



Trends Shaping Education Spotlight 20

Money matters: Ensuring financial well-being

Strong basic literacy and numeracy skills are important foundations for making sound financial decisions. Curriculum design, pedagogical methods and stakeholder involvement can all be harnessed to build student financial knowledge and well-being.

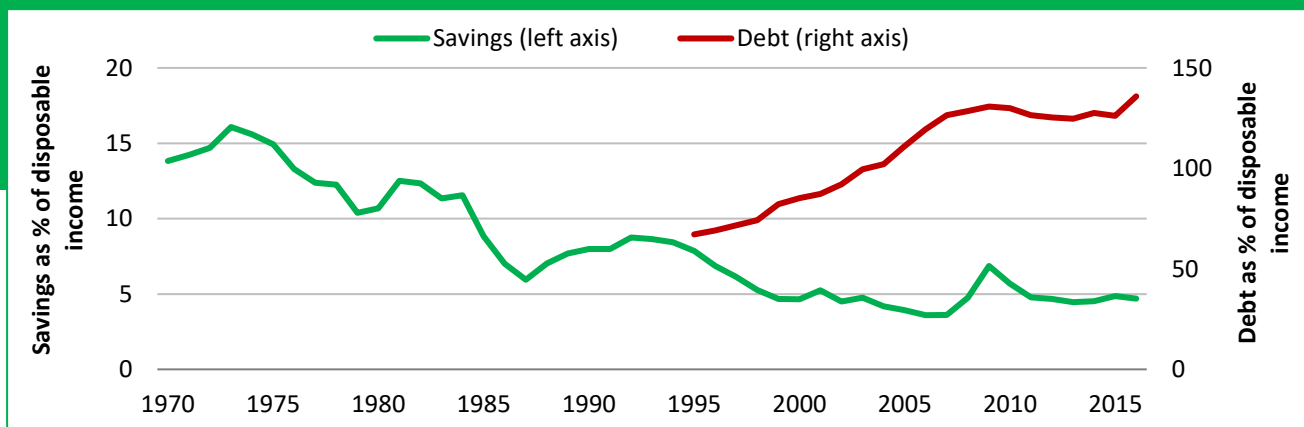
Growing financial risks for individuals

The financial landscape is growing increasingly complex. Financial risks, such as those related to unemployment, pensions and the costs of basic services are being transferred from both governments and employers to individuals (OECD, 2014; 2019a). In addition, the multitude of financial services, products and providers emerging with digitalisation pose new types of risks, such as those related to fraud and security and confidentiality of data (OECD, 2017a).

All this has an impact on financial well-being (OECD, 2019b). For instance, as shown in Figure 1, household debt has been rising while savings have been declining across OECD countries. In 2016, household debt was at its highest level in the previous two decades. This is a risky situation: households that are heavily indebted and those who lack access to liquid savings may face serious consequences from a rise in expenses or fall in income.

Figure 1. Household savings and debt

Household savings and household debt as percentage of disposable income, OECD average, 1970-2016



Note: OECD average refers to the average of the 32 OECD countries with data available. See source for further details.

Source: OECD (2019), *Trends Shaping Education 2019*, https://doi.org/10.1787/trends_edu-2019-en.

Caveat emptor?

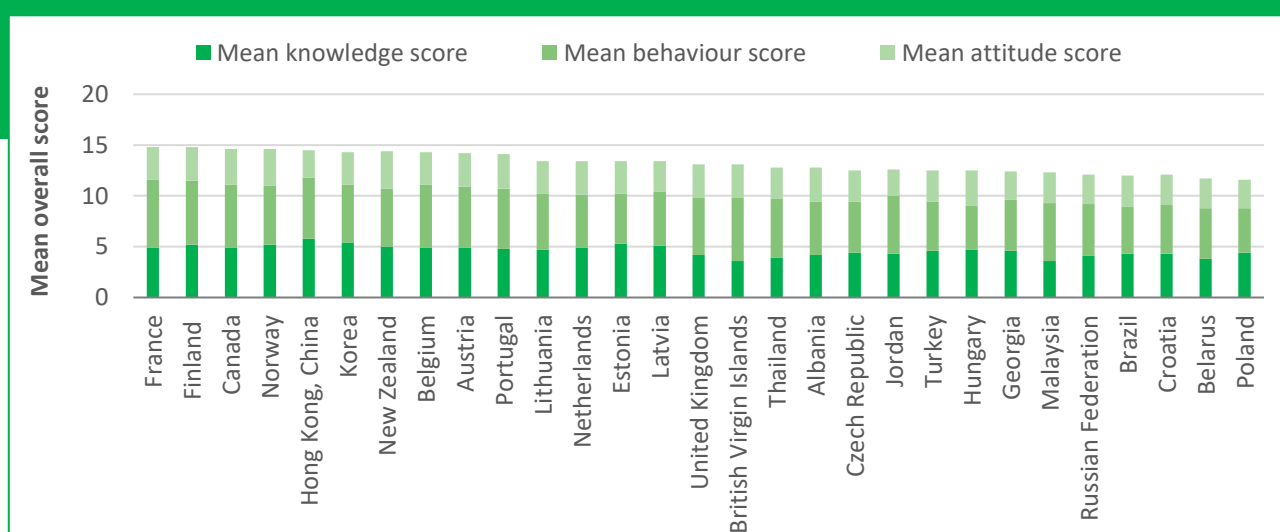
A lack of knowledge of financial instruments, products and services as well as poor financial risk awareness can contribute to bad financial decisions. Less financially knowledgeable individuals are more likely to have costly mortgages and less likely to refinance them during a period of falling interest rates. They are also more prone to engage in costly credit card behaviour, use high-cost methods of borrowing, and are less likely to hold precautionary savings and undertake retirement planning (Lusardi and Mitchell, 2014), all of which contributes to weaken their financial situation.

In addition to financial knowledge, financial literacy refers to the skills, motivation and confidence to apply such knowledge and understanding in order to make effective decisions across a range of financial contexts, to improve the financial well-being of individuals and society, and to enable participation in economic life (OECD, 2017b).

The OECD International Survey of Adult Financial Literacy Competencies measures financial knowledge (e.g. understanding of interest rates), attitudes (such as those related to spending money) and behaviour (people's statements on how they actually behave in relation to saving, spending or investing, for example). Results from 2015 reveal low levels of financial literacy among the adult population. As shown in Figure 2, financial literacy on this measure is relatively high in Canada, Finland and France. In OECD countries, it is lowest in Hungary, Poland and Turkey.

Figure 2. The financial literacy of adults

Financial knowledge, attitudes and behaviour of adults aged 18-79, 2015



Note: Countries and economies are ranked in descending order of the total composite of financial literacy competencies.

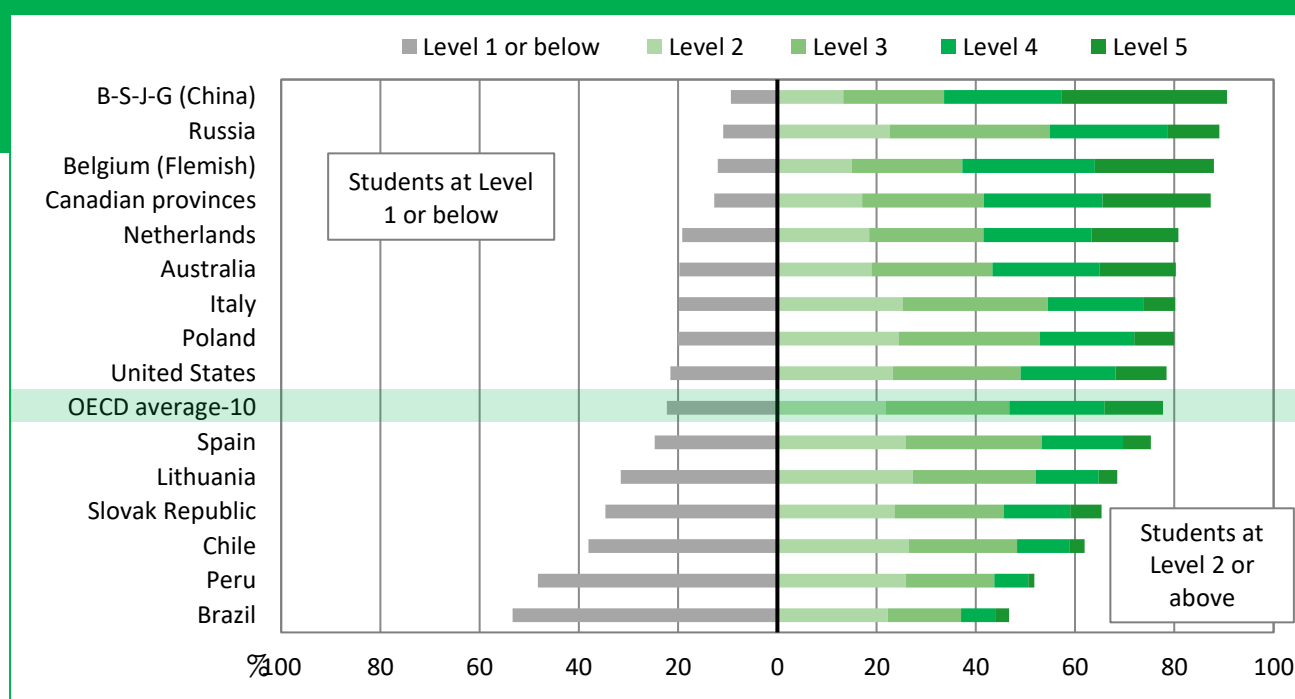
Source: OECD (2016), "OECD/INFE International Survey of Adult Financial Literacy Competencies", www.oecd.org/finance/OECD-INFE-International-Survey-of-Adult-Financial-Literacy-Competencies.pdf.

Sound financial decision-making for adolescents

The knowledge to make good financial decisions is also weak among adolescents. The PISA financial literacy assessment provides a picture of 15-year-olds' ability to apply their accumulated financial knowledge and skills to real-life situations involving financial issues and decisions. As seen in Figure 3, 20% of students across OECD countries performs at level 1 or below on this assessment. Only 31% of tested students reached Level 4, which indicates the knowledge and skills that are essential for managing a bank account or a financial task of similar complexity. Interestingly, students in countries with the most developed financial markets did not necessarily perform the best in the assessment. Hence, financial knowledge should not be taken for granted, even in advanced economies.

Figure 3. Financial knowledge among the youth

Financial literacy of 15-years-old students in PISA, by proficiency level, 2015



Note: Countries and economies are ranked in descending order of the percentage of students who perform at or above Level 2. OECD average-10 includes the ten OECD member countries participating in the financial literacy assessment.

Source: OECD (2017), *PISA 2015 Results (Volume IV): Students' Financial Literacy*, <https://doi.org/10.1787/9789264270282-en>.

Sound financial decision making among adolescents and young adults matters. A basic understanding of financial products is already needed by the age of 15. Many adolescents receive money from various sources, including part-time or summer work and money from parents and relatives, while many also have their own bank accounts (OECD, 2017b). In addition, adolescents and young adults across many OECD countries face decisions that affect their financial situation in the long term. For example, individuals financing their tertiary education via student loans (OECD, 2018) may incur in long-term indebtedness.

56% of adolescents owned a bank account at the age of 15 on average across OECD countries but only a third have the skills to manage such an account

Strong literacy and numeracy as basis for financial well-being

Financial education has been recognised alongside financial consumer protection and inclusion as an essential ingredient to individuals' financial well-being. As reflected in national strategies for financial education across countries (OECD, 2015a), the assumption is that financial education, alongside strong literacy and numeracy skills, increases financial literacy and supports decision-making and financial well-being.

Generic literacy and numeracy skills are an important piece in making sound financial decisions. Results from the Programme for International Student Assessment (PISA) show that over 60% of the variation in students' financial capability can be explained by their mathematics and reading performance, highlighting the impact such skills have on making calculations with money, for example, and understanding finance-related information that is presented to students. Nonetheless, about 40% of students' scores remains unexplained when accounting for these variables (OECD, 2017b). Knowledge of financial facts and issues could be part of the explanation.

The PISA financial literacy assessment includes a variety of elements. Students may only need basic calculations when faced with simple value-for-money assessments. Similarly, seeing that buying things in bulk can be wasteful may just be a matter of logical reasoning. However, certain topics require familiarity with finance-specific facts and concepts. Notions about taxes, salaries, consumer safety and fraud are needed to solve questions about invoices, payslips, and communication with financial providers successfully.



Values, habits and rules are used daily to facilitate the acquisition of new knowledge. Basic principles, such as "don't put all your eggs in one basket" (i.e. diversify risk), are used as knowledge shortcuts and serve to simplify complex issues and achieve gains by approximation. Activities such as budget planning and saving or values such as individual austerity are often the result of routine practices and rooted beliefs, and may be as well be a semiconscious means to diminish knowledge requirements if included as behavioural drivers.

In addition, expert advice and information gathering are common ways to bridge knowledge gaps and compensate for lack of experience (e.g. Chu et al., 2017). This is greatly facilitated nowadays by public information and financial advice portals, and by digital services allowing users to track spending, compare prices and simulate results (Yakoboski, Lusardi and Hasler, 2018).

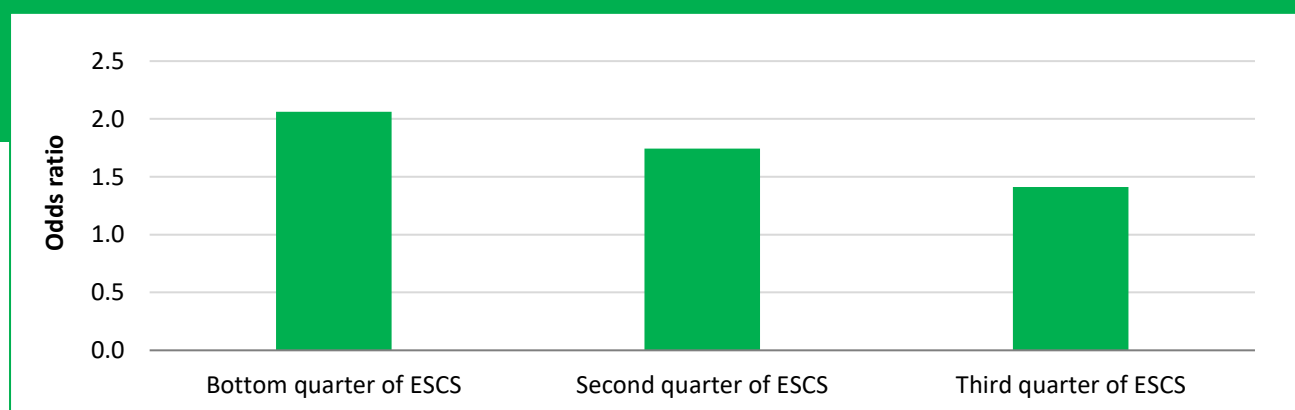
Nevertheless, individuals may not be aware of tools at their disposal or lack the time to assess information carefully. In fact seeking expert financial advice is related to individuals' wealth and financial knowledge (Calcagno and Monticone, 2015). Additionally, consumers in a digital world may struggle to identify relevant pieces of information, make use of unreliable sources, and be exposed to a number of digital risks (OECD, 2017b). Following basic rules, which some argue should be the basis of financial education (Drexler, Fischer and Schoar, 2014), is no silver bullet either; it may lead to decisions with returns lower than optimal if the rules are interpreted inflexibly (Lefevre and Chapman, 2017; IOSCO and OECD, 2018).

Attitudes and dispositions such as persistence, self-control and self-efficacy matter as well. These mediate the relation between knowledge and skills and their application in practice (CFPB, 2016). Opportunities to develop them might nevertheless be missing when individuals do not discuss and learn about finances at home. Children from low-income families are particularly vulnerable in this respect (Buckland, 2010; Karlan, Ratan and Zinman, 2014). As shown in Figure 4, they are twice as likely to perform poorly in financial literacy compared to the most affluent students.



Figure 4. The impact of student background on financial literacy

Likelihood of low performance in financial literacy by student economic, social and cultural status, 2015



Note: ESCS refers to the PISA index of economic, social and cultural status.

Source: OECD (2017), PISA 2015 Database, Table IV.4.25a, <https://doi.org/10.1787/9789264270282-table91-en>.

Education can support all students build financial knowledge and habits, such as baseline concepts and familiarity with saving and planning. It can help strengthen cognitive, social and emotional functioning and build the concrete and transversal skills and attitudes to thrive financially (OECD, forthcoming 2019; CFPB, 2016; Whitebread and Bingham, 2013). However, this may be easier said than done, and a number of practical considerations need to be taken into account if schools are asked to lead the way in such efforts.

Financial education in action: Practical considerations for schools

Financial education refers today to a wide range of interventions in terms of providers, channels, settings and intensity. It can take place in schools, within and out of academic learning time, and outside, in the community and the workplace. Research shows positive effects of interventions seeking to enhance financial knowledge and behaviour (Kaiser and Menkhoff, 2017, Fernandes, Lynch Jr and Netemeyer, 2014), and even if effects over behaviour are statistically small, such small effects may actually reflect large financial gains for individuals (Kaiser et al., 2019; Lusardi, Michaud and Mitchell, 2017).

A number of countries have identified schools as a key actor to develop their financial education strategies (OECD, 2015a). While this is logical – schooling systems reach all individuals from an early age – it also comes with challenges. New demands for schools and teachers, such as financial literacy as well as health or media literacy, for example, may result in curriculum “expansion” or “overload”: an ever-growing pile of demands to which teachers and students respond with broader but more superficial teaching and learning activities (OECD, 2020, forthcoming).



For schools, one way forward is to integrate financial education through a cross-curricular approach (OECD, 2017b). Here finance-related examples are used across subjects, such as mathematics, social sciences and civics. This approach can build financial knowledge at the same time as learning about other school subjects. Overall, it is crucial that these foster critical thinking, attitudes and behaviour (Kaiser and Menkhoff, 2018; Amagir et al., 2018).

Strategic curriculum design and ongoing communication with and support for schools (OECD, 2020, forthcoming) can contribute to streamlining existing demands and relocating and optimising instruction time. Achieving coherence across subjects and grades is a key.

Schools need support in coping with increasing demands from society

Additionally, schools may reflect on whether pedagogical innovation may help integrate multiple demands simultaneously, assess how the use of non-academic learning time and space can be strengthened, and deploy strategies that leverage the broader community in reaching educational goals. The sections that follow elaborate on these last points.

Avoiding overload: coherence across subjects and grades

Financial literacy is a complex and dynamic construct encompassing cognitive, social and psychological factors. For younger children, building financial literacy may be a matter of supporting learners to develop executive functions such as self-regulation, attention and memory, as well as building blocks for numeracy and reading skills (CFPB, 2016; Whitebread and Bingham, 2013).

As children grow older and understand more about the financial facts and operations around them, basic financial habits and principles may start being practiced, such as reflecting on the relationship between value and money, planning, and saving for what it is desired. Once a baseline is acquired, students can start working with more complex concepts and skills, such as exploring different ways to pay, save and borrow.

Sequencing curricular content logically and age-appropriately can help optimise learning time

Interestingly, time commitment might not be as much of an issue as timing. A review of school-based financial education programmes suggests that rather limited interventions – about roughly two teaching hours per a half year of schooling – can be highly effective (Kaiser and Menkoff, 2018). Concrete concepts and skills may be better introduced and taught when learners can see their value, i.e. “teachable moments” (Fernandes et al., 2014; Kaiser and Menkoff, 2017; Atkinson et al., 2015). For instance, discussions about banks and savings could take place when students reach the legal age to open a bank account.

Transversal skills, attitudes and motivations support financial decision-making as well. For example, critical thinking and problem-solving are fostered across subjects and throughout the entire schooling experience, and can support financial literacy regardless of the curricular topic addressed.

Developing curricula strategically in terms of timing and coherence is also crucial (OECD, forthcoming). Teacher education should also provide the content and pedagogical knowledge required (Urban et al., 2018), especially if non-specialised teachers deliver financial education as part of other academic subjects.

Personal finances and the economy (Denmark)

In Denmark, personal finance, economics and finance are included in the Common Objectives in lower secondary school. These cover issues such as savings, loans, credit, budget, consumer behaviour, tax and pensions.

Teachers who teach social science in primary and lower secondary school are trained to teach consumer behaviour and the relationship between personal finances and political economy, and to support students in reflecting on their own financial situation and disposals (OECD, 2015b).

At the same time, teachers have professional autonomy to select the themes and activities to achieve learning goals. The Ministry supports teachers with up-to-date and quality-assured inspirational materials for teaching via the national learning portal (EMU), where external organisations are invited to contribute with their expertise.

For more information: <http://eng.uvm.dk/>

Direct instruction is one option; experience may be a key

Building links between general financial concepts and real-life events is key to students' learning, particularly for those with fewer opportunities to learn at home

Class lectures can be combined with more dynamic activities where learners participate actively with financial content in ways that are engaging and meaningful to them (Amagir et al., 2018; Kasman, Heuberger and Hammond, 2018). This is perhaps obvious for younger children. Children develop basic calculation and language skills through games and may familiarise with financial concepts (e.g. money, spending) through role-playing (e.g. going to the marketplace). Children can enhance core capacities to self-regulate and plan ahead through play; learning to defer immediate gratification by carefully organising their play activities beforehand with adequate adult support, if needed (OECD, 2019c). Similarly, storytelling may also be a meaningful way to convey financial messages in a way that keeps students engaged.

Schools can become spaces to test actual financial decision-making as students grow. Opportunities to practice financial thinking may include reflection on students' own behaviour and in-class discussion with teachers and peers. Activities on the sideline of academic learning, such saving money in a classroom piggybank, may be elemental but supportive of basic habits and motivation.

For older children and adolescents capable of dealing with more complex financial concepts and decisions, financial considerations may be included through project work in a wide range of subjects, for example, undertaking a school-wide campaign to promote green finances in the context of a natural science course addressing climate change.

School Participatory Budget (Portugal)

Schools Participatory Budgeting (Orçamento participativo das escolas) was introduced in the public schools network during the school year of 2016-17 as a component of the Portuguese National Strategy for Citizenship Education. The state provides a supplementary amount to schools' budget, which may be complemented by school own funds, municipal and other community contributions.

After reflection upon school needs and budget availability, students in secondary education may present proposals for budget expenditure. These may relate to school services, equipment or educational activities and must be endorsed by at least 5% of students. Proposals are designed, submitted and voted by the students themselves. The proposal(s) with more votes shall be then selected and implemented.

For more information: <https://opescolas.pt/>

Opportunities for financial learning emerge at school beyond the classroom. Students can manage budgets in diverse areas of school life with the assistance of school staff, such as in raising and managing funds for class trips or doing the accounts of sport teams. Students may also manage the budget for their student council, reflecting on the strategic rationale behind budget allocation, and assessing whether all needs are foreseen and appropriately met. Students may even participate directly in the school budget, as they do in Portuguese public schools. The idea is for schools to become laboratories where students learn by making mistakes in a controlled environment, relying on adult supervision and support.

Reach out; schools don't have to do it alone

Reaching out to parents and families can make a difference (OECD, 2017b). Parents often discuss financial issues with children, act as role models, and provide them with their first experiences with money. Including parents in a conscious and strategically design effort to raise children's financial literacy may be carried out in a number of ways.

Schools can include financial information in their communication with families. This may include notifying information on the financial learning units taught at school in a given year and the kind of activities or discussion topics parents can use at home to support and positively reinforce such learning. Teachers may then build on what children experience daily, for instance, by helping students reflect on experiences such as accompanying a parent to the bank or helping with budget planning in the home.

For groups at higher risk of low financial literacy, such low-income students, schools can insist on the importance of financial inclusion, and provide supporting materials and advice to families, for example, on procedures to open and operate a bank account and basic financial safety habits (Kasman, Heuberger and Hammond, 2018). Involving parents and families may be as beneficial to both children and their parents (Bruhn et al., 2016).

The community at large may as well provide opportunities for learning. Educators can harness the financial expertise of local individuals and institutions to provide students with real-life examples of and experience on financial matters. This way, students can carry out finance-related projects beyond the school walls, helping adults and the elderly in the community optimise and build a better understanding of financial decisions, for example. This can raise financial literacy of both young people and adults and support learners in building social networks and broader skills for decision-making, such as empathy, assertiveness, persistence and self-efficacy (Yorio and Ye, 2012).

Buying Smart in Queensland (Australia)

The Office of Fair Trading in Queensland runs the “Buy Smart Competition” to help children and adolescents learn about marketplace issues and become more informed consumers. Students have to research a consumer issue, such as fraud, consumer rights and responsibilities, spending wisely, and credit, and present it to an audience.

By giving hints and tips, the objective is for participants to realise how to use financial knowledge in practice, familiarising with a diverse range of information sources and building up financial resilience for them and their community. A robust evaluation of the outcomes of the intervention is nevertheless needed.

For more information: <https://www.qld.gov.au/>

Working in the community environment may be an opportunity to reflect on the wider cultural, political and institutional factors shaping the financial landscape. Adding a societal perspective when discussing financial issues helps individuals to understand economic and political prospects and assess implications for their financial situation (Lusardi and Mitchell, 2007). Furthermore, it supports the formation of opinions on how consumers, market providers and governments behave or misbehave, transcending solely individual- and consumer-based approaches to financial learning and thus empowering learners as both consumers and citizens (Hutten et al., 2018; Davis, 2015; Arthur, 2016).

Towards the future

Financial literacy is a complex construct encompassing cognitive, social and psychological elements besides generic reading and numeracy skills and abstract financial concepts. Many habits and dispositions that determine our financial decisions and well-being are acquired early in life, but learning opportunities differ greatly across individuals and social groups. Educational initiatives, in schools, community or the workplace, can have a role in levelling the playing field and providing high-quality financial learning opportunities for all.

Financial education in schools: Key takeaways

- Both specific and transversal knowledge, skills and attitudes support financial decision-making. Deep conceptual understanding and epistemic reasoning are the basis for strong financial literacy.
- Financial literacy can be developed inside and outside of the school. Leveraging "teachable moments" and ensuring curriculum integration and coherence is key.
- Experiential learning may help optimise student learning. This can be done by various means, from play to project work, and take place within and outside the school walls.
- Parents and the broader community are important. Communicating and coordinating with them can help optimise learning time and resources.

Questions for future thinking

1. AI may soon play a large role in the way most of us manage our personal finances. Should our personal advisor-bots be charged with educating us on our financial behaviour? What challenges and/or limitations can you see in such approach?
2. It is likely that advertising will continue to develop and build on highly predictive individual behaviour profiles. Advertising will also be increasingly embedded in our day-to-day life in less perceptible ways. What challenges might arise from this? Is there a role for education to play in mitigating potential negative effects?
3. Pressure to adopt more sustainable lifestyles is increasing as the climate crisis worsens. In a financial landscape with increasing choices for individuals, should achieving greener finances and consumption become a primary aim of financial education?

References

- Amagir, A., et al. (2018), "A review of financial-literacy education programs for children and adolescents", *Citizenship, Social and Economics Education*, Vol. 17, No. 1, pp. 56-80.
- Arthur, C. (2016) "Financial literacy education as a public pedagogy: Consumerizing economic insecurity, ethics and democracy", *International Handbook of Financial Literacy*, Springer, Singapore, p. 113-125.
- Atkinson, A., et al. (2015), "Financial Education for Long-term Savings and Investments: Review of Research and Literature", *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 39, OECD Publishing, Paris, <https://doi.org/10.1787/5jrtqzfl6q9w-en>.
- Bruhn, M., et al. (2016), "The impact of high school financial education: Evidence from a large-scale evaluation in Brazil", *American Economic Journal: Applied Economics*, Vol. 8, No. 4, p. 256-95.
- Buckland, J. (2010), "Are low-income Canadians financially literate? Placing financial literacy in the context of personal and structural constraints", *Adult Education Quarterly*, vol. 60, No. 4, p. 357-376.
- Calcagno, R., and C. Monticone (2015), "Financial literacy and the demand for financial advice", *Journal of Banking & Finance*, Vol. 50, p. 363-380.
- CFPB (2016), "Building blocks to help youth achieve financial capability: A new model and recommendations", Consumer Financial Protection Bureau, www.consumerfinance.gov/data-research/research-reports/building-blocks-help-youth-achieve-financial-capability/.
- Chu, Z., et al. (2017), "Financial literacy, portfolio choice and financial well-being", *Social Indicators Research*, Vol. 132, No. 2, p. 799-820.
- Davies, P. (2015), "Towards a framework for financial literacy in the context of democracy", *Journal of Curriculum Studies*, Vol. 47, No. 2, p. 300-316.
- Drexler, A., G. Fischer and A. Schoar (2014), "Keeping it simple: Financial literacy and rules of thumb", *American Economic Journal: Applied Economics*, Vol. 6, No. 2, p. 1-31.
- Fernandes, D., J. G. Lynch Jr, and R. G. Netemeyer (2014), "Financial literacy, financial education, and downstream financial behaviors", *Management Science*, Vol. 60, No. 8, p. 1861-1883.
- IOSCO and OECD (2018), *The Application of Behavioural Insights to Financial Literacy and Investor Education Programmes and Initiatives*, www.oecd.org/finance/The-Application-of-Behavioural-Insights-to-Financial-Literacy-and-Investor-Education-Programmes-and-Initiatives.pdf.
- Kaiser, T., et al. (2019), "The Effect of Financial Education on Downstream Financial Behaviors", Global Financial Literacy Excellence Center, <https://gflec.org/wp-content/uploads/2019/04/10-Kaiser-Tim.pdf?x70028>.
- Kaiser, T., and L. Menkhoff (2018) "Financial Education in Schools: A Meta-Analysis of Experimental Studies", *CESifo Working Papers*, No. 7395.
- Kaiser, T., and L. Menkhoff (2017), "Does financial education impact financial literacy and financial behavior, and if so, when?", *The World Bank Economic Review*, Vol. 31, No. 3, p. 611-630.
- Karlan, D., A. L. Ratan, and J. Zinman (2014), "Savings by and for the Poor: A Research Review and Agenda", *Review of Income and Wealth*, Vol. 60, No. 1, p. 36-78.
- Kasman, M., Heuberger, B. and R. A. Hammond (2018), "Recommendations for Improving Youth Financial Literacy Education", *Economic Studies*, The Brookings Institution, www.brookings.edu/wp-content/uploads/2018/10/ES_20181001_Financial-Literacy-Recommendations.pdf.
- Lefevre, A. and M. Chapman (2017), "Behavioural economics and financial consumer protection", *OECD Working Papers on Finance, Insurance and Private Pensions*, No. 42, OECD Publishing, Paris, <https://doi.org/10.1787/0c8685b2-en>.
- Lusardi, A., P. C. Michaud, and O. S. Mitchell (2017), "Optimal financial knowledge and wealth inequality", *Journal of Political Economy*, Vol. 125, No. 2, p. 431-477.
- Lusardi, A. and O.S. Mitchell (2014), "The economic importance of financial literacy: Theory and evidence", *Journal of Economic Literature*, Vol. 52, No. 1 p. 5-44.
- Lusardi, A., and O. S. Mitchell (2007), "Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth", *Journal of monetary Economics*, Vol. 54, No. 1, p. 205-224.
- OECD (2020, forthcoming), *OECD Future of Education and Skills 2030: Curriculum Analysis*, OECD Publishing, Paris.
- OECD (2019, forthcoming), *Policy handbook on financial education for young people in the Commonwealth of Independent States*, OECD Publishing, Paris.

OECD (2019a), *Under Pressure: The Squeezed Middle Class*, OECD Publishing, Paris, <https://doi.org/10.1787/689afed1-en>.

OECD (2019b), *Inclusiveness and Finance*, www.oecd.org/daf/fin/financial-markets.

OECD (2019c), "Play!", *Trends Shaping Education Spotlights*, No. 18, OECD Publishing, Paris, <https://doi.org/10.1787/a4115284-en>.

OECD (2018), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/eag-2018-en>.

OECD (2017a), *G20/OECD INFE Report on ensuring financial education and consumer protection for all in the digital age*, www.oecd.org/finance/g20-oecd-report-on-ensuring-financial-education-and-consumer-protection-for-all-in-the-digital-age.htm.

OECD (2017b), *PISA 2015 Results (Volume IV): Students' Financial Literacy*, PISA, OECD Publishing, Paris, <https://doi.org/10.1787/9789264270282-en>.

OECD (2015a), *National Strategies for Financial Education: OECD/INFE Policy Handbook*, www.oecd.org/daf/fin/financial-education/national-strategies-for-financial-education-policy-handbook.htm.

OECD (2015c), *OECD/INFE Core competencies framework on financial literacy for youth*, www.oecd.org/daf/fin/financial-education/Core-Competencies-Framework-Youth.pdf.

OECD (2014), *Financial Education for Youth: The Role of Schools*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264174825-en>.

Urban, C., et al. (2018), "The effects of high school personal financial education policies on financial behavior", *Economics of Education Review*, <https://doi.org/10.1016/j.econedurev.2018.03.006>.

Whitebread, D. and S. Bingham (2013), "Habit Formation and Learning in Young Children", Money Advice Service, www.moneyadvice.service.org.uk/en/corporate/habit-formation-and-learning-in-young-children.

Yakoboski, P. J., A. Lusardi and A. Hasler (2018), *Millennial Financial Literacy and Fin-tech Use: Who Knows What in the Digital Era New Insights from the 2018 P-Fin Index*, TIAA Institute and the Global Financial Literacy Excellence Center, <https://gflec.org/initiatives/millennial-financial-literacy-and-fin-tech-use/>.

Yorio, P. L. and F. Ye (2012), "A meta-analysis on the effects of service-learning on the social, personal, and cognitive outcomes of learning", *Academy of Management Learning & Education*, Vol. 11, No. 1, p. 9-27.

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