six of the Top 10 most frequent responses for each group of stakeholders were shared by all groups and include relationships, patient and caring, engaging, subject knowledge, knowledge of learners, and professionalism. Additionally, stakeholders associated with public and private schools shared all of their Top 10 response categories, in varying order, whilst reporting the same top 2 most valued qualities. When addressing the qualities most valued for a primary or secondary teacher, respondents also shared all of their Top 10, again in varying order, and reporting the same top 2 qualities.

Executive Summary

These results reflect that the qualities most valued were not specific to grade level taught. Male and female respondents shared eight of their Top 10 most valued qualities, with their top 2 in the same order.

The categories of qualities mentioned most often across the entire sample reflect how strongly education stakeholders in England value dispositions of relatedness, responsiveness, and commitment in their teachers. There is research that supports the link between these dispositions, teacher effectiveness, and learner outcomes. The dispositions of effective teachers are characterized as the bridge between a teacher's capabilities (what they know and CAN do) and the actions they take (what they choose to do).

Overall, the survey responses align well with research on effective teaching, and with the standards for primary and secondary teachers outlined by the Department for Education. But there were a few significant gaps between what the educator stakeholder groups (teachers, principals, researchers, and policymakers) valued most and what research tells us matters most in enhancing student learning. Few educators addressed the importance of knowledge and use of *Assessment* to evaluate and track student progress. Yet researchers suggest that this is the single most important aspect of teaching practice to enhance student learning. Also, few referenced making learning *Challenging* and rigorous for all students, in the belief that all can learn. A "watered-down" curriculum, in fact, has been shown to increase dropout, repeating grades, and/or needing remediation. Additionally, there was surprisingly little mention of developing students' "Non-Cognitive" or 21st Century skills or using *Technology* to enhance learning, and no mention of focusing on Deeper Learning, all of which have garnered strong interest among teacher groups, researchers, and policymakers.

Implications

The greater emphasis placed on teacher dispositions such as relatedness, caring, and kindness, reflect a strong focus on the dispositions required for effective teaching. Dispositions are considered to be the bridge between what a teacher is able to do and what he or she chooses to do. These findings among British education stakeholders may reflect the belief that without these critical dispositions, teaching-specific knowledge and skills are insufficient to foster effective learning. Given the challenges in recruiting and retaining the "best and brightest" in teaching, and in improving the quality of pre- and in-service teacher training, this study offers an opportunity for England to re-think teacher effectiveness policies and the impact on the quality of the teaching workforce. Ultimately, the survey results reaffirm the notion that, at its foundation, learning is a social enterprise, and effective teaching is about trusting relationships between teachers and learners that foster learner success, as these communities define it.

66 The categories of qualities mentioned most often across the entire sample reflect how strongly education stakeholders in England value dispositions of care and character in their teachers.

Using These Results to Improve Teaching Practice in England

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 contexts of England. Moreover, the results can inform discussions about teacher preparation, hiring, training, and evaluation.

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, compassion, passion for the work, and responsibility. Cognitive science tells us that these relationships are critical to fostering effective learning, and thus this finding should be taken seriously. The programs could assess these qualities in candidates, counsel candidates on career fit and provide training to develop and enhance 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 assessment of learner progress and provision of a challenging, rigorous curriculum for all students, with an emphasis on the learning process and the skills students need for college and career success.

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.

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Overview



It is often the case that those who are most directly impacted by the set of competencies and standards have little say in defining which features of effective teachers are valued most.

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, including England, 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 should 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 competencies 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—i.e. the teachers themselves, their students, Istudents' 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:

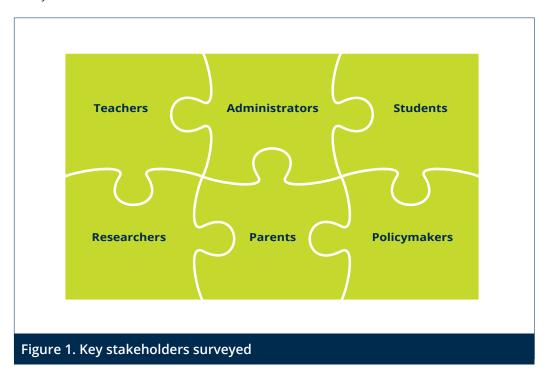
- 1. Key education stakeholders (students, parents, teachers, principals, education researchers, and policymakers);
- 2. The government (reflected in national teaching standards); and
- 3. Research on effective teaching

This report summarizes what we found in England.¹

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

Our Study

We engaged Dashboard Marketing Intelligence, an international marketing research firm, to collect the survey data from the six stakeholder groups (see **Figure 1**) across England. Given the limited sample size of education researchers and policymakers, we combined their surveys and responses in our analyses.

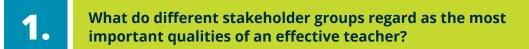


Along with demographic items—e.g., respondent's city, gender, school, or job experience—participants responded to two key items:

- 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.

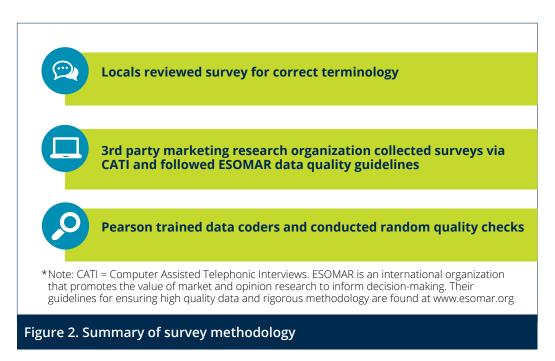
The study was driven by the following set of research questions:



Do these qualities differ by context?

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

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



The British Education System

Education in England is managed at both the national and local levels. Responsibility is shared between both central and local governments, as well as voluntary and governing bodies, allowing for the education system to be decentralized. At the national level, the Department for Education (DfE) was formed in May of 2010 to assume responsibility for primary and secondary education. The DfE is headed by the Secretary of State, and works with a number of agencies and public bodies to manage education for children and young people. The task of organizing public education at the local level lies with local authorities (LAs).

Students in England have many different choices regarding what type of school to attend, although, of the almost 8.4 million students enrolled in primary and secondary education, 91.6 percent attended state-funded schools as of 2015 (DfE, 2015a). The majority of schools in England are maintained schools, which are publicly-funded state schools governed by LAs (New Schools Network, 2015). There are four types of maintained schools: community schools which are established and run by LAs; foundation and trust schools, run by their own governing bodies (usually charitable foundations); voluntary aided schools, run by their own governing bodies, (usually churches and faith-based organizations); and voluntary controlled schools which are usually faith-based schools (UNESCO IBE, 2011). All maintained schools must follow the National Curriculum set forth by the DfE, and all teachers employed at maintained schools must have Qualified Teacher Status (QTS). There are other types of state schools, e.g., academies and grammar schools, which function differently with respect to curriculum and teacher credential requirements. For the private school sector, independent schools are self-governing and charge fees for students to attend. They have autonomy in choosing their own curriculum, as well as designating their own teacher preparation requirements. Almost 7 percent of students in primary and secondary education are enrolled in independent schools (DfE, 2015a). Special schools are reserved for students with special needs and disabilities, and can be either state-funded or independent.

The education system in England is comprised of preschool, primary, and secondary stages (UNESCO IBE, 2011). Compulsory education is required for children aged 5 to 18² as of 2015. Preschool, commonly known as the Early Years Foundation Stage, is offered for children aged 3 to 4. Enrollment is both free and voluntary.

For primary and secondary education, the system is divided into key stages, outlined in the National Curriculum.³ Primary education covers key stages 1 and 2, years 1 through 6, ages 5 to 11, and is free for students who choose to enroll in maintained schools (UNESCO IBE, 2011). Some areas organize schools into primary or first schools (ages 5 to 8/9), middle schools (ages 8 to 12, or 9 to 13), and secondary or high schools (ages 12/13 to 16 or 18). On completion of key stages 1 and 2 there are statutory assessments, commonly known as SATs, in English and math, with an additional assessment in science for key stage 1.⁴

Due to low test scores, the secondary education system in England has undergone reforms.

² See http://services.parliament.uk/bills/2007-08/educationandskills.html

³ See http://www.bbc.co.uk/schools/parents/national_curriculum_key_stages/

⁴ See http://www.bbc.co.uk/schools/parents/education after 16/

Secondary education covers key stages 3 and 4 (a.k.a. lower and upper secondary) for years 7 through 11, ages 11 to 16 (UNESCO IBE, 2011). Upon completion of key stage 4, most students are assessed by qualifications that are formulated by external, independent organizations known as awarding bodies. The General Certificate of Secondary Education (GCSE) is the most common qualification taken by students age 16; GCSEs are available in over 40 academic subjects and 9-work related subjects. While the majority of students choose to take GCSEs, an alternative qualification option are Entry Level Certificates (ELC) for pupils who do not feel prepared to take GCSEs. Additional vocational qualifications that students can opt to take alongside GCSEs are introductory certificates and diplomas.

Upon completion of year 11, students have the option to continue their education for two more years through enrollment into either sixth form or further education colleges, as well as to opt into attaining an apprenticeship to gain licensure for a specific vocation.⁵ Further education colleges also offer two-year programs for 16 to 19 year olds, but can enroll older learners as well and are less structured than sixth form schools.⁶

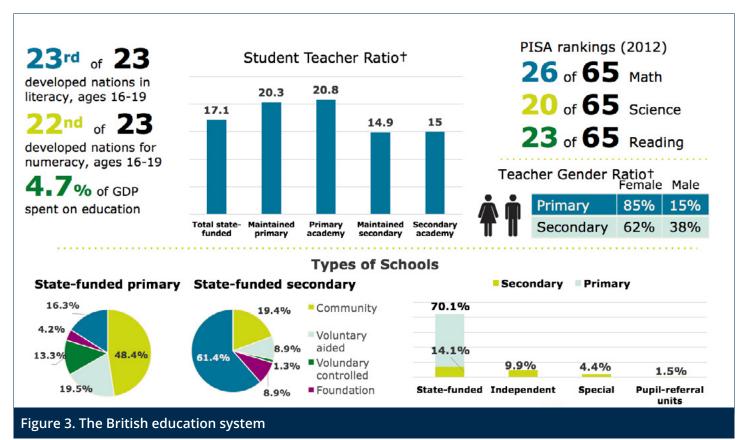
In 2012, the OECD reported that a third of teenagers aged 16 to 19 had poor basic literacy and numeracy skills, which is three times higher than the number in some of the highest performing countries such as Finland, Japan, Korea, and the Netherlands (Kuczera et al., 2016). This was reflected in England's 2012 PISA scores, which were similar to the scores of the UK as a whole (average in math, above average in science, average in reading) (Wheater et al., 2013). In addition, only 70 percent of 16 to 19 year olds were participating in any type of formal education or training, a surprisingly low percentage compared to nearly universal participation in many other OECD countries. This indicates that young people in England tend to leave the education system earlier than in other countries.

In response to these problems, secondary education has undergone many reforms in recent years. One of the arguably largest reforms is the decision to extend mandatory education and/or training to 18 years of age. With this reform also came the restructuring of the qualifications system to make it more streamlined. More recent legislation aims to grant the DfE power to convert all underperforming state schools into academies, with the goal of converting all state-schools by the year 2022 (Adams, 2016).

Figure 3 summarizes some key information about the British education system.

⁵ See http://www.bbc.co.uk/schools/parents/education_after_16/

⁶ See https://www.studential.com/further-education/sixth-form-or-college



Notes: All data are from 2014 except PISA scores (2012) and the types of schools (2015). PISA rankings are for the UK as a whole; all other data is for England alone. † denotes information for state-funded schools only.

Sources: Teen literacy and numeracy rankings (Kuczera et al., 2016); %GDP (HM Treasury, 2015); student teacher ratios and teacher gender ratios (DfE, 2015b); PISA rankings (OECD, 2014); types of schools (DfE, 2015a).

Teacher Preparation

Currently, in order to teach in any type of maintained school, as well as nonmaintained special schools and pupil-referral units, teachers in England must obtain QTS. The only exception came in 2012, when teachers with qualified teacher learning and skills (QTLS) status gained the ability to teach as fully qualified teachers in order to give schools more access to teachers who have experience teaching vocational subjects (DfE, 2011). The National College for Teaching and Leadership (NCTL) is responsible for awarding QTS to qualified graduates who have completed initial teacher training (ITT) (NCTL, 2014).

Individuals have two main options for ITT: school-led training and university-led training. All ITT programs focus on knowledge of teaching and supplement this with a minimum of 24 weeks of classroom experience in two different schools, as well as an assessment of teaching skills through observation.⁷ Graduates of ITT programs are equipped with knowledge of the National Curriculum, as well as with skills in effective lesson planning, setting learning objectives, classroom management, student assessment, and teaching strategies for special needs students. University-led training is offered to both graduates and

⁷ See https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/402159/sd-factsheet.pdf

undergraduates. Students can concurrently earn a Bachelor's degree in the subject they want to teach while completing professional training, or students who already have a Bachelor's degree can complete a one year Postgraduate Certificate in Education (PGCE) alongside an ITT program. School-led training is for graduates who already have a Bachelor's degree or individuals wishing to change careers. Many schools offer their own training outside of the government, called School-Centered Initial Teacher Training (SCITT). SCITT lasts one year, and can also result in a PGCE. Another ITT option is Teach First, a special program that focuses on training teachers to work in challenged schools in low-income communities. There are also special routes to obtaining QTS for individuals who are earning or have earned their doctorate in academia, as well as veterans of the armed forces.

After being awarded QTS, newly qualified teachers (NQTs) must complete a statutory induction period (UNESCO IBE, 2011). During this time, NQTs are offered extra support and are also assessed to ensure that they successfully fulfill the Teachers' Standards (see below).

66 All teachers must acquire Qualified Teacher Status.

Teaching Standards

The Department for Education (DfE) released a thorough list of national Teachers' Standards, effective September 1, 2012.8 These standards define the minimum of what teachers should know and act upon, and are currently used to assess all teachers with QTS in maintained schools, as well as NQTs and trainees working towards acquiring QTS, in accordance with the 2012 Education (School Teachers' Appraisal England) Regulations. Additionally, the standards may also be used to assess the performance of teachers who hold Qualified Teacher Learning and Skills (QTLS) status. While the *Teacher's Standards* do not apply to all teachers in England, they do apply to the vast majority due to the prevalence of maintained schools. However, with QTS slated to be replaced by local teacher accreditation, it is unclear whether the *Teachers' Standards* will remain in use.

The Teachers' Standards are comprised of three parts: the Preamble, Part One, and Part Two. The Preamble summarizes what a teacher should value and how they should behave throughout the course of their career, while Part One details the Standards for Teaching. Part Two focuses on the Standards for Personal and Professional Conduct, which are used by the NCTL when reviewing cases of serious misconduct in all education sectors. While the standards are used for assessment, the document also notes that it is important to consider the role and context in which the a teacher is practising. Teachers should be assessed at a level of expectation that is reasonable for their experience and the current stage of their career.

Since the *Teachers' Standards* are designed to apply to the majority of teachers in England, we focus on these standards for alignment with our survey findings, as shown in **Table 2** of this report.

⁸ See https://www.gov.uk/government/publications/teachers-standards for information on the Teachers' Standards, as well as a link to the standards themselves

Challenges to Developing Effective Teachers in England

Despite numerous legislative changes to improve public education, England still faces significant challenges to developing its teaching workforce and improving the education system for all students. These include, but are not limited to:

- The potential for variable rigor and quality in teacher preparation, licensing, ongoing training, and evaluation: Recent legislation attempting to convert all state schools into academies by the year 2022 also contains a movement to replace QTS requirements with a system of local accreditation, proposed by individual headteachers (Keates, 2016). Some fear that this change will result in highly variable degrees of teacher quality and effectiveness. There is also fear that the status of the teaching profession in England will be viewed more negatively within the international community. Teacher pay and promotion could also be affected.
- Local teacher shortages, recruitment and retention crisis: The government has missed its recruitment goals for four years in a row. In addition to fewer candidates entering the teaching profession, many qualified individuals are also leaving due to low pay and high workload (Dyer, 2016). New immigration laws might also result in teachers being forced to leave their jobs by failing to meet income requirements (Weale, 2016). Miscommunication between the DfE and LAs is also fueling the crisis as the DfE claims that teacher recruitment is not a major concern, with more teachers being recruited rather than leaving the profession and the student-teacher ratio remaining the same (Burns, 2016).
- Increased pressure and stress from the accountability system: The OECD's Teaching and Learning International Survey (TALIS) of 34 countries showed that 85 percent of secondary school teachers in England reported that accountability measures such as Ofsted inspections and school league tables added significant pressure to their jobs, and 77 percent felt that these measures added significantly to their workload (Micklewright et al., 2014).
- Longer work hours than international colleagues: TALIS results indicate lower secondary school teachers in England work more hours per week than their international colleagues (46 versus 37 hours/week respectively) (Micklewright et al., 2014).
- Lack of perceived value of the profession in England: Only 35% of British teachers believe teaching is valued in British society (Micklewright et al., 2014). The perceived value of the profession influences the quality and quantity of individuals who are attracted to it and choose to stay. Interestingly, this perception was also correlated to school Ofsted ratings. More teachers felt their profession was valued in schools with "outstanding" or "good," ratings, decreasing to just 20 percent of those in "inadequate" schools.

Overview

66 It is important that the system in which teaching and learning happens is considered.

Our survey research was conducted within a wide range of teaching and learning contexts in England, 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.

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. Stakeholders included 150 students, 150 parents, 150 teachers, 50 principals, and 30 education researchers and policymakers from the different regions of England (see Appendix for regions surveyed). Most of the students (70%) went to public schools and all were in secondary school (years 7-13). Their median age was 17. For parents, 60% had some sort of post-secondary schooling and 95% had attended public schools as a student. The teachers and principals were experienced on average, with a median of 17 and 22.5 years on the job, respectively, and most worked in public schools (66% and 62% respectively). The education researchers and policymakers were on average somewhat less experienced, with a median of 12.5 years on the job. 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 number of responses ranged from 3 to 9, and the median number of responses was 3 for the entire sample. Principals and researchers and policymakers tended to provide more responses (median was 4), while students, teachers, and parents tended to stop at 3.10

A description of how we developed the coding categories and a description of each can be found in **Table A2** 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 most for a teacher to be regarded as effective. Therefore we compared the results by five stakeholder groups (we combined education researchers and policymakers due to the small numbers), public and private schools, grade levels, and gender of respondents.

To compare our survey results with teaching standards and research on teacher effectiveness, we conducted an extensive review of the research literature and the aforementioned guidelines for teacher competencies put forth by the DfE. We focused on international research aimed at identifying

⁹ 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.

¹⁰ On average, participants varied from the median number of responses by about 1. Additionally, each response often included multiple qualities, so the median value is a low estimate of the number of responses from each stakeholder group.

general competencies that could be applied globally for K-12 teachers, and on studies conducted specifically with teachers in the England.

Top 10 Reported Qualities of An Effective Teacher

The Top 10 endorsed qualities across all stakeholder groups surveyed in England are shown in **Figure 4.** 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. The color patterns indicate some interesting differences between some of the stakeholder groups, which we address in the following section.

	All	Research & Policy	Parents Principals		Students	Teachers
Relationships	20.1%	18.8%	19.2%	17.5%	25.2%	17.8%
Patient, Caring	10.7%	8.1%	15.3%	10.5%	9.9%	7.9%
Engaging	8.1%	10.2%	7.6%	6.2%	9.4%	7.5%
Subject Knowledge	7.6%	8.6%	9.4%	8.6%	6.0%	7.0%
Knowledge of Learners	7.6%	8.1%	7.1%	5.8%	9.3%	7.2%
Professionalism	6.2%	9.1%	4.6%	7.4%	4.5%	8.0%
Class Management	5.8%	5.4%	4.2%	11.7%	3.9%	7.1%
Make Ideas Clear	5.5%	7.0%	6.1%	3.9%	5.2%	5.3%
Dedication	5.1%	2.7%	5.1%	5.8%	5.7%	4.9%
Teaching Skills	5.0%	5.9%	3.2%	2.7%	4.9%	7.2%

Figure 4. Top 10 most important qualities of an effective teacher

Note: A description of each category is found in Table A2 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.

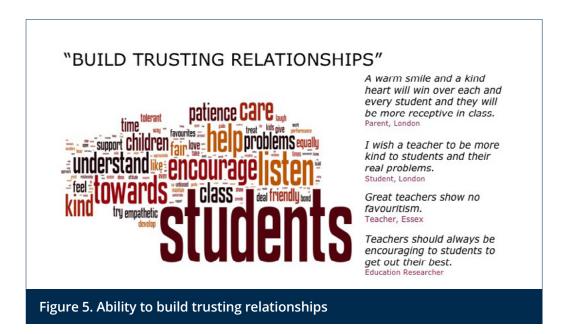
Table 1 illustrates the top 3 reported qualities of an effective teacher for the overall sample, and how those qualities were ranked, based on frequency of reporting, for each of the stakeholder groups.

	Relationships	Patient, Caring	Engaging	
Students	1st	2nd	3rd	
Parents	1st	2nd	4th	
Teachers	1st	3rd	4th	
Principals	1st	3rd	6th	
Education Researchers and Policymakers	1st	5th	2nd	

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 England strongly value the teacher's ability to cultivate trusting, productive *Relationships* and relate to as well as mentor students. Relationships with students was the most valued quality or competency of an effective teacher across all five stakeholder groups. Students reported this quality most frequently (25.2% of their responses). As our word cloud illustrates, listening to students, encouraging, and helping them were some of the most common descriptors (see Figure 5).



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; Gehlbach et al., 2012; Collie, Martin, Papworth, & Ginns, 2016). In a study by Gehlbach 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 dropped 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:

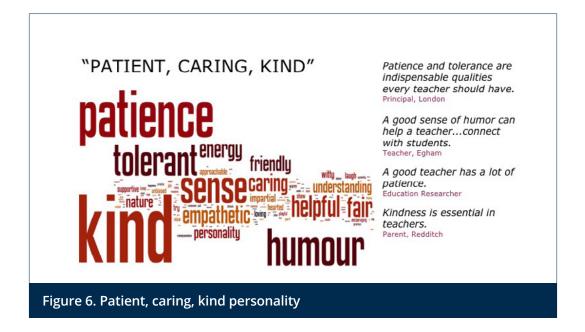
...that crucial part of education that is to do with the classroom interaction of learner and teacher and with the extraordinary ability of teachers to generate sparks of learning, even in the most inauspicious of circumstances (p. 76).

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. Cognitive neuroscience also emphasizes the importance of trusting social relationships for enabling, supporting and enhancing learning. In essence, trusting relationships reduce the cognitive load and outcomes, including learning, require less effort (Coan & Sbarra, 2015).

Patient, Caring, Kind Personality

The second most valued quality for the full sample was personality characteristics related to being a compassionate person, particularly with learners (*Patient, Caring*). This category was ranked highest among students and parents (second) and was mentioned most frequently by parents (15.3%), followed by principals (10.5%). There is a significant body of research indicating that teacher dispositions are strongly related to student learning and development (Schulte et al., n.d.). 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 that make up a caring attitude, such as sociability, were found to function as buffers. Recent surveys of English teachers indicate that workplace stress, particularly due to being overworked and student misbehavior, may be a growing concern (Precey, 2015).

Figure 6 illustrates respondents' ideas in this category, highlighting the importance of tolerance and a sense of humour along with patience and kindness.



Engaging Students in Learning

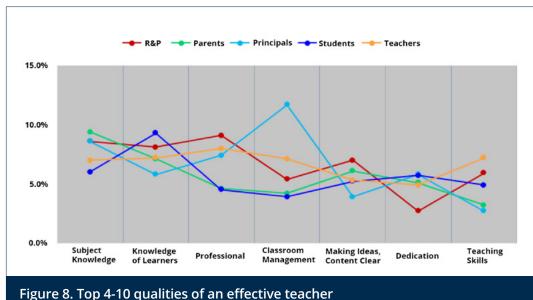
The third most frequently mentioned quality across all stakeholders is the teacher's ability of *Engaging* students in the course content and learning and motivating students to learn. Researchers talk about three types of engagement that are required for students to learn: cognitive, emotional, and behavioral (Fredricks, 2014). Research supported ways to increase student engagement include (James, 2014):

- 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
- focusing on mastery learning instead of grades and exam scores

Survey responses in our study primarily focused on making content interesting and the teacher's ability to motivate students to learn. Students often mentioned making the learning fun. Of the five stakeholder groups, education researchers and policymakers mentioned this category most (over 10% of their responses and ranked second in their Top 10 list). Figure 7 highlights the features mentioned most.



The next most important qualities making up the Top 10 list for the sample show some variability across the groups (see Figure 8). These qualities focus on sets of skills and knowledge specific to teaching as well as dispositions important in any profession (*Professionalism*, *Dedication*). Figure 8 illustrates how each of the five stakeholder groups compares on these seven qualities, highlighting variability in the frequency of responses for a number of competencies. Following the line graph, it appears that students and parents generally reported similarly, as did teachers, researchers and policymakers, and that principals stood apart regarding their emphasis on classroom management.

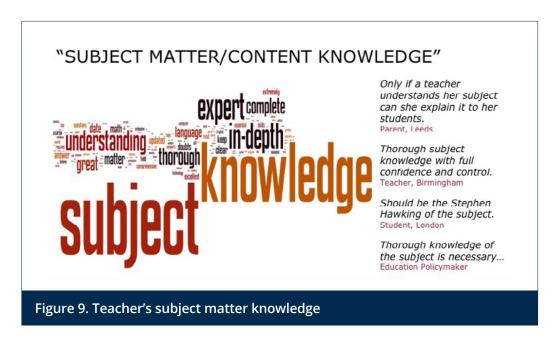


Subject Matter Knowledge

The fourth most frequent category of responses for the sample, 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 led 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).

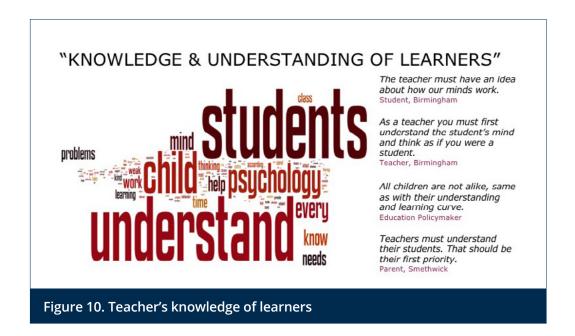
There are some concerns that English teachers have poorer math subject knowledge compared to their counterparts in other countries such as Japan, China and Russia (e.g. Richardson, 2011). Subject matter knowledge was reported most frequently by parents over 9% of their responses and ranked third in their Top 10 list). Responses emphasized the teacher's mastery of his/ her subject area. Figure 9 highlights the features of responses in this category.



Knowledge of Learners

The fifth 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 learners. Such knowledge includes an understanding of how students learn at a given developmental level; how learning in a specific 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 effectitgxzve 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 England, many of the responses focused on understanding how students think. This category was mentioned most frequently by students (over 9% of their responses and ranked fourth in their Top 10 list). Figure 10 illustrates survey responses regarding this category.



Professionalism

Sixth most frequently reported was the teacher's *Professionalism*. Education researchers and policymakers reported this quality most frequently of all stakeholder groups, and it was the third most valued quality in their Top 10 list. This category has to do with workplace practices and responsibility as a professional (e.g., being respectful and honest), including knowledge of rules and regulations. Remaining calm during stressful situations was mentioned frequently, as was being respectful, well-mannered, and polite. Stakeholders frequently mentioned the importance of modeling these behaviors for students so they will learn to do the same.

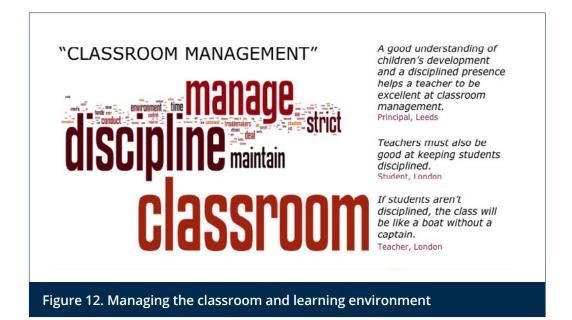
According to data from the OECD's 2013 Teaching and Learning International Study (TALIS), 11% of England teachers work in schools where headteachers report that teachers have difficulties with absenteeism on at least a weekly basis (Micklewright et al., 2014). This was much higher than the median value (1%) among other higher performing countries. Additionally, the data indicate that classroom climate, which is positively correlated with the amount of instructional time (i.e., fewer disruptions in class allows for more instructional time), is significantly more disruptive in maintained and academy schools. In our study, the emphasis on teacher professionalism by principals and teachers in particular is therefore notable. Figure 11 illustrates the features for this category.



Managing the Classroom Learning Environment

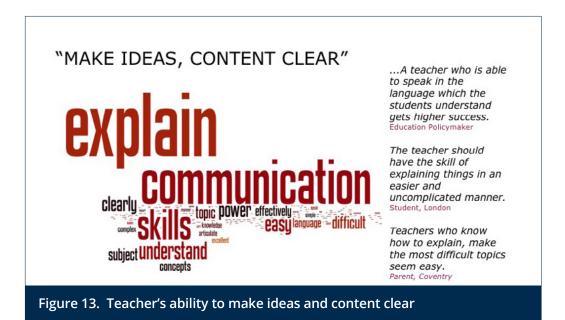
The seventh most frequently reported quality of an effective teacher across the entire sample is categorized as *Classroom Management*. Research describes this category as the ability to manage classroom routines, student behavior, and time, to create a productive learning environment in which learning time is maximized (e.g., Shulman, 1986; Bransford et al., 2007; Bourgonje & Tromp, 2011). These are critical 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 opportunity to learn. TALIS 2013 results show that when England's teachers have fewer disruptions in the classroom, they spend more time on instruction (Micklewright et al., 2014).

This category was most frequently mentioned by principals (it ranked second in their Top 10) and failed to make the Top 10 lists for parents. Responses generally focused on managing student behavior (discipline) in order to creating a caring, safe and productive learning environment. Figure 12 highlights the most common responses in this category.



Ability to Make Ideas and Content Clear

The eighth most commonly reported quality across the entire sample was the ability to *Make Ideas and Content Clear*. 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. Responses included explaining complex ideas in a way that makes it simple for students to understand, and strong communication skills. In the research literature, the ability to make ideas and content clear is an essential skill for all teachers (Bransford et al., 2007; Harley et al., 2000). Of all the stakeholder groups, researchers and policymakers then parents reported this competency most frequently, and it failed to make the Top 10 most frequent responses for principals. **Figure 13** illustrates the features of this category.

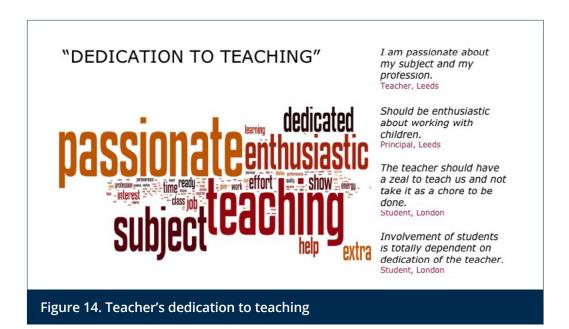


Dedication to Teaching

The ninth most frequently cited quality by the overall survey sample was the teacher's *Dedication*. It was cited most often by principals and students and failed to make the Top 10 for education researchers and policymakers. Dedication refers to a love of teaching or passion for the work, which includes commitment to students' success. Responses often referred to loving the subject matter or simply being dedicated to the work. Dedication is a reflection of an individual's intrinsic motivation. According to the popular book "Drive" (Pink, 2011), intrinsic motivation is driven by an individual's sense of autonomy or control over their own work and their own lives; the ability to learn and create new things; and the desire to improve oneself and make the world a better place.

Like everyone else, for teachers to be intrinsically motivated to be effective in their work, these conditions of autonomy, mastery, and contribution to a greater good must be in place. Yet documented issues in some British maintained schools and the education system as a whole, suggest that these conditions are likely not present for many British teachers, particularly those who work in under-resourced communities.

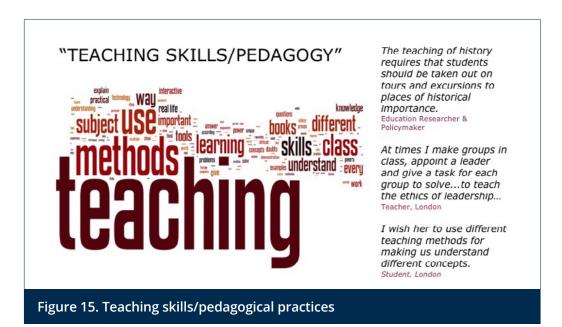
The features most frequently mentioned related to being a dedicated teacher are illustrated in Figure 14.



Teaching Skills/Pedagogical Practice

The tenth most common set of responses across the sample, the teacher's Teaching Skills, reflects use of specific teaching practices or pedagogical approaches, and is sometimes referred to as general pedagogical knowledge (e.g., Turner-Bissett, 1999). These include what some call "best practices" in teaching specific content, such as guided student discourse in mathematics or laboratory experiments in science, as well as more general approaches such as having students set their own learning goals. There is a good amount of research on how specific teaching practices improve student learning, as well as reports documenting research-supported instructional practices that promote student learning. Practices such as collaborative learning, peer-instruction, problem-based learning, and other active learning strategies are some examples.

Responses ranged from very general statements about teaching practices, such as the need to use a variety of teaching methods, to very specific strategies for given subject matter like geography and math. This category was most valued by teachers (7.2% of responses), and failed to make the Top 10 lists for parents and principals. **Figure 15** highlights the features of responses in this category.



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 4 and 8 show how stakeholder groups compare on the Top 10 list for the entire sample, but not on their own Top 10 lists. Figure 16, on the next page, compares the Top 10 most valued qualities for each stakeholder group. All stakeholders shared six of their Top 10 most valued qualities: Relationships, Patient, Caring personality, Engaging students in learning, Subject Knowledge, Knowledge of Learners, and Professionalism. Where stakeholder groups varied, includes the following:

- Always Learning mindset, which refers to striving for continuous improvement, was in the Top 10 lists for education researchers and policymakers, parents, and principals only.
- Use of specific *Teaching Skills*, practices or pedagogical approaches was in the Top 10 lists for education researchers and policymakers, students, and teachers only.
- Making Ideas and Content Clear, which includes the critical ability to make difficult concepts clear and understandable for learners, was in the Top 10 list for all but the principals.
- The love of teaching or *Dedication* towards the work was in the Top 10 list for all but the education researchers and policymakers.
- The teacher's *Classroom Management* was in all but the parents' Top 10 list while *Creativity* only made the Top 10 list for parents and principals.

Students and teachers shared all ten of their Top 10 most valued qualities, in a slightly different order; and both of these groups shared nine of their Top 10 lists with education researchers and policymakers. Parents and principals also shared nine of their Top 10 most valued qualities. Overall, we take these results to mean that education stakeholder groups, despite their different roles in the education system, value similar qualities as the most important for being an effective teacher. Moreover, it is clear that the most valued quality is the teacher's ability to develop and maintain trusting and compassionate relationships with students and to have a patient, caring, and kind disposition.



Despite their different roles, education stakeholders value similar qualities of what it means to be an effective teacher.



Research & Policy	%	Parents	%	Principals	%	Students	%	Teachers	%
Relationships	18.8	Relationships	19.2	Relationships	17.5	Relationships	25.2	Relationships	17.8
Engaging	10.2	Patient, Caring	15.3	Class Mgt	11.7	Patient, Caring	9.9	Professionalism	8.0
Professionalism	9.1	Subject Knowledge	9.4	Patient, Caring	10.5	Engaging	9.4	Patient, Caring	7.9
Subject Knowledge	8.6	Engaging	7.6	Subject Knowledge	8.6	Know Learners	9.3	Engaging	7.5
Patient, Caring	8.1	Know Learners	7.1	Professionalism	7.4	Subject Knowledge	6.0	Know Learners	7.2
Know Learners	8.1	Make Ideas Clear	6.1	Engaging	6.2	Dedication	5.7	Teaching Skills	7.2
Make Ideas Clear	7.0	Always Learning	5.6	Dedication	5.8	Make Ideas Clear	5.2	Class Mgt	7.1
Teaching Skills	5.9	Dedication	5.1	Know Learners	5.8	Teaching Skills	4.9	Subject Knowledge	7.0
Class Mgt	5.4	Creativity	4.8	Creativity	5.4	Professionalism	4.5	Make Ideas Clear	5.3
Always Learning	5.4	Professionalism	4.6	Always Learning	4.7	Class Mgt	3.9	Dedication	4.9

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

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 (public, or state-funded, and private), grade level (primary, years 1-6, and secondary, years 7-13), and subject matter. All stakeholder groups except education researchers and policymakers indicated whether they or their children went to public or private schools, so their data are not included in that analysis. Figure 17 compares the Top 10 qualities valued by those from public and private schools. Categories are color coded for ease of comparison.

Public (N=337, 63.6%)	%	Private (N=164, 30.9%)	%
Relationships	21.0	Relationships	18.5
Patient, Caring	10.7	Patient, Caring	11.2
Engaging	8.5	Subject Knowledge	8.1
Knowledge of Learners	7.7	Knowledge of Learners	7.5
Subject Knowledge	7.3	Engaging	7.1
Class Mgt	5.7	Professional	6.8
Make Ideas Clear	5.7	Class Mgt	6.0
Professional	5.7	Teaching Skills	5.9
Dedication	5.3	Dedication	5.3
Creativity	4.4	Make Ideas Clear	4.5
Teaching Skills	4.4		

Figure 17. Top 10* qualities by type of school

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. Eleven qualities are listed for public schools because there was a tie for the tenth most frequently valued quality.

As **Figure 17** illustrates, public schools shared the same Top 10 responses as the private schools (with the addition of *Creativity* for the public schools), although they varied slightly in order of frequency. The top 2 responses were the same and in the same order. For grade levels, results were similar. Figure 18 shows the results for the Top 10 categories across the sample, by grade level of the teacher the respondents were thinking of when they listed the most important qualities. Both grade levels reported the same Top 10 categories, in a slightly different order, valuing the same top 2.

Primary (N=180, 34.0%)	%	Secondary (N=441, 83.2%)	%
Relationships	19.0	Relationships	20.2
Patient, Caring	9.6	Patient, Caring	11.5
Subject Knowledge	8.4	Engaging	8.0
Engaging	7.6	Subject Knowledge	7.8
Knowledge of Learners	7.3	Knowledge of Learners	7.6
Professional	7.1	Professional	5.9
Class Mgt	6.9	Make Ideas Clear	5.7
Dedication	6.2	Class Mgt	5.4
Make Ideas Clear	4.7	Teaching Skills	4.8
Teaching Skills	4.6	Dedication	4.7

Figure 18. Top 10 reported qualitie by grade level

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. When data are available from all 23 countries, the sample sizes make it possible to make these comparisons.

We also compared the responses of male and female respondents to assess if there were any important differences. Interestingly, they share eight of their Top 10 most valued qualities, and value the same top 2, in the same order (see Figure 19). They differed in frequency of reporting the different categories, and *Dedication* (sixth) and *Always Learning* (tenth) were unique to the Top 10 list for males, while *Teaching Skills* (eighth) and *Creativity* (tenth) were unique for females.

Male (N=222, 41.9%)	%	Female (N=307, 57.9%)	%
Relationships	21.0	Relationships	19.5
Patient, Caring	12.7	Patient, Caring	9.3
Knowledge of Learners	8.5	Subject Knowledge	8.7
Engaging	8.1	Engaging	8.0
Subject Knowledge	6.3	Knowledge of Learners	7.0
Dedication	5.9	Professionalism	6.8
Make Ideas Clear	5.8	Class Mgt	6.0
Class Mgt	5.5	Teaching Skills	5.8
Professionalism	5.3	Make Ideas Clear	5.1
Always Learning	4.1	Creativity	4.8

Figure 19. Top 10 qualities by gender

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 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 general (versus content-specific) competencies of grade school (primary and secondary) level teachers.

We compare our survey results with England's DfE Teachers' Standards because they are nationally recognized and apply to teachers of all grade levels and content areas who have or are working on acquiring QTS. Table 2 aligns the general summary statements for the Preamble, Part I, and Part II of the Standards document with our survey results. It is important to note that the DfE's Standards statements and our survey categories are generally aimed at the same level of detail, although occasionally the Standards have more detail.

Teachers' Standards

Preamble

Teachers make the education of their pupils their first concern (2), and are accountable for achieving the highest possible standards in work and conduct (17). Teachers act with honesty and integrity (17); have strong subject knowledge (1), keep their knowledge and skills as teachers up-to-date and are self-critical (14); forge positive professional relationships (18); and work with parents in the best interests of their pupils (25).

Survey Responses

- 1 Deep content knowledge, understanding of subject matter and curriculum
- 2 Passion; commitment; dedication
- 14 Mindset & passion for continuous learning & challenging oneself to improve
- 17 Professionalism; knowledge & practice of duties & responsibilities
- 18 Collaborator; ability to work with colleagues
- 25 Communication with parents, families

Part One: Teaching (1 through 8)

A teacher must:

- 1. Set high expectations which inspire, motivate and challenge pupils (6, 27)
- establish a safe and stimulating environment for pupils (6, 8), rooted in mutual respect (11)
- set goals that stretch and challenge pupils of all backgrounds, abilities and dispositions (7, 12,
- demonstrate consistently the positive attitudes, values and behaviour which are expected of pupils (**17**)

- 6 Engaging; motivating students to learn
- 7 Ability to plan meaningful lessons/learning tasks/ instruction; organized
- 8 Ability to manage classrooms, create productive learning environments
- 11 Ability to build productive, trusting relationships, relate to, & mentor students
- 12 Knowledge of how students learn & develop; personalize learning
- 17 Professionalism; knowledge & practice of duties & responsibilities
- **27** Maintains a challenging and rigorous curriculum for all students

Table 2. The DfE's Teachers' Standards aligned with survey results

Teachers' Standards Survey Responses 2. Promote good progress and outcomes by pupils 7 - Ability to plan meaningful lessons/learning tasks/ instruction; organized be accountable for pupils' attainment, progress and outcomes (17) 12 - Knowledge of how students learn & develop; personalize learning be aware of pupils' capabilities and their prior knowledge, and plan teaching to build on these 17 - Professionalism; knowledge & practice of duties (7, 12)& responsibilities guide pupils to reflect on the progress they have 20 - Pedagogical knowledge, skills & methods made and their emerging needs (20, 31) 31 - Teaching students skills necessary for college & demonstrate knowledge and understanding career success/21st century skills; focus on nonof how pupils learn and how this impacts on cognitive skills teaching (12) encourage pupils to take a responsible and conscientious attitude to their own work and study (**31**) 3. Demonstrate good subject and curriculum 1 - Deep content knowledge, understanding of subject matter and curriculum knowledge (1) have a secure knowledge of the relevant 6 - Engaging; motivating students to learn subject(s) and curriculum areas (1), foster and 9 - Ability to make ideas & content clear; good maintain pupils' interest in the subject (6), and communication skills; good speaking ability address misunderstandings (20) demonstrate a critical understanding of 14 - Mindset & passion for continuous learning & developments in the subject and curriculum challenging oneself to improve areas (1, 14), and promote the value of 20 - Pedagogical knowledge, skills & methods scholarship (31) 23 - Fluent in English; ability to teach in English demonstrate an understanding of and take responsibility for promoting high standards 27 - Maintains a challenging and rigorous of literacy, articulacy and the correct use of curriculum for all students standard English, whatever the teacher's specialist subject (9, 23, 27, 31) 31 - Teaching students skills necessary for college & career success/21st century skills; focus on nonif teaching early reading, demonstrate a clear cognitive skills understanding of systematic synthetic phonics if teaching early mathematics, demonstrate a clear understanding of appropriate teaching strategies (20) 4. Plan and teach well structured lessons (7) 6 - Engaging; motivating students to learn impart knowledge and develop understanding 7 - Ability to plan meaningful lessons/ learning

tasks/instruction; organized

challenging oneself to improve

14 - Mindset & passion for continuous learning &

Table 2. The DfE's Teachers' Standards aligned with survey results (continued)

intellectual curiosity (6, 31)

through effective use of lesson time (7)

promote a love of learning and children's

Teachers' Standards Survey Responses 17 - Professionalism; knowledge & practice of duties set homework and plan other out-of-class activities to consolidate and extend the & responsibilities knowledge and understanding pupils have 20 - Pedagogical knowledge, skills & methods acquired (**7**, **20**) 31- Teaching students skills necessary for college & reflect systematically on the effectiveness of career success/21st century skills; focus on nonlessons and approaches to teaching (14) cognitive skills contribute to the design and provision of an engaging curriculum within the relevant subject area(s) (6, 7, 17) 6 - Engaging; motivating students to learn Adapt teaching to respond to the strengths and needs of all pupils (12) 12 - Knowledge of how students learn & develop; know when and how to differentiate personalize learning appropriately (12), using approaches which 14 - Mindset & passion for continuous learning & enable pupils to be taught effectively (20) challenging oneself to improve have a secure understanding of how a range 20 - Pedagogical knowledge, skills & methods of factors can inhibit pupils' ability to learn, and how best to overcome these (12) 23 - Fluent in English; ability to teach in English demonstrate an awareness of the physical, social and intellectual development of children, and know how to adapt teaching to support pupils' education at different stages of development (12) have a clear understanding of the needs of all pupils, including those with special educational needs (12); those of high ability (12); those with English as an additional language (23); those with disabilities (12); and be able to use and evaluate distinctive teaching approaches to engage and support them (6, 14, 20) 6. Make accurate and productive use of assessment 7 - Ability to plan meaningful lessons/ learning

(13)

- know and understand how to assess the relevant subject and curriculum areas, including statutory assessment requirements (13)
- make use of formative and summative assessment to secure pupils' progress (13)
- use relevant data to monitor progress (13), set targets, and plan subsequent lessons (7)
- give pupils regular feedback, both orally and through accurate marking, and encourage pupils to respond to the feedback (13)

- tasks/instruction; organized
- 13 Knowledge & use of assessment

Table 2. The DfE's Teachers' Standards aligned with survey results (continued)

Teachers' Standards Survey Responses 7. Manage behaviour effectively to ensure a good 6 - Engaging; motivating students to learn and safe learning environment (8) 8 - Ability to manage classrooms, create productive have clear rules and routines for behaviour learning environments in classrooms (8), and take responsibility for 10 - Leadership promoting good and courteous behaviour both in classrooms and around the school (11), in 11 - Ability to build productive, trusting accordance with the school's behaviour policy relationships, relate to, & mentor students **(17)** 12 - Knowledge of how students learn & develop; have high expectations of behaviour (8), and personalize learning establish a framework for discipline with a range 17 - Professionalism; knowledge & practice of duties of strategies (8), using praise, sanctions and & responsibilities rewards (6) consistently and fairly (11) manage classes effectively (8), using approaches which are appropriate to pupils' needs (12) in order to involve and motivate them (6) maintain good relationships with pupils (11), exercise appropriate authority (8), and act decisively when necessary (10) 8. Fulfil wider professional responsibilities (17) 10 - Leadership make a positive contribution to the wider life 14 - Mindset & passion for continuous learning & and ethos of the school (10, 17) challenging oneself to improve develop effective professional relationships with 17 - Professionalism; knowledge & practice of duties colleagues, knowing how and when to draw on & responsibilities advice and specialist support (18) 18 - Collaborator; ability to work with colleagues

- deploy support staff effectively (10)
- take responsibility for improving teaching through appropriate professional development, responding to advice and feedback from colleagues (14, 18)
- communicate effectively with parents with regard to pupils' achievements and well-being (25)

- 25 Communication with parents, families

Teachers' Standards

Part Two: Personal and professional conduct

A teacher is expected to demonstrate consistently high standards of personal and professional conduct. The following statements define the behaviour and attitudes which set the required standard for conduct throughout a teacher's career.

- Teachers uphold public trust in the profession and maintain high standards of ethics and behaviour, within and outside school (17, 19), by:
 - treating pupils with dignity (11), building relationships rooted in mutual respect (11), and at all times observing proper boundaries appropriate to a teacher's professional position (17)
 - having regard for the need to safeguard pupils' well-being, in accordance with statutory provisions (17)
 - showing tolerance of and respect for the rights of others (17, 24)
 - not undermining fundamental British values, including democracy (28), the rule of law (28), individual liberty and mutual respect (17, 28), and tolerance of those with different faiths and beliefs (24)
 - ensuring that personal beliefs are not expressed in ways which exploit pupils' vulnerability or might lead them to break the law (17, 19)
 - Teachers must have proper and professional regard for the ethos, policies and practices of the school in which they teach, and maintain high standards in their own attendance and punctuality (17)
 - Teachers must have an understanding of, and always act within, the statutory frameworks which set out their professional duties and responsibilities (17)

Survey Responses

- 11 Ability to build productive, trusting relationships, relate to, & mentor students
- 17 Professionalism; knowledge & practice of duties & responsibilities
- 19 Religious; spiritual; moral; ethical
- 24 Cultural competence; respect for diversity
- 28 Belief in education as a way to promote political values

Note: Numbers reflect the coding categories from Table A2 in the Appendix.

Table 2. The DfE's Teachers' Standards aligned with survey results (continued)

Overall, the survey results aligned well with the Teachers' Standards and with research on the competencies and dispositions of effective teachers.

Regarding the standards, there was only one competency present that was not mentioned by stakeholders in our survey: the teacher acting as a part of a *Political* system in which education serves to reinforce political beliefs. Yet there were several competencies mentioned in our survey responses and in research on effective teaching that were not mentioned in the Teachers' Standards. These include:

- The teacher's *Patient, Caring* personality (the second most frequently reported quality by the overall sample, or 10.7% of the total responses).
- The teacher's *Creativity* (the 12th most frequently reported quality by the overall sample or 4.2% of the total responses, and most cited by parents and principals).
- The teacher's *Intelligence* (the 16th most frequently reported quality by the overall sample, about 1% of the total responses).
- The teacher's ability to use *Technology for Learning* (the 20th most frequently reported quality by the overall sample, or 0.5% of the total responses).
- The teacher's ability to conduct and understand *Research* (only 0.1% of the responses, or 29th most frequent for the full sample).
- The teacher's value of *Deep Learning*, which includes focusing on the learning process as much or more than learning outcomes like test scores, and working toward a deep understanding of content that can be transferred to novel situations. This is the only category not mentioned by stakeholders in England, or in the Teachers' Standards.

What Surprised Us



All stakeholder groups endorsed the importance of teachers building trusting relationships and relating well to students.

The key research questions driving this study were

- whether there were important differences in the qualities that different groups of education stakeholders value for a teacher to be regarded as effective;
- whether context made a difference in the qualities most valued; and
- 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 public and private school teachers; and perhaps, by males and females. However, we were surprised by the general consistency in findings across the groups. All stakeholder groups endorsed the importance of teachers building trusting, compassionate *Relationships* with and relating well to students; the importance of a *Patient, Caring* and kind personality; *Engaging* students in learning; the teacher's Subject Matter Knowledge; their Knowledge of Learners, regarding who they are as individuals, their learning needs, and how they learn and develop; and *Professionalism*. The remaining Top 10 categories for each group were in at least one other group's Top 10 list. When we compared contexts, public and private schools shared all of their Top 10, although they varied in frequency

of reporting, and their top 2 were the same. Males and females also shared eight of their Top 10 most valued qualities for an effective teacher, and their top 2 were the same. When we compared which qualities were valued most for primary and secondary school teachers, both grade bands reported the same Top 10 categories, in a slightly different order, valuing the same top 2 as well.

Regarding research question 3, we found that survey responses were generally well aligned to documented competencies of effective teachers and teaching practices supported by research, and with the DfE's Teachers' Standards developed for K-12 teachers in maintained schools and those with or pursuing QTS. Several categories, all of which were reported with low frequency by all stakeholders, were not found in the Teachers' Standards: the teacher's intelligence and self-confidence; a patient, kind and caring personality; integration of technology for learning; a research mindset; and emphasis on learning processes and deep learning.

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 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, reports like 21st Century Knowledge and Skills in Educator Preparation and others 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 England, we were surprised to find that a small percentage 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, particularly the following:

66 It was surprising to find that a small percentage of responses from educators included certain knowledge and skills known to enhance student learning, such as assessment or challenging curriculum.

- No more than 0.4% of educators' responses (0% of researchers and policymakers) addressed the teacher's critical knowledge and use of Assessment to monitor student progress. Wiliam (2007) and others suggest that the ability to consistently assess student learning progress and adjust instruction accordingly is the single most important aspect of teaching practice to enhance student learning. We therefore expected to see this competency mentioned far more frequently by education researchers and policymakers, principals, and teachers.
- No more than **0.4%** of responses from educators (**0%** from education researchers and policymakers) addressed making learning Challenging and rigorous for <u>all</u> students, in the belief that all can learn. A "watered-down" curriculum, in fact, has been shown to increase drop-out, repeating grades, and/or need for remediation (Stronge, 2007).
- No more than 1.1% of responses from educators addressed the teacher's critical abilities around *Planning* lessons and learning tasks to ensure understanding and student success.
- None (0%) of the principals, teachers, education researchers, and policymakers in this study mentioned the importance of focusing on the learning process itself and emphasizing Deeper Learning of content for students. Deeper learning includes the following three domains (Martinez, McGrath, & Foster, 2015):
 - Cognitive: students understand content principles and concepts and develop a strong academic foundation
 - <u>Interpersonal:</u> students learn to work collaboratively and to solve complex problems
 - Intrapersonal: students learn how to monitor and direct their own learning

Globally, there has been a renewed focus among researchers and practitioners on the importance of teaching for deeper learning, which may be in response to the strong emphasis on testing and student achievement over the past decade. Recent research in the U.S. concluded that a deeper learning curriculum improved students' content knowledge, problem solving skills, graduation rates, college enrollment to selective institutions, collaboration skills, academic engagement, and motivation (Zeiser et al., 2014).

Educators made little mention of important teacher behaviors within the school community, including taking on *Leadership* roles and contributing to the profession (< 0.5% of all educators' responses). Additionally, only 0.1% of teacher responses mentioned working *Collaboratively* with colleagues, while none (0%) of the education researchers, policymakers, and principals did. Surprisingly few responses (< 0.4%) addressed the importance of working with Families to keep them informed and to support student learning. Darling-Hammond (2010) notes the importance of these competencies for effective teaching, and research on effective schools show these practices to be important as well (e.g., Fullan, 2003). They are also explicitly addressed and emphasized in the DfE's Teachers' Standards.

What Surprised Us

We thought we would see more mention of the importance of integrating *Technology* for learning, yet <1% of educators referred to this competency. In 21st Century schools, teaching and learning are both expected to be impacted, if not transformed, by technology (e.g., Greenhill, 2010). However, effective use of technology for teaching and learning is not addressed in the Teachers' Standards.

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. Although it is understandable that not all important knowledge, skills, and dispositions for effective teaching would be reported by each educator, we expected that these categories would appear more frequently. These categories are all explicitly addressed in the the DfE's Teachers' Standards, which have a direct impact on educators. It is clear from research and education policy literature that these categories are associated with student learning, and in the case of the use of assessment and instructional planning, they are central to effective teaching.

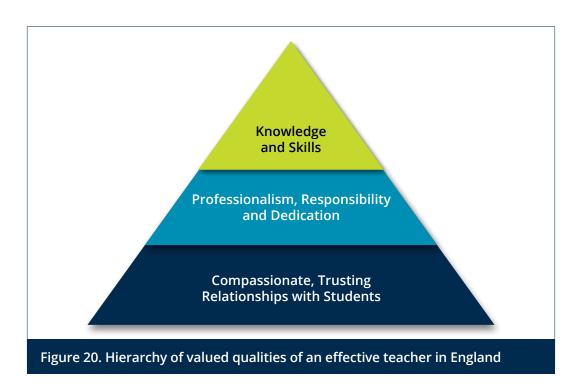
66 Dispositions are the gap between abilities and actions (Ritchard, 2002).

Implications

Recent attention on the link between the education system and the country's long-term economic growth has focused on policies to improve teaching and learning in England, including the quality of the teaching workforce. At the 2016 International Summit on the Teaching Profession held in Berlin, the focus was on these three issues that are critical for developing an effective teaching profession globally:

- 1. The competencies—skills, knowledge, and dispositions—needed to be a successful teacher.
- 2. The policies that help foster teachers' competencies so they can be effectively prepared for teaching.
- 3. Implementation policies that promote teachers' professional learning and growth.

In light of these issues, it is notable that the surveyed education stakeholders value teacher dispositions of care (*Relationships*; *Patient*, *Caring* personality) and character (*Professionalism*; *Dedication*) 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 pedagogical skills will do little to help students learn and succeed. In fact, Ritchart (2002) views dispositions as the gap between abilities and actions: having these professional dispositions of care and character, for example, enables teachers to use effective professional judgment and do the right thing for students. Research tells us that when teachers create a safe and supportive learning environment, students are more motivated and consistently engaged. Cognitive scientists tell us that these conditions reduce the cognitive load of learning by allowing individuals to shift their focus from worry and potential risk to the learning task at hand. 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 20 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 a study in India, Singh and Sarkar (2012) conclude that "what the teacher does and believes, rather than what the teacher knows, is what ultimately counts for their students."

Given the emphasis among all stakeholder groups, it may be that teacher preparation and training initiatives should emphasize the development and foster these critical dispositions of care and character. Research demonstrates that teachers can improve in these areas through careful and purposeful training programs (Taylor & Wasicsko, 2000; Schulte et al., n.d.). As popular author and educator Jessica Lahey (2014) reports, "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."

What Our Findings Mean for England



66 Data are only as valuable as the questions they inspire, the policies they inform, and the practices spurred to examine.

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 these values, and they are wellaligned with the teaching standards specified in the the DfE's Teachers' Standards for primary and secondary teachers.

Data are only as powerful as the questions they inspire, the policies they inform, and the practices we are spurred to examine (McComb, 2016). The value of our study is in the use of these results to shape critical discussions needed for reviewing current pre-service and in-service teacher training, as well as hiring and teacher evaluation policies. The emphasis of British education 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 in England include:

<u>Dispositions:</u> Focus on what are often referred to as "non-cognitive" factors, including social-emotional intelligence, to support teachers in building trusting relationships and a safe, 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. Neurocognitive scientists emphasize the importance of trusting relationships for human learning (e.g., Coan & Sbarra, 2015), and mastering the dispositions, knowledge and skills required to do this well should have a positive impact on a wide array of student outcomes (Lahey, 2014). Dottin (2009) provides examples of how teacher preparation

What Our Findings Mean for England

- programs and ongoing professional development can incorporate training and support of critical dispositions needed for professional judgment and intelligent teaching practice.
- Content knowledge: Ongoing, teacher-driven, collaborative, often "justin-time" training to update relevant subject-matter knowledge. Critics of teacher preparation in England often point to insufficient content knowledge. Training 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).
- <u>Pedagogy:</u> Training in specific pedagogical practices aligned with how humans learn and develop, supported by research and driven by specific learning goals and objectives. Teaching skills was the most frequently cited category by the education researchers and policymakers in our study. Training can be supported by peer observations and modeling by a subjectmatter 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.
- Assessment: Training in the use of assessment for monitoring learner progress and facilitating learner control of their learning. Assessments aligned with learning standards or progressions can help to integrate lesson planning and instructional practices. A surprisingly low number of responses (< 0.5%) by educators in this study addressed use of assessment, yet the ability to regularly monitor student progress and adjust instruction accordingly is central to effective teaching.
- 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 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 England's teachers is the development of a school climate and culture that supports effective teaching and learning. Recent policy efforts focus on why teachers are leaving the profession in large numbers in England, and the difficulty with recruiting new candidates. As the Guardian recently reported, 43% of current teachers indicate they'll be leaving the profession within the next 5 years (Lightfoot, 2016). Some of the major concerns include increasing workload, decreased pay, and increased class sizes. Some potential areas for improvement to the teaching profession, supported by research and/or teaching policy experts include:

What Our Findings Mean for England

- 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, 2013). This can help to address documented concerns about low teacher morale in England.
- 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. Moreover, opportunities for career advancement via teacher leadership roles helps improve teacher retention (Natale, Gaddis, Bassett, & McKnight, 2016). Taking on leadership roles is addressed in the Teachers' Standards (see Table 2). Given the difficulty in recruiting and retaining teachers in England, 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., Darling-Hammond, 2006; Gallimore et al., 2009; Saunders et al., 2009). Stronger teachers can help support their less skilled peers. This collaborative practice is emphasized in the *Teachers' Standards* as well (see **Table 2**).

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 across England, from stakeholder groups representing public and private schools, using computer assisted telephone interviews. However, we cannot claim that this sample accurately represents the views of all members of each stakeholder group across England. Moreover, because we asked respondents to generate their own lists of qualities or competencies they value most, 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.

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 England reaffirm the notion that at its foundation, teaching is about relationships between teachers and learners that ultimately foster learner success, as these communities define it.

- 66 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 England

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 for teachers to be effective, the work conditions and environment, first and foremost, must be well managed. 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; Darling-Hammond, 2010; Bourgonje & Tromp, 2011; Taylor et al., 2012).

In light of these concerns, we hope that the results of this study—reflecting the opinions of a wide array of education stakeholders across England, representing public and private 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.

66 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.

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Appendix



Participating Countries	Data Collection Agency
Vietnam	
Hong Kong	Cimira
Singapore	Cimigo
Japan	
Australia	Helme Consulting
India	Nielsen India
South Africa	
USA	
Canada	
Mexico	
Argentina	
Brazil	
England	
Germany	
Poland	Dashboard Marketing Intelligence
Finland	
Qatar	
Saudi Arabia	
Iran	
Turkey	
Morocco	
Egypt	

 $^{^{\}rm 11}$ Hong Kong (a territory) and Singapore (a city state) are technically not countries.

Descriptions of Study Methods

Dashboard collected data from multiple regions in England as shown in Figure A1.

Region	% of sample*
South East	5.4%
London	42.6%
North West	2.6%
East of England	3.4%
West Midlands	24.8%
South West	2.2%
Yorkshire and the Humber	17.2%
East Midlands	1.8%
North East	0%

^{*}Researchers and policymakers are not included. They were not asked this question in their surveys. For students and parents, these regions are where they lived. For teachers and principals, this is where their school is located.

Figure A1. Areas surveyed in England

How We Surveyed

Dashboard Marketing Intelligence used one method for data collection with the different stakeholder groups in England:

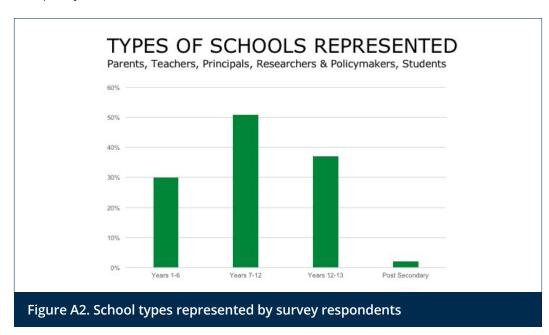
Target Group	Data Collection Method
High School Students	
Parents	
Teachers	CATI
Principals	
Researchers and Policymakers	

We specified quotas for public and private school responses. Data quality was monitored by random quality checks and voice recordings for a sub-sample (5-15%) of the interviews.

Who We Surveyed

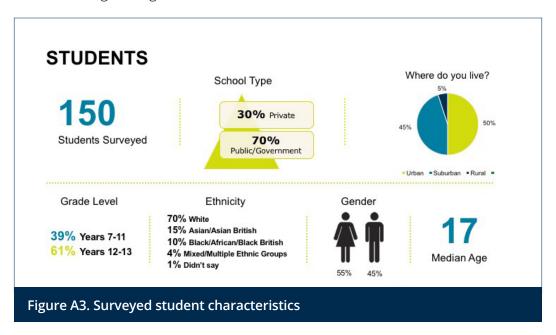
In total, we surveyed 530 respondents.

Figure A2 shows the grade levels represented by the respondents in the survey. Note that all of the students who participated were in secondary school (years 7-13). Post-secondary generally refers to school levels reported by researchers and policymakers.

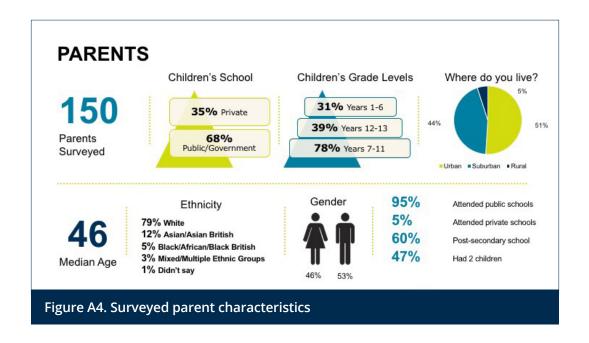


Figures A3 - A7 summarize key characteristics of each of the surveyed groups.

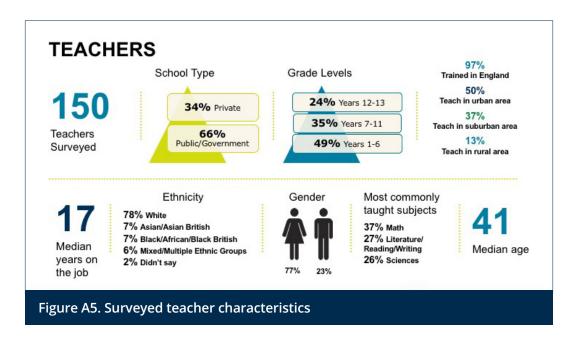
For the **students**, slightly more females participated, most lived in urban and suburban areas, and most attended public schools. All were in secondary school, and ages ranged from 15-19, with a median of 17.



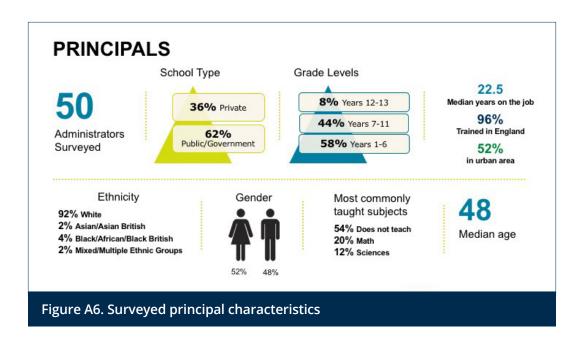
For parents, slightly more males responded, and most (95%) attended public schools as children. Nearly two in three had post-secondary schooling, and therefore on average, this sample was better educated than the general population. A little over one-third (35%) send their children to private schools, and about half live in an urban area.



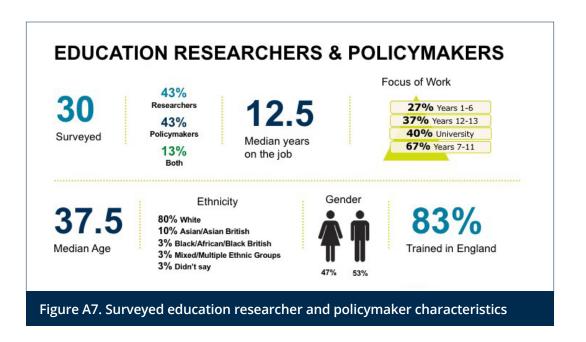
The **teacher** respondents represented a wide range of experience, from 1–33 years on the job, and the median of 17 years suggests that on average, these were experienced teachers. Almost all (97%) were trained in England, most (66%) taught in public schools, and most (77%) were female.



The surveyed **principals** also represented a range of experience, from 4 to 45 years on the job, with a median of 22.5 years. This suggests that on average, this is an experienced group of principals. Most (96%) were trained in England, and 62% worked in public schools. Slightly more females than males participated in the survey.



The education researchers and policymakers we surveyed were mostly (83%) trained in the England and had 2-29 years of experience, with a median of 12.5 years at their current job, suggesting that on average, this group was fairly experienced. Slightly fewer were female (47%) and most focused their work on primary and secondary education.



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 A2**.

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.

Characteristic	Description
(1) Subject Knowledge	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
(2) Dedication	Dedication, passion, or commitment to one's work as a teacher; commitment to help all learners succeed
(3) Creativity	Qualities indicating the ability to think creatively, adapt, or embrace new ideas or teaching styles; includes being innovative
(4) Technology	Familiarity and/or fluency with and ability to use technology for teaching & learning; keeping current or up-to-date with technology
(5) Patient, Caring Personality	Positive personality characteristics, e.g., patient, caring, kind, fair, humorous, friendly
(6) Engaging	Ability to make class fun and/or engaging and motivates learners to learn
(7) Planning	Ability to effectively plan lessons as well as being organized more generally; ability to organize the learning for the learner
(8) Class Management	Ability to effectively manage classrooms, learner behavior, and time for learning; develop classroom routines to maximize learning time; create a productive learning environment
(9) Make Ideas, Content Clear	Ability to present information in a clear, accessible manner
(10) Leadership	Qualities related to being a leader, e.g., decision-making skills, visionary, influential etc.
(11) Relationships	Ability to understand and establish trusting, productive relationships with learners; includes a mentoring role
(12) Know Learners	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
(13) Use of Assessment	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
(14) Always Learning	Willingness/passion/desire to learn and develop, to challenge oneself to improve, reflect on own practice, & accept constructive criticism. Includes desire to stay updated on relevant knowledge and skills in their field; engaging in ongoing professional development
(15) Belief in Self	Confidence in oneself

Table A2. Coding categories of characteristics/competencies of effective teachers

Appendix

Characteristic	Description
(16) Intelligence	General intelligence and/or being well-informed; a strong general fund of knowledge (not specific to the content being taught); critical thinking, analytical and problemsolving abilities
(17) Professionalism	Workplace professionalism and responsibility (e.g., honesty, loyalty, punctuality); awareness of and compliance with rules and policies of the education system
(18) Collaborative	Ability to work well with colleagues; shares knowledge and skills with colleagues; cooperative and works with others to improve as a team
(19) <i>Moral</i>	Good moral character or general ethics; principled; can include religiosity and spirituality
(20) Teaching Skills	Knowledge and use of various pedagogical/teaching techniques, general as well as specific to a given content area; pedagogical content knowledge
(22) Qualifications	Possessing necessary preparation and credentials for teaching the grade levels and subject matter
(23) English Fluency	Having the knowledge and skills to teach English to non-native speakers
(24) Cultural Competence	Knowledge, appreciation and respect for different cultures and backgrounds; tolerant, unbiased regarding different learner backgrounds
(25) Families	Ability to communicate and build relationships with learners' parents and families; includes families in learner's education
(26) Research	Ability to conduct and understand research; studying one's own practice and the impact on learners (e.g., action research, lesson study)
(27) Challenging	Belief that all learners can learn; maintaining a challenging, rigorous curriculum for all learners
(28) Political context and/or beliefs	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)
(31) Non-cognitive skills	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
(32) Deep Learning	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
(21, 29, 30) "Other"	Either odd responses (e.g., "eccentric," "well-traveled") or responses too general to code, e.g., "experienced" or "effective" (essentially repeating the question).

Table A2. 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.

