The challenge to quality retention: why schools matter

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The retention challenge

For nearly two decades there has been no shortage of policy and research attempts to improve the financial and non-financial attractiveness of teaching in response to stubborn teacher supply challenges across the four UK nations (e.g., European Parliament, 2019; Department for Education, 2020; EPI, 2021a; Worth and Faulkner-Ellis, 2022). However, despite intense investments, almost 40% of newly qualified entrants to teaching in 2009 have left the profession after 10 years (Department for Education, 2019) and the overall number of teachers has in general failed to keep pace with increasing pupil numbers since 2011 (House of Commons, 2021). At a time when the UK education system is still stretched by trying to make up for the effects of Covid lockdowns on pupils' learning, the sector is unlikely to be able to recruit its way out of the teacher supply crisis in a foreseeable future.

Investing in teachers' on-going development has been seen by researchers, thinktanks and policy makers as a cost-effective approach to improving teacher retention (DfE, 2019; EPI, 2020, 2021b,c; RAND, 2021; PBE, 2022; Perry et al., 2022), and leveling up educational opportunities for every child in all parts of the UK (IOP, 2020; EEF, 2021; HM Government, 2022). However, to date, extensive efforts to improve schools—especially those serving disadvantaged and marginalized communities—by increasing teachers' human capital (i.e., sum of teachers' knowledge, skills, capabilities and dispositions) appear to have failed to bring about the desired result. Examples include the £355 m funds for strategic school improvement and teaching and leadership innovation in England, the four-year Wellcome CPD Challenge to increase the quantity of subject-specific professional development.

The failure of the teacher-centered human capital strategy to transforming teacher quality and reforming schools is not limited to England alone. In the USA for example, Johnson (2019) questioned the lack of success in reaching its goal of improving student achievement and graduation rates of the intense and costly effort of the Bill & Melinda Gates Foundation's six-year, $575 million intervention to improve human capital in three large urban school districts and four charter management organizations. This and other UK-wide initiatives suffer from a profound conceptual limitation and have struggled to identify sustained impact on improvement: By focusing narrowly on individual teachers' learning entitlements and increasing the total sum of teachers' knowledge, skills and dispositions, these initiatives have largely ignored the integral role of the school organization in teacher retention. Schools are the finders and keepers of teachers (Johnson, 2004): teachers who excel and whose students excel with them do not just do so on their own (Day and Gu, 2010, 2014; Day, 2017; Gu et al., 2021). Johnson argues that

> Relying exclusively on efforts to improve human capital in this way rests on the shaky assumption that a teacher's success is independent of the school context in which he works, that a teacher who is effective in one school will be equally effective in any other. It is as if the features of schools that teachers regularly report matter to them—for example, the knowledge and skills of the principal, the effectiveness of schoolwide order and discipline, how time is used, whether they have a curriculum and what it is—have no influence on teachers' practice or their ability to successfully educate their students. According to this view, schools are little more than collections of classrooms, each housing a teacher and her students, who work together unaffected by others.
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> Johnson (2019: 3–4).

Building and sustaining the quality of teachers is not only an agenda for the future (Day, 2017), but equally importantly, for the wellbeing, learning and achievement of the children who attend schools today. Improving education quality holds the hope of ending learning poverty for the most disadvantaged and marginalized children and young people around the world. For these children especially, school represents an *oasis of safety and hope* where they can learn, play, grow and achieve. Although schools alone

cannot address many of the centuries' old issues of educational and social inequalities that still challenge many children's fundamental right to quality education in modern times, they are spaces where many committed and caring teachers are dedicated to inspiring the learning and achievement of young minds.

The question of how to retain the hearts, minds and effectiveness of teachers who work in intellectually, emotionally and physically challenging places called "school" (Goodlad, 2004) has been contemplated for many years in many countries. In essence, this is a *quality* retention question. In confronting this question, we encounter more fundamental issues of what constitutes teacher quality, why quality retention matters (as opposed to teachers' *physical* retention), and what schools and systems can due to enable them to learn to live new lives in which they are able to sustain their capacity to teach to their best over time.

Why *quality* retention matters

The important role of a high-quality teaching profession in raising standards and transforming educational outcomes cannot be better emphasized in research papers nationally and internationally. Research on teacher effectiveness consistently reports that teachers' classroom practices have the largest effects on student learning and achievement (Rockoff, 2004; Hallinger, 2005; Rivkin et al., 2005; Leithwood et al., 2006). The positive effects of high-quality teaching are especially significant for pupils from socioeconomically disadvantaged backgrounds. Evidence suggests that when taught by very effective teachers, pupils can gain an extra year's worth of learning (Hanushek, 1992, 2011; Sutton Trust, 2011). Internationally, comparative research evidence from the Organization for Economic Co-operation and Development (OECD) affirms that "teacher quality" is the single most important school variable influencing student achievement (OECD, 2005). Indeed, its Teaching and Learning International Surveys (TALIS) have repeatedly concluded that making teaching a more attractive and more effective profession must be the priority in all school systems if they are to secure and enhance effective learning (OECD, 2009, 2011, 2018a).

It remains the case, however, for diverse and complex socio-economic and political reasons, that for many countries retaining and developing committed and effective teachers is a real challenge. In many low- and medium-income countries, for example, where school enrollment is on the rise, an acute shortage of primary teachers represents one of the greatest hurdles to providing education for all school-age children (UNESCO, 2011, 2014, 2015). A lack of resources and financial incentive packages to attract qualified personnel into teaching has meant that quantity, rather than quality, continues to be a primary concern in their efforts to provide basic education. This has meant that, unfortunately, children in countries needing teachers the most, tend to be taught by the least qualified personnel (UNESCO, 2006, 2015, 2020).

In contrast, in the world of high-income countries, such as the USA, the UK and many European countries, shortage of teacher supply tends to be a particularly pressing problem for core subject areas such as maths, modern foreign languages and science (European Commission, 2012, 2014; European Parliament, 2019) and for schools serving socioeconomically deprived communities (Ingersoll, 2001; Guarino et al., 2006; Boyd et al., 2008; Allen and McInerney, 2019). There are also troubling indicators which suggest that leadership turnover is especially higher and teacher quality is especially lower in schools serving high-need communities (Loeb et al., 2005; Boyd et al., 2008; Goldhaber and Hansen, 2009; Sibieta, 2020) where most children, who are already disadvantaged in accessing or benefiting from rich capital and social capital in their early years, are then denied access to the quality education to which they are entitled when entering the formal school system.

Retention first, recruitment second

Concerns about teacher supply and quality are not new. Significant falls in the proportion of graduates applying for teacher training programs across many European countries have culminated in an urgent call to increase efforts to transform the conditions of teaching and through this, attract more suitably qualified people to the profession (Auguste et al., 2010; OECD, 2011; European Commission, 2012; European Parliament, 2019). At the same time, the aging population of the existing teaching workforce (Grissmer and Kirby, 1997; Guttman, 2001; Chevalier and Dolton, 2004; OECD, 2005; Matheson, 2007; Aaronson, 2008; European Commission, 2012, 2014) poses pressing challenges to the nature of its composition in the future. Only 7% of all primary and secondary teachers in the EU are under 30 years old, while around more than 1 in 3 (36%) are 50 or older (European Parliament, 2019). In England, for example, close to half of the full-time teachers (46%) are aged over 40, with 19% of these aged over 50 (Department for Education, 2020). This situation is the most pronounced in Italy where more than half of all teachers are older than 50 (European Commission, 2012, 2014; European Parliament, 2019).

Moreover, high rates of attrition of teachers in their first five years of teaching (Darling-Hammond, 1997; Ingersoll, 2003; Kados and Johnson, 2007; Burghes et al., 2009; Shen and Palmer, 2009; OECD, 2005, 2011; Department for Education, 2020) remain a persistent teacher retention problem. Although some studies show that on average, early career leavers tend to be less effective than stayers as measured by the test score gains of the students in their classrooms (Henry et al., 2011; Goldhaber et al., 2011; Boyd et al., 2011), others suggest that teachers with stronger qualifications and more competitive university backgrounds are more likely to exit early (Lankford et al., 2002; Boyed et al., 2005; Guarino et al., 2006; Feng and Sass, 2011).

The reasons behind teachers' decision to leave are complex. A common critique has, at least in part, attributed teacher attrition to a whole-sale redefinition of teacher professionalism driven by "a culture of accountability, performance, and measurability" (Luke, 2011, p. 370; see also Rots and Aelterman, 2008; Smith and Kovacs, 2011). Luke (2011) laments that "the normative, the ethical,

the cultural—matters of value—have quietly slipped from policy discussion (Ladwig, 2010), overridden by a focus on the measurable, the countable, and what can be said to be cost efficient and quality assured" (2011, p. 368). Within such a performativity culture, teacher professionalism has become more closely aligned with national educational policy which tends to define educational success in relatively narrow, instrumental terms (Furlong, 2008). Alongside this, the power of government regulatory bodies for the setting and adjudication of standards has been increased significantly over time. This has been complemented by more detailed and bureaucratic monitoring of what teachers do in their classrooms and how they do it—irrespective of whether what they are required to do is educationally and/or culturally meaningful (Luke, 2011). Thus, whether or not teachers agree with the centrally prescribed policy agendas and strategies, they are expected to conform to them in their day-to-day practice (Furlong, 2008).

It is perhaps, then, no surprise that this highly prescriptive culture of neoliberal accountability and performativity has been criticized by scholars as having contributed to a wide-spread lack of deep trust in teachers' professional standing, judgment and capability. For some years now, a substantial number of studies on teacher retention have been overly concerned with a narrow problem-focussed agenda. Although this body of research has improved our understanding of the factors which may cause some teachers to struggle and/or exit, it offers rather limited explanation as to why so many other teachers who are working with similar challenges embedded in outcomes driven educational systems are willing, able and committed to continue to teach to their best. What tends to be absent from many of the investigations of teacher stress, attrition and job satisfaction of individual teachers is the integral role that teachers' professional, role and organizational identities, wellbeing and sense of vocation play in enabling them to meet the daily challenges of teaching and learning (Day and Gu, 2014); and the part played by school leaders in mediating the sometimes negative effects of educational policies and through this, shaping and influencing many, if not all, teachers' sense of job fulfillment, commitment and effectiveness (Gu et al., 2018).

The positive impact of strong leadership on student learning through building supportive school culture and creating favorable working conditions for teachers is well documented in the teacher development, school improvement and school effectiveness literature (Hallinger, 2005; Johnson, 2004; Leithwood et al., 2004, 2006; Gu et al., 2008; Day et al., 2011; Sammons et al., 2011). Grissom's (2011) study found that higher teacher turnover rates in disadvantaged schools result in part from the ineffectiveness of the principal. His analysis of national school and teacher surveys showed that teacher satisfaction is likely to be lower, and that the probability for teachers to leave schools is significantly greater when the leadership of the principal is weak and ineffective.

Recent research on scaling up innovations for better teaching and learning outcomes in England also points to the significance of leadership in enabling sustained teacher professional learning, development and change (Gu et al., 2019, 2020, 2021). The research shows that leadership support for professional learning and development is a prerequisite for change in school culture which shapes the intellectual, social and organizational environments that are necessary for change in teacher practice and improvement in pupil engagement in learning. Put simply, "A 'good' research-informed innovation can rarely travel into the day-to-day realities of classrooms on its own merits without school leaders that can help teachers engage with it and apply and adapt it to their own classroom contexts" (Gu et al., 2021: 19). In line with these research findings is the observation of the strong and positive associations between school leaders' administrative support and low teacher retention rates (Ladd, 2009; Boyd et al., 2011). A strong sense of staff collegiality has been found to be crucial in building intellectual, emotional and social capital in schools so that teachers, and especially those working in schools serving socioeconomically deprived communities, are able to maintain their integrity and commitment in times of change (Gu and Day, 2007; Allensworth et al., 2009; Day et al., 2011; Holme and Rangel, 2012).

In his reflection of his leadership journey in education, Sir Dunford (2016) argued that schools and the education system at large should place "retention first" and "recruitment second" in their endeavor to secure an effective workforce to meet the learning entitlements of every student in every school in every country of the world. It would indeed be more fruitful and educationally more meaningful if greater attention were paid to the factors which enable teachers who decide to stay to maintain committed to their own learning and the learning and achievement of their pupils. This is, in essence, a quality retention issue because, as Johnson et al. (2005) have argued, the physical retention of teachers, "in and of itself, is not a worthy goal":

> Students are not served well when a district retains teachers without regard to quality. Little can be achieved (and much might be lost) when a district succeeds in reducing teacher turnover if some of those teachers are incompetent, mediocre, disengaged, or burnt out. Instead, student learning is the goal, and schools must seek to retain teachers who demonstrate that they are skilled and effective in the classroom, are committed to student learning, and are ready and able to contribute to the improvement of their school.
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> Johnson et al. (2005, p. 2).

However, we all know that to teach at one's best over time is not easy. In reflecting on her professional work with teachers over the course of her career, Nieto's (2011) expressed the greatest respect for such teachers: "My belief in teachers is stronger than ever because I have seen the best of them do unbelievable work in sometimes harsh circumstances" (2011, p. 133). These are the teachers who give witness to the essential meaning of "everyday resilience" that Day and Gu (2014) have elaborated in their work on the work, lives and effectiveness of teachers.

Over the years, scholars have used different conceptual and methodological lenses to explore issues around improving the quality of provision of teaching and learning in schools. We have chosen *resilience* in our recent work because it provides a useful conceptual lens for teachers, school leaders and policy makers to understand how and why many teachers have managed to weather the often unpredictable "storm" of school and classroom life (Patterson and Kelleher, 2005) and sustain their commitment and motivation in the profession. It also enables us as researchers to probe deep into teachers' inner and external professional worlds

to explore why many are able to remain committed and passionate about making a real difference and continue to do so—irrespective of the unpredictable nature of every school and the many physical, emotional and intellectual challenges that are associated with this. More importantly, we know from research that pupils of highly committed and resilient teachers are more likely to perform better academically (Day et al., 2007).

In the remainder of the chapter, I associate teacher quality with the purpose, value and beliefs in teachers' inner worlds which enable them to endure the persistence of hope and endeavor to do their best to reach and engage every student in learning, regardless of the challenges which this may bring. I will do so in the knowledge that teacher quality is not fixed as individuals' capacity to express the conviction of their vocational commitment is almost certain to fluctuate over the course of a career. The extent to which individual teachers are able to exercise their capacity to be committed and resilient will depend not only upon their individual histories and their personal resources, but also upon the influence of the school environment, their colleagues and the quality of their school leadership.

Teacher quality revisited: purpose, value and beliefs at the core

There is strong and consistent research evidence that teachers' classroom practices have the largest effects on student learning achievement (Rockoff, 2004; Hallinger, 2005; Rivkin et al., 2005; Leithwood et al., 2006; Barber and Mourshed, 2007; Mourshed et al., 2010; Leithwood, 2019). At the systems level, the two McKinsey's reports (Barber and Mourshed, 2007; Mourshed et al., 2010) show that getting the right people into the teaching profession and developing them to become effective teachers have played a central role in enabling the world's most improved school systems to come out on top, and more importantly, keep getting better. Put simply, teacher quality is the most critical school-level and system-level predictor of student success.

Depending on the theoretical and methodological interests and preferences of educational researchers, the definitions and measures of teacher quality vary considerably. At times, the meaning of *teacher* quality is used interchangeably with that of *teaching* quality. For example, in some studies where the research focus was on investigating increases in the quality of teach*ing*, value-added scores and learning gains were used to measure and categorize the quality of teachers rather than what they do in the classroom (e.g., Chetty et al., 2014; Bowen and Mills, 2017).

It is necessary to make a distinction between teach*er* quality and teach*ing* quality because, as Kennedy (2010) argues, "the qualities teachers bring with them to their work are not always enough to ensure better teaching practices" (2010: 591). A profound difference is that the former is essentially concerned about the person in the professional teacher, while the latter is about the practice of the professional. Put differently, teacher quality concerns *who the teacher is, what being a teacher means to the person,* and *what the values, capacity and, capabilities they have* that influence, positively or negatively, student learning and achievement. In contrast, teaching quality is primarily concerned with *what the teacher does in the classroom* (i.e., processes and activities of instruction) and *how well they do it* (i.e., impact of instruction on student learning). Thus, quality teach*ing* as against quality teach*ers* will be influenced, as Kennedy (2010) reminds us, not only by the "enduring personal qualities that they bring with them" but will also be "a function of schedules, materials, students, institutional incursions into the classroom, and the persistent clutter of reforms that teachers must accommodate" (2010: 597).

Teacher quality has remained central to policy debate about teacher supply and demand in many countries. This is because, at least in part, teacher quality attends to the ethical and vocational values, passion and resilience, as well as cognitive, social and psychological resources and dispositions of the person *in* the teacher—all of which influence, powerfully and profoundly, teachers' capacity to teach well over the course of their professional lives. Their commitment, enthusiasm and resilience—qualities that are harder to measure—are fundamental to how teachers feel about their work, how they think about themselves as professionals, and importantly, how they are (or are not) able to fulfill their professional values and core purposes by making a real difference to children's learning and achievement.

In this chapter, I focus on two inner resources of teacher quality: *altruistic values* and *efficacious beliefs*. The reasons are twofold. First, these inner resources are expressions of the personal values and strengths of the *person* in the professional teacher that define the ethical character and professional quality of the teacher. Second, and related to the first, they enthuse and enable teachers to improve their capabilities to fulfill the personal and social meaning of teaching, and therefore explain *why* some can "maintain equilibrium and a sense of commitment and agency in the everyday worlds in which teachers teach" (Gu and Day, 2013, p. 26) while others cannot.

Purpose and values: the soulfulness of quality

In his seminal work on teaching as a calling and vocation, Hansen (1995, 2021) argues persuasively that the idea of vocation underscores the fact that it is not the teaching *role* itself but "the person within the role and who shapes it who teaches students" (1995: 17). In describing teaching a calling and vocation, Hansen invites us to probe deeply into understanding the soulfulness and passion in teaching as well as the social origins of the *practice* of teaching which embodies teachers' esthetic (e.g., having a feeling and a sense for work done well), moral, and intellectual endeavors and inspirations to enact their inner urge to make a difference to the learning and achievement of their students. The language of vocation takes us *inward* to recognize that when the person is called to "*be* a teacher rather than just to *do* or *perform* a job that others might easily accomplish in their place (Sherman, 2013, 2020)"

(Hansen, 2021: 23), we see the identity of the person in the teacher and get closer to understand why for many teachers, teaching is much larger than a job.

> The sense of vocation finds its expression at the crossroads of public service and personal fulfilment. It takes shape through involvement in work that has social meaning and value. … Vocation is also expressed over time. … a person cannot will a sense of service into existence nor wake up one day and decide to be of service. Those dispositions grow and take shape over time, through interaction with people and through the attempt to perform the work well.
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> Hansen (2021: 3–4).

What follows is that the person's altruistic values and principles shape the ways in which they derive the social, intellectual and moral meanings from their role as a teacher. Recognizing how these inner meanings motivate teachers to improve their ability to teach well is integral to understanding why the teaching profession is regarded by many committed and dedicated teachers as a "lifestyle" (Day and Gu, 2014).

Altruism as a philosophical concept has long been used in education to describe an ethical principle and moral purpose that drive many teachers to build caring relationships with their students (Nias, 1989; Noddings, 1992), and remain committed and passionate about giving their best to the students whom they serve (Ayers, 2010; Day, 2004; Gu and Li, 2013; Hansen, 1995; Nieto, 2003, 2015). Altruistic principles and values are internal to the calling that has drawn many teachers into the practice of teaching. However, to view teaching as an "altruistic vocation" (Schwarz and Alberts, 1998: 155) is not, as skeptics might argue, an unsustainable "ethical ideal" which requires teachers to sacrifice a high degree of selflessness (e.g., Higgins, 2011). Nor does it deny that teachers' material needs (such as pay and income) are important. Our research on teachers' subjective wellbeing in China shows that teachers' altruistic values have no direct associations with their income satisfaction, but positive and direct associations with their satisfaction with work (Song et al., 2020). When teachers' salaries have met the "basic threshold" of income, those with stronger altruistic values and higher efficacious beliefs tend to report smaller effects of income on their work satisfaction.

Over the last decade evidence from our own research in England and China and international surveys of teachers (OECD, 2014, 2018b) repeatedly shows that the majority of teachers in the profession are still hopeful, committed and passionate about making a difference to the learning and lives of the children—for whom they care and feel responsible. Bullough and Pinnegar (2009) argue that it is in moments when teachers were meeting their ethical obligations to children that they felt elevated and were reminded of why they were first "called to teach" (2009: 246).

Therefore, in our analysis of teachers' work and lives, we consider altruism as the essence of teachers' ethical values, principles and obligations, which according to Hansen (1995), enable them to see work as a "service to others" and gain "personal satisfaction in the rendering of that service" (1995, p. 3). This view "turns the focus of perception in such a way that the challenges and the complexity in teaching become sources of interest in the work, rather than barriers or frustrating obstacles to overcome" (Hansen, 1995: 144). Such a view of teaching leads to a positive and productive emphasis on learning, growth and development—which regards teachers' need for intellectual challenge and capacity building as an indispensable part of their moral responsibility. It reveals profoundly that the good life of teaching entails both an *intellectual* act and a *moral* enterprise (Huberman, 1993; Palmer, 2007; Day and Gu, 2010, 2014; Goodlad et al., 1990; Hansen, 2021). It is this inner meaningfulness—intellectually, emotionally and spiritually—that influences, deeply and powerfully, teachers' own sense of identity and wellbeing.

> Becoming a wonderful teacher, or a great or awesome teacher, is a lifetime affair. This is because good teaching is forever pursuing better teaching; it is always dynamic and in motion, always growing, learning, developing, searching for a better way. Teaching is never finished, never still, never easily summed up. "Wonderful Teacher" might be inscribed on someone's lifetime achievement award, printed on a retirement party banner, or etched on a tombstone, but it is never right for a working teacher.
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> Ayers (2010: p. 16).

From the perspective of social change and evolution, Welzel and Inglehart's (2010) seminal work on values and wellbeing reminds us of the importance of considering the social markers and cultural sources of values when investigating teachers' internal worlds. This is because "humans internalize most of their values fully unconsciously in an unquestioned process of socialization"—through which they are "familiarized with what is socially accepted in their society" (Welzel and Inglehart, 2010, p. 47). For example, in the Chinese culture and society where the self is viewed as "a connected, fluid, flexible, and committed being who is bound to others" (Lu, 2010, p. 335), and where the prevalent Confucian moral discourse has long stressed the importance of supressing selfish desires to serve the collective, the origins of Chinese teachers' sense of purpose and meaningfulness as well as intellectual and social connections in their worlds of work reside not only in their personal motives and goals, but more profoundly, the fulfillment of their moral obligations as a professional for the society. In this sense, Chinese teachers' satisfaction with the quality of their professional lives encapsulates the attainment of purpose and goals that meet both their own intrinsic professional needs and those of the larger professional community and society—to which they belong. The identification of culture-specific values in shaping Chinese teachers' perceptions of the meaning and goals of their work highlights the need for a deep understanding of *what matters to whom* and *in what contexts* in future research on teachers and teaching.

Efficacious beliefs: psychological functioning that enhances quality

Bandura's (1986) social cognitive theory defines perceived self-efficacy as individuals' beliefs about their capabilities to exercise control over events that affect their lives, to produce expected performance, and to influence others. People with strong beliefs in their capabilities make things happen by setting themselves challenging goals, thinking strategically in the face of difficulties, and remaining resilient, motivated and task-focussed (Bandura, 1997). Bandura (1997) thus rejects the view that efficacy beliefs are mere inert predictors of performance accomplishment. Rather, he argues that they are "a vital personal resource" (2000: 120) which function as a key contributor to effective functioning and human flourishing.

> When faced with obstacles, setbacks, and failures, those who doubt their capabilities slacken their efforts, give up, or settle for mediocre solutions. Those who have a strong belief in their capabilities redouble their effort to master the challenges.
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> Bandura (2000: 120).

Bandura's argument, together with findings from the latest research on teachers' self-efficacy (e.g., Klassen et al., 2011; Renshaw et al., 2015; Zee and Koomen, 2016), offers conceptual and empirical ground for the argument that teachers' efficacy beliefs are their self-referent judgments of their own capacity and capability to perform at certain levels (Kelley and Finnigan, 2003; Zee and Koomen, 2016). Over the last thirty years research has consistently reported that self-efficacious teachers tend to suffer less emotional exhaustion and burnout symptoms, and experience more confidence in mastering challenging tasks and higher levels of responsibility for teaching, commitment, personal accomplishment, and job satisfaction (e.g., Klassen and Chiu, 2010; Pillay et al., 2005; Skaalvik and Skaalvik, 2010; Schwerdtfeger et al., 2008; Zee and Koomen, 2016; Song et al., 2020). These findings lend support for the view that the strengths of teachers' judgments of their performance capability enhance, or constrain, the strengths of their aspiration, commitment, and effort to fulfill different task demands in given circumstances and through these, influence, positively or negatively, their emotional outlook and satisfaction with the quality of their work and life.

Values and efficacious beliefs are both key aspects of psychological functioning (OECD, 2013). Our recent research on teachers' wellbeing (Song et al., 2020) offers additional evidence emphasizing the importance of psychological functioning in explaining human flourishing (see also, Diener et al., 2010; OECD, 2013). Although strong altruistic values can fulfill teachers' satisfaction of "becoming the kind of teacher and person they desire to be," (Bullough and Pinnegar, 2009, p. 246), the enactment and fulfillment of these values is mediated by their efficacious beliefs. On the one hand, purpose and meaning, as "powerful regulators of human behavior" (Welzel and Inglehart, 2010, p. 47), empowers (or limits) individuals' efficacious beliefs in their capacity to perform proficiently in context. On the other hand, teachers need to feel efficacious in what they do in order for there to be a positive effect on work satisfaction from their strong values. Put another way, only when teachers' care and love for students are enacted in ways which enable them to master the challenges and thus continue to teach to their best can they experience higher levels of satisfaction with the quality of their work as a teacher.

Developing teacher quality: why schools matter

A social ecological approach to researching teacher quality

Over the years, we have worked with teachers also who, despite their hard work, commitment, moral purpose and dedication to the education of their students, struggle to improve outcomes. Those teachers who excel and whose students excel with them do not just do so on their own. While it is clearly the responsibility of each teacher to teach to their best, it is the responsibility of each individual school, school district and national government to ensure that they are able to do so through high-quality leadership and the provision of physical and other resources. Strong and consistent evidence from educational research suggests that the social and intellectual organization of the school, and by extension, schools' connections with local communities, society, and the policy structure—when characterized with supportive and trusting relationships between different stakeholders—fosters teachers' collective capacity, commitment, resilience and effectiveness (Bryk and Schneider, 2002; Day and Gu, 2010, 2014; Sammons et al., 2007; Tschannen-Moran and Barr, 2004).

Such evidence invites us to use a social-ecological approach to analyze how the environments in which teachers work and live influence, and are influenced by, their capacity to teach well over the course of their professional lives. The relevance of the social-ecological approach to researching teachers' quality are at least threefold.

First, an *environment-centered approach* to human development reinforces the importance of emphasizing the impact of multilevel contexts on the growth of teachers over the course of their professional lives, especially in terms of their capacity to maintain a sense of commitment and agency in the everyday worlds in which they teach. The theoretical underpinning of the social ecology of teachers' work, lives and professional development emerged from Bronfenbrenner's (1979) ground-breaking work on human development which is, in essence, concerned with the interconnectedness and interactions between multilevel systems and the ways they shape the course of human development throughout the life span. Bronfenbrenner defined human development as "the person's evolving conception of the ecological environment, and is relation to it, as well as the person's growing capacity to discover, sustain, or later its properties" (1979, p. 9).

The same argument applies to teacher development. The quality of the reciprocating systems in education influences the quality of the intellectual, social and organizational conditions in which teachers work—which in turn impact, positively or negatively, on their professional identities and their capacity to be committed, efficacious and effective (Beltman, 2015; Day and Hong, 2016; Gu, 2014; Gu and Day, 2007, 2013; Johnson et al., 2016). Among these, the environments of schools are found to be particularly significant in shaping why and how many teachers are able to continue to commit their time, energy and passion to a profession which can make them "feel a sense of invisibility and powerlessness" (Nieto, 2015, p. 252; see also Gu and Johansson, 2013; Johnson, 2004; OECD, 2016; UNESCO, 2015). I will unpack why schools and school leadership especially, matter to teacher development and teacher quality in more detail later.

Second and related to the first, the social ecological model of person × environment interaction (Ungar et al., 2013) enables us to place teachers in their complex worlds of work and analyze the ways in which their capacity to teach to their best *influences* and *is influenced* by their professional worlds. Unlike children whose individual resources (e.g., optimism and efficacy) are believed to be "only as good as the capacity of his or her social and physical ecologies that facilitate their expression and application to developmental tasks" (Ungar, 2011: 6), teachers are "moral and political agents" (Soder, 2004: 11) whose moral values form the hub of a school's culture which energize teachers' collaboration, learning and development. For teachers, if their role expectations were primarily defined by prescribed standards, methods and techniques, then these expectations would have missed a simple but fundamental truth about "a good teacher":

> Good teachers possess a capacity for connectedness. They are able to weave a complex web of connections among themselves, their subjects and their students so that students can learn to weave a world for themselves. … The connections made by good teachers are held not in their methods but in their hearts—meaning heart in its ancient sense, as the place where intellect and emotion and spirit and will converge in the human self.
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> Palmer (2007: 11).

The voice of the *heart* flows from the identity and integrity of the inward teacher (Palmer, 2007) and speaks out why many teachers in many countries regard teaching as "a way to live in the world" (Nieto, 2015, p. 1). As I have elaborated earlier in this chapter, understanding the role of moral values and vocation in influencing what many teachers do and why they do it in their schools and classrooms is key to understand the dynamic and complex nature of the interaction between the teacher and their context of work. Deal and Peterson (2009) argue that "like a butterfly, a school must be nurtured by its inner energy in order to thrive" (2009: 180). This reinforces the observation that teachers' actions, commitment and beliefs also influence, individually and collectively, the social and organizational culture and contexts in which they work and live. Buchanan (2015) found in her research on teacher identity and agency that the discourse of education policy and structures do not completely redefine teachers' self-concepts: "Teachers are more complex and multifaceted than that" because individual teachers bring with them "a unique mix of personal and professional experiences and commitments" (Buchanan, 2015: 700):

> Teachers therefore confront the policies and professional discourses they encounter not as tabulae rasae, but rather actively use their own preexisting identities to interpret, learn from, evaluate, and appropriate the new conditions of their work in schools and classrooms. In this process, their identities are reformed and remade—and professional agency is carved out.
>
> Buchanan (2015: 700).

Last but not least, the social ecological understanding of teachers' work and lives emphasizes a *process-oriented, developmental-contextual* approach to viewing and supporting teacher development. Teacher quality, or put differently, teachers' capacity to develop and sustain their qualities to teach well is nurtured, learned and acquired in their context of work. Over time such capacity unfolds progressively in a developing individual (Schoon, 2012) as they learn to navigate and negotiate their way to the intellectual, social/relational and technical resources in their immediate external environment that enable them to continue to learn, to grow, and to enact their values and capacity to teach well. For many teachers who have managed to sustain their commitment and motivation in the profession, the ability to weather the often unpredictable "storm" of school and classroom life (Patterson and Kelleher, 2005) is not an option, but a necessity. Sustained pursuit of continuing professional learning and development is what makes good teachers and great teaching. This is a career-long moral commitment and "a sustainable investment for professional capital" (Hargreaves and Fullan, 2012: 186).

Why schools matter in developing and sustaining teacher quality

The conceptual strengths of the social ecological approach to researching teachers' work and lives highlight the significance of schools as "finders and keepers" (Johnson, 2004) of committed, resilient and quality teachers. Despite the reform and societal pressures on teachers, research consistently shows that three interrelated conditions—teachers' vocational selves, social and professional relationships with colleagues, and leadership support and recognition—are found to be integral in enabling them to sustain their educational purposes and successfully manage the "unavoidable uncertainty" (Shulman, 1987, p. 1) inherent in the everyday life of a teacher (Gu and Day, 2013). Among the three, school leadership comes first and acts as a necessary organizational condition that enables teachers to fulfill their professional commitments in collaboration and partnership with their colleagues.

Recent research evidence on teacher retention shows that teacher leavers are not necessarily "escaping" from pupils' poor behavior. Rather, they are escaping from poor leadership and dysfunctional school cultures. Toxic cultures devalue our need of others, impede our ability to turn to them for support, and challenge our capacity to form supportive and collegial relationships to learn and develop (Jordon, 2006, 2012). At a result, with a heavy heart, we continue to observe in our research that some teachers seeing teaching behind closed doors as a reality of the profession. Many of these teachers, more often than not, have struggled to understand why their sheer hard work has failed to bring about the levels of progress and achievement that they would like to see in their students (Matthews et al., 2014).

Our decades of research on school leadership and school improvement shows that principal leadership is instrumental in bringing about improved learning outcomes in schools. They contribute to student learning largely *indirectly* through leadership activities and influence, particularly through building school capacity and (re)designing structural, sociocultural, and relational processes that are conducive to promoting professional learning communities and raising the quality of teaching and learning (Bryk et al., 2010; Day et al., 2011; Gu and Johansson, 2013; Hallinger and Heck, 2010a,b; Leithwood et al., 2010, 2017; Sun and Leithwood, 2012, 2015). The quality and professional capability of leadership also defines the extent to which individual schools are to be engaged with externally initiated improvement effort and the ways in which the new learning is to be aligned with, as well as advance, the existing culture and capacity for change and sustained improvement.

In this process, school leaders, and school principals especially, are the *architects* of social relations and learning cultures in their schools. Their ability to drive professional development and improvement in their own schools (leader self-efficacy) and to develop sustained collaboration with other leaders and schools (leader collective efficacy) shapes the *base* capacity to be engaged with improvement initiatives within local school systems and "the *new* capacities that must be developed to sustain and extend these initial efforts over time" (Bryk et al., 2010, p. 220, italics in original; also Leithwood and Louis, 2012). It is perhaps then no surprise that in high-performing schools a key defining aspect of principal leadership is an unrelenting focus on fostering consistent values, expectations, and standards, and through these, empowering and transforming staff capacities and organizational conditions to embrace change and improvement.

Concluding remarks

A central task for all concerned with enhancing quality and standards in schools is, therefore, not only to have a better understanding of what influences teachers' quality over the course of a career, but also the means by which the teacher quality necessary for these to be sustained may be nurtured in the contexts in which they work. Promoting and cultivating healthy individual and collective learning and achievement cultures in schools is essential to how they feel about themselves as professionals.

Establishing consistency and coherence in school structures, cultures, and improvement processes holds the key to engaging the heads, hearts and hands of the school community to achieve sustained and sustainable performance over time. Such consistency and coherence were reflected in understandings—between those who led and those who were led—of how and why their schools were able to become successful and, as importantly, to stay successful. They helped to shape the day-to-day practice of school life and enabled schools in our research to remain focused on the core business of schools—quality provision of teaching and learning—irrespective of external pressures of change (Gu et al., 2018).

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