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The poor relation: health education in English schools

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This article is in our series on the relationship between health and education.

Alongside genetic, environmental, medical and societal factors are the personal skills that facilitate good health.[1] Underlying the decision to eat a salad or a hamburger, to put on a condom or hope for the best, to reach for a beer or reach out to a friend, to follow instructions on a medical leaflet or discard it, to trust vaccine regulators or a Facebook post, is a skill – or the absence of one.

Instilling such skills is the focus of school health education, and the evidence shows that it can do so effectively, with life-long impact on health.[2,3] Encouragingly, health (and relationships and sex) education became mandatory in all English schools in 2020, with support from parents, teachers and health professionals.[4,5]

Yet, ongoing obstacles mean its potential to improve population outcomes is being squandered: health education continues to be the poor relation of the curriculum, with little evidence-based practice or professional training.[6,7]

This situation is not unique: internationally, low priority is given to schools' role in health promotion and few teachers receive training for it.[8] Yet, the need to improve the physical and mental health of children and young people in England is acute: the UK ranks 9th out of 34 OECD countries for childhood overweight and obesity,[9] and 69th out of 72 countries for children's life satisfaction.[10] Emerging evidence of the impact of COVID-19 on children's mental health and recent revelations regarding sexual harassment among young people adds impetus for action.[6,7] Failing to act has significant implications for population health, inequalities and the burden of disease facing our healthcare system.

This commentary, part of a series exploring the nexus between health and education, highlights the skills underlying health and the current obstacles to ensuring children are equipped to live healthy lives. Drawing on current initiatives in England, we propose large-scale investment in a Learning Education System approach, akin to a Learning Healthcare System, to create evidence-based mechanisms that continually improve school health education.

Health as a skill

Underlying good health are skills that enable us to make healthy choices.

Some of these choices depend on cognitive abilities, which aligns with the finding that education level is a key determinant of health. Yet, many do not, and recent research demonstrates that certain non-cognitive skills have even greater power to predict health than cognition. Previous studies overestimated the importance of cognition by failing to account for the skills collectively known as social and emotional learning.[11]

Social and emotional learning

Extensive longitudinal research, including in Britain, finds that childhood social and emotional learning predicts a wide range of adult outcomes, even

controlling for an extensive array of child, parent and family characteristics.[1] An outline of the five core social and emotional skills is shown in Figure 1, synthesised with the findings of research into their lifelong impact on health.[12]

The impact of childhood social and emotional learning extends to GCSE results, job satisfaction, occupational status, unemployment and housing.[1,6] The gap in social and emotional learning between disadvantaged children and their peers, which is widening in Britain, is one of the mechanisms which perpetuates intergenerational inequality.[1,11]

Social and emotional learning augments healthy behaviour by developing attributes like self-motivation, resisting negative social pressure and judging consequences. Obesity research reinforces the importance of social and emotional learning, with children's eating habits significantly correlated with emotion regulation, and reduced emotion regulation predicting increases in maladaptive eating.[13]

Alongside the social and emotional capacity to make healthy choices, the capacity to understand, evaluate and navigate health information and services is key. This combination of competencies and knowledge, termed 'health literacy', is a prerequisite for responsible decision-making, the fifth social and emotional skill (Figure 1).

Health literacy

The state of health literacy in England is worrying: 42% of working-age adults are unable to understand and use everyday health information, rising to 61% when numeracy is involved.[14]

Low health literacy is associated with smoking, drinking, poor diet, insufficient exercise, morbidity and premature death, independent of other factors. People with low health literacy are 1.5–3 times more likely to experience hospitalisation or premature death, are at increased risk of multiple health problems, have longer inpatient stays, use fewer preventative services and use A&E more than the general population. The cost of poor health literacy to NHS England is estimated to be between £2.95 billion and £4.94 billion annually.[14]

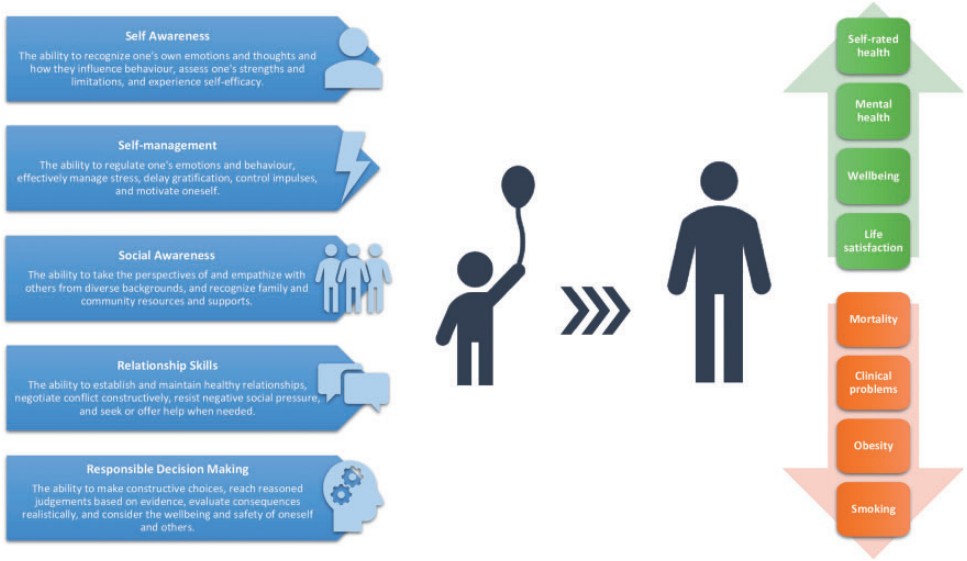
While a person's health literacy is correlated with their general literacy and educational attainment, these are not always equivalent, and associations with health outcomes exist independently of cognitive and socioeconomic factors. The population groups with the lowest health literacy suffer the poorest health outcomes, suggesting that disparities in health literacy can significantly contribute to inequality.[14]

Health as a taught subject

The enduring impact of deficits in social and emotional learning and health literacy are clear, but the good news is that these skills can be learned and taught effectively in schools.[6]

As explored in other pieces in this Journal of the Royal Society of Medicine series, schools significantly impact children's health and are highlighted by WHO as central to health promotion worldwide.

Figure 1. The five core social and emotional skills and the lifetime health benefits of social and emotional learning skills in childhood (adapted from CASEL[12] and Goodman et al.[1]).



Furthermore, school health education (lessons encompassing the physical, social-emotional and psychological aspects of health, safety, nutrition and wellbeing, taught by classroom teachers) is identified as a key way of modifying the school determinants of children's health.[15,16]

A recent literature review found that school health education can improve physical health, mental health, sexual health, fitness, diet, pro-social behaviour and reduce smoking, whilst also improving academic attainment.[3] The evidence base on teaching social and emotional skills is particularly strong, with several meta-analyses finding significant improvements in health and education outcomes.[2,6]

The synergy with academic attainment means that health education aligns with schools' key performance drivers. This is crucial because effective health education requires commitment from schools, with effect sizes being two to three times higher when delivery is high quality.[6] Internationally, effective approaches are characterised by:

- Regular lessons dedicated to teaching health-related skills according to the 'SAFE' principles (Sequenced, Active, Focussed, and Explicit skill development).
- A 'whole school' approach to promoting health. School culture impacts children's health behaviour,[15] so effective health education requires shifting collective norms and values.
- High-quality training for health education teachers, as they are responsible for delivering the curriculum.
- An implementation system that enables schools to understand the needs of their pupils, develop action plans and address barriers.[2,3,6,16]

Health education in England has the potential to fulfil these characteristics. The subject is taught within 'Personal, Social, Health and Economic' education, a worthwhile combination which allows for an integrated approach to children's skill development and engagement with the determinants of health.

Aspects of the Personal, Social, Health and Economic education curriculum became mandatory for all English state schools in September 2020, with teaching required to begin by the start of the summer term 2021 at the latest.[5] However, the investment in schools and teachers needed to optimise the public health impact of this significant change has yet to be made.

The journey so far

I think [Personal, Social, Health and Economic education] lessons should be taught by a teacher in that field, rather than a teacher who doesn't know anything about the subject but still tries to teach it to people. (Year 9 pupil)[17]

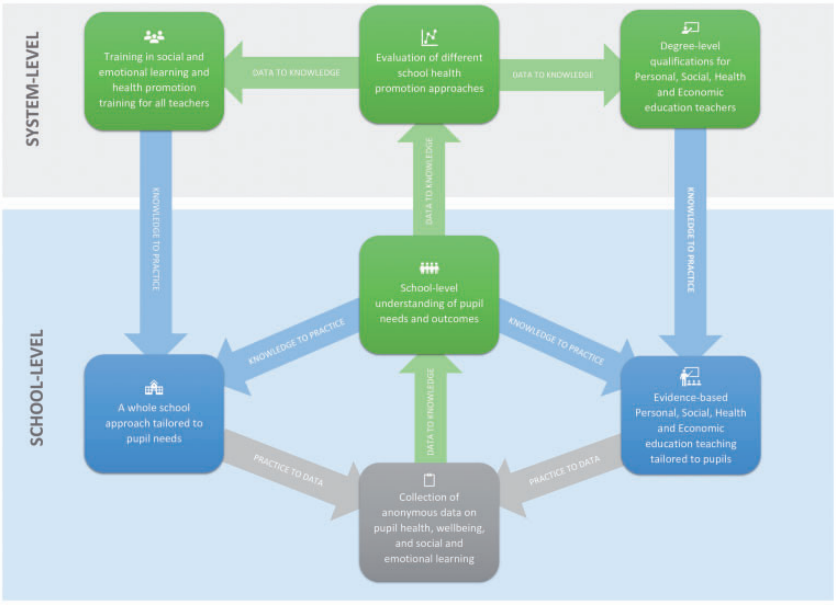
The dire state of health education in England was laid bare in the early 2010s. In 'Not yet good enough: personal, social, health and economic education in schools', the schools' inspectorate (Ofsted) reported that pupils in 40% of schools lacked essential knowledge and skills. Examples ranged from children receiving mixed messages about hygiene, to not knowing what physical contact is acceptable/unacceptable, to girls beginning menstruation before learning about puberty. Schools' delivery of Personal, Social, Health and Economic education varied, with most offering dedicated lessons but others relying on alternatives like tutorial time, assemblies and one-off suspended timetable days. Even when the teaching of the subject was considered good, inspectors found no parity of esteem with other subjects: the standards applied in Personal, Social, Health and Economic education were lower.[17]

This disparity is unsurprising considering the lack of training for Personal, Social, Health and Economic education teachers: unlike subjects ranging from Maths to Media Studies, degree-level Personal, Social, Health and Economic education courses are scarce. From 2004 to 2010, a three-day certified Personal, Social, Health and Economic education programme was nationally funded, but the prevalence of certified teachers remained shockingly low: research in 2011 found that over 90% of Personal, Social, Health and Economic education teachers had not received the training. The situation has since deteriorated; when funding ceased, programme registrations plummeted by over 80%.[4] Now, annual government data on whether teachers are qualified in the subjects they teach omits Personal, Social, Health and Economic education, while revealing that the time spent teaching the subject declined by a third between 2011 and 2019.[18]

The parliamentary report calling for mandatory Personal, Social, Health and Economic education presented it as a means to an end: ensuring high-quality provision for pupils through raising the status of the subject and improving training for teachers.[4] These aspirations have yet to be met and significant obstacles to effective health education remain.

There continues to be no routine training for Personal, Social, Health and Economic education teachers and few pre-service qualifications. Research by Ofsted in June 2021 found that poor teacher subject knowledge remains, and teachers described delivering content in tutorial time rather than lessons and receiving resources too late to review them before teaching.[7] The varied delivery of Personal, Social, Health and Economic education is set to continue,

Figure 2. A Learning Education System. The schematic demonstrates how investment in teacher training and the collection of pupil data could combine to create cycles of continual improvement at both school and system levels. Starting at school level, collecting pupil data generates knowledge that can be used by teachers to improve their understanding of pupils' needs, enabling practice to improve through tailoring Personal, Social, Health and Economic education teaching and the wider school approach to those needs. Additionally, evaluating outcomes can inform school improvement planning. At a system level, aggregating and analysing pupil data from multiple schools generate knowledge of the most effective approaches to school health promotion, which can improve practice by informing training for all teachers and Personal, Social, Health and Economic education qualifications for specialists. The feedback loops at both school level and system level can support continual improvement in school health promotion and Personal, Social, Health and Economic education teaching, with the ultimate outcome being improved health and wellbeing for children. PSHE: Personal, Social, Health and Economic; SEL: social and emotional learning.



as the statutory guidance does not require schools to provide dedicated lesson time for the subject. The guidance itself focusses almost exclusively on knowledge that children should acquire by the time they leave school, rather than on sequential skill development.[5] Although healthy decision-making requires accurate information, knowledge alone is unlikely to have the desired outcomes; short-term, non-integrated health education is prone to fading effects.[19]

If the public health impact of this significant curriculum change is to be optimised, it is essential that schools' curricula are based on the best available evidence, that adequate curriculum time is available, and that teachers have the necessary training, confidence and competence to effectively facilitate this learning.

Unleashing the potential of Personal, Social, Health and Economic education

The current state of Personal, Social, Health and Economic education is concerning, but the potential benefits of investment in this area are significant. A recent randomised control trial in secondary schools in England compared the impact of a four-year evidence-based Personal, Social, Health and Economic education curriculum delivered by trained teachers with that of the subject taught 'as usual'. Pupils who were taught the programme, designed by the charity Bounce Forward, experienced significant improvements in health and wellbeing compared to pupils who received their school's usual Personal, Social, Health and Economic education. After the four-year programme, Bounce Forward pupils had significantly higher self-assessed general health compared to control pupils (a difference of 10 percentiles), and improved physical health, behaviour, relationships and life satisfaction. The study was conducted on an intent-to-treat basis, with the total cost of the programme (including 19 training days per teacher) being conservatively estimated at £23.50 per pupil per year – less than 0.5% of the £6000 spent on each secondary school student annually.[19,20]

This study demonstrates that the public health benefit of Personal, Social, Health and Economic education has yet to be unleashed in England. To improve Personal, Social, Health and Economic education and enable it to fulfil its life-enhancing potential, we recommend four steps:

- **Training all teachers:** incorporate social and emotional learning and health promotion into pre-service training and the Early Career Framework for all teachers and provide government-funded, evidence-based in-service training to current teachers and school leaders, to enable a whole school approach.
- **Training subject specialists:** develop a Postgraduate Certificate in Education in Personal, Social, Health and Economic education and funded in-service training for existing teachers of the subject, and an expectation of dedicated Personal, Social, Health and Economic education lessons in all schools, to ensure parity of esteem.
- **Collecting pupil data:** gather anonymous school-level data on pupils' health, wellbeing and social and emotional learning to enhance school improvement planning, enabling schools to gain insight into pupils' needs, tailor their Personal, Social, Health and Economic education teaching accordingly and improve it over time. Data of this kind are about to be collected for the first time in secondary schools across Greater Manchester, where pupils will complete comprehensive annual wellbeing assessments to inform School Improvement Plans and the work of service providers across the region.[21]
- **Continually evaluating approaches:** aggregate school-level data to evaluate different health education approaches and develop increasingly effective curricula and teaching techniques, used to inform teacher training.

Implementing these recommendations would not only empower schools and teachers to deliver effective Personal, Social, Health and Economic education, but create a 'Learning Education System' (Figure 2), with built-in feedback loops that enable teaching to improve over time, akin to the concept of a Learning Healthcare System, in which health data are used to generate knowledge to improve medical practice.

Large-scale investment in health education could have a transformative impact on the physical health, mental health, educational and socioeconomic outcomes of future generations. Young people are entitled to learn the life-enhancing competencies that underlie good health, and evidence indicates that disadvantaged children can benefit most.[3] Teaching children health-related skills also yields a significant positive return on investment.[11]

As our children and young people struggle in the face of unprecedented physical and mental health challenges, and the disruption to their learning and life chances caused by the COVID-19 pandemic, we must ask ourselves: can we afford for health education to remain the poor relation any longer?

Declarations

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