Summary

Delivering on every child's right to basic skills

Introduction

Recognition that education is a basic human right was agreed 70 years ago through the Universal Declaration on Human Rights (UN 1948) and applied specifically to children through the Convention on the Rights of the Child (UN 1989). The earliest phases of Young Lives education research built on these principles, as well as being specifically linked to the launch of the UN Millennium Development Goals. By the time the Young Lives Younger Cohort were teenagers, the international policy agenda had shifted again, through the launch of the Sustainable Development Goals, introducing a universal framework applicable to all countries (UN 2015).

The focus for education also shifted, partly in response to the progress of efforts to deliver universal schooling. The Sustainable Development Goals acknowledge that social development and economic growth are closely related to the skills of a population, and that a central development goal for education should therefore be that all young people attending school should be competent in at least 'basic skills' (OECD 2015), which are required to establish the *social foundations* to participate fully in society (a right, by virtue of being a member). Basic skills open possibilities that otherwise would be closed: a better chance to enjoy the well-established social benefits of lower fertility, better health and greater civic engagement and to defend and protect rights to survival (UNICEF 2007). Achieving basic skills for all is the 'civil rights struggle of our generation' (Education Commission 2017).

Many of the challenges for basic skills acquisition were apparent right from the start of Young Lives longitudinal research. We began monitoring children's progress through early childhood and primary schooling in 2002 and continued to track through each phase of school, identifying which type of school they attended (if at all) and how their

This summary is based on the Young Lives *Delivering on every child's right to basic skills* report, by Jack Rossiter, Martin Woodhead, Caine Rolleston and Rhiannon Moore. The full report is available on the Young Lives website, detailing acknowledgements, photo credits and references.

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experiences of learning interacted with numerous other child development, health and well-being, family and community variables. One of the striking initial findings was the substantial cross-country variation in ability to read a simple sentence by age 8, including very low rates in Ethiopia and India – and little evidence of improvement in literacy levels seven years later. In this summary we identify this along with many other indicators of the progress and the challenges faced by 12,000 Young Lives children, in 80 sites across diverse country contexts and education systems.

Increasing access to school for all children has been a key indicator of progress for modern education systems across the world. But a less positive indicator has been the failure to deliver universally on even the most fundamental goals for education, with latest global estimates suggesting that six out of ten children and adolescents are not achieving minimum proficiency levels in reading and mathematics (UIS 2017). The total includes more than 387 million children of primary school age (Figure 1) and 230 million adolescents of lower secondary school age. More than half of all children will not be able to read or handle mathematics with proficiency by the time they are of age to complete primary education (Education Commission 2017).

Our starting point for this report is this key challenge for 21st century education systems, which we summarise as '**delivering on every child's right to basic skills**'. This challenge is about prioritising the movement of all children to reach minimum expectations for learning.

1. Universal basic skills are *the* educational priority for sustainable development

Educational inequalities are typically very marked in low-income countries – and higher than income inequalities in some cases (Crouch and Rolleston 2017). However, even where differences may be inevitable in final learning outcomes and in later labour market opportunities, **there need not be any inequality in basic skills acquisition, which is a universal foundation for personal and social development**.

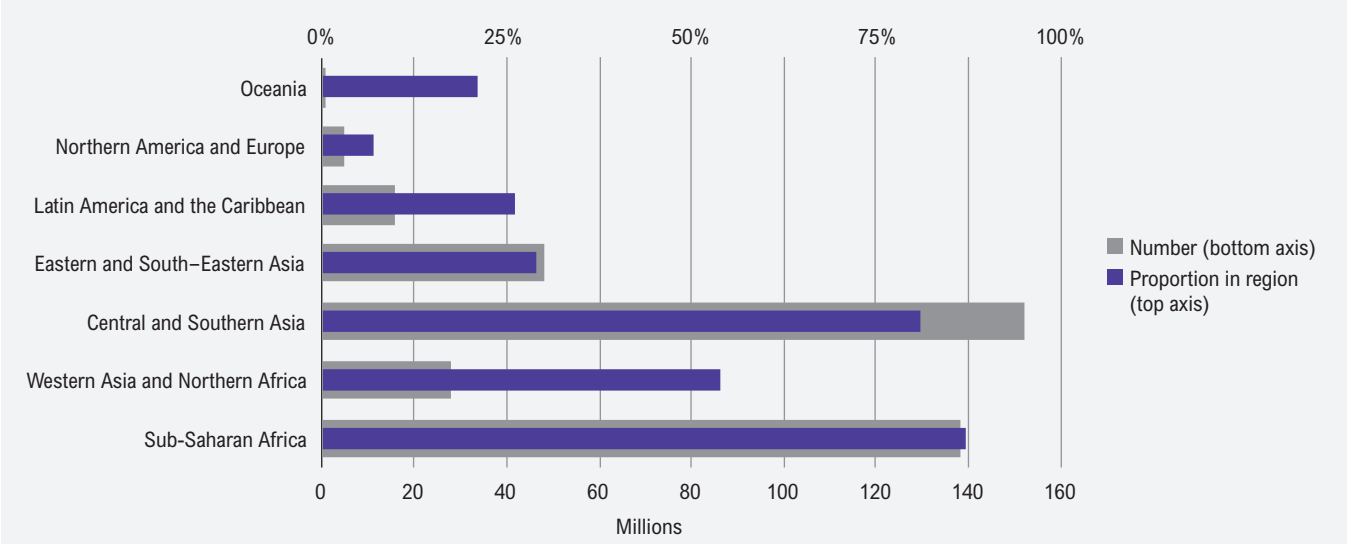
To deliver basic skills for all will require, in most circumstances, considerable system reorientation towards mass learning. The education systems that have done a remarkable job in providing mass access over the past two decades now require models that combine access with quality learning so that all children achieve basic skills. This report discusses how a major reorientation towards basic skills will encourage a dramatic increase in what is known about which children do not attain these skills and why, and approaches that countries are taking to capture resources from the public, private and philanthropic sectors in order to increase from US$1.2 trillion to the US$3.0 trillion level needed to deliver on the right to basic skills by 2030 (Education Commission 2017).

Countries vary significantly in the governance and financing of schooling, including marked variations in how funds are used. How systems are organised to deliver education services and distribute financial and human resources influences system efficiency and equity – and therefore impact fairness, rights and the realisation of talents. Looking across countries, the key for equity is to ensure that any rationing which is applied still allows all pupils a fair chance to develop basic skills.

2. All children reading?

Foundation skills in literacy and numeracy provide the basis for 'tackling the learning crisis at its root' (DFID 2018: 3), are fundamental for participation in modern global society (Room to Read 2014) and open the door to lifelong-learning (USAID 2017). Yet low levels of literacy are common and remain stubborn in many countries (Figure 2). The most striking findings from Young Lives' surveys are: (i) the size of differences in reading rates between study countries; and (ii) the system inertia that means improvements in these rates are often slow. In Ethiopia, four in five Older Cohort children could not read a simple sentence by age 8, and in Andhra Pradesh, India, one in every two children had similar difficulty. Children unable to acquire the education foundations by Grade 2 or 3 (approximately age 8) are a long way from the path to basic skills.

Figure 1. *Global distribution of primary school-age population not achieving minimum proficiency levels in reading*



Source: UIS 2017.

Experimental studies of literacy teaching with this age group have shown that rates of foundation literacy can be improved rapidly (see, for example, Room to Read 2014). Young Lives studies demonstrate what can be achieved at scale. For example, Vietnam's education system has been able to deliver positive outcomes for most children, providing insight into quality features that contribute to impressive reading levels, notably a positive focus on teaching foundation skills and the priority given to preparation in the first grades of school which ensures that most children (87 per cent in Young Lives sites, at age 8) establish a basic level of literacy as a foundation for future learning. Vietnam's strategy demonstrates that it is possible to ensure that all children can establish literacy and numeracy competencies as the education foundations for basic skills development, even during a time of rapid school expansion (World Bank 2018). The key ingredients appear to be: (i) a narrow but deep curriculum with a majority of time focused on building foundation skills in the early grades, and teachers working to a standard that all children are expected to reach (UNESCO 2014); and (ii) a persistent emphasis on the needs of the poor and disadvantaged (World Bank 2018).

Country policies increasingly recognise the potential of high-quality early childhood care and education to support skills development of young children, especially first-generation learners and children in areas with low rates of adult literacy. When Young Lives was launched, one of the earliest priorities was to document the scale, changing role and potential impact of early learning programmes. Studies carried out across Young Lives countries highlighted features of 'everyday' programmes for young children and their families in highly variable contexts in terms of resourcing and management, especially questions around equity of access and quality (Woodhead et al. 2009).

More recently Young Lives has been able to return to these issues related to early education in Ethiopia – with a focus on the *implementation* of early learning services at scale. These studies reveal substantial changes in early learning service delivery, with potential to boost schools' readiness for children, as well as children's readiness for school, to the extent that teacher expectations have risen dramatically:

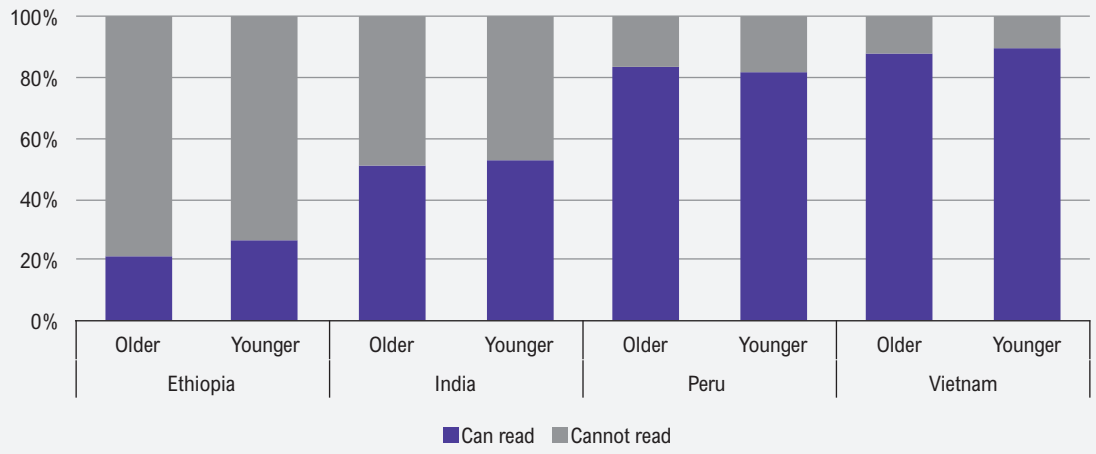
> "At this time, in our country, to join Grade 1 a child should have the capacity to read and write. You cannot teach them how to hold a pen; we are sending children who have such problems back to their parents."
>
> (Teacher, Ethiopia, quoted in Orkin et al. 2012)

However, the *risk* to children if governments push ahead to implement early learning programmes in low-resource contexts is that millions may be enrolled in low-quality pre-primary and then progress to low-quality primary classrooms. Despite considerable investment and the establishment of a new teacher cadre for pre-primary grades, the long-term policy objective of higher rates of basic skills is then not realised. These risks are greatest during a transitional period when education quality systems are being consolidated, teacher training for pre-primary and primary classes is being strengthened and effective governance and monitoring systems introduced (Woodhead et al. 2014).

3. Reducing to zero the number of children not reaching a threshold of basic skills

In the drive towards 'mass learning', delivering on the right to basic skills shifts attention away from a preoccupation with overall inequalities in learning (i.e. between highest and lowest achievers in any school, country or region), towards the idea of a threshold below which an individual is denied the basic skills that are required to establish the social foundations to participate fully in society. Delivering on the right to basic skills then requires the percentage of a population below this 'basic skills' threshold to reduce as close as possible to zero. Making it a priority that all children reach a minimum expectation of achievement also appears to be the way that countries have transitioned most quickly out of *very-low* levels of learning, with evidence suggesting that the percentage of students at very-low levels of achievement decreases strongly as a country progresses to average overall performance (Crouch and Gustafsson 2018).

Figure 2. *Comparing reading levels at age 8 (the Older Cohort in 2002, the Younger Cohort in 2009)*



Source: Calculated from Young Lives Round 1 and Round 3 data.

OECD data illustrate the power of country level monitoring to highlight major differences in progress towards basic skills for all. Looking beyond school enrolment rates and introducing a measure of learning as a key indicator, the OECD has shown that low-income countries are much further behind high-income countries than enrolment rates would suggest – but also that the acquisition of basic skills is not just an issue facing poor children from poor countries but an issue for many children in many countries (OECD 2015).

The Young Lives longitudinal research design has been able to extend cross-sectional evidence, to provide a dynamic picture of children's skills development during a crucial phase of the life course, from ages 5 to 15. Cognitive assessments at different ages can be linked and used to construct learning profiles for each country, which illustrate a general picture of skills development from one point in time to the next. From these we see that the striking message is the substantial gaps that open *between countries* by age 8 for children whose cognitive development had been broadly comparable at age 5. Rates of learning in numeracy during the period to age 8 are markedly higher in Vietnam than in Peru, India and Ethiopia (in that order), mirroring the rates of literacy acquisition in the four countries. From age 8 to 12, these gaps are consolidated, with data for Vietnam and Peru suggesting children are making relatively stronger learning progress compared to India and Ethiopia (Figure 3), with only minor differences between boys and girls. As a result, by age 12 the four countries vary hugely in the proportion of children making progress towards acquiring basic skills.

Peru and Vietnam each have groups of children that have reached the highest levels of achievement in Young Lives assessments. But the differences in profiles for Young Lives samples also highlight marked impacts of relative poverty on basic skills. The close link between achievement levels at age 8 and age 12 in Peru implies that early achievement is strongly predictive of later outcomes. Opportunities to learn are unevenly distributed, with resource-rich areas benefiting in terms of resources, language of instruction matched to students' mother tongue, teacher qualifications and skills. The trend in Peru implies that students progress in parallel, alongside each other, with lowest achievers continuing to languish behind their peers and most children, except for an elite, a substantial distance away from a path to basic skills.

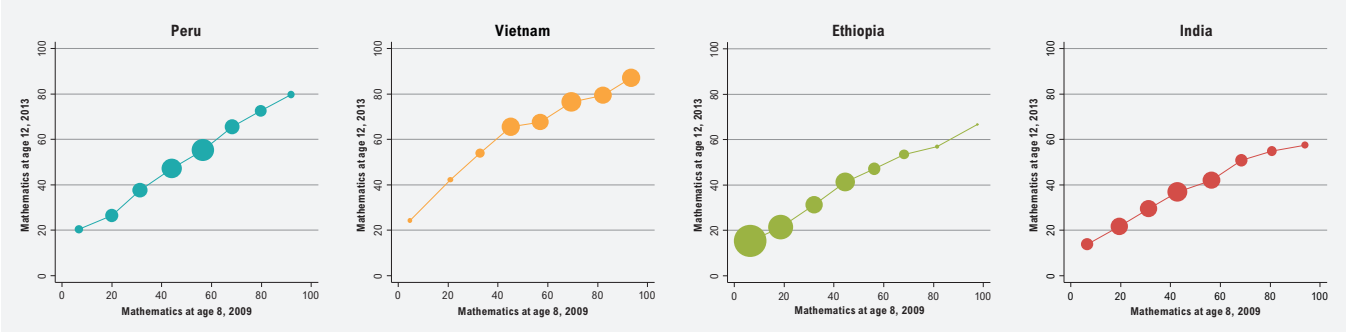
Assessment data for Young Lives samples in Vietnam also illustrate that it is not inevitable that societal inequalities lead to differences in opportunities to learn and the acquisition of basic skills. Although a (very) small number of children in Vietnam obtained low achievement scores at ages 8 and again at age 12, a much larger proportion of children with quite different scores on earlier cognitive tests have reached a threshold level of basic skills by age 12. The contrast between Vietnam and Peru tells something about Vietnam's recent history and its education system that sets out to decouple acquisition of basic skills from family economic circumstances. The country's education law (Vietnam National Assembly 1998) sets out that the state will provide education for everyone, while giving priority to ethnic minorities and other disadvantaged groups. This has led to policies in Vietnam which have included those focused on the need for all pupils to attain 'minimum achievement standards', with specific attention and subsidies to schools in disadvantaged areas.

4. Bridging the gap between children's learning and the pace of the curriculum

Despite these differences in learning profiles for Young Lives samples in Peru and Vietnam, broadly speaking, these are the higher achievers. The picture was different for our samples in India and Ethiopia, with Young Lives data suggesting very low rates of progress from ages 8 to 12, with large numbers of children unable to keep pace with the curriculum, progressively 'falling behind' in their learning. From the point of view of skills development, these cases illustrate how very low levels of learning can be the norm in some contexts, through a combination of factors linked to household poverty as well as school system weaknesses, with the consequence that the vast majority of children are 'off-track' to achieve basic skills.

In 2010, Young Lives' 'nested' school surveys were introduced in acknowledgement of the growing importance of school in the lives of children and were designed to be context specific and aligned to policy questions relevant to specific countries at specific points in time (Boyden and James 2014). School surveys in Ethiopia took place with children in Grades 4 and 5 in 2012-13, and with children in Grades 7 and 8 in 2016-17. The 'repeated measures' design required data collection at the beginning and end of the school year, to allow analysis of maths and language achievement *levels* and *progress*. From these data, school 'value-added' can be estimated and related to school-, teacher- and student-background factors, which is rare in the contexts in which Young Lives is working.

Figure 3. *Learning profiles from ages 8 to 12 in Young Lives countries, Younger Cohort 2009-13*



Source: Young Lives household survey Round 3 and Round 4 mathematics assessments.
Note: Round 4 mathematics score uses only common items across countries, of which there are 13.

From these school surveys we estimate that less than 3 per cent of the Young Lives sample of 11,982 children in Ethiopia was able to demonstrate the skills in literacy and numeracy expected by the minimum learning competencies of the curriculum of Grades 4 and 5. Interpreting these findings in relation to expected pathways to basic skills, we estimate that one in three children for literacy and four in five children for numeracy, were 'off-track', with their rate of learning being outpaced by the curriculum. Young Lives qualitative data confirms the gulf between aspirations and achievement, with children forced to recognise their futures are very different than they may have hoped, as this quote from Fatuma, the only child from the Young Lives qualitative sample who attempted the Grade 10 final exam, reveals:

> "I attended public school where the quality of education is very poor. I did not have a tutor. From our school very few pass the exam … Since childhood I have wanted to finish university education and become a medical doctor … Now, I am just planning to get training in sewing machine."

(Fatuma, age 17, 2011, quoted in Tafere 2014)

Where most children do not develop basic skills then the issue is not specific to certain groups and solutions require the identification of overarching barriers to learning that cause slow progress. No doubt multiple factors contribute, but one school system factor can be singled out. Curricula which 'outpace' pupils' rate of learning act as a barrier to progress by encouraging teaching which is outside the range of what children can realistically master, given their prior learning (UNESCO 2014). Experiments with 'Teaching at the Right Level' are an attempt to improve the matches between curriculum content/pace, student competencies and teacher skills and may have a lot to add in contexts where low-learning and slow – or stagnating – progress towards basic skills is the norm (Pratham 2016).

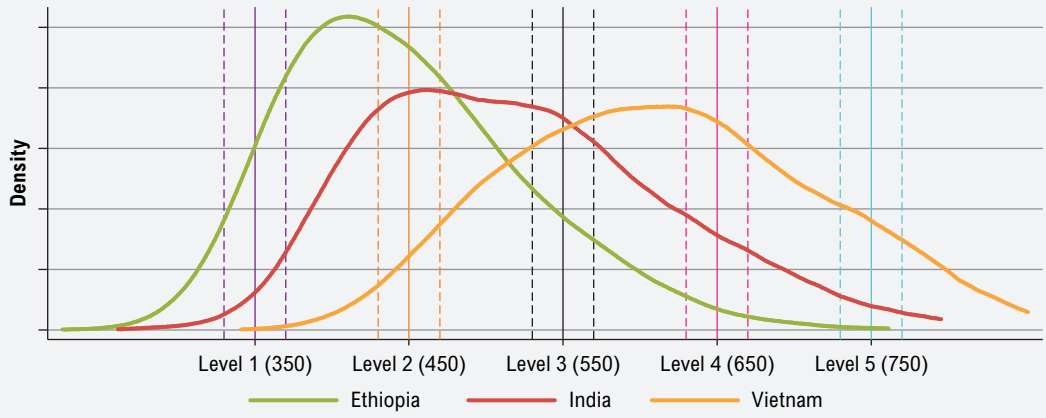
Building on Young Lives core design, we can make cross-country comparisons of 2016-17 school survey data, to better understand basic skills acquisition among children aged around 14 to 15. The survey approach allowed the construction of a common scale of achievement that can be used to illustrate the distribution of proficiencies among these students, from those failing to demonstrate even the most basic competencies to those exceeding more complex skills (Figure 4). Here, we draw on measures of basic skills in mathematics, for Ethiopia, India and Vietnam. In the case of Ethiopia, as few as one in ten of our sample was assessed as having acquired basic skills in mathematics by age 14 or 15. Similarly, in India, around one in three of the sample had acquired basic skills in mathematics – and this was at a time when they have reached the penultimate year of lower secondary school. In comparison, in Vietnam three in four had exceeded an estimate of basic skills in mathematics and could draw on this as a foundation for further education and training.

The differences in basic skills between countries, presented in this summary, represent an entrenchment of the gaps in the education foundations of numeracy and literacy observed in Young Lives' core sample at ages 5, 8 and 12. Vietnam's focus on assuring minimum achievement standards for all pupils in early grades translates, logically, into opportunities to reach higher-order skills at this stage. On the other hand, low learning levels in Ethiopia and India, including in large numbers of children that had not achieved basic literacy by ages 8 and 12, leave many children without basic skills as a social foundation by the time they complete primary and junior secondary school.

5. Leveraging private finance, with equity

Provision of high-quality basic skills for all young people in resource-constrained contexts has increasingly led to education systems harnessing a diverse range of funding sources, including private finance. As soon as Young Lives began to address the role of the private sector, initially focusing on India (Woodhead et al. 2013), it was apparent that this is a highly controversial issue, for governments, private providers, parents and children, with rapidly changing finance, governance and pedagogy within school systems affecting school choices and opportunities for learning. Notwithstanding important debates around the role of the profit motive in education or the effectiveness of particular delivery mechanisms (such as public–private partnerships), the key question for governments in

Figure 4. *Distribution of students and achievement benchmarks on the 2016-17 school survey common scale for mathematics*



Source: James and Rossiter 2018.

LMICs therefore, is not whether to facilitate private investments in education, but *how to do so equitably.*

Through subsequent studies, we have been able to provide contrasting country case studies of the extent and impact of private financing of basic education. In India and Peru, inequality is high by international standards, both in educational terms and in terms of incomes; private schooling is widespread and often sits alongside and in competition with government schools, with rapid growth in low fee and largely unregulated private schools in India (Glewwe et al. 2014; Crouch and Rolleston 2017). Socialist Vietnam presents a *prima facie* contrast. Households in that country make very significant contributions to education both through the public system and to supplement it through paid-for extra classes (Le and Nguyen 2016).

India and Vietnam illustrate quite different approaches to bringing together public and private sectors in education – through public financing of private schools and private financing of public schools (Duong 2015; Le and Baulch 2012; Singh and Bangay 2014). While Vietnam's approach has perhaps been more successful in practice, both approaches in principle offer to combine the benefits of public and private provision.

Findings from Young Lives, in common with several other studies, demonstrate a modest positive 'private school effect' on learning outcomes in India (Singh and Sarkar 2015), although with some variation across subjects and at different grade levels (Singh 2015). The school effectiveness design of the Young Lives school surveys allows these differences to be evaluated in terms of what each school is adding, over and above the differences in intake. We find that the gap between those attending private schools and government schools continues to widen, and private schools, particularly those with higher fees, appear to add considerably more value than other types of school management (Rolleston and Moore 2018). As a result of both an initially higher starting point *and* the greater 'value-added', by the end of Grade 9 those children in private schools are, on average, more than one standard deviation ahead of those in state government schools: the equivalent of around three years of schooling (Moore et al. 2017). More significant is the apparent efficiency advantage of low-fee private schools, given their much lower recurrent costs (often linked to lower teacher salaries) when compared to government schools. The mechanisms by which private operators are able to provide this efficiency advantage are hotly contested, but are certainly woven into the political economy of education reform, governance and relationships of accountability in India's education system.

In the absence of dramatic improvements in quality in government schools, reforms to ensure the benefits of private finance in education are shared widely are essential to the goal of developing basic skills for all. Legislation to ensure that private schools in India enrol less advantaged children (the Right to Education (RTE) Act 2009) has been designed to address these issues. The RTE approach centres on requiring private schools to admit less advantaged pupils without payment of fees but with some government subsidy, which may be termed 'socialising' private schools – such that the benefit of private investments in education are extended to pupils whose families do not have the means to pay for them. Recalling that many private schools in India have operating costs that are lower than public schools, this approach in principle offers not only to improve equity and reduce inequality, but it might also be expected to increase the efficiency of public spending in education. However, for a complex range of reasons, many linked to implementation, the RTE policy has had at best very mixed results so far (Kingdon 2018).

Whereas one emerging priority for India's laissez faire management of schooling has been to encourage 'socialisation' of private schools, the policy approach in Vietnam is in some respects in the very opposite direction: that is, cost-sharing in public schools. Although schooling in Vietnam is overwhelmingly public, responsibility for financing education is shared between state and communities, according to the somewhat controversial principle of 'socialisation' (xã hội hóa) (Duong 2015). Households make contributions to public schools under a long list of categories, providing important additional resources (Le and Baulch 2012).

While socialisation amounts to 'cost-sharing', what is crucial is that costs are shared, in principle, based on ability to pay and it is this requirement which distinguishes socialisation from privatisation. Poorer districts and populations (especially ethnic minorities and those in isolated areas of Vietnam) are often exempt from certain contributions (for example, for full-day schooling charges, see Rolleston et al. 2013). Redistributive measures within socialisation policies allow the state to mobilise resources from the public and use state funds to target government allocations so that minimum quality standards are reached everywhere. As a result, Vietnam has been successful in reducing the relationship between pupil background, school and teacher quality in the period of basic skills development, such that students from any background can benefit from a school that 'adds much value' to their learning progress (Rolleston et al. 2013).

With respect to basic education and to basic skills, Vietnam represents a context in which a high proportion of disadvantaged pupils perform well in school (an *equalising* context). While commonly cited explanations for this relatively equalising system focus on 'common minimum standards and expectations' (see Rolleston and Krutikova 2014), 'leveraging private finance' (through socialisation) plays a key role in ensuring that funds are available to support schools to reach minimum standards in less advantaged areas. The principle of socialisation allows schools in urban and more advantaged areas to raise funds to improve education in line with rising parental expectations without competing with the need to focus public funds on more disadvantaged areas where private sources of funding are scarce. By contrast, the increasing bifurcation of the education system in India, if indeed it does lead to improvements in learning outcomes for those that attend, appears to do so at the cost of rising inequality.

6. Looking ahead: from basic skills to digital and transferable skills

In this final section, we reflect more widely on the challenges of delivering on a right to basic skills for all, now and into the future. We focus on two specific issues: the methods used

to assess and monitor learning; and the ways education systems and students' experiences are being transformed by technology.

One of the consequences of realigning education priorities towards ensuring children achieve at least basic skills is that it shifts attention onto questions about how to measure children's achievement and how best to monitor progress towards goals: assessment is needed to measure what children know and can do, in relation to an agreed expectation of basic skills. Carrying out assessment of children's learning is not an end in itself. Reforming education systems that can work to deliver basic skills for all requires, first, political consensus around which basic skills are the highest educational priority and by when these should be achieved. Thereafter, information collected on progress towards basic skills can form an important part of the accountability relationships that exist within the education system (World Bank 2018). Reflecting on Young Lives' experiences of international comparative assessment, three considerations are relevant to assessment for basic skills.

First, testing children's learning is not a neutral process, nor always benign in its consequences. Specific areas of curriculum or skills singled out for assessment can all too often acquire a reified status in school systems. This inevitably diminishes the chances of students being introduced to more exploratory, open-ended and creative aspects of learning.

Second, assessment for basic skills does not necessarily have to be 'large scale', 'top-down' and 'complex' in its design. In assessing for basic skills, it can be far more efficient to assess directly against the skills required at each stage and avoid the steps required to translate finely-graded scores, on some arbitrary scale, into benchmarks of proficiency.

Third, a 'rush to rigour' is unlikely to be necessary in developing assessment for basic skills. In the case of assuring basic skills acquisition among all children, smaller, quicker and cheaper assessments, high in local impact, can be prioritised to improve instruction (Wagner 2011). Community-led approaches, such as UWEZO, ASER and others under the 'PAL Network' have been shown to use technically minimal assessments to generate relevant information on the achievement of basic skills (PAL Network 2018). A major benefit of 'decentralised' assessment, within or alongside schools, is strengthened contextual relevance and a shortened information chain from assessment to action: the individuals that need to know (i.e. the teachers, communities and school leaders, not forgetting parents and children themselves) do not have to wait for information to be processed nationally, or even internationally. For example, in Vietnam, pupils' progress towards reaching grade-specific minimum learning standards is prioritised and monitored using continuous formative assessment, with national and international assessments taking secondary roles.

In conducting any assessment for basic skills, it is important to re-emphasise that the concept and definition of 'basic skills' is not fixed, nor are the indicators appropriate to assess children's progress towards the acquisition of basic skills. Country priorities shift in the wake of cultural or technological change or a revised political outlook. Two powerful examples of this are the impact of digital technologies on basic skills, and the possible transformation of educational goals towards what are sometimes called 'transferable' and/or '21st century' skills.

In the latest rounds of data collection, Young Lives has begun to contribute to knowledge about the impact of digital device access, use and skills, including the impact on education. Patterns of digital device use, generally, reflect trends for basic skills acquisition observed in earlier sections of this summary. Fifteen year olds in Peru and Vietnam showed higher levels of access, more frequent use, and earlier age of engagement with digital devices than those in Ethiopia and India, although we do not assume the acquisition of basic skills is a cause of greater digital access, nor indeed vice-versa.

Comparisons between the two cohorts also highlighted how rapidly children's lives are being transformed. Age of first use was much lower for the Younger Cohort, compared to the Older Cohort; with children in Peru and Vietnam again showing an advantage. Overall, household poverty during infancy has a significant association with digital access 14 years later, confirming again the enduring patterns of inequality in all countries. Young Lives qualitative research highlights these issues from parents' perspectives. In Vietnam, for example, worries were expressed that children were being distracted from learning by new digital opportunities:

> "… students drop out of lessons at the school to play games online in the internet cafes nearby the school … I see during class time, but there are still many students, sitting in the internet café playing games. So I am afraid that my son will be in the same situation …"

(Parent, Vietnam, quoted in Boyden et al. forthcoming 2018)

Finally, and looking beyond specific opportunities and challenges associated with new technologies, educationists are increasingly interested in so-called transferable or 21st century skills. In the Young Lives 2016-17 school surveys data collection included the assessment of higher-order problem-solving and critical-thinking skills. Findings suggest that children in India and Vietnam, at age 14-15, possess similar levels of transferable skills, with around 50 per cent of children in both countries being classed as 'emergent critical thinkers', and most children in both being classed as either 'basic' or 'competent problem solvers' (Iyer and Rolleston 2017). Young Lives unique findings suggest that there is little evidence that Vietnamese or Indian children are merely 'rote learners', with most possessing at least basic skills in both problem solving and critical thinking. Yet findings also suggest that, while student performance in 21st century skills is positively associated with performance in more curriculum-based subjects such as maths and English, it is not always the same schools achieving high scores in both (Iyer 2017). In Ethiopia, however, where literacy is weakest, few students could demonstrate reading comprehension levels in preliminary screening questions deemed adequate to access assessments of critical thinking and problem solving.

It may be tempting to divert resources from the development of foundational skills into the technological skills, higher-order cognitive skills, and socio-emotional skills needed in the 21st century, which seem more novel and exciting (World Bank 2018). However, the longitudinal picture of skills formation presented in this report supports the argument that skills (basic or otherwise) beget skills and that higher-order cognitive and related skills are complements to basic skills, not substitutes for them. They can only be built on a solid foundation.

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Young Lives is core-funded by UK aid from the Department for International Development (DFID). The views expressed are those of the author(s). They are not necessarily those of, or endorsed by, Young Lives, the University of Oxford, DFID or other funders.

Core-funded by UKaid from the British people

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