

# 10 Child empowerment, well-being and inequality

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Child empowerment is on the policy agenda of countries around the world. Equipping children with the skills and knowledge to make informed decisions for their own health and well-being is important for child outcomes, and in enabling them to be agents of change and positively impact their surroundings in the future. However, social inequalities can undermine child health and empowerment, especially as countries are dealing with the economic uncertainty exacerbated by the COVID-19 crisis. These are thus key policy areas for OECD and partner countries to target in order to ensure equitable outcomes for all children.

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## Introduction

In recent decades, child rights and empowerment have made their way onto policy agendas around the world. The UN Convention on the Rights of the Child (1989<sup>[1]</sup>) underlines the importance and expectation of children as actors in their own right concerning matters that affect them, suggesting that adults should engage in dialogue and respond to the views of children when making decisions concerning them.

Alongside this evolving landscape, views of children have shifted from being dependent and innocent to knowledgeable, active and social participants in society (Prout, 2005<sup>[2]</sup>). This shift in perception challenges the notion that children are vulnerable and unable to make decisions for themselves in their own best interests (Bradbury-Jones, Isham and Taylor, 2018<sup>[3]</sup>). When children and young people are included in processes such as producing knowledge that can impact decision making in their communities, it can foster a stronger sense of responsibility to others, and has the potential to promote both community and individual health while also potentially increasing the relevance of research, policy and practice for children and young people (Wong, Zimmerman and Parker, 2010<sup>[4]</sup>).

Education systems play a key role in empowering students in becoming responsible, informed and engaged citizens, allowing them to actively participate in societal conversations and to make decisions for the good of themselves and their communities. Students who are better prepared for the future can be agents of change, positively impacting their surroundings, and understanding and anticipating how their actions will affect themselves and others in both the short and long term (OECD, 2018<sup>[5]</sup>). Education itself must evolve in order to continue helping individuals develop as people, but also as citizens and professionals especially in our complex and quickly changing world (OECD, 2019<sup>[6]</sup>).

Despite the strides society and education systems have made in terms of child empowerment, persistent inequalities continue to challenge and undermine these efforts. Socio-economic inequalities are endemic; one in seven children in OECD countries lives in income poverty (OECD, 2019<sup>[7]</sup>), and inequitable learning outcomes by socio-economic status exist in all countries, albeit with varying intensities (OECD, 2017<sup>[8]</sup>). Socio-economic disadvantage is also negatively related to a number of different health outcomes and behaviours (Inchley et al., 2020<sup>[9]</sup>) and contributes to digital inequalities, curtailing children's capacity to exercise their rights to information and play in digital environment (Burns and Gottschalk, 2019<sup>[10]</sup>).

One of the starkest reminders of the persistence of inequalities in childhood became apparent while schools were closed during the COVID-19 crisis. Opportunities to transition smoothly to digital learning were not available for all students around the OECD, disproportionately affecting those from lower socio-economic backgrounds (OECD, 2020<sup>[11]</sup>) (see also Chapter 3). The role of the school in terms of service delivery, such as meal programmes and providing opportunities for sports and exercise, especially for disadvantaged children became clear. Moving forward, education systems will play a key role in mitigating social inequalities that were augmented during the pandemic.

This chapter will cover how education systems teach children about health and well-being, and focus on their digital inclusion. It looks at how systems strive for equity in terms of health and digital outcomes, highlighting areas in need of policy scrutiny and development highlighting examples from the 21st Century Children Policy Questionnaire.

## Knowledge as power: Educating children for their health and well-being

Many countries have seen broadening of educational goals to include educating children in and supporting their well-being, social development and personal growth. They have moved towards taking a “whole child” perspective which involves balancing the focus on cognitive, social and emotional skills (OECD, 2015<sup>[12]</sup>). Educating children about their own health and fostering digital skills are important in empowering them to be informed decision makers now and in the future regarding their health, well-being and social inclusion.

## Learning about health and well-being

Education is an important tool that can be used to teach children about their own health and the health of others in the community. Education systems use a number of avenues to do this (see Table 10.1). One common avenue of educating children to develop healthy habits and improve wellness is through curricular methods, often through incorporating health studies and learning about healthy habits into the physical education curriculum.

In some contexts, aspects of health literacy are also explored in science education, civics and ethics, which is the case for example in the Mexican curriculum, and in Finland this is in environmental studies for children in grades one to six. Health frameworks can also be used as avenues to promote health literacy through encouraging effective delivery of health and physical education. Other routes include taking population-based approaches through national frameworks, initiatives and informational campaigns.

**Table 10.1. Learning about health and healthy behaviours**

Country	Curriculum/policy	Goals
Australia	Australian Curriculum: Health and Physical Education	Acquire movement skills and learn how the body moves, and to develop positive attitudes towards physical activity, learn to appreciate outdoor recreation and sport.
Czech Republic	Health 2020	Increasing health literacy in the population and in vulnerable groups including through provision of online programmes for good nutrition and obesity prevention, dissemination of good practices within communities, acquisition of good health knowledge in education.
Finland	Health Education	Focus on multidisciplinary knowledge base to develop health literacy and foster respect for human life and dignity in compliance with human rights. Health education includes topics related to health, well-being and safety and focuses on building knowledge, skills, self-awareness and ethical responsibility for health.
Ireland	Get Active Ireland! Framework	Recognises the need for effective delivery of physical health literacy programmes to equip children with the skills and confidence for lifelong participation in physical recreation and sport.
Latvia	Skola 2030	Setting out to change health attitudes and behaviours in schools, with an update to the physical health curriculum to help them develop a deeper understanding of how to develop a healthy lifestyle and promote healthy environments within their families and communities.
Mexico	Curriculum	Health is explored within different disciplines for example in the following subjects: Knowledge of the Environment, Natural Sciences and Technology, Biology and Chemistry, Civic and Ethics. Physical education is also used to promote an active and healthy lifestyle, including knowledge about and care for the body as well as practicing physical activities.
Prince Edward Island (Canada)	Prince Edward Island Curriculum: Health and Physical Education	Renewing and integrating intermediate health and physical education curriculum, including content on sexual health, to include content on some challenges faced by students today.
Turkey	Physical education and sports competencies	Basic health values are promoted, such as appropriate hygiene and self-care, as well as developing plans to protect oneself from physical and mental health risks.

Source: 21st Century Children Policy Questionnaire

Sexuality education<sup>1</sup> is an important pillar of health and wellness education, which when effectively implemented can promote beneficial health and well-being outcomes such as delayed initiation of sexual intercourse, decreased number of sexual partners, reduced risk taking and increased use of contraception including condoms (UNESCO, 2018<sub>[13]</sub>). Research also suggests that sexuality education does not increase sexual activity, risk-taking behaviour or rates of STI/HIV infections (Montgomery and Knerr, 2016<sub>[14]</sub>). Education alone is not enough to promote reduced risk-taking and uptake of safer sex practices. A 2016 review concluded that sexuality education should be part of a larger-scale strategy that engages young people in learning about their sexual and reproductive futures, working with actors in the health sectors, within the community and families (Montgomery and Knerr, 2016<sub>[14]</sub>). Many children also use digital spaces or turn to peers to seek information regarding health and well-being, including sexuality (see Box 10.1).

### Box 10.1. Let's talk about sex (online)

The Internet gives access to near limitless amounts of information. In recent years, young people use the digital environment to socialise or play games, they also use it to seek important information about their own bodies, sex and relationships. A recent survey by UNESCO (2020<sup>[15]</sup>) highlighted that friends and peers tend to be the top ranked source of information on bodies, sex and relationship, with digital spaces coming closely in second place, edging out school-based education. Some digital spaces are explicitly designed or designated as spaces for sexuality education, whether this is through websites, apps or chatrooms.

Children aged 15-18 in this survey reported accessing digital information on a number of different topics such as the human body and anatomy, sexually transmitted diseases, and gender identity, roles and discrimination. Young people who self-identified in another way from male or female (such as transgender or non-binary), or those who preferred not to divulge their sex or gender, reported looking online more frequently for content related to bodies, sex and relationships than their male or female identifying peers (UNESCO, 2020<sup>[15]</sup>). Anonymity in digital spaces can allow young people, especially LGBTQ+, opportunities to participate in discussions and explore their identities in safe and supportive environments, without facing stigma or discrimination (OECD, 2020<sup>[16]</sup>).

The Internet is an important source of information for children, especially for topics that are difficult to find in “mainstream” sexuality education programming. For example, in New Zealand an evaluation by the Education Review Office in 2017 found inconsistent coverage of the sexuality education curriculum and many schools having large gaps in coverage. Although biological aspects of sexuality and puberty are well covered, more in-depth coverage is needed for aspects like consent, digital technologies and relationships. While the Internet and digital resources can certainly fill some of these gaps, there are risks in terms of children accessing and sharing unverified or untrue information therefore making the case for developing digital skills and media literacy even more pressing.

Partnerships are also an important part of delivering effective health and well-being programming. For example, in the Flemish Community of Belgium, [Sensoa](#) is the Flemish center of expertise for sexual health that advocates for sexual education in schools and provides education and training opportunities for educators. Their *Tussen de lakens*, or “*between the sheets*”, teaching package focuses on sex education materials for children aged 10-17 including modules on the body, contraception, sexually transmitted diseases and sexually transgressive behaviour (Ministre de l'Enseignement obligatoire et de Promotion sociale, 2013<sup>[17]</sup>).

Despite the emphasis on educating children on health and well-being, many countries report problems in a number of health behaviours in children such as lack of exercise and poor eating habits, which is reflected in rising obesity rates and increased sedentary time. There is also room to improve in terms of instilling the importance of safer sex practices in young people. Although few countries report struggling with teen pregnancy or sexually transmitted diseases/infections as a pressing policy priority according to the Policy Questionnaire, young people still report that they engage in risky sexual behaviours. In a survey of adolescents in Europe and Canada, one in four 15-year-olds who have had sex reported not using a condom or contraceptive pill during their last sexual intercourse (Inchley et al., 2020<sup>[9]</sup>).

### Box 10.2. The importance of learning about health and developing health literacy

Health literacy refers to both competence and knowledge of individuals to meet the demands of health in today's society (Sørensen et al., 2012<sup>[18]</sup>). It requires a combination of cognitive, social and critical analysis skills, incorporating reading, listening analysis and decision making (OECD, 2019<sup>[19]</sup>). One key issue associated with low health literacy is that it can exacerbate existing socio-economic inequalities (Moreira, 2018<sup>[20]</sup>), while on the other hand being highly health literate empowers individuals to take control over their own health decisions and to understand how different lifestyle habits can help or hinder their health (OECD, 2019<sup>[19]</sup>).

Despite the importance of having the personal tools, knowledge and competences to make informed decisions about one's health, rates of health literacy tend to be quite low. For example PISA 2015 data highlights that across OECD countries, only 20% of 15 year-old students surveyed reported they could easily understand a newspaper report on a health issue, interpret the scientific information provided on the labelling of food items, or describe the role of antibiotics in the treatment of disease (OECD, 2017<sup>[21]</sup>). Low health literacy in adults has been associated with lower income, self-reported poor health, lower rates of exercise and a high body mass index (HLS-EU Consortium, 2012<sup>[22]</sup>). Effective health literacy education starts early, from compulsory schooling, and extends throughout the lifespan (Abrams, Klass and Dreyer, 2009<sup>[23]</sup>).

Improving health literacy can be done through updating national curricula, establishing sustainable sources of funding, capitalising on key partnerships between education and health sectors and through measuring the levels of health literacy in young people (Winkelman et al., 2016<sup>[24]</sup>). There are currently a number of instruments measuring health literacy in adolescents and children. However due to differing definitions of health literacy and lack of standardisation these instruments often measure different things. Therefore comparing health literacy in different samples is challenging (Okan et al., 2018<sup>[25]</sup>). Governments and researchers should work towards a streamlined approach and common agreement among what it is we are measuring and focusing on when talking about health literacy.

In terms of child empowerment, when developing a health education agenda in schools it is important to include the voices of children in the development and implementation stages of these models. Research suggests that “vessel” participation types that describe more traditional youth-adult relationships that are adult-driven and involve little to no input from young people have low empowerment potential (Wong, Zimmerman and Parker, 2010<sup>[4]</sup>). Despite the fact that young people can learn skills and knowledge, there exists little space for them to co-learn and contribute their own ideas to the discussion. Open dialogical practices where adults and children can contribute their perspectives can help develop critical consciousness, allowing room to address concerns (Wong, Zimmerman and Parker, 2010<sup>[4]</sup>).

### ***Promoting digital skills and inclusion***

With the rise in digital technologies and the convergence of digital and physical spaces, acquiring digital skills is necessary for children in the 21st century. Despite the ever present nature of digital risks, digital tools provide near endless opportunities, for example access to unprecedented amounts of information, opportunities for personalised learning and instruction, and for children to create content and creatively express themselves. Indeed, research suggests that many young people turn to the Internet for health-related resources, and information seeking is a common health-related Internet use (Park and Kwon, 2018<sup>[26]</sup>). In order to fully participate in the digital world, all children need material access to digital tools, and a baseline level of digital skills (for initiatives systems use to lessen digital inequalities, refer to Chapter 11 in (Burns and Gottschalk, 2019<sup>[10]</sup>)).

Children who are digitally skilled and media literate will be able to search for information and resources regarding their own physical and emotional well-being, and will be more adept in using online platforms to search for and book medical appointments, and access and manage online medical records. Higher levels of media literacy will allow them to discern between information that could be misleading or fake, and promotes their consumption of higher quality information from trusted sources.

### Box 10.3. Get (media) smart

Being media literate is important in the 21st century. Children need the skills to discern fact from fiction, to determine the quality of information they consume, and to be able to find trustworthy sources online especially when it comes to their health and well-being. Alongside media literacy, developing a baseline level of science literacy so that individuals can understand how knowledge is produced and how to interpret scientific findings is important. In general, more highly educated people are more confident in science as they are able to leverage their skills in understanding it. Together, science and the media are important influencers of civic values and discourse. Being able to be discerning consumers of both will help children now and in the future to make good decisions surrounding their health, well-being, and more generally in other areas of their civic, educational and social lives.

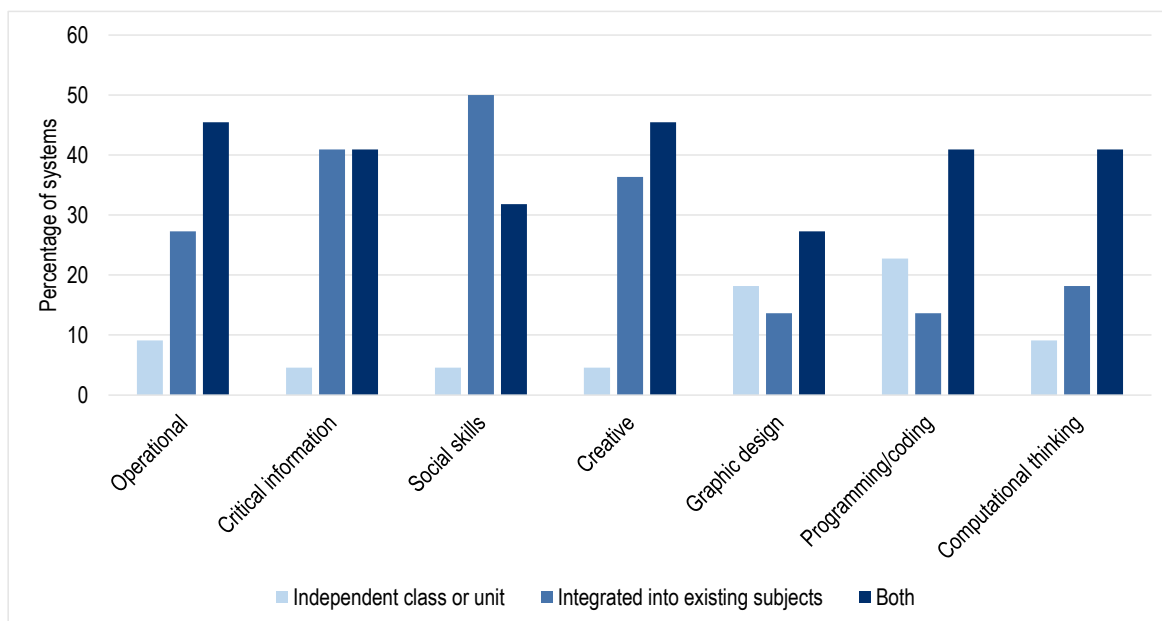
Developing media literacy is something that many education systems around the OECD are investing in and focusing on through expanding curricula, implementing school-based programmes and fostering partnerships with key actors working in the media literacy space (Burns and Gottschalk, 2019<sub>[10]</sub>). Programmes can target media literacy and promote individuals to engage in health information sharing. Some examples developed by Canadian non-profit organisation MediaSmarts include:

- [Break the Fake](#): teaches four main skills for developing habits in finding and verifying information online, understanding that it is imperative to verify information before sharing it.
- [Check then Share](#): aimed at information around COVID-19, providing concrete tools such as a dedicated search engine to find information from trusted expert sources. It promotes sharing of reliable information to improve the ratio of quality to weak or misinformation.

Other media literacy interventions take a gamified approach, tapping into children's habits and tendencies to play online games, and are therefore able to rather seamlessly integrate into their daily lives. One example of this is the [Bad News Game](#) where players become fake news tycoons, gaining followers by spreading disinformation. Games of this nature can help people (as these are not limited to children) in preparing themselves on how to encounter and combat misinformation or conspiracy theories which they may come across online. There are a plethora of online resources that can be used to promote media literacy in children. Forming key partnerships with well trusted experts and organisations working on these initiatives should be high on education policy agendas.

Teaching digital skills tends to feature more heavily in secondary education than in primary, and less so in pre-primary and early childhood education and care (Burns and Gottschalk, 2019<sub>[10]</sub>). Education systems take different approaches to teaching and learning digital skills in their curricula. Figure 10.1 highlights how different skills are incorporated into teaching and learning either as an independent subject, incorporated into existing course content or through a combination of the two. Generally, digital skills are integrated into existing subjects or are integrated and feature as independent classes or units. Some countries are engaging or have already engaged in an overhaul of the curriculum, whereas others are incorporating digital skills across the existing curriculum. Having a sound grasp on operational, critical thinking and social skills in digital spaces will allow for children to effectively harness the available resources to gain insight and make good decisions into their own health and well-being.

**Figure 10.1. How systems incorporate digital skills into teaching and learning**



Note: Respondents were asked which digital skills were taught in school, and how these were taught.

Source: 21st Century Children Policy Questionnaire

To highlight one example, the Danish Ministry of Education has launched a three-year experiment in compulsory education. Running from 2018-2021 with DKK 68 million of funding, it examines the importance of technology and automation in society, with a focus on ethics, security and consequences of digital technologies. Some of the digital skills it focuses on include: computational thinking/informatics, knowledge of networks and algorithms, programming, abstraction, pattern recognition and data modelling.

#### **Box 10.4. Technology and teaching children with special needs**

UNICEF defines inclusive education as providing "...real learning opportunities within the regular school system for groups who have traditionally been excluded, such as children with disabilities and speakers of minority languages." (UNICEF, 2017<sup>[27]</sup>).

The Flemish Community of Belgium's [ADIBib](#) project is targeted at students in primary and secondary school with written communication impairments (serious reading and writing disorders), aiming to enable them to participate fully in social life and achieve better academic outcomes. At the end of 2017, [another programme](#) was launched to fund availability of software for children with dyslexia (text-to-speech software). 650 000 euros is reserved to further distribute the software with the aim of supporting pupils, parents and schools.

With schools moving towards more integrated and inclusive classrooms, there is a need for professional development for teachers in this domain, as well as programmes providing opportunities for children with special needs (OECD, 2019<sup>[28]</sup>). Furthermore, instructional leadership for school principals can help improve the level of preparedness for inclusive education; according to TALIS 2013 the reported need for professional development was lowest in schools that had greater instructional leadership (Cooc, 2018<sup>[29]</sup>).

## Striving for equity: Reducing health and digital inequalities for all children

There are many factors that affect child health and well-being outcomes (see Chapter 2). Socio-economic status is an important mediator of many physical health trends. However it is a proxy for underlying relationships between factors caused by material disadvantage and increased likelihoods for engaging in risky or detrimental lifestyle behaviours (Aston, 2018<sup>[30]</sup>). To give an example, individuals living in communities where there is inadequate access to safe facilities for physical activity (such as gardens or green spaces) will increase the chance that these individuals are less physically active (Schalkwijk et al., 2017<sup>[31]</sup>). Thus the environmental factor, which is more common in more deprived areas with low cost housing, is independently related to physical activity regardless of parental knowledge or education on the importance of regular physical activity (Schalkwijk et al., 2017<sup>[31]</sup>).

### Table 10.2. Relationships between affluence and health behaviours and outcomes in adolescents

Trends across countries based on family affluence in Europe and Canada

	Likelihood in students from advantaged compared to disadvantaged backgrounds
Healthy eating habits (daily breakfast, family meals, fruit and vegetables every day)	Higher
Brush teeth twice a day	Higher
Physical activity participation	Higher
Overweight/obese	Lower
Negative body image	Lower
Self-reported health	Higher
Alcohol consumption	Higher
Family and peer support	Higher

Note: Findings from the 2017/2018 Health Behaviour in School-aged Children (HBSC) survey in Europe and Canada.

Source: (Inchley et al., 2020<sup>[9]</sup>)

By accounting for various social differences and providing programming for those in need, education systems can target disparities among children and aim for more equitable outcomes. Effective approaches targeting equitable education outcomes include investing in early childhood education and care, removing barriers to participation and ensuring quality, as well as finding and providing specialised support to low performers in school, and supporting disadvantaged schools (OECD, 2017<sup>[8]</sup>). It is also essential for education systems to address other barriers to educational attainment related to children's social status and environment. Ensuring children have healthy food to eat, opportunities for physical activity and access to well-being services that would otherwise be inaccessible are key for educational success and child wellbeing. This section provides an overview of some high priority policy areas and the programmes and practices governments are implementing to improve child opportunities and outcomes.

### **Targeting child nutrition and food insecurity**

Many factors influence the dietary habits and nutrition of children including age, socio-economic status, food security, food preference and palatability, as well as factors such as how foods are marketed. Cost is a barrier to consumption of healthy foods. A systematic review analysing food cost and diet quality found that lower quality diets tend to cost less per calorie, and tend to be selected more by people from lower socio-economic backgrounds. Despite the availability of some nutrient dense foods available at low costs, palatability and cultural acceptableness are factors that influence their purchase by low-income consumers (Darmon and Drewnowski, 2015<sup>[32]</sup>).



Exposure to a wide range of good food choices, and healthy role modelling by parents will play a role in determining children’s eating tendencies (Scaglioni et al., 2018<sup>[33]</sup>), and repeated exposure to unfamiliar foods can promote liking of previously rejected foods (Wardle et al., 2003<sup>[34]</sup>). In the effort to promote healthier habits, evidence suggests that increasing the amount of fruits and vegetables served to children at mealtimes can promote intake of these foods and reduce the energy density of foods ingested at meals. However, children who dislike the fruits and vegetables being served, are unlikely to consume more of them irrespective of portion size (Mathias et al., 2012<sup>[35]</sup>). There is an opportunity cost to rejected foods and the cost of wasted food is too high especially for disadvantaged families, which is why families often resort to more palatable “safe” foods, despite having fewer health benefits.

Food security is an issue that affects many children around the OECD. It depends on food access, availability, utilisation and stability over time (Ashby et al., 2016<sup>[36]</sup>), and is related to poverty, influenced also by regional context (Pereira, Handa and Holmqvist, 2017<sup>[37]</sup>). Childhood food insecurity is related to a number of outcomes, such as emotional, behavioural and academic problems; outcomes differ in part based on the time at which a child is insecure in the developmental process (i.e. during infancy, school-aged) and may demonstrate a dose-response (i.e. the more time a child is food insecure, the larger the effect) (Shankar, Chung and Frank, 2017<sup>[38]</sup>). These are just some of the barriers for children in accessing and eating healthy food in adequate quantities. Alongside educating children in the importance of food and nutrition so they are able to make healthy choices, education systems play a key role in feeding children.

### *Policies and practices*

Many systems implement approaches to enhance children’s nutrition. At a population level, financial disincentives such as taxes on sugary or junk foods can be used to reduce consumption in children (UNICEF, 2019<sup>[39]</sup>). Education systems play a key role as well, taking a number of different approaches as highlighted in Table 10.3. Some examples focus on food provision such as free or subsidised meals, reducing the provision of unhealthy food offerings while increasing availability of healthy options. Other tactics focus on behavioural change and information dissemination such as educating about healthy eating practices, and disseminating guidelines or best practice principles to be implemented in schools or at home. Some systems adopt integrated approaches, harnessing the power of partnerships and implementing a range of measures from the system to the classroom level to enhance food availability and nutrition. Often, food and nutrition are incorporated into teaching and learning about health literacy.

**Table 10.3. Food and nutrition policies and practices**

Examples of how systems tackle student food and nutrition needs in and out of the school

Policy target	Examples
School meals	<ul style="list-style-type: none"> <li>universal free school lunch programmes (Finland, Sweden)</li> <li>needs-based provision of school lunches (Ireland)</li> <li>funding mechanisms for school lunches with cost dependent on parental income level (France)</li> <li>needs-based free breakfast programmes (Canada, France)</li> </ul>
Food insecurity	<ul style="list-style-type: none"> <li>one initiative in Scotland’s Diet and Healthy Weight Delivery plan is an investment of GBP 1 million to support children experiencing food insecurity during school holidays</li> </ul>
Establishing healthy food environments in school	<ul style="list-style-type: none"> <li>online provision of guidelines for healthy eating environments (New Zealand)</li> <li>hiring teachers with specific knowledge on diet and nutrition to provide guidance (Japan)</li> <li>online resources for children/families/teachers with healthy eating tips and ideas (Australia, French Community (Belgium), Scotland)</li> <li>resources guiding how schools can apply for professional support and financial assistance in developing healthy eating plans (French Community (Belgium))</li> <li>regulation or guidelines of foods that can be sold or provided in schools (Czech Republic, Flemish Community (Belgium), Scotland)</li> <li>protecting children from food marketing (Czech Republic)</li> </ul>

	<ul style="list-style-type: none"> <li>a common focus on cultural shift towards an environment where awareness about nutrition and access to healthy food choices is the norm (Canada)</li> </ul>
Curriculum	<ul style="list-style-type: none"> <li>incorporating nutrition studies in health education and other relevant areas of the curriculum (Canada, Ireland)</li> </ul>
Partnerships/multi-sectoral approaches	<ul style="list-style-type: none"> <li>partnerships with the food industry in developing school food policies (Flemish Community of Belgium)</li> <li>targeted information for parents, caregivers, educators, youth workers and health professionals (Scotland)</li> <li>agreements for the provision of complementary services between the education network and the health, social services and community networks to address poor dietary/nutrition (Québec (Canada))</li> <li>hiring a school food environment officer responsible for investigating alternate ways of providing local, nutritious, affordable food choices for students (Prince Edward Island (Canada))</li> </ul>

Source: 21st Century Children Policy Questionnaire

One example of an effective public-private partnership focused on school nutrition is found in the Flemish Community of Belgium. In 2016 the Education Ministry in partnership with the food industry committed to having more balanced and healthier drink and snacks policies in Flemish schools, targeting a reduction in soft drink consumption (which is already decreasing) as well as unhealthy food, while promoting wide availability of water, milk and fresh fruit. The goal in Flemish schools is to have no sugar and fat-rich drinks and snacks on offer by 2021. This initiative has thus far had some success – the Flemish Institute for Healthy Living, which surveyed over 650 schools, found that seven in ten primary and secondary schools no longer offered sweetened soft drinks to students in the 2017-2018 school year, and since 2015 schools offer significantly fewer unhealthy drinks and snacks. The majority of primary schools (90%) no longer offer cakes, chocolate or candy, although these were still available in 45% of secondary schools surveyed.

### Box 10.5. The importance of school meals, especially in times of COVID-19

What children eat and drink at school can play a key role in their health. Children have on average 7 590 hours of compulsory instruction during primary and secondary education and eat at least one meal per day at school (OECD, 2019<sup>[40]</sup>). In the US, up to two thirds of children's daily nutritional needs are met through meals and snacks consumed at school and that these tend to be healthier than foods consumed outside of school (Dunn et al., 2020<sup>[41]</sup>). The provision of nutritious school meals works to support student health, particularly for those less well-off. Access to healthy food at school affects not only student physical and emotional well-being, it can also support learning, leading to better academic performance.

In April 2020, at the height of school closures during the COVID-19 pandemic, 369 million children around the world were missing out on school meals (World Food Programme, 2020<sup>[42]</sup>). Countries responded to this concern in different ways. For example in the United Kingdom, policy approaches included providing supermarket vouchers to the opening of school canteens for children of families working what were considered “key worker” positions (i.e. health professionals, police etc.). In Colombia, decision-making powers were delegated to regional authorities to enact programmes based on local capacities and needs, while in Costa Rica school canteens were initially kept open then closed in favour of setting up distribution points for food baskets to families (WFP, UNICEF and FAO, 2020<sup>[43]</sup>).

As the pandemic continues with “second waves” around the world, systems will need to ensure continuity in access to food programmes in the case of country-wide or localised school closures. Reaching children reliant on school meal programmes who are required to self-isolate following exposure to COVID-19 or a positive diagnosis will also be an important measure.

Strategic partnerships in Scotland (United Kingdom) have also been created to improve nutrition information and provision of food and drink. This multifaceted approach involves training of front-line staff

ensuring parents receive information and support, training front-line staff (e.g. healthcare professionals, educators, youth workers) to ensure parents receive appropriate support and advice. Other facets include provision of health and wellbeing support to schools and authorities, expanding the provision of free meals and milk, updating regulations and guidelines on nutritional requirements in Scottish schools, and improving food provision and food education. Despite these initiatives, students still report that they need more support and guidance in making healthy food choices and establishing lifelong healthy eating habits. Another British initiative, [the Food Dudes](#) was developed in Wales and has been adapted and implemented in [Ireland](#). This initiative works to encourage children to eat more fruit and vegetables, and is based on positive role modelling, repeated tasting and rewards.

### **Health support and service delivery in schools**

In many OECD countries the school serves as a location for students to access important health services and information that they would not necessarily have access to otherwise. Research suggests that adolescents often lack access to preventative care and tend to have lower rates of primary health care use than other age groups (Rand and Goldstein, 2018<sup>[44]</sup>; American Academy of Pediatrics, 2016<sup>[45]</sup>). In a review of 102 countries, Baltag and colleagues (2015<sup>[46]</sup>) found that in over half of the countries health services were provided in schools by dedicated health personnel. The most common interventions in schools included “vaccinations, sexual and reproductive health education, vision screening, nutrition screening, and nutrition health education,” (Baltag, Pachyna and Hall, 2015<sup>[46]</sup>). Especially for low-income adolescents, or those who lack access to health insurance, school-based health centres/interventions are important sources of medical care to which they would not otherwise have access (Boonstra, 2015<sup>[47]</sup>). Table 10.4 highlights some examples of school-based programming or policies implemented to support children’s health in OECD education systems.

**Table 10.4. Health supports in schools**

School-based programming or policies in different systems to promote positive and equitable health outcomes

Country/region	Policy	Goals
Canada	Pan-Canadian Joint Consortium for School Health (JCSH)	Strengthens cooperation among ministries, agencies, departments, and others in support of healthy schools; builds the capacity of the health and education sectors to work together more effectively and efficiently; and promotes understanding of, and support for, the concept and benefits of comprehensive school health initiatives across Canada.
Flemish Community (Belgium)	Healthy School project by the Flemish Institute for Healthy Living	The Institute surveys health policy in primary and secondary schools every three years, in collaboration with the Association for Alcohol and Other Drug Problems. The Institute promotes the setting of health policies in schools on topics such as nutrition, smoking, sedentary behaviours, movement, mental health, environment policy, and relationships and sexuality. Schools assess their unique situation, determining priorities and work on an action plan, followed by an evaluation and adjustment period. The strategies promoted include education, environmental interventions, forming agreements and rules, and providing care and guidance.
Mexico	Health in your school	Joint initiative of the Secretary of Health and the Public Education Secretary to strengthen prevention and health care, while also promoting healthy lifestyles in children and young people. One pillar of this plan involves visits from professionals will help consult and monitor student health in the school, and promote healthy habits; students who require it will be referred to health centers to receive attention and follow-up care.
New Brunswick (Canada)	Health Support Service Policy	Standards and procedures required for the provision of health support services to students while they are the responsibility of the public school system, recognising this responsibility is shared among parents, the public education system and health care providers.
Scotland (United Kingdom)	Headspace	Access to specialist support is available to students, specifically targeting mental health. This programme has been reported to reduce referrals to general practitioners and child and adolescent mental health services.

Source: 21st Century Children Policy Questionnaire

Health interventions and programmes in schools are implemented along one of three tiers:

1. Universal whereby the whole school or classroom is targeted.
2. Selective interventions target subgroups that are at a higher risk of developing a health issue than their peers.
3. Indicated and treatment interventions target those who are already showing signs of a health issue (Costello, Egger and Angold, 2005<sup>[48]</sup>).

Many school-based interventions also target health behaviours and attitude changes. Some examples include changing attitudes towards risky behaviours, building awareness of healthy behaviours, teachers and school staff as role models (modelling healthy behaviours) and building healthy school environments (Aston, 2018<sup>[30]</sup>). Other forms of support include providing access to goods that children need for their health or well-being, such as menstrual products (see Box 10.6), or to contraceptive products as is the case in France (since 2008 all high schools are required to be equipped with at least one automatic condom dispenser). Effective interventions and service delivery on the whole rely on forming key partnerships between education and health sector actors.

### **Box 10.6. Nobody left out. Period.**

#### **The importance of ameliorating period poverty**

Still to this day the topic of menstruation is shrouded in taboo. In recent years global efforts to lift this shroud have attempted to empower and educate individuals about their periods and period hygiene, as well as tackle cultural stigma that is still prominent in many societies. The abolishment of the “tampon tax” in many countries such as Australia, Canada, Colombia and Germany, whereby menstrual health products have traditionally been subject to value-added sales tax (taxed as luxury products rather than basic necessities that would be tax exempt), has been a step in the right direction for “menstrual equity”. However, the taboo persists in many societies, with many around the world suffering from period poverty (i.e. experiencing financial barriers to accessing adequate sanitary products). Not to mention the potential health problems (e.g. caused by using unhygienic items), period poverty can result in missing school and can thereby perpetuate disadvantage (Sommer et al., 2015<sup>[49]</sup>). Often thought of as an issue affecting those in low to middle income countries, period poverty resulting in missed school days is a reality in OECD countries as well and systems are finding ways of addressing this issue.

In New Zealand, a 2021 policy to support young people in period poverty will be rolled out with a NZD 2.6 million investment whereby the Ministry of Education will provide free period products in schools. A 2019 survey highlighted that 12% of students in years 9-13 (age 12-18) who had their period experienced difficulty in getting period products due to cost. This inequity disproportionately affected Maori and Pacific students, and students in disadvantaged communities (Youth2019, 2020<sup>[50]</sup>). In 2018, Scotland became the first country in the world to provide free sanitary products in schools, colleges and universities. Students benefitting from this GBP 5.2 million programme have reported that having easy access to these products at school has had a positive impact, and it has also sparked more of an open conversation, that has relied heavily on student initiative and involvement, around periods to reduce associated stigma (Scottish Government, 2019<sup>[51]</sup>).

Research suggests that school-based interventions can have promising effects on youth health outcomes. For example, school-based health centres in the United States that provide sexual health services can improve reproductive health outcomes in young people (such as reducing teen rates of sexually transmitted diseases), and students tend to view these centres positively (McCann et al., 2020<sup>[52]</sup>). Embedding mental health services in schools is linked to enhanced student mental health and educational attainment (Fazel et al., 2014<sup>[53]</sup>). In order to implement sustainable school-based interventions, school leadership should be

committed to its continuity and school staff involved in implementation (whether this is teachers or health professionals) must be knowledgeable and motivated to continue delivering the programmes. Student engagement and available resources are also important factors influencing continuity of programming (Herlitz et al., 2020<sup>[54]</sup>), resources being a potential barrier especially for disadvantaged schools.

### ***Movement for all: Promoting physical activity in and out of school***

Despite the policy attention rates of physical activity in children and youth have been declining in recent years in many countries. Only 19% of adolescent respondents in the HBSC 2017/2018 survey achieved the recommended daily amount of 60 minutes of moderate-to-vigorous physical activity (Inchley et al., 2020<sup>[9]</sup>). A number of factors contribute to child physical activity rates. For example, children from higher socio-economic backgrounds are more likely to do more activity than their disadvantaged peers and boys tend to get more exercise per day than girls (Inchley et al., 2020<sup>[9]</sup>). Opportunities for participation in sports are also affected by relative advantage or disadvantage, with more disadvantaged individuals having less access overall, despite the push in many European countries for “Sports for All” initiatives (Vandermeersch et al., 2016<sup>[55]</sup>). Education is also a protective factor as those who are more highly educated tend to engage in more physical activity (Costa-Font and Gil, 2013<sup>[56]</sup>), and age affects rates with trends in physical activity rates generally decline as children get older, especially once they reach school age (Farooq et al., 2017<sup>[57]</sup>; Reilly, 2016<sup>[58]</sup>).

Irrespective of background and demographic factors, many children do not engage in recommended amounts of physical activity, of which guidelines across countries are relatively consistent recommending 60 minutes or more per day of moderate to vigorous physical activity for school-aged children (Konstabel et al., 2014<sup>[59]</sup>). Inadequate physical activity has implications for health outcomes such as obesity and overweight (Konstabel et al., 2014<sup>[59]</sup>), mental health outcomes (Biddle and Asare, 2011<sup>[60]</sup>), and physical activity tends to correlate positively with academic outcomes (Kari et al., 2017<sup>[61]</sup>; Erwin et al., 2012<sup>[62]</sup>). In the early years, physical activity, especially activity that is at least moderate-to-vigorous, is associated with motor development, fitness, and bone and skeletal health (Carson et al., 2017<sup>[63]</sup>). For children, both in the early years and for those who are school-aged the rule of thumb generally seems to be that more is better when it comes to health outcomes (Carson et al., 2017<sup>[63]</sup>; Janssen and LeBlanc, 2010<sup>[64]</sup>). For children aged 5-17, while benefits can be seen from engaging in 30 minutes per day, at least 60 minutes per day will bring more benefit (Janssen and LeBlanc, 2010<sup>[64]</sup>) and meeting physical activity guidelines versus being inactive across the population level is associated with lower levels of mortality (Long et al., 2015<sup>[65]</sup>).

#### *Policies and practices*

Many education systems have implemented initiatives to increase the amount of physical activity and sport children do during the school day. These programmes tend to be universal, encouraging all students to take part and increase their movement and physical activity during the day and sometimes provide the only opportunities to engage in sports and activity for disadvantaged students.

Evaluating programmes to determine efficacy is important. For example the University of Luxembourg studied the outcomes of the Clever Move initiative, and found that 70% of students thought including movement during class time made it more enjoyable than traditional lessons. Another example of programme evaluation was in Finland for the Finnish Schools on the Move programme. This was piloted in 2010-2012, and as of August 2018 more than 90% of municipalities and 88% of comprehensive schools were involved. Examples of areas that schools evaluate themselves on include: students spending breaks outdoors, agreed upon practices to break up periods of excessive sitting during lessons, ensuring enough bicycle parking and storage for helmets, cooperation with local organisations to arrange activities, and that school staff and students jointly participate in promoting physical activity. EUR 21 million was allocated over 2016-18 specifically to implement this initiative, with additional grant funding for programmes such as cooperation between sports clubs and schools, renovation of school years and acquiring sporting goods and equipment.

**Table 10.5. Initiatives promoting children’s physical activity**

Country	Initiative	Goals
Australia	Sport 2030: National Sport Plan	This is a long-term strategy covering participation, performance, prevention through physical activity. This plan aligns with the Australian Curriculum, and also includes recommendations for including physical activity for students during school time.
Belgium (Flemish Community)	Action Plan to strengthen health policy in schools	Focus on promoting exercise, and sport friendly infrastructure in schools. In partnership with <a href="#">MOEV</a> , there is a range of practical materials for providing information to schools, students and parents on how to get more active, and organised activities (often free) such as mountain biking, football and swimming. MOEV helps schools develop movement policies, embedded in school health policies.
Canada	Decentralised programming	Provinces and territories use policies or curricular measures to increase physical activity in schools. Approaches include prescribed number of physical education minutes over the course of the school week, or mandatory courses.
Finland	Schools on the Move	The programme targets schools and municipalities, which implement individual plans to increase physical activity, focusing on areas outside of physical education, during the school day.
Ireland	Curricular 0013/2016	This gives information to schools and the education sector on their important role in promoting the national Healthy Ireland agenda through contributing to different elements of well-being in young people. This curricular highlights and emphasises the importance of physical activity and healthy eating.
Ireland	Active School Flag Programme	This programme has three main pillars, curricular physical education, physical activity and partnerships. Active School Week programmes are also common in Irish schools, with many committing to having it included in the annual calendar. The Active School Flag is awarded to schools that thrive to achieve a school community that is physically educated and active.
Latvia	<i>Sporto visa klase</i>	Aim to strengthen the role of sports in society, inspire children to engage in regular activity and to monitor the effects of physical activity on their health. Inaugurated in 2014, this programme is targeted for children in grades 2-6 who receive two mandatory physical education lessons per week. The programme provides three optional lessons per week, thereby providing the opportunity for children to engage in daily physical activity. Lessons are intended for different activities such as swimming, football and general physical fitness.
Luxembourg	Clever Move	Schools that encourage students to move more during the day will receive the Clever Move label. The initiative advocates for movement breaks during lessons, for up to 15-20 minutes per day.
Portugal	<i>Desporto Escolar</i>	Promote sports and physical activity in all students. Promote healthy habits and values such as discipline, respect, solidarity, courage. Training available for teachers.
Québec (Canada)	<i>À l'école, on bouge!</i>	Support for preschool and primary schools to ensure students are physically active for at least 60 minutes per day. Schools where this measure is in place can sign up for the "Force 4 du Grand Défi Pierre Lavoie" programme, and will receive support over a three-year period as an incentive to promote structural change for new ways of doing things, in terms of both organisation and activities.
Switzerland	<i>Schule bewegt</i>	The School Moves programme in Switzerland is to promote more movement in schools. It advocates for teachers taking active or calming movement breaks during class time, depending on the needs of the learners, and also how teachers can incorporate movement into the teaching and learning process.

Source: 21st Century Children Policy Questionnaire

Ways in which education systems can promote equitable outcomes in terms of physical activity include:

- providing affordable or subsidised access to after school sports or sports clubs.
- ensuring safe play spaces, outdoors or indoors, are available for recreational use (and encouraging their use) during breaks, recess or after school.
- adapting programming to be inclusive and accessible for children with special needs.
- including children’s opinions in the development and implementation of programming, ensuring representation from disadvantaged students and those with special needs.

It is important to note that effective interventions targeting behaviours such as physical activity and nutrition often have limited effects (Russ et al., 2015<sup>[66]</sup>; Jago et al., 2015<sup>[67]</sup>). However, some mediating factors that can affect programme success include child engagement (when children feel they have some autonomy over their behaviour this can increase success), teachers role modelling healthy diet and physical activity behaviours, engaging parents and community members, and providing adequate resourcing (Jago et al., 2015<sup>[67]</sup>). Interventions should also start early, as rates of physical activity may start declining as early as age seven (Farooq et al., 2017<sup>[57]</sup>), with a concurrent increase in sedentary time (Reilly, 2016<sup>[58]</sup>).

### Box 10.7. Movement in the classroom

Physical education need not be the only opportunity in the school day for children to be active and enjoy movement. Programmes such as *TAKE 10!* are designed and implemented to reduce sedentary time and increase movement during teaching and learning time outside of PE. This initiative has been associated with increased focus on learning, increased physical activity during the school day and can be used by schools to help with wellness initiatives (Kibbe et al., 2011<sup>[68]</sup>).

Classrooms that incorporate physical activity in the teaching and learning process may see slightly improved academic achievement and may enhance student enjoyment of lessons. A recent systematic review and meta-analysis highlights some of the limitations of the research base in terms of statistical randomised controlled trials. Few studies included measures on cognitive abilities and attention (Bedard et al., 2019<sup>[69]</sup>).

Pedagogies such as embodied learning, where the main idea is that students who consciously use their bodies to learn are more engaged than those who are at a desk or a computer, can involve integration of physical education and dance into academic tasks and core subject areas (Paniagua and Istance, 2018<sup>[70]</sup>). Creative activities based on self-expression and aesthetics are more likely to engage learners than academic activities.

In some countries, policy initiatives embed movement into the school day. For example, in [Denmark](#) primary school pupils need to move for an average of 45 minutes per day, which is to be ensured by the school head. Teachers can incorporate movement throughout the day in different ways such as including short bouts of activity during traditional teaching and learning activities in the classroom, or during specific periods dedicated to movement and exercise. This can be in collaboration with local sports associations, and can take place in sports fields, the gym, the classroom or outside.

Focusing on encouraging behaviour changes that make sense to children and including their input in the development and implementation of programmes that affect their lives in and out of school is key in developing long lasting and effective change. Furthermore, continuing efforts with measuring outcomes and evaluating progress of these interventions are key steps in ensuring accountability and promoting effective use of scarce resources. Interventions targeting behaviour change will be more difficult to evaluate than programmes with easier to measure indicators of effectiveness or programme delivery (e.g. number of school meals delivered to children).

### ***Tackling digital inequalities***

Children will often turn to the Internet to seek health-related information, whether through websites, apps, games and other modalities. Research suggests that this behaviour can have potential positive impacts on health outcomes, with particularly strong evidence for mental health (Liverpool et al., 2020<sup>[71]</sup>). However, digital inequalities, in access to digital devices or digital skill level (Burns and Gottschalk, 2019<sup>[10]</sup>) can undermine children's health information seeking and participation in these interventions.

Digital inequalities are persistent. Despite increasing access to digital tools, inequalities in skills, attitudes and usages remain and in some instances have widened in the last decade. These issues are high on the policy agenda of education systems around the OECD, especially with the expansion of digital education strategies and the use of digital tools in the teaching and learning process, especially post COVID-19 crisis (for more see Chapter 3). Now more than ever, education systems need to address digital inequalities and coordinated efforts across different sectors of government are important to address the underlying factors influencing these inequalities.

## In sum

Education systems play a key role in empowering students to become well-informed decision makers in terms of their own health, and for those around them. Through fostering key skills and incorporating important topics such as health, digital skills, and well-being into the teaching and learning process, children will be able to search for and verify important information online, or find who to turn to in times of need. Providing programming that targets equitable health outcomes is also essential, especially in the post COVID-19 era as many children around OECD countries live in disadvantaged circumstances that have worsened during the pandemic. Barriers for children to access healthy food, primary care, and to equitable participation in the digital sphere are essential to overcome.

It is clear around OECD countries that many have made efforts and large strides in targeting the skills, competences, as well as health needs of children. There is room to grow in many countries however, and focusing on equitable programming and targeting students in need to ameliorate both health and educational outcomes should be at the forefront of education and health policy agendas. Education systems also need to focus on key challenges schools face in implementing health interventions which include lack of staff support, lack of resources and facilities, initiative overload, low school autonomy and government-led academic priorities to name some examples (Christian et al., 2015<sup>[72]</sup>). This is especially important for schools that are disadvantaged or serve more disadvantaged populations. Key partnerships between education and health experts and policy makers will be necessary in developing and implementing effective and cost-effective school-based programming.

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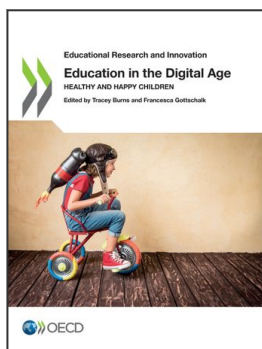
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## Note

<sup>1</sup> UNESCO defines comprehensive sexuality education as "a curriculum-based process of teaching and learning about the cognitive, emotional, physical and social aspects of sexuality. It aims to equip children and young people with knowledge, skills, attitudes and values that will empower them to: realize their health, well-being and dignity; develop respectful social and sexual relationships; consider how their choices affect their own well-being and that of others; and, understand and ensure the protection of their rights throughout their lives." (UNESCO, 2018, p. 16<sub>[13]</sub>).



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