The Primary Review

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INTERIM REPORTS

Research Survey 1/3

AIMS FOR PRIMARY EDUCATION: THE CHANGING NATIONAL CONTEXT

Stephen Machin and Sandra McNally
University of London

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Stephen Machin and Sandra McNally

This is one of a series of 32 interim reports from the Primary Review, an independent enquiry into the condition and future of primary education in England. The Review was launched in October 2006 and will publish its final report in late 2008.

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A briefing which summarises key issues from this report has also been published. The report and briefing are available electronically at the Primary Review website: www.primaryreview.org.uk. The website also contains Information about other reports in this series and about the Primary Review as a whole. (Note that minor amendments may be made to the electronic version of reports after the hard copies have been printed).

We want this report to contribute to the debate about English primary education, so we would welcome readers' comments on anything it contains. Please write to: evidence@primaryreview.org.uk.

The report forms part of the Review's research survey strand, which consists of thirty specially-commissioned surveys of published research and other evidence relating to the Review's ten themes. The themes and reports are listed in Appendices 1 and 3.

The theme: this survey relates to Primary Review theme 1, Purposes and Values.

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AIMS FOR PRIMARY EDUCATION:
THE CHANGING NATIONAL CONTEXT

Introduction

The nature of primary education in England has been subject to significant change in recent times. Part of this arises from government education policy, and part from changing demographic, economic and social structures. In this survey we consider this changing national context of primary education.

Inevitably, we have had to be selective in how we address such a broad theme. We therefore focus on what we believe to be three of the major issues of relevance: the labour market and broader social consequences of education, and the implications for raising standards in primary education; inequality between socio-economic groups and changes in social mobility; and the application of 'market economics' to educational issues.

In the last few decades, there has been increasing awareness of the importance of education and skills to an individual's prosperity and well-being as well as to the competitiveness of the economy. The labour market has changed rapidly, in large part because of technological change. These changes are relevant to all stages of education and are an important part of the background to the increased emphasis on raising standards in education. The first part of our review deals with evidence on the consequences of education and skills for wages, among other outcomes (and the background to this). We relate this to the debate about raising standards.

Another major theme is inequality between socio-economic groups in educational performance and the decline in social mobility over time (at least up to the early 1990s). This means that children's incomes are more closely related to that of their parents than in the past. The causes of this inequality (within and between generations) may be partly related to how the system of education operates – although this is difficult to pin down. Increasing equality of opportunity within education is certainly seen as part of the solution.

Finally, the application of 'market economics' to educational issues has happened since the 1980s. This manifests itself in the move to increase choice and accountability within the system, as well as efforts to incentivise schools and teachers. We discuss the implications of the 'market philosophy' both for raising standards and potentially for raising inequality.

The changing socio-economic context

The 'value' of education

The 'value' of acquiring the basic skills acquired in primary school is evident even in the most routine tasks. However, even in a rich country like the UK, these skills cannot be taken for granted. It has been estimated that about one-fifth of adults are not functionally literate (Moser 1999). Numbers from the International Adult Literacy Survey of 1995 show countries like the UK and US have very dense lower tails of their adult literacy skill distributions (including amongst younger adults) whereas in other countries like Sweden and Germany hardly any adults are at these low levels. This clearly has serious implications for many aspects of individuals' well-being, as well as having important consequences for the rest of society.

McIntosh and Vignoles (2000) and Layard *et al*. (2002) consider the importance of basic literacy and numeracy skills for labour market returns (that is to say wages and employment). They show that even acquisition of very basic skills in numeracy and literacy has an important effect on the probability of employment and on wages. The measure of literacy/numeracy, 'level 1', is equivalent to standards of literacy and numeracy that should be achieved by age 11 according to the National Curriculum (although 20 per cent of adults do not meet this standard). Among the results reported is the finding that, controlling for other characteristics, acquisition of level 1 numeracy or literacy skills raises the probability of employment by about 5 percentage points, and, for workers, raises wages by about 9 percentage points in the case of numeracy skills and 7 percentage points in the case of literacy skills.

There are many studies that estimate the economic value of additional years of schooling or educational qualifications. In developed countries this normally pertains to secondary or post-compulsory schooling, as primary education is universal. However, some discussion of this is relevant to understanding the broader socio-economic context.

There is much good evidence of large average wage returns to additional years of schooling (see the reviews in Card 1999, 2001). The recent focus of this literature in the UK has been on returns to qualifications (rather than years of schooling). Typically it is found that there are higher wage returns to academic qualifications than vocational qualifications and there is no return to low-level vocational qualifications (that is, defined as below 'level 2') – see, for example, Dearden *et al.* (2002) and Sianesi (2003).

Returns to individuals in terms of higher wages and employment are only one part of the story of how education affects individuals' livelihood and well-being. Social science researchers have considered the wider benefits of education by studying connections between education and outcomes like health, crime, civic engagement and intergenerational effects on children's outcomes. There is evidence of important effects of education on individual outcomes beyond the labour market. For example, education significantly improves health outcomes (Grossman and Kaestner 1997; Kitagawa and Hauser 1973; Lleras-Muney 2005), is associated with lower crime levels (Lochner and Moretti 2004; Feinstein and Sabates 2005; Machin and Vujic 2005), and enhances the extent of civic engagement and participation (Brehm and Rahn 1997; Bynner and Egerton 2001; Bynner and Parsons 1997). Moreover, there is evidence that raising the level of parental education benefits their children's educational outcomes (Black, Devereux and Salvanes 2005).

The changing labour market value of education

Over the last few decades, there has been a rapid upgrading of the educational status of the workforce (see, for example, Machin 2003). Other things equal, one would expect this increase in the supply of more educated workers to depress wage gaps between more and less highly qualified workers. The logic here is that employers have more people with good qualifications to choose from; this increased competition should therefore lower the premia attached to 'good qualifications'. This has not happened because the demand for workers with good qualifications (especially higher level qualifications) has increased faster than the supply.

The pattern of change in the graduate wage differential in the UK (that is graduates relative to non-graduates) has been well documented. The differential rose very sharply in the 1980s, and continued to rise at a lower rate in the 1990s and any growth has stagnated by the 2000s (Machin 1996, 1999, 2003; Machin and Van Reenen 2006) A number of studies document rising returns over time from the 1970s to the early 1990s (Harkness and Machin 1999; Gosling, Machin and Meghir 2000) and slightly rising or constant returns from the early

1990s to the early 2000s (Chevalier *et al*. 2004; Walker and Zhu 2005; O'Leary and Sloane 2004, 2005; McIntosh 2004).

The question arises as to why the returns to education in general (and higher education in particular) have increased so much over time. Various explanations are given but the weight of the evidence is behind what is known as 'skill biased technology change' (for reviews of possible explanations and discussions of the large body of evidence see, for example, Katz and Autor 1999, or Machin and Van Reenen 2006). This refers to the introduction of new technologies that are biased in favour of skilled workers. It comes from the hypothesis that employers' demand for skilled workers has been shaped by the kinds of technologies that are permeating into modern workplaces. In this changing environment, employers will be willing to pay more to workers who are skilled enough to operate these new technologies whereas less skilled workers will be less valued – and this will be reflected both in wages and in the employment probability. There is good evidence for the importance of skill biased technical change internationally as opposed to competing explanations such as increased globalisation (Berman *et al*. 1998; Machin and Van Reenen 2006).

How does this relate to primary education?

The major relevance of the above discussion to primary education is increased awareness of the importance of education to individuals and to the economy (and its rising value). There is still an economic premium to having the most basic skills (meaning the expected levels of literacy and numeracy at age 11). This reflects the fact that many adults in the UK do not have these skills: if basic numeracy and literacy skills were universal, there would be no special 'wage premium' attached to them in the labour market. However, the economy as a whole would be expected to perform better. Indeed the UK has between 10 and 25 per cent lower output per hour than France, Germany and the US, and much of this can be explained by a poorer level of skills and a shortfall of capital investment (CEP[1] 2005).

A good primary education is important not only for imparting knowledge of basic skills to the next generation but also for enabling pupils to learn faster and more effectively as they go through the education system. Furthermore, it seems unlikely that pupils who perform poorly at primary education will be in a position to take advantage of opportunities that arise later in their educational career (such as going to university).

In this context, it is not surprising that concerns about educational standards in primary school (and education more generally) have become a top priority. Furthermore, there have been long-held concerns about poor standards of education in UK schools. For example, as documented by Machin and Vignoles (2004), the proportion succeeding in their examinations at age 16 remained stagnant from around 1970 to the mid 1980s. In the 1980s, more than two thirds of the cohort did not achieve examination success at age 16 and therefore entered the labour market with no academic qualifications at all. Such statistics, along with international indicators, suggested to policy makers that the UK had a particular problem with a so-called 'long tail of low achievement'.

National statistics about the level of education in primary schools do not exist before the mid-1990s. However, reports document the state of primary education in particular local education authorities (LEAs). A particularly prominent report published by Ofsted in 1996 was *The Teaching of Reading in 45 Inner London Primary Schools* (Ofsted 1996). This report was very critical of the standards of teaching in the majority of these schools. Specifically, it included criticism of the following practices: free reading with little or no intervention by the

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1 The Centre for Economic Performance, The London School of Economics and Political Science (LSE).

teacher; too much time spent hearing individual pupils read; insufficient attention to the systematic teaching of an effective programme of phonic knowledge and skills. Such reports prompted concerns that standards in the teaching of reading varied widely from school to school, with many primary teachers not having had the opportunity to update their skills to take account of evidence about effective methods of teaching reading and how to apply them (Literacy Task Force 1997).

Thus, important parts of the changing national context of primary education include greater understanding of the value of education (especially to the economy); an increase in the value of education to individuals and to the economy over time; and growing awareness of poor performance and/or standards of education in English schools.

Recent performance and future prospects

In more recent times, available indicators suggest that educational performance has improved. There is always a debate about to what extent an improvement in examination (or Key Stage Stat test) outcomes reflects a genuine improvement in standards as opposed to other explanations (such as easier examinations or 'teaching to the test'). However, it seems unlikely that the meaning of educational indicators has become completely distorted. Furthermore, recent international surveys such as the Programme for International Student Assessment (PISA) and the Progress in International Reading Literacy Survey (PIRLs) suggest that English school children perform well in literacy and numeracy compared to other countries (see Hansen and Vignoles 2005).

With regard to primary education, it seems likely that some of this success has been due to the National Literacy and Numeracy Strategies (even though progress seems to have hit a plateau in the last few years). The background, implementation and evaluation of the National Literacy Strategy are discussed in detail by Stannard and Huxford (2007). The predecessor of the National Literacy Strategy ('the National Literacy Project') has been evaluated by Machin and McNally (2004). They find this to have been extremely effective in raising standards at low cost.

Another important development has been the increase in resources devoted to education in recent years. For example, expenditure on education and training as a percentage of GDP was 4.9 per cent in 1987/88 – and was still at that level in 1997/98. By 2005/06, it had increased to 5.6 per cent, which moved spending up close to the OECD average. Gordon Brown's aspiration is to match the resources of the state sector to current levels in the independent sector. This aim is extremely ambitious. For example, even though class sizes have fallen considerably in the state sector, pupil-teacher ratios are only half the size in the independent sector - on average 10 fewer pupils per class (Green *et al*. 2007). The future prospects of primary education may be viewed in a very positive light if expenditure really increases to meet this aspiration.

There is a debate in the literature about the extent to which resources matter for improving educational performance. For example, Hanushek (1986) reviews a large number of studies based on US data and concludes that increasing expenditure should not be expected to improve educational outcomes. However, these findings are challenged in other studies. For example, in a famous study, Krueger and Whitmore (2001) find positive effects of reduced class size (the Tennessee STAR experiment). There are also examples in the UK where interventions involving the allocation of increased resources to schools have led to positive (and cost effective) outcomes (for example Machin *et al*. 2007a; Machin *et al*. 2007b). A reading of the literature might be that the effect of resources depends on how they are spent.

However, the quality and quantity of some school inputs are not entirely dependent on how much the government spends. For example, recruitment problems in the teaching profession

are partly attributable to the rising wage return to other occupations. For example, there are substantial foregone earnings for a graduate with a Maths or Science degree entering the teaching profession. A consequence is that current teachers are being drawn from further down the educational achievement or ability distribution than they were in the past. There is some evidence for this in the UK (Chevalier *et al*. 2007; Nickell and Quintini 2002) as well as in the US (Corcoran *et al*. 2002; Lakdawalla 2001).

Machin and Vignoles (2005) draw a link between the teacher labour market and the introduction of the tightly prescribed national curriculum and daily lesson plan in primary schools. In the short run, it appeared that being more prescriptive in what teachers should be teaching (and teaching them how to teach it) might raise standards, at least in the absence of being able to recruit more effective teachers. They go on to argue that in the longer term, it is of course important to try and re-establish teaching as an important and well-respected profession, which sits uneasily with policies that take away their autonomy. This longer run objective clearly requires policy makers to think seriously about improving the total compensation package for teachers, including their non-pecuniary conditions of work (Chevalier and Dolton 2005).

These concerns are accentuated by the fact that there is an ageing teaching population, especially in primary education. As documented by Chevalier and Dolton (2005), 40 per cent of all teachers are aged 45-55 and those aged above 55 account for another 6 per cent of the workforce. Within the next ten years, nearly 50 per cent of the current workforce would be expected to have retired. At the current level of recruitment into teaching, a large shortage of teachers is therefore predicted. Chevalier and Dolton (2005) explain that this could be partly mitigated by influencing the retirement plans of existing teachers – for example, by reforming pension rights. However, clearly, the challenges of recruiting more young people into the teaching profession need to be addressed.

Inequality

An important part of the socio-economic context of education in the UK is increasing inequality over several decades – as manifest in wages, education and social mobility. Education is a mechanism in all of these phenomena and hence it is relevant to discuss these issues here.

Wage inequality

Changes in wage inequality since the 1970s are documented by Machin (2003) and Machin and Van Reenen (2006). From the late 1970s and through the 1980s, the inequality of earnings rose massively for both sexes. Post-1990, inequality at the upper end of the distribution continues to diverge whereas at the lower end it increased a little in the 1990s and decreased a little in the 2000s.[2] Another way to consider trends in wage inequality is to examine the growth of employment in high wage and low wage jobs (Machin and Van Reenen 2006). Since 1979, there has been a significant increase in well-paid jobs (for example lawyers, senior managers, consultants) and an increase in low-paid jobs (for example cleaners, hair dressers, shop assistants). This is consistent with 'polarisation of the labour market' (see also Goos and Manning 2003).

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[2] Inequality at the upper and lower ends of the distribution are defined here as the 90-50 wage ratio and the 50-10 wage ratio respectively. If we rank individuals by level of pay, then the 10th percentile gives the pay of someone 10 percentage points from the bottom; the 90th percentile gives the pay of someone 10 percentage points from the top and the 50th percentile gives the pay of the person at the middle of the distribution.

There have been many papers that have tried to explain these changes both in the UK and in other countries (especially the US, where patterns have been similar). There is no unique and simple explanation that is capable of fully explaining the patterns at different parts of the distribution. However, probably the most important contributory factor has been 'skill biased technology change' (see the discussion above, 'The changing labour market value of education'). Hence the high demand for highly skilled graduates has been an important mechanism for creating wage inequality over the last few decades.

Educational inequality

Although there have been increasing opportunities for those with good qualifications, access to good qualifications is not equal according to socio-economic background. Differences in educational progress start very early and then widen as children age. Feinstein (2003) finds significant gaps between children from a high and low socio-economic background in an index of development, which is derived from tests of ability (at 22 months) in cube stacking, language use, drawing and personal development. He then maps the development of children through from 22 months to 10 years old, and shows that the gaps between high and low socio-economic status children widen out slightly from 22 months to 5 years and then more substantially from age 5 to 10, the first years of school. These findings appear to be supported by school level information (see DfES 2002), which shows that the gap between average attainment at schools of low and high disadvantage (as measured by the percentage of pupils eligible for free school meals) rises as pupils move through the key stages.

The initial gap in early cognitive ability, combined with the growth in the attainment gap through the educational system, leads to substantial differences in final attainment levels between children from high and low socio-economic backgrounds. Machin and Vignoles (2004) analyse staying-on rates at age 16 broken down by parental income group for the cohorts finishing compulsory schooling in 1974 (the 1958 birth cohort), 1986 (the 1970 birth cohort) and 1996 (the 1980 birth cohort). At each point in time, there is a large gap between the staying-on rate of people from high-income backgrounds compared to people from low-income backgrounds. For example, in 1996, 86 per cent of people from the richest fifth of families stayed on in education beyond the age of 16 whereas this is true for only 61 per cent of people from the poorest fifth of families. With regard to changes over time, although there was a rise in the staying-on rate for all children, the rate of growth was higher for those from high-income backgrounds in the earlier period (1974-1986) and lower in the more recent period (1986-1996). The result is that educational inequality (according to family income) was about the same for those at the end of their compulsory schooling in 1996 as it was back in 1974 (with much higher inequality in 1986).

Although the poorest groups have begun to catch up in terms of their chances of staying on in education beyond the age of 16 (at least relative to the 1980s), Blanden *et al*. (2005) report that a stubborn gap remains with regard to participation at university. Among cohorts of age 18 in the late 1990s, children of parents who are in the poorest fifth of the population compare unfavorably in terms of educational outcomes to children of parents in the richest fifth of the population. In the former group, only 9 per cent of children graduate from university by age 23. This compares to 46 per cent of children in the latter group.

Social mobility

Another aspect of inequality is the extent to which a person's income is related to that of their parents. A strong relationship suggests an immobile society and most likely indicates restricted opportunities for those born into poorer families. Evidence suggests that the level of mobility in the UK is low by international standards (for example Jantti *et al*. 2006; Corak 2006; Solon 2002).

Blanden *et al*. (2005) analyse the change in intergenerational income mobility over time using longitudinal studies of parents and their children. They find that intergenerational income mobility has fallen for those born in 1970 compared to those born in 1958. More specifically, adult earnings of the 1970 cohort were more strongly related to their parental income as teenagers than was the case for the 1958 cohort. Thus, social mobility declined across these cohorts. Moreover, the decline was substantial. Of course, things may well have changed since then. Data constraints make this a more difficult question to analyse, although it is the subject of on-going research.[3]

Solon (2004) has developed a model about the determinants of social mobility. On this basis, factors that could potentially have a role in explaining the decline in social mobility include an increase in the earnings return to human capital and a shift towards less progressive public investment in human capital. In his words: 'an era of rising returns to human capital or declining progressivity in public human capital investment is also an era of declining intergenerational mobility'. In a UK context, Blanden *et al*. (2005) and Blanden and Machin (2007) find measures of education, at various ages through the education sequence, to be important in accounting for declining social mobility in the period when mobility fell.

The potential role of primary education

Wage inequality, educational inequality and social immobility are all inter-related and are all affected by education. The rising wage returns to education seems to be a likely mechanism in generating all these sources of inequality. Of course, a persistently high return for high-level qualifications is a reflection of the fact that demand continues to outstrip supply. If the overall level of education were to improve substantively (such that the 'long tail of underachievers' no longer existed), wage and income differentials between people with different levels of education would reduce and some of these social inequalities would be mitigated. Primary education has an important potential role to play in this process, both in equipping pupils with basic skills and in facilitating their progression to higher levels of education.

One would also want to address educational inequality directly by a particular focus on those from disadvantaged backgrounds. Of particular concern is that some aspects of primary education are geared in favour of helping higher income groups (in the context of Solon's model, they might be thought of as contributing to declining progressivity in human capital investment). For example, the admissions policy of most schools uses distance from the school as a criterion for admission in the case of over-subscription. In a climate where parents know a lot about schools (for example from the Performance Tables), this encourages people to reside near what they perceive to be 'good schools'. Such a policy discriminates in favour of those who can afford to choose exactly where to live. Indeed there is evidence that high-income parents locate near high performing schools and, that house prices reflect this (Gibbons and Machin 2003; Rosenthal 2003). As discussed below, there is good cause for concern that choice and competition does not work in favour of those from low socio-economic groups.

A fundamental reform of admissions policy (for example, prohibiting schools to discriminate on the basis of residence) would do much to level the playing field in terms of educational opportunities. It would thereby reduce the large inequalities that appear later in terms of wages and intergenerational mobility. Another thing that could be done is to learn the lessons from successful area-based initiatives like Excellence in Cities and provide targeted funding to areas that need regeneration. There are many other initiatives that might

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3 For example, Blanden and Machin (2007).

potentially raise the educational performance of children from disadvantaged families (in other areas of policy like housing and benefits as well as in education). With regard to education, other important policies include the 'City Academy' programme and instructional programmes that are targeted at those with learning difficulties (such as Reading Recovery). In order to know what works for disadvantaged children, it is crucial to have a good evaluation strategy in place from the outset. Unfortunately, this is not always the case.[4]

Application of market economics to the school system

The view that market disciplines should be applied to public services – including education – has been implemented in the UK since the 1980s. This is an important part of the changing socio-economic context that is relevant to education. In an education context, the implementation of 'market reforms' involves efforts to create competition between schools and other measures to incentivise teachers (such as an attempt to introduce Performance Related Pay). There are several contributory factors to a more competitive environment for schools: making information on school performance publicly available (in the School Performance Tables, and with Ofsted reports); a tough regulatory regime; increasing choice over where parents may send their children to school; and linking funding to pupil numbers.

The idea behind a more competitive environment is that it would lead to improved productivity in the education system. There is a relevant literature in the US (for example, Hoxby 2003), which shows that increasing competition among schools and decentralising school finance can increase pupil attainment. However, there is very little evidence in the UK. In a study about secondary schools, Bradley *et al*. (2001) found that schools with the best examination performance grew most quickly and that increased competition between schools led to improved exam performance. In a study about primary schools, Gibbons *et al*. (2006) find little evidence of a link between choice and achievement and only a small positive association between competition and school performance (which is not causal). The only case where choice and competition seem beneficial is in faith primary schools (attended by about 1 in 5 pupils). This may indicate that there could be more scope for improvement if choice and competition is coupled with other changes in governance and admissions arrangements.

However, an important concern is that choice and competition may exacerbate educational inequalities. Parents are not equal in the extent to which they can exercise choice or use information. For example, there is evidence (discussed above) that high income parents choose to live near high performing schools and pay a premium in the housing market. There is also evidence to suggest that high socio-economic groups have better information on and understanding of school performance, for example via 'league tables' (West and Pennell 1999) – although there is a large literature about the limitations of such information in assessing school effectiveness (for example Goldstein 1997; Kane and Staiger 2002). This inability to exercise choice could lead to educational segregation, with children from disadvantaged families having to make do with the schools that more advantaged parents do not want to send their children to. The extent to which segregation has changed over time is very controversial; different methods produce different results (Allen and Vignoles 2006; Goldstein and Noden 2003; Gorard and Fitz 1998).

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[4] One problem is where the proponents of particular strategies (for example some phonics programmes) do not allow researchers to know in what schools they operate, making it impossible to tell whether these programmes are effective. With regard to evaluation of public policy, granting funding to schools on a purely discretionary basis (like the Specialist schools policy) makes it very hard to construct a counter-factual. Therefore we cannot come up with a credible policy evaluation.

The potential for choice and competition to lead to greater inequality is also a concern for the future. The projected fall in pupil rolls will only accentuate competition as schools struggle to maintain revenue. One of the problems with the application of quasi-market measures to the education sector is that schools are not like firms: they do not close down when they no longer make a profit and hence there is no automatic market mechanism to trigger the exit of failing schools. This means that pupils at failing schools that turn out to be very unpopular might be stuck there for a considerable period. A danger is that children from poor families are made to pay the price for a potential productivity gain elsewhere in the education system. This has a productivity cost in itself, as able pupils from poor families will not achieve their potential. Thus there are reasons to question the efficacy and fairness of 'choice and competition' as a school improvement strategy.

Conclusion

Important changes in the national context of primary education include a rising value of education in the labour market, increased inequality between socio-economic groups and the application of 'market economics' to educational issues.

It is difficult to say whether wage returns to education will keep on rising. This remains controversial and it is too early days to reach any strong conclusions. There is a little evidence of a decrease in O'Leary and Sloane (2005) and Walker and Zhu (2005), but Dickerson (2005) reports no change using the same data sources. However, whether or not wage returns to education will fall is not the most relevant issue. The important issue is that the wage return to education and skills is extremely high, and this is partly a reflection of the fact that many people leave school with very low (or no) educational qualifications. An important challenge for the primary education sector is to get more people to a level where they have the basic skills in literacy and numeracy, thus equipping them to learn when in secondary school and when they enter the labour market.

The rise in the return to education is one of the factors behind the increase in wage inequality and the decline in social mobility that has been observed over recent decades. There are indications that wage inequality is beginning to reduce (at least if one compares people at the middle of the wage distribution compared to the bottom). It would also appear that low-income groups are beginning to catch up with high-income groups with regard to the staying-on rate (beyond compulsory education). However, the inequalities are still extremely large. Furthermore, they remain persistently high for some indicators (for example, participation in university; wage inequality as measured at the top of the distribution relative to the middle). Improvements in the quality of primary education would help to reduce these inequalities in the long-term. This could happen by increasing the standard of achievement such that the 'long tail of underachievers' no longer exists. It is also important to address educational inequality directly by re-examining factors that discriminate against the poor (for example schools admissions policies) and targeting disadvantaged schools/families/areas for special assistance (both in the context of education and other areas of social policy).

Finally, many measures have been taken to enable parental choice and facilitate competition between schools. There is reason to express scepticism about the magnitude of productivity benefits that can realistically be expected from the latter strategy. The problem with parental choice is that better-off families have the freedom to exercise it whereas poorer families are faced with numerous constraints on their ability to make choices. Declining pupil rolls may aggravate this concern if this leads schools to become more competitive. However, policies to address the educational inequality between different socio-economic groups (including

reform of admissions policies) would seem to be an important way forward in dealing with these concerns.

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APPENDIX 1

THE PRIMARY REVIEW PERSPECTIVES, THEMES AND SUB THEMES

The Primary Review's enquiries are framed by three broad perspectives, the third of which, primary education, breaks down into ten themes and 23 sub-themes. Each of the latter then generates a number of questions. The full framework of review perspectives, themes and questions is at www.primaryreview.org.uk

The Review Perspectives

P1 Children and childhood
P2 Culture, society and the global context
P3 Primary education

The Review Themes and Sub-themes

T1 Purposes and values
- T1a Values, beliefs and principles
- T1b Aims

T2 Learning and teaching
- T2a Children's development and learning
- T2b Teaching

T3 Curriculum and assessment
- T3a Curriculum
- T3b Assessment

T4 Quality and standards
- T4a Standards
- T4b Quality assurance and inspection

T5 Diversity and inclusion
- T5a Culture, gender, race, faith
- T5b Special educational needs

T6 Settings and professionals
- T6a Buildings and resources
- T6b Teacher supply, training, deployment & development
- T6c Other professionals
- T6d School organisation, management & leadership
- T6e School culture and ethos

T7 Parenting, caring and educating
- T7a Parents and carers
- T7b Home and school

T8 Beyond the school
- T8a Children's lives beyond the school
- T8b Schools and other agencies

T9 Structures and phases
- T9a Within-school structures, stages, classes & groups
- T9b System-level structures, phases & transitions

T10 Funding and governance
- T10a Funding
- T10b Governance

APPENDIX 2

THE EVIDENTIAL BASIS OF THE PRIMARY REVIEW

The Review has four evidential strands. These seek to balance opinion seeking with empirical data; non-interactive expressions of opinion with face-to-face discussion; official data with independent research; and material from England with that from other parts of the UK and from international sources. This enquiry, unlike some of its predecessors, looks outwards from primary schools to the wider society, and makes full though judicious use of international data and ideas from other countries.

Submissions

Following the convention in enquiries of this kind, submissions have been invited from all who wish to contribute. By June 2007, nearly 550 submissions had been received and more were arriving daily. The submissions range from brief single-issue expressions of opinion to substantial documents covering several or all of the themes and comprising both detailed evidence and recommendations for the future. A report on the submissions will be published in late 2007.

Soundings

This strand has two parts. The *Community Soundings* are a series of nine regionally based one to two day events, each comprising a sequence of meetings with representatives from schools and the communities they serve. The Community Soundings took place between January and March 2007, and entailed 87 witness sessions with groups of pupils, parents, governors, teachers, teaching assistants and heads, and with educational and community representatives from the areas in which the soundings took place. In all, there were over 700 witnesses. The *National Soundings* are a programme of more formal meetings with national organisations both inside and outside education. National Soundings A are for representatives of non-statutory national organisations, and they focus on educational policy. National Soundings B are for outstanding school practitioners; they focus on school and classroom practice. National Soundings C are variably-structured meetings with statutory and other bodies. National Soundings A and B will take place between January and March 2008. National Soundings C are outlined at 'other meetings' below.

Surveys

30 surveys of published research relating to the Review's ten themes have been commissioned from 70 academic consultants in universities in Britain and other countries. The surveys relate closely to the ten Review themes and the complete list appears in Appendix 3. Taken together, they will provide the most comprehensive review of research relating to primary education yet undertaken. They are being published in thematic groups from October 2007 onwards.

Searches

With the co-operation of DfES/DCSF, QCA, Ofsted, TDA and OECD, the Review is re-assessing a range of official data bearing on the primary phase. This will provide the necessary demographic, financial and statistical background to the Review and an important resource for its later consideration of policy options.

Other meetings (now designated National Soundings C)

In addition to the formal evidence-gathering procedures, the Review team meets members of various national bodies for the exchange of information and ideas: government and opposition representatives; officials at DfES/DCSF, QCA, Ofsted, TDA, GTC, NCSL and IRU; representatives of the teaching unions; and umbrella groups representing organisations involved in early years, primary education and teacher education. The first of three sessions with the House of Commons Education and Skills Committee took place in March 2007. Following the replacment of DfES by two separate departments, DCSF and DIUS, it is anticipated that there will be further meetings with this committee's successor.

APPENDIX 3

THE PRIMARY REVIEW INTERIM REPORTS

The interim reports, which are being released in stages from October 2007, include the 30 research surveys commissioned from external consultants together with reports on the Review's two main consultation exercises: the community soundings (87 witness sessions with teachers, heads, parents, children and a wide range of community representatives, held in different parts of the country during 2007) and the submissions received from large numbers of organisations and individuals in response to the invitation issued when the Review was launched in October 2006.

The list below starts with the community soundings and submissions reports written by the Review team. Then follow the 30 research surveys commissioned from the Review's consultants. They are arranged by Review theme, not by the order of their publication. Report titles may be subject to minor amendment.

Once published, each interim report, together with a briefing summarising its findings, may be downloaded from the Review website, www.primaryreview.org.uk .

REPORTS ON PUBLIC CONSULTATIONS

1. *Community soundings: the Primary Review regional witness sessions* (Robin Alexander and Linda Hargreaves)

2. *Submissions received by the Primary Review*

PURPOSES AND VALUES

3. *Aims as policy in English primary education*. Research survey 1/1 (John White)

4. *Aims and values in primary education: England and other countries*. Research survey 1/2 (Maha Shuayb and Sharon O'Donnell)

5. *Aims for primary education: the changing national context*. Research survey 1/3 (Stephen Machin and Sandra McNally)

6. *Aims for primary education: changing global contexts.* Research survey 1/4 (Hugh Lauder, John Lowe and Rita Chawla-Duggan)

LEARNING AND TEACHING

7. *Children's cognitive development and learning*. Research survey 2/1a (Usha Goswami and Peter Bryant)

8. *Children's social development, peer interaction and classroom*. Research survey 2/1b (Christine Howe and Neil Mercer)

9. *Teaching in primary schools*. Research survey 2/2 (Robin Alexander and Maurice Galton)

10. *Learning and teaching in primary schools: the curriculum dimension*. Research survey 2/3 (Bob McCormick and Bob Moon)

11. *Learning and teaching in primary schools: evidence from TLRP*. Research survey 2/4 (Mary James and Andrew Pollard)

CURRICULUM AND ASSESSMENT

12. *Curriculum and assessment policy: England and other countries*. Research survey 3/1 (Kathy Hall and Kamil Özerk)

13. *The trajectory and impact of national curriculum and assessment reform*. Research survey 3/2 (Harry Torrance, Dominic Wyse, Elaine McCreery and Russell Jones)

14. *Curriculum alternatives for primary education.* Research survey 3/3 (James Conroy, Moira Hulme and Ian Menter)

15. *Assessment alternatives for primary education*. Research survey 3/4 (Wynne Harlen)

QUALITY AND STANDARDS

16. *Standards and quality in English primary schools over time: the national evidence*. Research survey 4/1 (Peter Tymms and Christine Merrell)

17. *Standards in English primary education: the international evidence*. Research survey 4/2 (Chris Whetton, Graham Ruddock and Liz Twist)

18. *Quality assurance in English primary education*. Research survey 4/1 (Peter Cunningham and Philip Raymont)

DIVERSITY AND INCLUSION

19. *Children in primary education: demography, culture, diversity and inclusion.* Research survey 5/1 (Mel Ainscow, Jean Conteh, Alan Dyson and Frances Gallanaugh)

20. *Learning needs and difficulties among children of primary school age: definition, identification, provision and issues*. Research survey 5/2 (Harry Daniels and Jill Porter)

21. *Children and their primary schools: pupils' voices*. Research survey 5/3 (Carol Robinson and Michael Fielding)

SETTINGS AND PROFESSIONALS

22. *Primary education: the physical environment*. Research survey 6/1 (Karl Wall, Julie Dockrell and Nick Peacey)

23. *Primary education: the professional environment*. Research survey 6/2 (Ian Stronach, Andy Pickard and Elizabeth Jones)

24. *Teachers and other professionals: training, induction and development*. Research survey 6/3 (Olwen McNamara, Rosemary Webb and Mark Brundrett)

25. *Teachers and other professionals: workforce management and reform.* Research survey 6/4 (Hilary Burgess)

PARENTING, CARING AND EDUCATING

26. *Parenting, caring and educating*. Research survey 7/1 (Yolande Muschamp, Felicity Wikeley, Tess Ridge and Maria Balarin)

BEYOND THE SCHOOL

27. *Children's lives outside school and their educational impact*. Research survey 8/1 (Berry Mayall)

28. *Primary schools and other agencies*. Research survey 8/2 (Ian Barron, Rachel Holmes, Maggie MacLure and Katherine Runswick-Cole)

STRUCTURES AND PHASES

29. *The structure and phasing of primary education: England and other countries*. Research survey 9/1 (Anna Eames and Caroline Sharp)

30. *Organising learning and teaching in primary schools: structure, grouping and transition*. Research survey 9/2 (Peter Blatchford, Judith Ireson, Susan Hallam, Peter Kutnick and Andrea Creech)

FUNDING AND GOVERNANCE

31. *The financing of primary education.* Research survey 10/1 (Philip Noden and Anne West)

32. *The governance, administration and control of primary education*. Research survey 10/2 (Maria Balarin and Hugh Lauder).

The Primary Review is a wide-ranging independent enquiry into the condition and future of primary education in England. It is supported by Esmée Fairbairn Foundation, based at the University of Cambridge and directed by Robin Alexander.
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FURTHER INFORMATION

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