RE-OPENING OF SCHOOLS POST-COVID-19

A JOINT SUBMISSION FROM THE ROYAL SOCIETY OF EDINBURGH/ LEARNED SOCIETIES' GROUP TO THE SCOTTISH PARLIAMENT EDUCATION AND SKILLS COMMITTEE 12 JUNE EVIDENCE SESSION WITH CABINET SECRETARY FOR EDUCATION AND SKILLS, JOHN SWINNEY

Royal Society of Edinburgh (RSE)

1 Through its Education Committee and the recently established Post-COVID-19 Futures Commission, the RSE, as Scotland's National Academy, is well placed to draw upon a wide range of public, private, and third sector expertise and practitioner experience to support Scotland's education system in recovering from COVID-19. The points we make below are informed by initial thinking we have undertaken in this area and which we have fed into the Scottish Government. We look forward to continuing to work with the Scottish Government and the Scottish Parliament's Education and Skills Committee. The RSE is also a member of the Learned Societies' Group on Scottish STEM Education.

Learned Societies' Group on Scottish STEM Education (LSG)

2 The LSG's constituent learned societies and professional associations have been active in supporting remote learning and in monitoring reported impacts of the lockdown on education. In addition to this joint submission, the LSG has also submitted as evidence a letter sent to Scottish Government's COVID-19 Education Recovery Group regarding the need for a reduction in examinable course content for 2020–2021.

Topic: Re-opening of schools

3 The transition back to school has to be carried out in parallel with the national plans for easing of social distancing requirements.

4 Schools operating under social distancing measures will experience a range of significant logistical impacts, including constraints on the overall capacity of the school, and on the capacity of classrooms; staffing levels; timetabling; and school transportation.

5 Staff will need to be able to return to school (and be reassured that it is safe to do so) in advance of learners in order to plan for the re-opening of schools in August; plans will need to be put in place for the phased return of learners and blended learning recognising that it will not be possible for all pupils to be in school at the same time; individualised remedial support will be needed to compensate for 'lost' learning during the lock-down, which is likely to disproportionately adversely impact the most disadvantaged learners;[1] and a decision will need to be made soon as to whether the assessed content of qualification courses will be reduced for session 2020/21 given that learners will not have started courses before the summer as is the norm. This auditing of individualised support needs could also be extended to the need to gather data on teachers' views on the support being provided to students by schools and the amount and quality of work being completed by students. This would greatly assist in informing any remedial plans and teacher preparations ahead of the summer holidays.

Practical work

6 Subjects and qualification courses, including in the STEM areas, often have a practical focus that is difficult to recreate while schools are closed. The impact of school closures and social distancing have therefore created particular challenges for teaching and learning in the STEM subjects. Practical work and experimentation are core components of STEM learning as well as being key motivators for learners taking up and remaining in STEM. Similar concerns apply to field and project work, with particular impacts on learning for sustainability. The LSG supports the Scottish Schools Education Research Centre's (SSERC) ongoing work in developing recommendations around adapting practical work to suit social distancing.[2]

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1 Learning during the lockdown: real-time data on children's experiences during home learning (Institute for Fiscal Studies, May 2020) https://www.nuffieldfoundation.org/news/educational-gaps-are-growing-during-lockdown

2 SSERC Home Learning (SSERC, undated) https://www.sserc.org.uk/subject-areas/sserc-home-learning/

Topic: Particular impacts on vulnerable children

Disrupted schooling

7 There is evidence that even short periods of disrupted or interrupted schooling can compromise pupil learning. While it is unclear how these impacts will manifest over a longer period of COVID-19 disruption, children from disadvantaged households tend to be disproportionately impacted by breaks in formal education which will likely exacerbate the attainment gap. Interrupted schooling has consequences for learner progression and what they can be expected to 'know' as they move to the next stage of schooling and, indeed, on to post-school destinations. These points have consequences for the individualised support that will need to be provided to learners as schools re-open.

8 The impact of interrupted and disrupted schooling, including loss of socialisation, will have implications for children's learning and wider development and is likely to lead to a widening of the attainment gap. The need for ongoing social distancing will present a number of logistical challenges both for schools and for children's parents and carers.

9 Protracted social distancing could hinder the various learning relationships that contribute to a learner's success and that are difficult to replicate in a digital setting, namely those between peers (i.e. peer-to-peer learning) and those between mentors and learners.

10 Meeting the learning needs of children with additional support needs will also present significant challenges under home working and blended approaches to learning.

Digital learning and inequalities

11 Digital learning provision has been intrinsic to supporting home learning during the lockdown, with schools and education authorities having responded very quickly to put in place arrangements for digital learning. However, reports have suggested that the extent to which learners are engaging in online learning varies significantly, and so there needs to be clear expectations with regard to 'attendance' and participation.

12 A lack of access to appropriate hardware/software, lack of connectivity and lack of skills and support means that a significant minority of learners will be disproportionately affected. In addition, the absence of good learning spaces will have had a negative impact on many learners. Again, it is children from poorer and/or disadvantaged households who are most likely to experience digital poverty and challenges around accessing the necessary technology, support and space to learn effectively.

13 If more extensive use is to be made of digital learning provision, consideration should be given to whether there is a need to develop high quality learning resources at the national level with a view to minimising both duplication of effort at the local level and demands on teachers.

14 It will be important to ensure that, as part of a blended approach to learning, digital provision is founded on effective pedagogy. It is commonly stated that young people are 'digital natives', confident with digital devices and the online environment, however, experience during the period of school closure so far has highlighted that this is generally not the case. Whilst many learners may be very familiar with tasks such as accessing YouTube videos and the use of social media, there is often a significant need for the development of the more complex skills required for effective online learning using the tools and apps designed for this purpose. For effective and efficient blended learning there is a need for training for both teachers and learners.[3]

15 It is also often assumed that the solution to problems associated with remote or blended learning can be best solved by improving access to the digital environment and to hardware. However, there is some evidence to suggest access to good quality textbooks and other print resources are a more effective tool for providing and improving learning. The use of good quality textbooks, guided through some more limited digital communication, may provide both more effective learning resources and better equity of access, since textbooks can be used more or less anywhere, anytime, regardless of limits on device time, WiFi, or broadband.

3   These points are largely informed by discussions amongst the Institute of Physics in Scotland (IOPS) Education Committee, including the Open University's input, and amongst teachers joining IOPS webinar and Virtual Physics Staffroom sessions.

Topic: Replacement of exam diet and impacts on learning and assessment over the next academic year

Assessment

16 The education system is having to find new ways of assessing learners in response to examinations having been cancelled. With the focus on teacher professional judgement informed by learners' prior performance, it will be important to ensure that checks and balances, including appropriate forms of moderation, are in place to ensure the objectivity, fairness and robustness of this approach; including the need to address the risk of unconscious bias, and to avoid any adverse impact for disadvantaged learners in particular.

Additional Information

For further information, please contact Daria Tuhtar (dtuhtar@therse.org.uk).
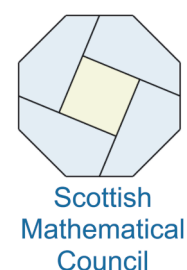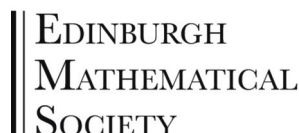
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