

Encouraging innovation and experimentation in Scottish schools

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Though experts disagree about the state and direction of Scottish school education, there is a remarkable degree of consensus over its cultural malaise. The accounts of academics, journalists, activists and school leaders converge to present a picture of a system that is cautious, conformist, risk averse and stuck in its ways – in a word, stagnant. This will not do if the country is to meet the social, educational and technological challenges of the years to come, not least in the wake of the current pandemic. This briefing considers the existing obstacles to innovation and experimentation, and proposes some ways to develop a more dynamic, creative and inventive school system.

KEY POINTS

The relative lack of innovation and experimentation in Scottish school education is perpetuated and exacerbated by certain structural issues:

- A tendency towards micromanagement, and a ‘tick-box’ audit culture
- A ‘middle layer’ of administration uncertain about its role, with local authorities seen as obstructing innovation and Regional Improvement Collaboratives yet to achieve their potential
- Personnel in senior positions that tend to rise through conformism and avoiding ‘rocking the boat’
- A lack of time and resources for new ideas and professional development
- Too little support for forums for sharing ideas and spreading good practice
- Assessment and inspection practices that too often constrain rather than encouraging innovation and diversity
- Scope to improve evaluation and engagement with research

POLICY RECOMMENDATIONS

1. Create an ‘innovation fund’ to sponsor particularly novel projects that would not otherwise occur, and a prize for outstanding initiatives
2. Make innovation and experimentation an explicit part of the remit of educational bodies, especially Regional Improvement Collaboratives
3. Diversify hiring and appointments to key roles in government and agencies
4. Support forums for the exchange of ideas
5. Invest in research and knowledge exchange

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WHAT IS THE PROBLEM?

It is easy to get the impression that Scottish school education is in deep crisis, with politicians and commentators quick to condemn the system as “failing”.¹ Such narratives of decline can be overstated. To a large extent, they are based on apparent (and not always statistically significant) decreases in Scotland’s scores in PISA, the OECD’s international benchmarking exercise. Yet while Scotland’s PISA performance on reading and maths did fall in the early 2000s, it has been fairly stable since 2006; with only science scores dropping in recent editions.² Even so, Scotland remains around the OECD average for maths and science and above average for reading. Trends in other measures – such as qualification attainment and progress to further and higher education have been positive, if not dramatic.³

A better characterisation of the situation is one of “stagnation”, as Lindsay Paterson, professor of education policy at the University of Edinburgh, has put it.⁴ Scottish school education is functional, it is not on the verge of collapse or disaster, but there is little sense that things are likely to change dramatically or get better quickly. There is a risk that this lack of a ‘burning platform’ undermines any impetus for improvement. Yet complacency would be a mistake. The status quo is in many respects unacceptable, particularly the persistence of deep educational inequalities: students in the least deprived areas are more likely to achieve five Higher passes than those in the most deprived are to achieve one.⁵ And social, economic and technological changes are likely to place new and growing demands on the education system that it needs to rouse itself to meet.

There are deep and passionate debates over the state and direction of Scottish education – not least between those who favour a ‘knowledge based’ curriculum and those who defend the approach of supporting children to construct knowledge for themselves.⁶ Yet for all that disagreement, there is a remarkable degree of consensus that the school system faces a cultural malaise. This briefing is based on a review of literature, data and interviews with practitioners and experts of various sorts – academics, journalists, activists and school leaders.⁷ Almost all – from those relatively sympathetic to the government to those resolutely opposed to its approach – describe the system as cautious, conformist, risk averse and stuck in its ways.

Take a selection of public statements in recent years. Chris Deerin, of the think-tank Reform Scotland, has said that “Nothing defines Scottish state education so much as its conservatism”.⁷ The journalist and former teacher James McEnaney has described what he calls “aye been” culture: a deep-rooted resistance to new ideas that contradict how things have “aye been” (always been).⁸ Professor Walter Humes of the University of Stirling, who has been studying Scottish education for over 40 years, sees a “cosy” and insular “insider culture” in need of “wild cards” to “ask tough questions and challenge orthodoxies”.⁹ A review carried out by the British Educational Leadership, Management and Administration Society, drawing on input from practitioners, policymakers and academics spoke of “a high degree of uniformity” in Scottish education with limited opportunity for “disrupting unquestioned assumptions”.¹⁰

In some ways this is surprising. Scottish schools have a significant amount of formal autonomy, with relatively few statutory requirements.¹¹ The Standards in Scotland’s Schools Act 2000 contains a set of National Priorities, but these are quite general and

ⁱ Those that were interviewed include Keir Bloomer, Walter Humes, Graham Hutton, James McEnaney, Neil McLennan, Lindsay Paterson, Alison Payne, Mark Priestley and Ian Stuart.

consistent with divergent practical approaches between different schools. Most notably, Scotland does not have a national curriculum – notwithstanding its name, Scotland's Curriculum for Excellence is supposed to operate more like guidance rather than prescribing what needs to be taught.¹² Indeed, among the objectives of the Curriculum for Excellence was to empower teachers and give them space to be creative and try things out in the classroom. The problem is that too often schools and teachers are not aware of or do not feel able to use the latitude that they have.

Scotland has the building blocks of a dynamic, creative, inventive school system, embracing and leading change rather than resisting it. Education – as one of the three major distinctively Scottish institutions, along with the church and the legal system – has long been a central component of Scottish identity. As Scotland grapples to define its place in the world in the years to come, its approach to schools will be a key measure of its outlook and character. Will it retreat into nostalgia, consoling itself with the strength of its increasingly distant educational heritage? Or will it seek to develop new ideas, new approaches and find new sources of pride? Could it, for example, take inspiration from a country like Estonia, which has demonstrated the potential of a small country committed to combining educational improvement with digital transformation?¹³

In this context, the current pandemic offers both a challenge and an opportunity. The physical closure of schools has demonstrated the resilience of many children and the resourcefulness of many teachers. It has forced many schools to consider new ways of doing things, and highlighted the benefits of flexible and adaptable approaches. Yet in the months and years ahead, minimising any damage to young people's life chances and trying to avoid the widening of inequalities will be imperative.

The purpose of this briefing is to consider how to support schools to make more of the freedoms that they have, and to break (or at least weaken) the dynamic of conformity. The objective is to develop a system in which people are supported and encouraged to challenge established practices, to come up with and test out new ways of doing things. Such innovation could take many different forms: different pedagogical approaches, use of technology, personalisation, interdisciplinary study, outdoor learning, to name but a few. What is intended is a more experimental system. Pupils should not be the only ones learning – through discussion and debate, trial and error, Scottish schools could incrementally improve their understanding of how best to support their students.

Such an approach is not costless, and can be demanding. Educating children is a high stakes endeavour, and cautiousness is understandable. A culture of experimentation demands patience of us: a recognition that not everything will work immediately. It needs us to give less heed to fears about 'postcode lotteries' and worry more about the negative consequences of stale uniformity. For those that are content with the current situation, these risks will not be worth taking. But such an attitude fails to take seriously the inequalities that blight our existing system, and the need to anticipate and respond to the economic and social changes arriving in the years to come. If Scotland is to thrive as a nation, it will need a well-educated population, emerging from schools that have instilled the flexibility, ingenuity, curiosity and core skills to successfully navigate the world around them. That depends on increasing the school system's openness to new ideas.

It is conventional in briefings like these to argue for specific policy recommendations, and I will indeed suggest some measures that might be taken to improve things. Fundamentally, however, what we are discussing is a shift in culture and there is no simple policy lever that can be pulled to bring that about. It is as much about the tone being set from those in leadership positions, about the mentality and approach of teachers and

officials, as it is about institutions and initiatives. That has a positive implication: individual parts of the system, such as schools or local authorities might be able to bring about some change in direction without having to wait for national policy or norms to evolve. However, it also has a negative implication: even the best conceived reforms on paper are unlikely to have a significant effect if they are implemented by people that do not understand or buy in to their objectives.

What are the obstacles to innovation and experimentation?

While the relative lack of innovation and experimentation in Scottish school education is primarily a cultural and psychological issue, it is perpetuated and exacerbated by certain structural obstacles.

Micromanagement

There appears to be a tendency towards micromanagement within Scottish educational culture. Recent years have seen prominent complaints that teachers are overloaded with bureaucracy. In particular, many have suggested that the implementation of Curriculum for Excellence has been too rigid, guidance and planning too detailed, and audit and accountability processes too onerous.¹⁴ This has created a 'tick-box' mindset, rather than giving schools and teachers the confidence and resources to think for themselves how best to achieve the broad goals of the reform within their specific circumstances.

The impulses from which these arise are understandable. There is an obvious temptation to specify in detail the implications of a major reform like the Curriculum for Excellence, perhaps partly driven by requests for clarity from a teaching profession used to close instruction and monitoring.¹⁵ Collecting evidence on the effectiveness of teaching, especially when new measures are introduced, is important. However, the current regime seems to have gone too far in the direction of central control. Schools and teachers would benefit from a longer leash.

The role of the 'middle layer'

The OECD's 2015 report, *Improving Schools in Scotland*, raised concerns about the purpose and effectiveness of the 'middle layer' of governance between schools and central government, a worry shared in different ways by many of those I spoke to for this briefing.¹⁶ The OECD saw a constructive role for local authorities in combining resources, ideas and expertise. Others are more sceptical: the Commission for School Reform has suggested diminishing the power of local authorities and devolving more responsibility to the heads of individual schools, who they argue should be "seen as the chief executives of largely autonomous bodies".¹⁷

Approaches and cultures appear to vary significantly between different local authorities. On the whole, though, they tend to be perceived as a brake on innovation, resistant to new ideas and overly focused on enforcing a 'lowest common denominator' standard on all schools. That does not necessarily mean that schools would be better off liberated from local authority control. Local authorities can play a part in the system, coordinating between schools, apportioning resources and taking on administrative functions that could be a burden as much as a freedom to school managers and teachers. The experience of academisation in England suggests that efforts to eliminate the middle layer may just lead to it reconstituting itself – for example, in the shape of Multi-Academy trusts.¹⁸ However, in many local authorities a significant change in approach is necessary.

Since 2018, there has been another middle layer in the Scottish education system: six Regional Improvement Collaboratives (RICs), which bring together local authorities and Education Scotland (the executive agency responsible for standards and improvement) to work together on common priorities and share good practice. There seems to be some uncertainty over the appropriate function of RICs. They emerged out of the aborted Education Bill, as local authorities successfully resisted the Government's efforts to formally curtail their power but agreed to pool their resources and work more closely with one another instead.¹⁹ Being local authority-led in this way would seem to limit the ability of RICs to challenge consensus. However, they do appear to have some capacity for disruption: for example, RIC leads attempted to challenge the Government-set agenda of the Scottish Education Council, which brings ministers and key stakeholders together, and began to withdraw from the meetings when they felt they were being steered away from frank and open discussions.²⁰

As with local authorities, there seems to be wide variation in how well different RICs work. Overall, though, there is a sense that they have not yet fulfilled their potential.²¹ As one participant in the Government's interim evaluation of RICs put it, there is a danger that they end up as simply "another layer of bureaucracy", when they should be "a creative space, an experiment...a test bed for innovation".²²

Personnel

As much as the institutions themselves, some experts point to the personnel in key positions of authority as a reason for risk-aversion in Scottish education. In particular, there is a sense that to progress to senior positions within the system, people have to conform and avoid 'rocking the boat'. Moreover, there is a belief that the 'leadership class' of Scottish education – local authority directors of education and senior staff at agencies like Education Scotland and the Scottish Qualifications Agency (SQA) – form a relatively insular group, rotating on a 'merry-go-round', with limited outside influence. Some have argued that discussions of education policy are often defensive rather than critical or constructive, with stakeholders seeking to protect their interests and avoid censure.²³

Time and Resources

Innovation and experimentation are more likely to occur if schools and teachers have time and space to develop new ideas and resources to invest in trialing them. The fact that Scottish teachers spend longer in the classroom than international peers – 63% of secondary teachers' working hours are spent teaching, compared to an OECD average of 43% – eats into time that could be spent planning lessons, engaging in training or pursuing other forms of professional development.²⁴

There was an opportunity for schools to fund novel initiatives through Pupil Equity Funding (PEF) and the broader Attainment Scotland Fund which it was part of, both initiatives to target resources to support disadvantaged students. However, the lack of transparency around how exactly the money has been spent means that it is difficult to know how far it has supported genuinely new and different ideas. Some schools have reported the PEF made them more confident about trying things out.²⁵ However, it has been suggested that a large portion of the money has been used to offset reductions in budgets, particularly staffing.²⁶ Despite a period of cuts between 2011 and 2015, per-pupil funding is slightly higher than it was a decade ago.²⁷ However, this has been driven by an increase in teacher pay and so may not reflect an increase in resources available to schools.

It has also been argued that the design of the PEF may have inhibited innovation by being too narrow and prescriptive in its guidance and requiring too many checks and balances, particularly from local authorities.²⁸ Moreover, perceived pressure to demonstrate impact too quickly may have pushed schools to be more cautious than they otherwise would be.²⁹

Forums for sharing ideas and spreading good practice

Ideas often develop through cross-fertilization: finding out and discussing what others are doing. Much of the value of experiments is lost if the knowledge they generate is not shared. An innovative and experimental school system should therefore encourage school leaders and teachers to meet, interact and learn from one another.

At a senior level, the RICs could fulfil this function if they were seen as less dominated by administrators and more open to head teachers. However, there could be as much benefit from encouraging and supporting more informal forums. Many such forums have developed organically - for example, TeachMeet's 'unconferences' run by teachers for teachers³⁰, or the BOCSH group of headteachers collaborating on curriculum design and implementation.³¹

Assessment and inspection practices

Both assessment and inspection practices are seen to constrain innovation and diversity. There appears to be a disjuncture at the start of the senior phase of secondary school, where the principles of the Curriculum for Excellence gives way to SQA qualifications, which has in some schools encouraged a more conservative approach to avoid jeopardising students' exam prospects.³² A more flexible approach to assessment and certification could reduce the perceived risks of diverging from convention.

In theory, Scotland's inspection system, relying strongly on self-evaluation and reflection from schools and teachers, should be supportive of innovation and experimentation. In practice, that is not always how inspections are experienced - with schools sometimes chafing under what they believe are unduly rigid pre-conceptions of what constitutes good practice.³³ As with much else in the system, the obstacle seems to be shifting norms and outlooks as much as formal institutions, rules and requirements.

Evaluation and engagement with research

A crucial component of any experiment is examining the outcome to learn how it worked and how it should be taken forward. There can be a tricky balance to be struck here. Expecting immediate evidence on every point of practice is unrealistic and creates an excessively demanding audit culture that puts people off trying new things in the first place. However, without robust evaluation, we cannot know whether a given approach is effective or counterproductive.

Within the Scottish Government's survey of headteachers as part of its evaluation of the Attainment Scotland Fund, there were some encouraging signs about the use of data and evidence in schools. Around 90% said that they used evidence to develop interventions and that they had evaluation plans in place to measure impact.³⁴ At the same time, rigorous evaluation can be tricky without adequate methodological training, and there are clear risks of bias from relying solely on internal evaluations where schools 'mark their own homework'.

There may be benefits therefore from building closer connections between educational researchers and practitioners in school. Again, there are existing initiatives to build on: for example, the University of Stirling's 'Critical Collaborative Professional Enquiry'

programme, in which teachers and senior school management participate in workshops supporting them to engage critically with research and carry out empirical investigations of their own work.³⁵

It would clearly be inappropriate, intrusive and unworkable to subject everything that happens in schools to formal evaluation. However, the Commission for School Reform proposes that schools should be required to engage in a self-evaluation on a topic of their choice every third year, expertly validated by an external agency such as a university or local government quality improvement unit.³⁶ This would be less onerous, and could push schools to put the interventions they are most confident in under stronger scrutiny. These studies should be published in the interests of transparency and to spread good practice.

RECOMMENDATIONS

To reiterate, fostering innovation and experimentation in Scottish school depends on deep changes to culture and attitudes. Without that, reforms to structures and institutions will have limited effect. To some extent, cultural change can be engendered from the top through leaders in local and central government changing their tone and behaviour, modelling openness and tolerance for diversity, empowering rather than directing schools.

New initiatives cannot bring such changes into being, and without a fundamental shift in outlook they risk being mere gimmicks. However, changes in policy can help signal commitment to a more permissive and risk-taking approach. Specifically, the following measures could help.

Recommendation 1 - Create an 'innovation fund' to sponsor particularly novel projects that would not otherwise occur, and a prize for outstanding initiatives

In complex organisations, the most effective way to shift priorities is often to mobilise resources. If the Government were to create a dedicated funding stream seeking to support the most innovative ideas, that would create an immediate incentive for schools to cultivate them. The critical question is who would administer such a scheme. Central government, Education Scotland, Regional Improvement Collaboratives and local authorities would all have a claim, but there are legitimate doubts over the commitment and effectiveness of each of those organisations to breaking consensus.

Cultural change is not just about money, though: symbolism matters as well. The Government could demonstrate the value it places on innovation by awarding a prize to the most novel and effective initiatives - perhaps presented by a high-profile figure such as the First Minister.

Recommendation 2 - Make innovation and experimentation an explicit part of the remit of educational bodies, especially Regional Improvement Collaboratives.

There is more optimism about the potential of RICs than other educational institutions, though there is a sense that they are a solution in search of a problem. Explicitly tasking RICs with supporting innovation and experimentation could provide them with a clearer sense of purpose. Giving them responsibility for allocating an innovation fund could further sharpen that purpose.

Recommendation 3 - Diversify hiring and appointments

Diversify hiring and appointments. Part of the reason that there is a lack of confidence in major agencies' ability to encourage disruption and dynamism is because the people that staff them and rise to seniority tend towards consensus and groupthink. An important step to breaking out of that dynamic would be to open up key roles in local government, agencies like Education Scotland and the SQA, leadership of RICs and government committees like the Scottish Education Council, to a broader range of people. In particular, more effort should be made to seek out critical, dissenting voices and 'outsiders'. In recent months, MSPs have called for "substantial reform" of the SQA and Education Scotland. If their roles and composition are indeed reviewed, it would be advisable to consider ways to encourage a greater diversity of perspectives and experiences in their staff. There is more optimism about the potential of RICs than other educational institutions, though there is a sense that they are a solution in search of a problem. Explicitly tasking RICs with supporting innovation and experimentation could provide them with a clearer sense of purpose. Giving them responsibility for allocating an innovation fund could further sharpen that purpose.

Recommendation 4 - Support forums for the exchange of ideas.

There may be scope to create new formal forums that bring together managers and teachers from different schools to learn from one another's experiences. There may also be opportunities to help existing, less formal ones that have developed organically like TeachMeet to grow and become more widely accessible. For example, there could be benefits to providing such groups with funding, allowing staff to take sabbaticals to help sustain them or facilitating leave to attend their events.

Recommendation 5 - Invest in research and knowledge exchange

With exceptions, links between academic researchers, schools and policymakers are not as close as they could be. Investment in educational research and the development of closer networks between researchers and practitioners could produce more reflective, evidence-based teaching and learning initiatives, and more robust evaluation of their effectiveness.

ENDNOTES

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