

# **Creating a functioning education market in England: an experimental approach**

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**THE CENTRE FOR MARKET REFORM OF EDUCATION**

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## About the author

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**The Centre for Market Reform of Education** is an education research and policy unit based at 2 Lord North Street in London, the offices of the Institute of Economic Affairs. Its purpose is to explore the benefits of a more diverse, competitive and entrepreneurial education sector and the feasibility of market-led solutions to public policy issues. The Centre publishes policy research and organises forums and events to encourage enterprise and initiative in education – with the long-term aim of changing the policy framework within which schools and other educators work.



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“Increasing school choice and competition ought to be an effective mechanism for raising education quality, but most reforms attempted to date have been hampered by a combination of insufficient autonomy for schools to experiment and differentiate themselves from the competition, inadequate incentives for schools to expand and replicate their successes, and constraints on parents’ ability to make informed choices about which school is right for their child. Gabriel Sahlgren’s book surveys the international literature and explains the flaws in design that have compromised the effectiveness of reforms attempted to date. The proposals which emerge offer the possibility of liberating choice reform from political expediency via a longer-term, experimental approach to raising education quality.”

*James Croft, Director of The Centre for Market Reform of Education*

“*Incentivising excellence* marks a significant achievement in evidence-based policy analysis. Sahlgren takes a controversial topic and adds a strong dose of empirical evidence in the discussion. He rigorously analyses the existing literature and offers policymakers a pragmatic programme of options for improving school quality.”

*Harry A. Patrinos, Lead Education Economist, The World Bank*

“This book is a marvellous compendium of recent research on school choice worldwide, strengthened immeasurably by Sahlgren’s careful attention to the competitiveness of the choice arrangements under investigation.”

*Paul E. Peterson, Henry Lee Shattuck Professor of Government, and Director of the Program on Education Policy and Governance, Harvard University*

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## Creating a functioning education market in England: an experimental approach<sup>1</sup>

Although England has had at least an embryo of school choice since 1988, there are significant challenges and problems that need to be addressed if the system is to function properly. While there has been some opening up of the education system, there has been no fundamental transformation.

Most choice reforms worldwide have been similarly half-hearted, and have lacked the necessary supporting reforms. This, in turn, means that there is little reason to be surprised that studies analysing certain reforms often find only small-to-moderate gains. It is crucial to understand that the mere introduction of some more choice in the English education system will not improve quality significantly. Rather, a whole new approach to education is necessary. For school choice to function properly as a mechanism for raising quality, systematic reforms designed explicitly with a view to creating an education market are needed. Policymakers, therefore, should be aware of the importance of producing a coherent reform package that, while increasing scope for the exercise of school choice, actually induces schools to compete by increasing standards. If schools were held accountable to credible performance measures, parents would be more likely to choose schools on the basis of education quality.

These are the measures that are necessary for the creation of a functioning education market:

1. Introduce a voucher system – but implement it gradually for scientific purposes.
2. Ensure that the education market mimics regular markets as closely as possible.
3. Ensure generally equal public funding and regulatory treatment of schools.
4. Facilitate closure of failing schools.
5. Differentiate voucher funding.
6. If top-up fees are allowed, discourage cream-skimming by other means.
7. Allow policy experiments with selection practices.
8. Introduce lotteries as the default tie-break device.
9. Increase autonomy for all schools.
10. Allow bona fide for-profit schools to set up shop.
11. Further stimulate supply.
12. Avoid counterproductive anti-trust laws.
13. Reform the national exam system – but rely less on it.
14. Improve the information and accountability system.

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<sup>1</sup> All research cited in this policy paper is available and referenced in the book, which also contains a chapter with more expansive commentary on the measures that are necessary for the creation of a functioning education market.

While these measures would generally benefit from being as simple and comprehensive as possible, it might be preferable to settle the details of some of them in an experimental fashion. In general, a gradual process of implementation across different regions is to be preferred for evaluation purposes – as long as these are sufficiently large to produce competitive incentives in schools.

## **1. Introduce a voucher system – but implement it gradually for scientific purposes**

First, the English model should be national and universal in nature. Successful competition demands universal access. This is because small, targeted programmes are unlikely to create competitive incentives to any significant extent. When all pupils are able to choose schools more freely, competition among schools will be much stronger. This does not mean that all pupils should be given the same amount or even that all pupils should get public funding, as noted in Section 5, but merely that the system must ensure that all pupils have the financial means necessary to attend the school of their choice.

In England, there is currently no voucher system by which parents are able to choose between both state and independent providers. Although the funding system for state schools amounts to something like a de facto voucher, since it is largely pupil led, the system is complicated and non-transparent, making it very different from a voucher scheme. Furthermore, as discussed later in Section 3, minimum income guarantees for schools still apply, making it significantly different from a bona fide voucher system.

In comparison to the current English funding system, a national voucher policy is at least theoretically straightforward. Implementation would involve the following steps:

1. Determine the voucher value.
2. Approve eligible independent schools.
3. Issue the vouchers.
4. Let parents choose schools.
5. Determine the tie-break device in case schools are over-subscribed.
6. Monitor the system.

A universal voucher system is not radical in the context of previous political promises. It would merely realise the aims of the Education Reform Act of 1988, which were that: (1) money should follow pupils; and (2) parents should be given choice. If there is anything that previous school choice reforms have shown, it is that half-hearted measures will generate little more than small-to-moderate gains. The reason for this is that such measures generally fail to increase competitive incentives. As long as it is well designed and monitored, there is little reason to fear increased parental choice. Indeed, despite the problematic features of most reforms, the evidence on school choice and achievement is rarely negative. It is

absolutely crucial, however, that a voucher system is not viewed as an isolated measure, but rather as the cornerstone of an entire reform package designed to generate an education market. Without accompanying reforms, the likelihood of a voucher system generating large efficiency gains is slim.

Nevertheless, this paper strongly suggests that the government should take this opportunity to do something no other government has done: implement a universal voucher programme gradually across different regions. A key problem with large-scale voucher reforms in most countries is that the implementation has been far from optimal from a research perspective. Since the growth of competition is likely to be related to the level of education quality in neighbourhoods', it has proven very difficult to separate cause and effect in research analysing choice reforms. It would be highly desirable, therefore, if the government rolled out the programme gradually over different regions. It should be borne in mind when deciding what regional level is most appropriate for this type of programme that markets must be large enough, and cover more or less all pupils in those markets, to increase competitive incentives significantly. In order to facilitate the evaluation of these programmes, the assignment should be strictly randomised, and the programme should be designed and evaluated by education economists as well as other experts in the field.

### **1.1 Why not tax credits?**

Some argue that vouchers are not the optimal mechanism for stimulating the right kind of school choice. Proponents of an alternative approach, the education tax credit, argue that the way this reform mimics personal parental financial responsibility for their children's education is important for ensuring wise school choice decisions

First, it should be noted that there is, in effect, little actual difference between a tax credit and a voucher. In a tax credit system, people get money back on the amount that they have spent on private education, whereas in a voucher system the government gives a voucher of the same amount to parents who then pay the school they would like their children to attend. The result in both cases is that the government covers the costs of education. Since behavioural economics has established that framing is often important for outcomes, however, tax credits may have some additional advantage over vouchers in this respect. Parents could become more cautious when choosing schools, simply by virtue of having to pay up front.

Yet this advantage is small compared to a voucher programme's advantages in terms of increasing competitive incentives in all schools. This is because vouchers apply to both state and independent schools, which forces changes in the incentive structures of both kinds of school. This is important. For example, in Sweden, where the evidence is the least mixed in terms of outcomes compared with other national voucher programmes, the strongest positive effects on education quality are due to the impact of free school competition on all

schools, not that free schools are much better than municipal schools. The same applies to the best cross-national research, which indicates that the main benefit of independent schools arises from their introducing more competition and forcing all schools to improve.

Vouchers give the same funding to all schools and enable pupils other than those who live close to specific state schools to apply and attend the latter. Tax credits focus on private alternatives, but they do much less to change the incentive structure compared to vouchers. Instead of restricting school choice to private alternatives, vouchers also allow parents and pupils to choose between different state schools. In order to spur competition significantly, therefore, state and independent schools should be given equal means to compete. On this level playing field, if the private sector has a considerable advantage, it will gain market share from the state sector anyway as pupils opt out from the state sector.

Second, there is little empirical evidence that financial responsibility, which tax credits mimic better, is crucial for producing higher achievement. Some relatively old research finds positive effects of private spending and unaided private schools in a developing country context, but the methodologies utilised are poor, so one cannot draw causal inferences from them. Studies evaluating international test score data also find little reason to conclude that privately funded independent schools produce better outcomes than independent schools funded by the government, or that a higher share of private funding predicts higher achievement. In Chile, for example, research suggests there to be no differences between free voucher schools and voucher schools that charge top-up fees. In fact, some cross-national evidence indicates that private secondary schools funded by the government might be better than those that are funded privately, although this research does not take into account that pupils who opt for certain schools may differ markedly from those who opt for others. Finally, the cross-national evidence suggests that the system-level effects of independent school competition are not dependent on private funding to those independent schools.

Other research analysing different countries separately displays only a small advantage of fee-paying private schools over government schools in some countries and no or even negative effects in other countries. In England, the evidence displays no differences between state schools and fee-paying independent schools. In the developing world, where regulations might be less stifling and one might thus perhaps expect a larger impact, the effects are not consistent either. In Mexico and Thailand, research shows there are negative effects, while there are no effects in Colombia, Indonesia, and Uruguay, but positive effects in Peru and Brazil. In England, finally, it should be noted that spending per pupil is higher in independent schools than in state schools, which implies that the former are less effective than the latter.

Other evidence from developing countries, such as Pakistan and India, sometimes displays quite strong effects of fee-paying private schools. It seems to be the case that private

schools in these countries are more cost effective (although the evidence also suggests this is partly due to their benefiting from previous government investments in education). Yet the randomised research from India has also found similar effects when analysing pupils who attend such schools with vouchers, suggesting that third-party payments are not necessarily a problem. Overall, this indicates that parental funding does not seem crucial for academic success.

For these reasons, this book prefers a voucher system to tax credits. One could technically envisage two parallel systems, in which vouchers apply to government schools and tax credits to private schools. Yet this would involve higher costs and more bureaucracy than a simple, one-system voucher would require. These costs could only be justified if there is any evidence that tax credit systems consistently produce higher achievement than voucher systems. There is no evidence of this to date. By itself, of course, a universal voucher programme would not move England much closer to a functioning education market. Rather, this also depends on the system's design and accompanying reforms. How should the voucher system be designed in practice? And what accompanying reforms are necessary? The rest of the paper is devoted to these issues.

## **2 Ensure that the education market mimics regular markets as closely as possible**

There are important differences between education and other goods and services, which make it difficult to replicate regular, entirely free markets fully. The aim, however, should be to do so as much as possible. First, in contrast to existing universal programmes, an English voucher scheme should replicate the most advantageous aspect of the education tax credit proposal, engaging parents in both the choice of school and the financial transaction involved in paying that school. This could work in a variety of ways, but an electronic solution would be the easiest and cheapest option. This is to be preferred to parents merely choosing schools, which the government then pays. Although this might seem to be an unimportant detail, engaging parents in actual financial transactions in which they 'pay' schools for their services, although spending public money designated for a specific purpose, would make sure that parents are more aware of their responsibility to ensure a good choice for their children. While the evidence does not support the argument that direct financial responsibility would induce significantly stronger achievement, there is no harm in nudging parents to take even more care when making their choices with a third-party funded voucher.

Another important mechanism to introduce, which mimics regular markets, is to make it mandatory to choose. In practice, this means that the voucher model should not include a default school to which pupils are assigned if their parents do not choose any school. The problem with using the local state school as the default option is that people often stick with the status quo if this is an alternative, despite the fact that they would choose

something else if they had to. The aim of the voucher system is to create an education market. In regular markets, consumers do not get anything unless they actively buy it. This mechanism should be replicated as far as possible in an education voucher system.

### **3 Ensure generally equal public funding and regulatory treatment of schools**

It is absolutely crucial that an incentive framework focused on education quality is in place. This entails a level playing field for competition between government and independent institutions: in other words, all schools, whether government or independent, must be treated equally. This principle must be applied to the funding system also, which research suggests must be funded as equally as possible. In other words, all eligible schools should receive the same public funding per equivalent pupil. This is important, as up to now, government schools worldwide often get additional supply-side transfers on top of the voucher value, which ensures that competitive incentives do not emerge.

In contrast to the relatively simple funding model outlined, the English funding formula is complex and non-transparent. In a functioning voucher system, all public funding should be tied to the value of the voucher. This does not mean that all pupils necessarily should receive vouchers with the same value, but that school funding should solely come from the voucher. As the Chilean case and most universal voucher schemes generally, have shown, government schools operating within soft budget constraints strongly discourage competitive behaviour. In order to increase efficiency significantly, an English school choice model must therefore ensure that all schools that are approved are eligible for the same level of government funding.

The only exception to this rule is that it might be beneficial to increase the per-pupil funding for popular and high performing schools. Mechanisms to this effect would enable schools to expand and encourage schools to focus on raising educational quality. To incentivise growth among high quality schools, funding might partly be based on application figures, since over-subscribed schools correspond directly to parental preferences. Some of the additional funding could be targeted to allow for expansions, or the opening of new schools in other neighbourhoods. It would also mean that parents and pupils would have access to a strong, simple quality indicator which schools would be highly likely to emphasise in their marketing. A transparent performance-related funding system for schools would strengthen supply-side drivers of quality, complementing and speeding up the market process through parental choice, and would be an effective safeguard to ensure that schools focus on raising achievement. This additional funding could be tied to various measures of achievement, but would require high-quality information. This is discussed in more detail in Sections 13 and 14.

Were all schools funded on the same basis, English vouchers could be used to finance pupils' education at existing fee-paying independent schools as well, which would increase

competitive pressures among state schools further. While these schools have the ability to become free schools, there is no reason why they should have to change status in this way in order to be eligible for public funding. Allowing existing independent schools to participate in the English voucher scheme would ensure greater access to independent schools, while at the same time injecting more independent school competition into a state-dominated education system. This would clearly be a significant step forward given the cross-national research displaying the advantages of independent school competition. Whether selection practices in these schools should be allowed, however, is not straightforward. This is discussed in Section 7.

It is important that the voucher is national in the sense that the rules and regulations apply equally regardless of local authority. In Sweden, a problem has been that municipalities often try to stifle parental choice. This has led to regional inequalities in terms of opportunities for school choice. This makes it important that all state schools run by local authorities are directly financed in a national system. Such a policy would ensure that the funding of schools is removed from those managing and running publicly operated schools, which otherwise might be favoured in practice.

Private education providers should be expected to raise up-front capital in order to start new schools. What about up-front capital requirements for new state schools? First, it is not necessarily the case that new state schools should be started in the first place. If private school growth were sufficiently large, it would be redundant. Second, if there are very strong reasons for starting new state schools, exceptions could be made. Naturally, if the performance-related funding system is implemented, the increase in funding for good state schools would apply too, and thus enable these to expand and open new sites. The main point is that in almost all cases, the voucher should represent all the public funding schools receive.

#### **4 Facilitate closure of failing schools**

A related issue, and perhaps the most problematic feature of most voucher programmes, is that failing schools, especially schools run or managed by public authorities, rarely close. Although closing down failing schools is politically difficult, it is necessary to raise academic achievement. Indeed, research indicates that significant turnarounds of very bad schools are rare. While pouring money into such schools and combining it with various intervention strategies may improve them a little, it is extremely unlikely to bring about significant improvement. Indeed, research suggests that when bad schools do improve significantly, it is due to radical changes to the school's staff, which in practice emulate actual school closure.

To a large extent, tying school funding solely to the voucher would solve the problem. Without additional supply-side transfers to prop them up, unpopular schools would simply

run out of resources. Thus, research suggests that minimum income guarantees for schools need to be removed in order to allow excess capacity to be taken out of the system quickly. Provided that new schools start in, and expand into, neighbourhoods currently served by failing schools, the market mechanism would force such schools out of business. Naturally, the voucher system would only facilitate closure of failing schools if there are alternatives to which pupils could migrate. For these reasons, it is crucial that new and existing popular schools are given incentives to start in neighbourhoods with struggling schools. This is discussed in more detail in Sections 5 and 10.

A performance-related funding system, which rewards successful schools as described in Section 3, has the added advantage of making it easier for new and existing schools to target failing ones. As a strategy for growth, this obviously makes sense, as it is easier to compete with failing schools than with those that have already proven their capacity to improve achievement and thus gain additional resources. In other words, competition and choice would increase where it is most desperately needed, giving parents of pupils in failing schools better alternatives. Indeed, research suggests that while changing schools due to closure is often disruptive in the short run, it is not in the long run. Furthermore, moves to better schools as measured on quantitative performance data often generate performance improvements over the long term.

In a functioning market, it is expected that most transfers of pupils from failing to new schools would occur before the former go bust. This is especially true if funding is linked to performance. Some pupils – the children of the least informed parents – would remain until the end given the choice; in such circumstances, special assistance may need to be offered to help parents choose schools. Closures should not under any circumstances be delayed, since the damage to pupils' education would be likely to increase the longer they remained in the declining school. Of course, a functioning market would produce surplus capacity, which would ensure that parents had additional schools to choose from in the case of bankruptcy. In the transition period, however, and in unusual circumstances, there might not be schools with surplus capacity in the area, so it may be necessary to bus pupils to schools further afield. Another option might be to allow and fund enrolment in e-learning courses, as discussed below. In most cases, however, it is likely that remaining pupils would be reallocated to other schools with surplus capacity.

Of course, it is naturally the case that some areas with really bad schools might see a slower growth of competition. As argued in Sections 5 and 10, it is crucial that new providers and existing schools are given incentives to compete and to scale up their operations in these areas too. Also, in some places there might be relatively little competition simply because there are very few pupils. It could be the case that these areas are characterised by very bad schools. Thus, where there are currently no viable alternatives to persistently low-performing schools, allowing and funding pupils to enrol in e-learning courses could be a

method of ensuring more choice and competition. We know little about how online education impacts pupil performance in primary and secondary school since there are no rigorous studies on this topic available. However, though online education may not be as good as the best classroom instruction, it is most likely better than very bad education or none at all. Giving parents and pupils the opportunity to opt out of truly bad schools by the means of virtual education would give them choice even if there are no good schools nearby. This means that the worst schools would have to compete for pupils even if there are no other schools available, and even if they are located in areas where the supply of schools is unlikely to change significantly. The argument in favour of online education is discussed further in Section 11.

## **5 Differentiate voucher funding**

It is important to understand that the real cost of educating pupils depends on their ability and background. A privileged/high-achieving pupil is cheaper to educate than an underprivileged/low-achieving one, since more attention and resources must be spent on the latter. Differentiated vouchers are clearly preferable. This would also establish stronger incentives among popular schools to expand, since they would be compensated for the decline in their pupils' ability profiles that one would expect to follow.

One alternative would be to differentiate vouchers based on family income, which would enable less privileged pupils to choose schools to a similar extent as parents from more advantaged backgrounds. In this regard, it is noteworthy that the English system does already give significantly more money to children who receive free school meals or who have special education needs, although in a much less transparent way than a differentiated voucher would do. Additionally, the current funding system responds slowly to changes in the pupil composition of schools, meaning that schools taking on poor or special needs pupils must wait several years before this is reflected in their funding. A more systematic approach, with several levels of differentiation, would be preferable. For example, it would be possible to introduce several brackets based on family income, similar to the current progressive income tax brackets. The pupil premium was a step in the right direction, but was not sufficient.

Another alternative is to differentiate the voucher by pupil ability, which might be preferable since present human capital is a more relevant factor when estimating the real cost of educating a pupil. Provided that such a system does not produce perverse incentives for children to underperform in whatever performance assessment that determines the voucher value, it would clearly be beneficial for the voucher to be differentiated based on ability. One could, for example, use the cohort-referenced tests discussed in Section 14 to price pupils. While the practical details have to be worked out, the goal should be that the voucher reflects the cost of educating a pupil, regardless of ability and background.

It is important to note that it is not necessarily the *absolute* levels of funding that matter most for schools' incentives to compete for all pupils, but rather the *relative* levels. That is, schools must be compensated for taking on poor and low-ability pupils in relation to how much they receive for rich and high-ability pupils. For example, if the voucher amount for the richest and most able pupils were £2,000/year, we would not have to spend as much in absolute terms on the poorest and least able pupils as we would if it were £5,000/year. The main challenge, therefore, is to ensure that different types of pupils are priced correctly in relation to each other.

In theory, since it is difficult to differentiate in a way that corresponds perfectly to pupil differences, schools would be able to seek out 'overvalued' pupils who would be cheaper to teach. Differentiating the voucher partly by ability would minimise this problem. High-ability pupils from low-income backgrounds could technically be overvalued with a voucher differentiated solely on family income. In general, the cost of actively searching for overvalued pupils in a well-differentiated voucher system is very likely to be higher than the benefit. Furthermore, one could use the proposed cohort-referenced tests, discussed in Section 14, to differentiate the voucher, and simply postpone the classification of pupils until after schools have admitted them. Schools would know that they would be compensated for taking on more disadvantaged and low-performing pupils, but they will not be able to seek out the pupils that for various reasons have been wrongly priced. In practice, therefore, this issue is unlikely to be a problem provided that the voucher is differentiated on several levels based on income or ability, or possibly by both ability and family income.

Furthermore, if some pupils have been incorrectly priced in relation to others, it would be possible to spot and remedy this in hindsight. For example, if privately operated schools primarily set up shop in rich (poor) neighbourhoods, it would signal that the voucher amount would have to be increased for disadvantaged (advantaged) pupils or alternatively decreased for advantaged (disadvantaged) pupils. Thus, despite the fact that it is difficult to get prices just right, revealed preferences among actors in the education system can be used to alter prices in the right direction.

## **6 If top-up fees are allowed, discourage cream-skimming by other means**

Should schools be allowed to charge top-up fees? On the one hand, top-up fees would force parents to take some financial responsibility over their children's education. Although the evidence is not very supportive of this position as of yet, this could be beneficial because: (1) schools entirely funded by third-party payments may not be as responsive to parental demands; and (2) parents may have stronger incentives to ensure the best possible choice for their pupils. Furthermore, as some researchers point out, top-up fees would provide a price mechanism that could generate stronger incentives to increase efficiency and quality, which in the future would allow schools to lower the fees and thus attract more pupils. Such

a mechanism could also be important for signalling to education providers what type of education families prefer and giving them incentives to provide such education. The overall result over the long term would then be a better education for all.

On the other hand, the evidence from Chile's voucher system, which is currently the only large-scale school voucher system that allows top-up fees, is not very encouraging. An important implication of allowing top-up fees is that schools have greater incentives to select the richest pupils and compete on this basis rather than by raising quality. While this incentive is always present unless the voucher is differentiated (because the real cost of educating pupils from lower socio-economic backgrounds is greater), top-up fees exacerbate it. Indeed, Chilean voucher schools charging fees tend to take more pupils from advantaged backgrounds. Similarly, privately funded schools in Pakistan and India, which are often for-profit, disproportionately enrol pupils from more advantaged backgrounds compared to government schools. Increasing access to schools for the poor is necessary, but if insufficient attention is paid to the fact that the real cost of educating pupils differs according to profile, the incentives to focus on richer pupils may persist. And, again, as discussed in Section 1, the evidence does not lend support to the position that more private funding leads to better achievement. Theoretical evidence also appears to suggest that voucher schools must accept only the voucher as payment, rather than charging top-up fees, for producing a healthy incentive structure that targets efficiency gains instead of producing cream-skimming. The idea is supported by empirical research from the US, which suggests that the lack of top-up fees, in combination with random school selection and the covering of transportation costs, may be important to stem sorting by income.

It is thus unclear whether the introduction of top-up fees would make the English education system move closer towards a functioning education market. However, since the main concern is that schools would be able to compete by cream-skimming, a differentiated voucher based partly on family background may counter the problematic features. If top-up fees are allowed, it should most likely be compensated for by a sufficient increase in the voucher value for pupils from families who cannot afford to pay such fees. This might potentially combine the beneficial effects of fees as noted above, while countering the potential problems that could arise. Naturally, however, it might not be affordable if schools set their tuition levels too high, which they would have every incentive to do if the government takes responsibility for topping up funding for those deemed unable to pay. There might be an argument for some cap over which schools must top up poorer pupils' vouchers themselves, in combination with some form of restriction so that schools cannot accept pupils based on their ability to pay the fees. Again, if implementation of the voucher programme were randomised, as advocated in this paper, it would be possible to allow some regions to experiment with various measures of top-up fees in conjunction with the implementation of the voucher system.

## 7 Allow policy experiments with selection practices

Another important issue concerns selection practices. Selection practices may be important for diversity in the education system because they allow schools to specialise and tailor their educational offering to suit different types of pupils. They may also enable a better match between pupil and school/teacher. Selection can ensure a more homogenous ability level in the school, which may be beneficial for achievement. Furthermore, school choice coupled with academic selection methods might also incentivise primary school pupils to increase their efforts in preparation for admission to secondary school.

However, another theoretical possibility is that selection practices allow schools to cream-skim the best pupils without raising quality. It might also be the case that potential peer effects impact certain pupils in different ways, which has implications for the viability of selection practices. For example, if low-achieving pupils benefit more than high-achieving pupils from being surrounded by high-ability peers, a more integrated system may raise overall achievement. And even if all pupils benefit equally from high-ability peers, a more integrated system could still produce higher education equality. This is because the gap between high-achieving and low-achieving pupils could then widen if each group of pupils were separated into different schools. Many researchers thus argue that 'mature' education markets with publicly funded private schools should not allow schools to select their pupils. It is important to note that whether schools in fact build their reputations by increasing quality may be dependent on their not being allowed to select pupils. Some theoretical evidence suggests that this is indeed the case: given the opportunity schools will attempt to improve their reputation by selecting better pupils. Interestingly, the difference in this respect between Sweden, where compulsory schools cannot select pupils, and Chile, where they can, has been upheld as a reason why voucher reform appears to have been positive in the former country but not in the latter. However, the difference may very well also be due to the Chilean system's combination of selection practices, top-up fees, and an undifferentiated voucher, and information provision that conflates school quality and pupil ability. Theoretically, selection in schools can be a useful mechanism, provided that funding is sufficiently differentiated and schools cannot charge top-up fees. All pupils would then be equally attractive to enrol as there would be little monetary incentive to simply accept high-ability pupils rather than raising quality. However, academic selection practices may have other effects in the school system, with or without increased opportunities for school choice. It is thus important to look at the evidence regarding the impact of academic selection in schools in general.

The international evidence investigating the impact of academic selection practices (sometimes referred to as tracking or streaming) on achievement and long-term outcomes is mixed, with some studies finding positive effects on test scores and grades; some finding negative effects on test scores; some finding negative effects on years of schooling as well

as earnings on average; and some finding null effects over the long term on earnings as well as years of schooling. When taking into account pupils' age and grade, moreover, the effect of selection on test scores in international surveys is insignificant. In general, however, the effects of tracking on overall achievement are far from certain.

In England, initial evidence showed positive effects of selective practices in the form of the Eleven Plus achievement test at age 11 for high-achieving pupils, but no effects on other pupils. A later study concluded that this finding might be due to the fact that pupil performance differed markedly in the regions that opted to abolish selection practices, since there are positive effects even before pupils enter the level of education in which the practices apply, and that methodological concerns make it difficult to estimate selection effects in the English context. Yet other research suggests that this interpretation is incorrect, since selection practices create stronger incentives to work harder so that pupils can enter the selective track. Indeed, the same research also finds evidence of such effects in the English and international context, suggesting that it is not possible to dismiss the positive effects of tracking to be plagued by bias arising from 'unseen' differences between regions that opted to abolish selection practices before others. Meanwhile, research shows that attending an upper-secondary grammar school does not increase pupil achievement, but that it does raise the level of university enrolment. Another study focusing on reforms that affected selection processes at age 11 in Northern Ireland, finds that increasing the number of pupils attending grammar schools improves educational achievement and decreases inequality in terms of GCSE and A-level performance. Finally, there is evidence to suggest that increasing access to selective secondary schools in Northern Ireland – tantamount to some form of de-tracking – improved the total number of pass rates. Yet it appears as if this is due to the positive effects of attending selective schools, since quality decreased more in non-selective schools after the reforms. Pupils could simply benefit from selective education, which is not the same as arguing that the education system would produce better results without any selection at all. It is thus difficult to draw strong conclusions from the Northern Irish research for the usefulness of selection practices overall. Overall, therefore, the English research does not display an unequivocally positive or negative picture of tracking in education.

In general, it is clear that the impact of tracking is still very uncertain. Given the uncertainty of the empirical evidence in this area, ideally the government should allow policy experiments that could be tracked and evaluated by academic experts. The best approach would be to carefully design experiments involving all types of schools in order to investigate the system-level effects of selection policies. Of course, these experiments should ideally be combined with the randomised implementation of the voucher programme, which would allow careful research into how selection practices work in a universal voucher context.

Further research is also necessary to analyse how selection practices affect pupils in upper-secondary schools. Here, the situation is less contentious since most industrialised countries have some form of tracking in place at this level of education. Randomised evaluation processes might allow certain areas to use selection practices for Sixth Form colleges as well, with other areas making alternative arrangements.

## **8 Introduce lotteries as the default tie-break device**

Having argued that academic selection should be allowed only in experimental form for now, what should serve as a general tie-break device in primary and lower-secondary education? Using proximity dilutes choice, and gives more advantaged pupils readier access to better schools. Clearly, therefore, a school choice policy designed to improve quality rather than to reproduce segregation should abolish this practice. Long term, a dynamic market could solve these problems if better schools expand to meet increased demand. In the short term, however, it is important that parents are given equal opportunities to enter over-subscribed schools. This means that the role proximity plays as an admissions tool should be minimised as far as possible.

What, then, should be the alternative? In Sweden, over-subscribed compulsory free schools are allowed to employ queues. Municipal schools, however, are not, and therefore generally employ the proximity rule. Like proximity-based admissions criteria, queues likely to benefit more privileged pupils, whose parents can engage in extensive search behaviour.

A better tie-break device would be to use lotteries. Brighton and Hove have already introduced such a system for over-subscribed secondary schools. This reform led to decreased relationship between pupils' prior achievement and school attended, displaying less of a dependence on location. Yet it actually increased segregation in the short term due to a coinciding reform of school catchment areas, which maintained access to the most popular schools for pupils from more advantaged backgrounds. Displaying the dangers of implementing one good reform together with a bad one, it is nevertheless a model that should be advanced under more favourable conditions.

Of course, pupils could not be expected to travel too far in order to get to school. This is particularly the case in rural areas where public transportation is not as good as in urban areas. In a system of free choice, with lotteries as the tie-break device, pupils could technically lose the lottery and be left without a school within a reasonable proximity. However, there is little reason why this would be important in practice, since parents from outside these areas are just as unlikely to choose those schools. Nevertheless, in certain cases, there must be a second tie-break rule, where parents and local authorities can demand that schools should use proximity if it can be shown that pupils otherwise do not have access to a school within a reasonable proximity. These cases, of course, would be exceptions. Another alternative would be to provide school buses for younger pupils to

ensure that they do not have to travel too far by themselves to get to school. This would be beneficial since evidence from the US suggests that high transportation costs discourage low-income applicants to voucher schools from taking up their places. Of course, expanding opportunities for online education, discussed in Sections 4 and 11, would also be helpful for these purposes.

## 9 Increase autonomy for all schools

Currently, only academies and free schools are allowed significant autonomy over (1) the terms of employment for teachers, and (2) deviations from the National Curriculum. This type of autonomy should ideally be extended to all schools, despite the political difficulties involved in doing so. However, when it comes to autonomy in matters of curriculum, the government must go further and introduce qualifications autonomy. International evidence and research on academies in England, indicates that autonomy is important by itself, at least in developed countries, but it is absolutely crucial for a functioning education market since it allows schools to act upon competitive incentives. First, since the research displays the importance of teachers for pupil outcomes, being able to hire good teachers and fire bad ones is clearly important. And as noted in Section 3, in order for competition to raise the performance of publicly operated schools, these and privately operated ones should be treated as equals. In December 2011, as part of the government's on-going public sector pay review, and in response to proposals submitted by the Department for Education, the School Teachers' Review Body recently recommended that in future progression through the pay scale will depend not on length of service, but on the results of annual appraisals. Although the national pay scales for teachers remain in place, this may have been the first step towards more significant personnel autonomy in schools, which is crucial for a well-functioning education market.<sup>2</sup>

An example of how teacher incentives could be more closely aligned with the goal of increasing achievement is through performance-related pay, which randomised research often finds is linked to improved exam performance. The non-randomised research also often finds positive effects. In England, for example, research finds that a scheme that introduced performance-related pay for teachers who had reached the upper bound of the national pay scale improved value-added GCSE exam scores in science and English, but not in mathematics, by 40 per cent of one grade per pupil. Since the scheme was very complex, which can easily muddle incentives, these findings are noteworthy. Similarly, cross-national research finds that merit pay for teachers raises PISA scores in reading and mathematics by 0.25 standard deviations (SD) and science scores by 0.15 SD. In fact, the great majority of

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<sup>2</sup> It is also noteworthy that the government has abolished the requirement that teachers have to notify parents 24 hours before they put pupils in detention outside school hours. This will be followed by other similar autonomy measures designed to improve schools' abilities to deal with disruptiveness in classrooms more effectively.

international studies display at least some positive effects of teacher performance pay. While the design of such programmes is clearly important, and something to which researchers should pay greater attention, the evidence suggests at the very least that schools should be allowed to experiment with different pay systems in order to find out what works best.

Second, it is not enough to allow curriculum autonomy as long as schools must offer exactly the same qualifications. Ideally schools should be able to offer alternative qualifications in order to be able to accommodate for different pupil needs. By allowing universities, and to a certain extent also Sixth Form colleges, to select pupils on whatever qualifications they see fit, this would ensure healthy competition between different education qualifications. British universities are already well equipped to deal with various forms of European qualifications, so a natural starting point would be to allow all schools to offer any qualification that has already been approved by other EU governments. It should not be construed that these qualifications are the only ones that should be approved. New qualifications produced by independent groups, meeting minimum criteria in respect of standards, should also be allowed in the future. Everything, of course, will not be accepted. The government's role in establishing minimum standards remains also in a voucher system.

In general, schools should be given as much autonomy as possible in their day-to-day operations. This means that the government should not generally prescribe how schools educate. A well-functioning education market probably requires that we abandon many preconceived notions of how education should be carried out, and about the facilities required, to ensure quality. For example, in Sweden, many free schools attracted criticism for choosing not to provide their own libraries, and the Swedish government recently mandated that all schools need to have one. But schools should be held accountable for their output, not their inputs. If they perform well without spending money on traditional inputs, this merely means that these schools focus more on other factors that also matter for pupil performance. This is clearly part of a necessary process of experimentation.

## **10 Allow bona fide for-profit schools to set up shop**

The use of school competition and economies of scale as mechanisms for raising educational standards requires organisations that are willing to expand and replicate success in different markets. For-profit organisations have the strongest incentives to do so. It is therefore conspicuous that such schools are ineligible to receive public money in England. Such a policy is misguided. It stems from the belief that such schools would reduce quality because of their profit-maximising behaviour. As the global evidence shows, however, there is little evidence to suggest that for-profit schools differ significantly from non-profit schools in terms of quality. Indeed, the only available evidence from England indicates that for-profit, fee-paying private schools generally score higher than not-for-profit independent schools in Ofsted and ISI inspections. Following a best-practice approach, there

is thus little research to substantiate fears about the effects of the profit motive on publicly funded education.

Second, if the government is serious about inducing more competition and choice, with the long-term aim of crowding out failing schools, allowing for-profit schools is simply crucial. This is not because for-profit schools are inherently better than not-for-profit schools, but because they generate different incentives. For-profit companies have strong economic incentives to start new schools and capitalise on economies of scale. This would be especially the case if their funding were performance-related and if there were a differentiated voucher based on pupils' ability and background, as proposed. While non-profit schools are often high achieving, there are fewer incentives for them to increase in size and to open new schools to the same extent as their for-profit counterparts. The Swedish experience, from which the English free school model is drawn, indicates that for-profit schools are more likely to open new locations and expand into new municipalities compared to non-profit schools. Indeed, 30 per cent of all Swedish compulsory free schools are run by 10 large for-profit companies. The corollary is that the beneficial effects of scale economies are unlikely to materialise without for-profit schools.

Third, non-profit education providers have problems finding up-front capital for new schools. For-profit providers, on the other hand, are entrepreneurs who engage in risk-taking behaviour in exchange for future returns. While some non-profit providers may raise the capital required, this is unlikely to be sufficient for competition to increase significantly. Furthermore, being overly dependent on philanthropy is risky since there are no strong incentives for philanthropists to spend their money on the best schools. Indeed, analysing Californian non-profit charter school networks, research finds no relationship between the amount of philanthropic funding and educational achievement. For-profit schools seeking investment funding, on the other hand, have to demonstrate the capacity to generate future profits. This is precisely what the evidence from Chile displays: improvements in average test scores, controlling for changes in pupil background, predict increases in enrolment figures in for-profit schools only. In contrast, the best non-profit schools do not grow faster than other non-profit schools. While this research is not sufficient to separate causality from correlation, it is nevertheless important to note the correlations in this respect.

Fourth, it is also important to note that for-profit educators often expand into neighbourhoods that are unlikely to be served by non-profit schools, which are generally started by enthusiastic parents in middle-class neighbourhoods. The corollary is that they serve primarily middle-class pupils. Indeed, this is what the overall evidence on the English free schools policy suggests to date. Funded through a differentiated voucher, for-profit schools would be especially incentivised to expand into less privileged areas where parents are less likely to set up new schools. For-profit schools could therefore be instrumental for

expanding the degree of choice also in underprivileged neighbourhoods. Similarly, a partly performance-related funding system would strongly induce for-profit education providers to start competing with failing schools given their pecuniary interests to do so. In conclusion, therefore, encouraging for-profit companies to enter the education market would not undermine the policy goal of providing a good education for all. The two are not mutually exclusive.

Finally, in pursuit of profit, for-profit schools are more likely to adjust to what the majority of parents and pupils generally want: safe, high-performing, mainstream-oriented schools. Non-profit organisations, such as churches, on the other hand, tend to start schools that are 'mission oriented' rather than focusing on providing a general education. Of course, for-profit schools may also cater to particular subsets of the population as well, if they have a comparative advantage there.

All these points also make the current legal framework in England – which allows non-profit owners to outsource the management of the school to for-profit providers – clearly unsatisfactory. In contrast to the situation in Chile and Sweden, but similarly to America, the English situation means that schools cannot expand due to the profit motive, which is one of the most important reasons for allowing it. Outsourcing the management of a school to an education company may or may not make it more efficient, but it completely obliterates the dynamic impact of the profit motive and does little to solve the issue of up-front capital.

Thus, a voucher system without for-profit schools is unlikely to produce the supply-side dynamic necessary to ensure a functioning education market. The policy implication is loud and clear: the government should revoke the ban on for-profit schools as soon as possible. Of course, due to increased economic incentives in for-profit organisations, it is especially important that schools are accountable to credible measures of performance in order to discourage perverse incentives. This means, for example, that the information system should be improved significantly, a reform which is discussed in more detail in Section 14.

By giving strong incentives to educators to set up shop and expand, the profit motive can increase competition, which in turn has the potential to increase overall education quality to levels that would not be possible without those incentives.

## **11 Further stimulate supply**

Given the importance of a supply-side dynamic for the functioning of an education market, it is also important to minimise restrictions regarding how schools should be approved and built. The application process is currently a strange mix between procurement, competitive tendering and bona fide school establishment. What should be an invitation to establish schools is in reality an invitation to participate in a competition to be one of the lucky schools to be approved by the government. The application system should be revamped

entirely. As long as schools meet minimum requirements, and provide their own capital, free establishment of schools would streamline the bureaucratic process significantly and help produce a much stronger supply-side dynamic than is currently the case. This would be more similar to the Swedish education system in which the free school application process has been much more liberal in respect of the conditions that have to be met for schools to be approved.

Furthermore, reforms to the planning system are an important complement of a voucher system, since they could stimulate a significant increase in supply. A ‘big bang’ approach would be to exempt new schools from all local planning investigations to ensure that local authorities cannot use them to bar competition. If this is not possible, schools could at the very least be exempted from the unnecessary building regulations that currently apply. Providers should be able to set up a new school in different types of property. The Swedish case is again relevant here: organisations can, and do, set up new schools in formerly commercial properties. Furthermore, thorough liberalisation of the planning system would lead to lower housing costs, which in turn would make it cheaper to set up new schools. Finally, it would be highly desirable to expand the opportunities for online education in areas where supply is unlikely to increase radically, even with for-profit schools and a more liberal application/planning structure. Since we know little from rigorous research about the impact of online education on learning in primary or secondary education, it is important to use this alternative carefully. Rigorous evaluation of pilots should decide whether the government should use online education as an alternative to schools on a larger scale. As argued in Section 4, however, online education could be a wholesale option today if there are no other alternatives to low-performing schools. The minimum rules regarding learning and accreditation would apply to online learning facilities, and the approval and accreditation of such schools would be similar too.

Online education is not only a potential alternative to schools, but also a complement for pupils who attend schools that do not offer specific qualifications. For example, pupils who want to take advanced Latin could be given the opportunity to do so through online education, if the school does not offer it. The funding could be appropriately increased for the online educator and removed from the school the pupil attends, which is currently the practice in Florida for instance. Theoretically, there is good reason to believe that online education would force schools to improve as a result of the competition from online providers. Opportunities for online education would thus clearly induce more competition and liberalise supply to an extent beyond that which might be achieved via traditional methods of schooling alone.

## **12 Avoid counterproductive anti-trust laws**

Having argued that the goal should be a voucher system in England designed specifically to ensure that schools compete in terms of quality, it is important to consider whether the

state should regulate the market to ensure a minimum number of suppliers. For example, in the Netherlands, state authorities seek to ensure that private monopolies do not replace public monopolies by capping the number of schools controlled by any school board at 50 per cent of all schools in one market. In a system with a virtual public monopoly in schooling, this idea is certainly attractive: such a policy would break up the current monopoly in the name of competition. However, setting aside estimates of the impact of online education (which would probably ensure that such a monopoly never emerged), while the above policy certainly conforms to anti-trust regulation in other sectors, it would be counterproductive for the purpose of increasing educational attainment.

First, assuming that parents choose schools based on quality, which the evidence at least partly suggests is true in the current English context, there is no reason why we should prohibit parents from choosing school suppliers simply because they are popular. Indeed, a key argument for school choice is that good alternatives crowd out bad ones; banning suppliers that are best at raising educational achievement from scaling up would be a strange policy. Thus, there is little reason to ban education suppliers from expanding indefinitely.

Second, there is a fundamental difference between government and private monopolies in education: while the former traditionally emerges because of regulation, which perpetuates inefficiencies in large-scale production, the latter is generally a transitory phenomenon reflecting entrepreneurial success in a dynamic competitive process. Entrepreneurs must constantly satisfy demand, or else other producers will enter the market and compete. For these reasons, schools will face competition from both existing competitors and those which do not yet exist. The best way to ensure healthy competition, therefore, is simply to ensure free entry and exit to the market.

Furthermore, capping enrolment or placing a ceiling on the number of schools held by any given supplier would dilute the prospects of improving education through scale economies. Schools face competition from actors outside existing market structures, both from potential new schools and from school suppliers operating in other markets. Only on a static, rather than dynamic, view of competition is there a trade-off between scale economies and competition. If a ceiling is placed on school expansion, we would essentially produce such a trade-off ourselves.

### **13 Reform the national exam system – but rely less on it**

England's education system appears to suffer from grade inflation. There is simply no reason to believe that the huge increases in exam achievement since 1988 have been matched by actual knowledge gains. Although competition among exam boards may have contributed to grade inflation marginally, the current type of weak criterion-referenced

grading system seems to have an inherent bias towards gains. Thus, abolishing exam competition was never likely to be a panacea for solving the underlying problem.

There are two solutions to the problem of grade inflation within the GCSE/A-level system: either (1) the reintroduction of a strict cohort-referenced grading system; or (2) the introduction of a quasi-cohort referenced system. Yet such a change would only ensure that the English qualification is more comparable from year to year. Since we also want to ensure qualifications autonomy, and thus competition, one of these solutions should be combined with the promotion of alternative procedures, while at the same time giving schools greater discretion to opt for alternative qualifications.

Reintroducing a cohort-referenced grading system would ensure strict comparability within school cohorts. This is because a fixed percentage of pupils would receive each grade. Grades would thus only reflect the relative performance of pupils within their cohorts. No more, no less. But since the likelihood of deviations in overall ability between large school cohorts is low, the cohort-referenced system is likely to be highly comparable from year to year also. It should be noted, however, that this solution might still require something to be done about exam board competition in the *same* qualification due to differences between syllabi; easier syllabi would have the same distribution of results as more difficult ones.

The problem with a cohort-referenced system is that it cannot be used to measure gains and losses between school cohorts, however unlikely these are. Yet the whole idea of introducing school choice is to increase overall gains in the education system. Given that the current system produces significant grade inflation, however, little suggests that it is any better in terms of detecting performance gains or losses in the education system as a whole. Pupils assessed in years closer to the year in which the new criterion-referenced GCSE exam was introduced were clearly disadvantaged compared to later cohorts, and this effect is replicated every time there is a change to exam specifications. Clearly, comparability in the present system cannot be guaranteed either. It is possible to get around this problem, however, through the use of international surveys, which offer good alternatives for measuring gains and losses. A cohort-referenced system would at the very least ensure that pupils could be compared within any given cohort.

If policymakers are unwilling to reintroduce a fully cohort-referenced system, a 'contextualised' system, could be a compromise. In this model, the grade distribution in core subjects – GCSE English, Mathematics, and Science – would remain fixed from year to year. Candidates' mean achievement in these subjects could then be used to control for the same cohort's entry pattern in other subjects. This means that we allow the grade distribution in subjects other than the core ones to change from year to year, depending on the ability level of the cohort as decided by their performance in the core subjects.

In the first year of the new system, grades in subjects other than the core ones would be based solely on examiners' judgements, and the proportion of candidates receiving each grade in relation to their mean achievement in core subjects would be recorded. In subsequent years, this information is then used to predict the proportion of pupils that should receive each grade in subjects other than the core ones. The relationship between the concurrent mean achievement in core subjects and grades in other subjects could not change from year to year, but non-core subjects' outcomes could increase or decrease depending on the ability of the entry. This, in turn, would allow use of the mean achievement in all GCSE subjects as a control for the ability profile for A levels. Such a system could thus potentially ensure both comparability and that gains/losses in knowledge are taken into account.

However, the former two proposals are only meant to ensure that schools that opt for English qualifications are compared on an equal basis, while also providing a better foundation for developing valid school choice information. Neither of the above alternatives is a standalone alternative, but should rather be seen as complements to a stronger reliance on institutions when it comes to accepting pupils. On the model of increased qualification autonomy described earlier, universities would also be able to choose pupils taking various other types of qualifications, which would give strong incentives to schools to offer the qualifications that tertiary education institutions prefer. Competition would then ensure that the weakest qualifications are crowded out, but also that admissions requirements reflect the differences in qualifications. This would not be any news to admissions tutors at British universities, who are already well versed in the EU qualifications proposed here as viable alternatives, which could be offered by any English schools in the beginning, and reduce the importance of the national testing system compared to today. This could technically be complemented by the introduction of standardised national admissions tests, to be used by universities and to a certain extent also Sixth Form colleges on a voluntary basis.

## **14 Improve the information and accountability system**

A well-functioning education market needs good quality measures by which parents and authorities can compare schools. Research from several countries suggests that schools and parents react positively when provided with information regarding how well the former perform. Since school effectiveness differs depending on pupils' varying ability, it is important that the information reflects this in all metrics presented. Although the government began publishing such information in 2012, the average achievement measure is currently based on pupil groups that are too large and the value-added measure remains undifferentiated. In theory, league tables are supposed to help parents choose a school at which their children will improve their achievement the most. Although parents who choose based on average raw test score data and the now abolished contextual value-added

indicators have been better off than parents making random choices, research shows that none of these measures are effective in this respect. While no gauge is perfect, average exam grades could be used at schools within close proximity of each other, differentiating this measure based on pupils' prior ability. This would give parents more information on the relative effectiveness of the schools they actually choose between, while also taking into account that this effectiveness differs between pupils of varying prior ability. Due to the trade-offs between different metrics, however, it would be best to trial different metrics through a process of experimentation.

Such experiments could of course also be used to evaluate already existing regular value-added metrics or proposals for new contextual value-added measures. Although value-added and the now abolished contextual value-added metrics have been far too uncertain to be useful, the aim of isolating school effectiveness from pupil intake should not be abandoned. Rather, it is important to learn from previous mistakes and develop better effectiveness measures. For example, as previously noted, the modelling of contextual value added suffered from a lack of data regarding family composition, income, and parental education, which biased the scores; better data should be collected and included in the computation of potential future contextual value-added measures. Although raw average test scores have turned out to be a decent guide for parental school choice, properly developed value-added gauges would provide even more relevant information regarding the schools at which pupils would be most likely to improve. Indeed, recent research from the US indicates that controlling for specific background variables, contextual value-added measures do replicate random assignment to both teachers and schools. One way of producing more valid measures is to evaluate pupils each year, since value added based on yearly data has proven to be less unstable over time. As argued below, however, an experimentation process among independent actors is probably the best way to improve how school effectiveness is measured. One could, for example, foresee research projects that attempt to identify effective schools, just as a recent project set out to identify effective teachers.

Since qualification autonomy is important, as argued above, it is naturally important to ensure appropriate information in a system that allows several competing types of education. One could release value-added information and other quality measures from different qualifications. In fact, it could technically be possible to use improved value-added measures to calculate changes in achievement based on normalised scores that would be comparable across qualifications. This means that parents would be able to see the percentage increase in school performance across all qualifications (although this would not tell them anything about achievement *per se*, since some qualifications may simply be more difficult at different stages of a pupil's education).

Yet it is important to acknowledge that different types of qualifications have different types of assessments at different points in the education process. In the Swedish education system, for example, teachers set their own grades, which may or may not reflect the actual quality of the school. Another key problem in linking strong incentives to qualifications, the format of which has to be fairly consistent from year to year, is that it creates strong incentives to game the system among schools, and for teachers to engage in ‘teaching to the test’. Thus teachers end up coaching pupils for high-stakes tests, while ignoring other important things. Of course, this is not necessarily the case. Research has found that high-stakes testing policies in Florida generate gains in the high-stakes tests, but also in low-stakes subjects, thus suggesting positive spill-over effects rather than a crowding out effect. Similarly, other research shows that schools responded to high-stakes tests by raising spending on teacher training, instructional technology and development of curricula, indicating that high-stakes testing can also produce worthwhile changes in school behaviour. Nevertheless, it is clearly important to take these issues into account.

Some researchers have proposed a solution to the problem of perverse incentives in terms of teacher performance-related pay and accountability to state officials, which is based on the separation of qualifications from incentives. By introducing a separate set of examinations, which are entirely cohort-referenced and administered continuously throughout the education process, one could change the format from year to year. This would make it impossible to teach to the test, forcing teachers to focus on actual knowledge to improve their pupils’ scores. Different pupils would enter different ‘contests’ based on their initial achievement levels, background, peers, and other important characteristics. They would then be assigned a percentile score relative to other pupils in this contest.

Such tests would also be invaluable for information purposes in a system that allows qualifications autonomy. Examinations could be carried out in whatever way possible and would thus allow less theoretical subjects to be tested too. The tests could focus on the minimum required knowledge and skills that the education authorities want all pupils to master. Of course, they could also become more comprehensive quality metrics for all schools if they are devised to incorporate overlaps between different qualifications. Indeed, the TIMSS framework does precisely that by making sure that the exams test knowledge that is generic to various education systems. That the tests are cohort-related, which is crucial for allowing the test format to change over time, means that we can only say how well pupils are doing compared to other pupils, but we can track them and see how they move up and down the ranking across different years, which would allow for a specific relative value-added analysis also in the information tests. One can also construct specific sets of pupils according to whose average performance they may be compared to, depending on background and prior ability. This would take into account potential differential school effectiveness among different types of pupils as described earlier. While the regime would not remove all incentives to manipulate results, it would make it much

more difficult for schools and teachers to simply coach pupils for tests without instilling the knowledge required to perform highly on them.

However, it is also important to provide information on school qualities that cannot easily be captured by test scores alone. School inspections are important for this purpose. Furthermore, school inspections could also be used as an additional tool to compare schools offering different qualifications. It has been shown that the grades from Ofsted inspections correlate with pupil satisfaction with teachers as well as parental satisfaction with schools over and above test scores, which indicates that the inspection grades do pick up qualities that are not captured by conventional measures of education quality. Furthermore, the most methodologically sound research shows that inspections do increase achievement and that these gains are not obtained by making pupils study easier subjects. Thus, school inspections can clearly be useful and the outcomes of the inspections are valuable information for parents and pupils.

This is not to say that they cannot be more useful and informative. School inspections should be focused on output alone. Current Ofsted inspections are too prescriptive, for example by evaluating teaching styles rather than whether pupils learn as much as possible. Even though Ofsted inspections have been shown to improve test scores to a certain extent, therefore, they need to be less prescriptive in terms of how schools achieve success.

Furthermore, beyond whether schools fulfil the minimum requirements, the government does not have to be involved in inspections either. Instead, independent organisations could carry out inspections that are more focused on the specific types of qualification the schools offer. If a school offers the French 'Brevet des collèges', which is roughly equivalent to GCSEs, and 'Baccalaureate', which is roughly equivalent to A levels, for example, a third-party organisation that specialises in quality assurance of French qualifications could carry out additional inspections. The same would apply to new qualifications that have yet to be developed.

It would also be preferable if parental and pupil satisfaction scores could be published to give a fuller picture of the quality of the school. While test scores and inspections could provide reasonable indications of overall school quality, parents should have access to more fine-grained indicators of pupil needs and how schools meet these needs. Application statistics are also useful, since these indicate parents' preferences clearly. Teacher quality indicators, too, may be very important to publish as accountability information, since the variation in the quality of teachers is much higher than between schools. And, finally, statistics from admissions tests, wage premiums, and employment outcomes after school, corrected for prior achievement and background, could be published so parents know which schools are more successful in preparing their children for access to higher education institutions and the labour market. This would ensure that parents and pupils are informed about which qualifications are best for the purposes of reaching their individual goals.

In addition, it is important to learn from behavioural economics when designing the information system to maximise the potential of parents and pupils to become discerning in their choices. For example, the way information is presented can be very important for how choosers value something. Research from health care has displayed that when gains are described in relative terms, they are viewed more positively than in absolute terms. Similarly, research from health care shows that the provision of personalised information aids people in making more discerning decisions. Information, therefore, should be presented in a way that maximises the potential for this.

Of course, competition between different information providers can also develop, which could spur innovation also in this field while ensuring that providers act as quality checks of each other. For this reason, it is important to also allow diversity in the provision of information. For example, in the Netherlands, the national newspaper *Trouw* began publishing school quality information, which, in turn, produced radical changes in the government's School Inspection Service. It began publishing its own quality information on the internet, and reformulated its remit to include the provision of school quality information to citizens. Yet the government could clearly play a more constructive role from the outset: it could set minimum requirements regarding what information schools should provide, for example. Governments could assemble and publish the relevant information, and then allow other actors free use of this information in constructing alternative measures. The former has been proposed in England already, with the government producing an overall quality index that gives specific weights to different quality measures. There are various alternatives, but the main point is that competition in this area may very well generate gradual improvements in information supply, which would greatly aid the establishment of a functioning education market.

In general, therefore, a plethora of new information measures would promote healthy incentives among schools to compete along the lines of quality. As the above discussion indicates, choice in itself allows for a much more nuanced approach to accountability than the current state-dominated situation. Expanded parental choice allows for a potential army of education performance monitors. Such educational performance monitors are crucial for promoting a system of choice and competition that raise education quality significantly.

## Conclusion

This paper has suggested reforms to the current English school choice model which, if implemented, would move the system towards a well-functioning education market. A national voucher scheme should be the goal, but to facilitate proper evaluation the programme should ideally be randomly rolled out across different regions. The system should involve parents both in the choice of school and the financial transactions involved in paying for education. Parents should be directly involved in 'paying' schools with the voucher they have received, and choosing a school should be mandatory. This means that

there should be no default school to which pupils are automatically assigned if they do not exercise any other choice.

It is also of utmost importance that all schools, both state and independent, generally are treated equally in terms of funding. This, in turn, makes it necessary to tie practically all school funding to the voucher. Tying school funding to the voucher would also ensure that unpopular schools go bust, which in turn makes it crucial to incentivise new and better schools to start up in these areas. However, while equality in school funding should be the general rule, a voucher system that increases funding in one way or the other to well-performing and popular schools might be preferable. This would incentivise schools to focus on quality, and spur good schools to expand, while also facilitating the closure of failing schools. To ensure that such schools actually do close, online education should also be a viable wholesale option when there are no high-quality alternative schools available.

Furthermore, since the real cost of educating pupils depends on their ability and background, the voucher should be differentiated based on these features. While strong recommendations on the issue of top-up fees are not made here, it is important that such fees, if they are allowed, are accompanied by other mechanisms that discourage cream-skimming. Gradual implementation of the voucher would leave room for experimentation in this field, as also in respect of ascertaining the effects of widespread selection practices. Other regions would then be allotted to abolish proximity as the tie-break device to primary and lower-secondary schools, and instead introduce lotteries.

Today, only academies and free schools have significant autonomy in hiring and firing practices and in curriculum matters; all schools, state and independent, should be given such autonomy. Stronger qualification autonomy should also be allowed. This paper argues that allowing English schools to offer any other qualification that has been approved by an EU government would be a good start. This would ensure that schools have the ability to compete by providing significantly different types of education. In the future, however, new qualifications meeting the minimum requirements can be developed by various independent organisations.

In order to create the necessary supply-side dynamic to raise competition significantly, as well as to ensure access to good schools in underprivileged neighbourhoods, it is important to incentivise successful schools to scale up. This makes it crucial to allow for-profit schools to operate. And precisely because these seek to find out what works best and then replicate it, there should be no caps on enrolment or maximum shares per school provider in any given area. Although such regulation would be introduced under the guise of maintaining static competition, it produces a trade-off between scale economies and competition policy.

Since the supply-side dynamic is very important for the success of school choice, it also makes sense to liberate supply further. First, the process should be streamlined and made

easier. The free establishment of schools, provided that these meet requirements and raise their own capital, should be the norm. Second, planning laws should be liberalised when it comes to schools especially (and across the board preferably). A radical approach would be to exempt all schools from local planning investigations. If not, the building restrictions should be abolished, and schools should also be able to convert other types of property rather than being restricted to that designated for school use. Third, opportunities for online education should be increased to facilitate choice also in areas where the supply of schools is unlikely to increase rapidly/radically.

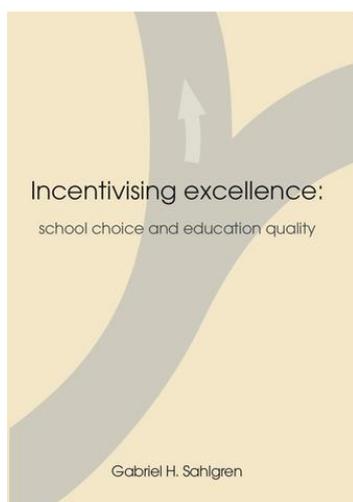
Additionally, reforms to the exam and admissions system should be introduced. While some form of cohort-referenced system would be preferable to the current weak criterion-referenced one, it is still desirable, as noted above, to adapt the system to more qualification diversity. Universities should be allowed to rely more on alternative admissions procedures to differentiate between pupils. Alternatively, they might simply set different admissions criteria for pupils taking different qualifications. This would (1) ensure healthy competition between different qualifications; and (2) produce yardsticks for admissions tutors, who can better understand the standard of grades in one qualification when there are other qualifications with which to compare and contrast. Additionally, standardised admissions tests could be introduced, which schools and universities could require applicants to take on a voluntary basis.

Finally, having dealt with the exam system, the information system must be improved to enable parents to make informed school choices based on education quality. This requires quality measures that better reflect pupil heterogeneity/background and local differences in school quality. Introducing new cohort-related 'information tests' that allow the test format to vary over time would also ensure that teaching to the test becomes impossible. The unpredictability of the tests would encourage schools and teachers to focus on increasing pupils' actual knowledge and skills, equipping them to do well on any type of test, rather than merely coaching them for exams. Furthermore, school inspections also offer valuable information that could capture school quality over and above that which is included in test scores, while also providing an additional instrument with which schools offering different qualifications could be compared. Other measures, such as parental satisfaction scores, should also be available and it would be preferable to allow an open source approach, which would enable third-party groups to produce new information and compete along these lines as well.

The system proposed would require overhaul of many features of the current education system in England. Nevertheless, the gradual implementation would allow researchers to study the effects in a scientific fashion. As the global evidence suggests, half-hearted attempts to introduce choice will not generate large gains, and may in fact produce perverse incentives to compete through other means than by raising quality. In order to

reap the benefits of choice, therefore, it is very important that it is not seen as a panacea. Rather, as outlined here, in order to increase efficiency significantly, expanded choice requires many other reforms. Creating a well-functioning market demands a coherent approach to changing the overall incentive structure in the education system.

## About the book



*Incentivising excellence: school choice and education quality*

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*Incentivising excellence: school choice and education quality* discusses the conditions that need to prevail for school choice to fulfil its promise in relation to improving educational outcomes. It contends that without attention to system design and supporting reforms geared to fundamentally altering the incentive structure in education, there is little reason to suggest that choice will generate significant gains. The book provides a comprehensive evaluation of the research regarding the effects of school choice – encompassing cross-national studies, in-depth discussions of national choice programmes in Sweden, Chile, the Netherlands, Denmark, and England, as well as smaller-scale programmes elsewhere – and exposes the flaws in system design that have undermined its effectiveness as a mechanism for raising education quality. It goes on to consider lessons for policymakers and in particular the reforms necessary to bring about a functioning education market in England.

Available to readers of this paper at the specially discounted rate of £14.99.

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