Background

This note has been prepared for the Education and Skills Committee evidence session on December 6th 2017, and relates to the Scottish Government’s programme of reforms for school education.

Summary

- Approaches with a direct focus on the quality of teaching and learning tend to be the most cost-effective ways to improve outcomes.
- Teacher CPD should be evidence-based and maintain a strong focus on pupil outcomes.
- Headteacher autonomy should be accompanied by support for decision-making and high quality evidence about what works to improve outcomes and support practice change.
- Collaborations should focus on teaching quality and aspirations for pupils, and should be informed by the evidence on effective CPD and implementation.
- Schools should be aware of the challenges of increasing parental engagement and shouldn’t expect this alone to narrow the attainment gap for disadvantaged pupils.

Improving the quality of teaching and learning

A direct focus on teaching and learning should be at the heart of any efforts to improve education outcomes. The Education Endowment Foundation (EEF) Toolkit shows that many of the most effective improvement strategies are those which focus on quality of pedagogy and teacher/pupil interaction. In contrast, ‘structural’ approaches such as extending the school day, changing timetabling or reducing class sizes tend to be less effective and in some cases much more expensive.

There is evidence that improving the quality of teaching is likely to have a disproportionately positive impact on children from low-income families, and that the quality of teaching can be lower in schools serving disadvantaged communities. So a focus on teaching quality can deliver both excellence and equity.

The most well-evidenced approaches to improving teaching quality focus on building capability through high quality professional development. Evidence of the impact of recruitment and retention strategies, initial teacher training, and pay and performance management is more limited.

Good continuous professional development (CPD) maintains a strong focus on pupil outcomes. A recent review by the Teacher Development Trust found that, in general, effective interventions:
- Are relatively long in duration (at least two terms).
- Involve ongoing support and follow-up activities, and an opportunity to reflect on learning.
- Are relevant to teachers’ day-to-day experiences and involve the direct application of learning in the classroom.
- Involve peer-to-peer learning and a strong relationship between the provider and the teacher.

Development of pedagogical skills and subject knowledge were found to be equally important for effective CPD. CPD is less effective when it does not have a strong focus on aspirations for students and the impact of changed teacher practices on pupil learning.

**Empowering school leaders**

Increased autonomy for headteachers can deliver improvement by enabling better decision-making at the school level. However, this requires headteachers to have access to high quality evidence about what works to improve educational attainment.

Most education programmes are no better than business as usual. For example, fewer than one in four EEF studies show enough promise for us to reinvest. Headteachers should have access to this type of information to support their professional decision-making. For example, Education Scotland have commissioned the Scottish Learning and Teaching Toolkit to help school leaders identify cost-effective ways to improve outcomes in their schools.

**Regional Improvement Collaboratives**

Evidence on the impact of different governance structures on pupils outcomes is limited. In general, research suggests that approaches which focus directly on the quality of teaching and learning are more effective than those which focus on more ‘structural’ factors.

Nevertheless, we believe that collaboration between schools – and support to enable this – is an important element of system-wide school improvement. Indeed, that is why we have established a network of Research Schools in England.

However, it is important to recognise that collaboration in and of itself is not enough: recent EEF projects have shown that some initially promising approaches to school collaboration failed to deliver improved outcomes for pupils when tested. The EEF is developing a practitioner guide to implementation in 2018, which will be shared with Research Schools to support their collaborations.

**Empowering children, parents and communities**

The evidence is very clear that parental involvement, parental characteristics and the nature of the home environment are key drivers of pupil outcomes.

However, it is important to recognise that although we know a lot about the relationship between these factors and pupil outcomes, we know much less about how you can change pupil outcomes by intervening with parents. Three EEF projects designed to raise attainment through direct parental engagement with their children’s education failed to have an impact when robustly tested. In contrast, a light touch approach using text messages to encourage parents to discuss school work with their children had a small positive effect on maths and attendance. The relationship between parental activity and pupil outcomes is complex, and increasing
engagement is challenging. Schools shouldn’t expect parental engagement strategies alone to narrow the attainment gap for disadvantaged pupils.

**Using evidence to improve outcomes**

The evidence shows that most education programmes are no better than business as usual. Taking an evidence-based approach can ensure that more teacher time and school funding is targeted towards things that will have impact and not wasted on ineffective interventions.

Taking an evidence-based approach should not rule out innovation: rather it requires innovations to be well-designed and rigorously tested, so that effective innovations can be scaled up to benefit more children, and ones which don’t work are not repeated to the detriment of learners.

An evidence-based system should develop robust data on which practices deliver the best outcomes. Education trials play an important role, but can be complimented with other, less intensive methods for estimating likely impact, such as meta-analysis and ‘quasi-experimental’ analysis.

One approach that we have found particularly valuable is using data to demonstrate that all types of schools and pupil groups can achieve success. For example, in around 10% of English schools, the average attainment of disadvantaged pupils matches or exceeds the national average for all pupils\(^\text{vii}\). Importantly, these include schools with very high proportions of disadvantaged pupils, as well as schools with more affluent intakes. There is similar evidence from the Australian system. Some of the Curriculum for Excellence data now being collected\(^\text{viii}\) would enable the same analysis to be done for Scottish schools.

Danielle Mason, Head of Research, EEF (danielle.mason@eefoundation.org.uk)

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\(^5\) https://scot.educationendowmentfoundation.org.uk/

\(^6\) For example, as illustrated by the EEF Toolkit. See above for details.

\(^7\) Fisher Family Trust analysis for EEF, using 2012 data and currently being repeated for 2016 data.

\(^8\) For example, data available at: https://public.tableau.com/profile/sg.eas.learninganalysis#!/vizhome/AchievementofCurriculumforExcellenceCfELevels201516/Dashboard1