



Premature schoolification during early childhood hinders later academic success and productivity

Jane Murray

To cite this article: Jane Murray (2025) Premature schoolification during early childhood hinders later academic success and productivity, *International Journal of Early Years Education*, 33:1, 1-7, DOI: [10.1080/09669760.2025.2481759](https://doi.org/10.1080/09669760.2025.2481759)

To link to this article: <https://doi.org/10.1080/09669760.2025.2481759>



Published online: 24 Mar 2025.



Submit your article to this journal [↗](#)



Article views: 1642



View related articles [↗](#)



View Crossmark data [↗](#)

Premature schoolification during early childhood hinders later academic success and productivity

Introduction

As part of my day job as Professor of Education, recently I was privileged to visit children aged 2–4 years at an early childhood setting in England. Everywhere in the setting, the children were wholly absorbed in pursuits they had chosen. From animal role play to climbing, mud kitchen baking to painting, constructing castles to enjoying books, malleable play to wheeled toys, and much, much more, each child was ‘so involved in an activity that nothing else seemed to matter’: they were in a state of ‘flow’ (Csikszentmihalyi 1990, 4). That ‘optimal experience’ of deep involvement demands a person’s full concentration whilst also making them creative and productive (Csikszentmihalyi 1990, 3). Moreover, Csikszentmihalyi (1990, 4) observed that experiencing flow invokes ‘a sense of participation in determining the content of life – that comes as close to what is usually meant by happiness as anything else we can conceivably imagine’. The children were responding to provocations that their educators had provided with knowledge, skill and sensitivity to support the children’s learning. Yet the children were motivated to become deeply involved by the reward each activity afforded in and of itself, not by the learning it afforded, worthy though the learning goal may have been. That said, the children’s engagements were evidently purposeful, with many children taking the activities in new directions that they created and produced for themselves, revealing mastery and autonomy. Mastery, autonomy and purpose are recognised components of intrinsic motivation which is positively associated with growth and productivity (Becchetti, Castriota, and Tortia 2013; Pink 2009; Ryan and Deci 2018).

From motivation to disaffection

However, I am sorry to report that the optimism I felt in the company of the children dissipated quickly after I left the setting. As I drove back to campus, I was listening to a radio programme that discussed a report from the International Monetary Fund (2024) (IMF) confirming the global decline in economic productivity – ‘the amount of value created for each hour that is worked in a society’ (McKinsey 2024). This decline has been prolonged and it is problematic because buoyant productivity secures taxes for public sector services and promotes a good standard of living and investments in developments for the future (Li and Noureldin 2024). In turn, lack of investment and poor educational outcomes are causes of weak productivity (Dieppe and Kose 2020). In the 2020s, workers across the World are less productive than previous generations, and in particular, young people are displaying unprecedented levels of disaffection in relation to work (WorkL 2024). While their disaffection may derive from a lack of opportunity for self-actualisation in the workplace, increasingly due to disparities in the distribution of power and wealth (Anderson 2023; Hall, Horwitz, and Tian 2023; Iraki 2024; O’Neill 2024), a lacklustre work ethic is evident

in some cases (Beaton 2024; Ito 2025; Milbank 2025). The disjuncture between young people's disaffection regarding work and the powerful intrinsic motivation I saw in children at the early childhood setting led me to question what could be happening in the lives of children and young people during the time from their earliest years until they enter the workplace.

Global preparation and progress

At a global level, the United Nations (UN) (2015) Sustainable Development Goal (SDG) 4 is ambitious, with the aim of 'Ensuring inclusive and equitable quality education and promote lifelong learning opportunities for all' by 2030 (Reimers 2024). However, aspects of SDG4 draw attention away from education as a path to individuals achieving personal liberation and eudaimonia (Csikszentmihalyi, 1990; Freire 1998; Murray 2023; Noddings 2005) towards a more utilitarian, neoliberal positioning of education as investment return (Jones and Ball 2024; Psacharopoulos and Patrinos 2018). Within SDG4, the only prescribed curriculum areas besides 'sustainable development' are 'literacy and numeracy' which are employability imperatives (Lane and Conlon 2016). Other curriculum areas are sidelined, though they may give children and young people who do not excel in the required areas opportunities to flourish. Target 4.1 to 'ensure that all girls and boys complete free, equitable and quality primary and secondary education' is justified by the qualification that the education provided must 'lead to relevant and effective learning outcomes', while the rationale for SDG Target 4.2 to 'ensure that all girls and boys have access to quality early childhood development, care and pre-primary education' is 'so that they are ready for primary education'. Yet at the time of writing, it is unlikely that SDG4 (UN, 2015) will be realised by 2030 (Klees 2024; United Nations (UN) 2024). Globally, 300 million children will still lack basic literacy and numeracy skills by 2030, with recent declines in these skills in many countries, and while the primary school completion rate increased from 85% to 88% between 2015 and 2023, the rate of children attending pre-primary education for a year remained the same at around 70% between 2015 and 2022, with the poorest children least likely to attend (UN 2024). Under-investment in early childhood education is a major reason for the lack of progress with SDG Target 4.2 (UN 2024), which will result in poorer education outcomes than would have been the case had it been on track. SDG Targets 4.1 and 4.2 predicate the rationale for Education on investment return and by doing so devalue the potential for education to catalyse individuals' emancipation or flourishing. Yet progress towards achieving SDG Targets 4.1 and 4.2 is characterised by a lack of investment and poor educational outcomes, which are also hindrances to productivity (Dieppe and Kose 2020), suggesting that weak global productivity may persist until 2030 and for some time beyond.

The influence of big data

During the first decades of the C21st, school systems across the World have become increasingly '... gated, regulated and governed as new non-state actors continue to penetrate, recalibrate and distort the educational policy environment' (Jules 2017, xv). Comparative, competitive international league tables are another characteristic of the utilitarian, neoliberal positioning of education as investment return, forming one arm of the powerful global Education industry that influences national education policies, another being curriculum development (Jones and Ball 2024; Psacharopoulos and Patrinos 2018; Steiner-Khamsi and Waldow 2018). Country governments ignore high-quality empirical educational research in favour of aligning their national policies and school systems to pursue high rankings in the big data that Progress in International Reading Literacy Study (PIRLS), the Program

for International Student Assessment (PISA) and Trends in International Mathematics and Science Study (TIMSS) produce (Li, Xue, and Guo 2025; Lundahl and Serder 2020). Increasing numbers of countries have been taking part in these international tests; for example, whereas 32 countries and economies participated in OECD's PISA in 2000, 81 did so in 2022 (OECD 2025a). PISA tests reading, mathematics, science, financial literacy, problem-solving, global competency and creative thinking (Zhao 2020). One stated purpose of PISA is to 'leverage peer pressure' between school systems (Schleicher 2023), and OECD (2017) itself acknowledges that PISA has a negative effect on most students' wellbeing, highlighting that 'Test-related anxiety is widespread: 59% of students worry about taking a test, and 66% worry about getting poor grades'. While there is some evidence to suggest that test anxiety can leverage learners' motivation and effort, resulting in enhanced academic outcomes (Jerrim 2021), fear of failure and failure in high-stakes tests are strongly associated with mental health problems (Beck et al. 2024, 260; Cunningham 2021; Howard 2020). When academic pressures cause anxiety, this 'can elicit a "threat response"' (Howard 2020, 4), typically presenting as 'flight or fight' (Cannon 1915). For example, in England, where the school system is characterised by high-stakes testing and high performance in global academic league tables (Ball 2018; Farquharson et al. 2024), the association between high-stakes testing and the threat response may explain why around one in five children and young people are persistently absent from school in England (Long and Roberts 2025): young people remove themselves from the site of the threat. Internationally, mental health issues present in one in five children and young people and although different factors may cause these, academic pressures are one cause (United for Global Mental Health 2025; World Health Organisation 2024a). Yet paradoxically, given academic pressure causes mental health problems, mental health problems impair academic outcomes for the short term as well as productivity into adulthood (United for Global Mental Health 2025; World Health Organisation (WHO) 2024b).

The intrusion of schoolification on young children's lives

More recently, in response to neoliberal imperatives requiring children to be prepared for globally competitive school systems and workplaces requiring increasingly skilled workers who will accept poor reward (Anderson 2023; UN, 2015, Target 4.2; World Economic Forum 2025), the pressure for academic attainment has turned to younger children. This shift has been exemplified by the introduction of the *International Early Learning and Child Well-Being Study* (IELS) or 'Baby PISA' in 2016, testing literacy and numeracy, self-regulation and socio-emotional skills in five-year-old children who complete the assessment on tablets (OECD 2025b). IELS has been criticised for different reasons including its poor rationale, weak data, lack of consideration for children's situated socio-cultural contexts, and for OECD's absence of engagement or consultation with others working in the field of early childhood education (Moss and Urban 2024). Zhao (2020) observes that 'The Baby PISA is likely to wield as much influence as PISA has over the world of early childhood education'. Indeed, Finland trialled an extension of its one-year pre-primary education programme for 6-year-olds to include 5-year-olds between 2021 and 2024 (Muhonen et al. 2024). Teachers found that 5-year-olds in the trial experienced more planned and goal-focused activities and more emphasis on mathematics and language than their peers in traditional Finnish early childhood provision (Muhonen et al. 2024). Equally, in England which is the only country to have engaged in both IELS cycles to date, highly contested testing of 4–5-year-old children began in 2018 (Meechan et al. 2024) and the framework that is required for use with children aged 0–5 years now gives greater focus to aspects

assessed in IELS, especially literacy, numeracy and self-regulation, and to adults leading learning (DfE 2024; OECD 2025b). These national responses to IELS amount to schoolification – the “academisation” of early learning environments’ – for 4–5-year-olds (Brogaard Clausen 2015). This is disappointing, not only because children aged 4–5 years fit comfortably within the boundaries of the international definition of ‘early childhood’ that is ‘the period below the age of 8 years’ (OHCHR 2006, 2), but also because evidence of the negative effects of premature schoolification of the early childhood phase have been documented for decades. Greenfield (1966, 240) found that school quickly ‘suppresses’ young children’s reasoning, while Flückiger, Dunn, and Stinson (2018, 104) report that young children lose their ‘sense of agency and self-efficacy’ as learners when they move into formal schooling, only to discover that learning now ‘requires them to be compliant and passive’. I have observed previously that such practices are anti-democratic and deny children their right to freedom of expression (Brooks and Murray 2018; OHCHR 1989).

Summary

To summarise, premature schoolification shifts focus away from young children’s optimal experiences (Csikszentmihalyi 1990). Optimal experiences in early childhood education are attuned to young children’s interests and needs, are purposeful for children and leverage children’s participation, happiness, mastery, autonomy and intrinsic motivation so they are positively associated with growth and productivity (Becchetti, Castriota, and Tortia 2013; Csikszentmihalyi 1990; Pink 2009; Ryan and Deci 2018). Conversely, the academic pressure that premature schoolification imposes on young children can lead to mental health problems, paradoxically risking negative effects on academic outcomes and productivity (United for Global Mental Health 2025; World Health Organisation 2024b).

Introduction to articles this issue

The issue features articles that focus on two main topics: eight articles feature research concerning aspects of early childhood education provision, whilst five articles highlight research about issues that arose in early childhood during the COVID pandemic. In the first two articles, Olivera Kamenarac is ‘Problematising Constructions of “Expert Teachers” and “Vulnerable Children” in New Zealand Early Childhood’, then Natalia Kucirkova, Lucy Rodriguez Leon and Neema Chinula are ‘Rethinking Agency in Literacies: Malawian children’s and teachers’ perspectives’. Next, Tanya Richardson from the United Kingdom asks: ‘What constitutes a high-quality environment for speech and language development?’ Krystyna Nowak-Fabrykowski offers ‘A Comparative Analysis of School Culture in the US and Poland – Advancing Humanism by Placing Love, Freedom and Care’, then New Zealand team Isabelle Swearingen, Samantha Moros, Elizabeth Schaughency and Elaine Reese share their research in the article ‘Quality of Educator-Toddler Conversations Varies Across Activity Settings in Centre-Based ECEC’. Catarina Grande, Joana Vilar and Vera Coelho report on research from Portugal in ‘The New (Ab)Normal: The Participation of Children attending preschool and elementary school during confinement’ and an article from a cross-national team from Iran and Australia – Mohammed Reza Keramati, Robyn M. Gillies, Fahimeh Ansarizadeh and Ali Keramati – highlights ‘Challenges and solutions of implementing cooperative learning in classroom environments: A case of a primary school teachers’ lived experiences’. ‘Toddlers as “new-comers:” The social lives of very young children during transition into an established group’ is the title of an article authored by Peiling Ruan and Anita Mortlock, followed by an article from Aysun Gündoğan who asks ‘Do young children imagine different

things as their experiences expand? A longitudinal study'. The issue concludes with four papers focused on research elucidating issues that arose in early childhood during the COVID pandemic. First, Or Perah Midbar Alter shares her study of 'Children's Perceptions of their Parent's Behavior during COVID-19 lockdowns', then an article by Wendy Boyd, Md Shahidul Islam and Arifur Rahman highlights 'Lessons learned during online education experiences of kindergarten during the COVID-19 pandemic in Bangladesh'. Verena Scharnagl and Wilfried Smith then report on their research focused on 'Parental support of emergent literacy in the final preschool year in Austria during COVID-19-induced lockdowns', and the title of our final article in this issue is 'Playing through the pandemic and beyond: Exploring the ongoing impact of COVID-19 on play-based learning in kindergarten classrooms', authored by Angela Pyle, Ruxandra Filip, Allison McCann, Nicole Larsen and Emily Cowan.

References

- Anderson, E. 2023. *Hijacked: How Neoliberalism Turned the Work Ethic Against Workers and How Workers Can Take It Back*. Cambridge: Cambridge University Press.
- Ball, S. J. 2018. "The Tragedy of State Education in England: Reluctance, Compromise and Muddle—A System in Disarray." *Journal of the British Academy* 6:207–238. <https://doi.org/10.5871/jba/006.207>.
- Beaton, K. 2024. "The Age of Discontent: Gen Z Is Frustrated at Work." *The Food Institute*, June 3. <https://foodinstitute.com/focus/the-age-of-discontent-gen-z-is-frustrated-at-work/>.
- Becchetti, L., S. Castriota, and E. C. Tortia. 2013. "Productivity, Wages and Intrinsic Motivations." *Small Business Economics* 41 (2): 379–399. <https://doi.org/10.1007/s11187-012-9431-2>
- Beck, K. C., H. L. Røhr, B. A. Reme, and M. Flatø. 2024. "Distressing Testing: A Propensity Score Analysis of High-Stakes Exam Failure and Mental Health." *Child Development* 95 (1): 242–260. <https://doi.org/10.1111/cdev.13985>.
- Brogaard Clausen, S. 2015. "Schoolification or Early Years Democracy? A Cross-Curricular Perspective from Denmark and England." *Contemporary Issues in Early Childhood* 16 (4): 355–373. <https://doi.org/10.1177/1463949115616327>.
- Brooks, E., and J. Murray. 2018. "Ready, Steady, Learn: School Readiness and Children's Voices in English Early Childhood Settings." *Education* 3-13 46 (2): 143–156. <https://doi.org/10.1080/03004279.2016.1204335>.
- Cannon, W. B. 1915. *Bodily Changes in Pain, Hunger, Fear and Rage: An Account of Recent Researches into the Function of Emotional Excitement*. New York: D Appleton.
- Csikszentmihalyi, M. 1990. *Flow: The Psychology of Optimal Experience*. New York: Harper & Row.
- Cunningham, V. M. 2021. "The Impact of High-Stakes Testing: The Experiences of Educators, Students, and Parents in Trinidad and Tobago." EdD Thesis, University of Sheffield.
- Department for Education (DfE). 2024. *The Statutory Framework for the Early Years Foundation Stage*. London: DfE. https://assets.publishing.service.gov.uk/media/670fa42a30536cb92748328f/EYFS_statutory_framework_for_group_and_school_-_based_providers.pdf.
- Dieppe, A., and A. Kose. 2020. *The Global Productivity Slump: What Policies to Rekindle?* Washington, DC: Brookings Institution. <https://www.brookings.edu/articles/the-global-productivity-slump-what-policies-to-rekindle/>.
- Farquharson, C., A. McKendrick, N. Ridpath, and I. Tahir. 2024. *The State of Education: What Awaits the Next Government?* London: Institute for Fiscal Studies.
- Flückiger, B., J. Dunn, and M. Stinson. 2018. "What Supports and Limits Learning in the Early Years? Listening to the Voices of 200 Children." *Australian Journal of Education* 62 (2): 94–107. <https://doi.org/10.1177/0004944118779467>.
- Freire, P. 1998. *Pedagogy of Freedom: Ethics, Democracy and Civic Courage*. Washington, DC: Rowman & Littlefield.
- Greenfield, P. 1966. "On Culture and Conservation." In *In Studies in Cognitive Growth*, edited by J. S. Bruner, R. R. Olver, and P. M. Greenfield, 225–256. New York: John Wiley and Sons.
- Hall, C., J. Horwitz, and Y. L. Tian. 2023. "China's Pessimistic Gen Z Poses Challenge for Xi Post-COVID." *Reuters*, January 18. <https://www.reuters.com/world/china/chinas-pessimistic-gen-z-poses-challenge-xi-post-covid-2023-01-18/>.
- Howard, E. 2020. *A Review of the Literature Concerning Anxiety for Educational Assessments*. Coventry: Ofqual. https://assets.publishing.service.gov.uk/media/5e45825340fb677bf6eb3ea/A_review_of_the_literature_concerning_anxiety_for_educational_assessment.pdf.

- International Monetary Fund. 2024. *World Economic Outlook. Steady but Slow: Resilience amid Divergence*. Washington, DC: International Monetary Fund.
- Iraki, X. N. 2024. "Kenya Unrest: The Deep Economic Roots That Brought Gen-Z onto the Streets." *The Conversation*, June 28. <https://theconversation.com/kenya-unrest-the-deep-economic-roots-that-brought-gen-z-onto-the-streets-233463>.
- Ito, A. 2025. "Gen Z Is More Fed up with Work than Ever." *Business Insider*, January 27. https://www.businessinsider.com/gen-z-employee-engagement-workplace-morale-careers-boomers-gen-x-2025-1?utm_source=linkedin&utm_medium=social&utm_campaign=business-author-post.
- Jerrim, J. 2021. "National Tests and the Wellbeing of Primary School Pupils: New Evidence from the UK." *Assessment in Education: Principles, Policy & Practice* 28 (5-6): 507–544. <https://doi.org/10.1080/0969594X.2021.1929829>.
- Jones, B. M. A., and S. Ball, eds. 2024. *Neoliberalism and Education*. Abingdon: Routledge.
- Jules, T. D. 2017. "Conceptualizing Education Governance at the Genesis of the Fourth Industrial Revolution." In *The Global Educational Policy Environment in the Fourth Industrial Revolution*, edited by T. D. Jules, xv–xl. Bingley: Emerald House.
- Klees, S. J. 2024. "Why SDG 4 and the Other SDGs Are Failing and What Needs to Be Done." *International Journal of Educational Development* 104:102946. <https://doi.org/10.1016/j.ijedudev.2023.102946>.
- Lane, M., and G. Conlon. 2016. *The Impact of Literacy, Numeracy and Computer Skills on Earnings and Employment Outcomes*. OECD Education Working Papers No. 129. Paris: OECD. <https://doi.org/10.1787/5jm2cv4t4gzs-en>
- Li, N., and D. Noureldin. 2024. "Eliminating the Productivity Drag." *Finance and Development Magazine*, September, pp. 28–31. <https://www.imf.org/en/Publications/fandd/issues/2024/09/Eliminating-the-Productivity-Drag-Li-Noureldin>.
- Li, J., E. Xue, and S. Guo. 2025. "The Effects of PISA on Global Basic Education Reform: A Systematic Literature Review." *Humanities and Social Sciences Communications* 12:106. <https://doi.org/10.1057/s41599-025-04403-z>.
- Long, R., and N. Roberts. 2025. *School Attendance in England: House of Commons Research Briefing 09710, 14th January 2025*. London: House of Commons Library. <https://researchbriefings.files.parliament.uk/documents/CBP-9710/CBP-9710.pdf>.
- Lundahl, C., and M. Serder. 2020. "Is PISA More Important to School Reforms than Educational Research? The Selective Use of Authoritative References in Media and in Parliamentary Debates." *Nordic Journal of Studies in Educational Policy* 6 (3): 193–206. <https://doi.org/10.1080/20020317.2020.1831306>.
- McKinsey & Company. 2024. "What is Productivity?" May 17. <https://www.mckinsey.com/featured-insights/mckinsey-explainers/what-is-productivity#/>.
- Meechan, D., Z. Williams-Brown, T. Whatmore, and S. Halfhead. 2024. "Once, Twice, Three Times a Failure: Time to Permanently Scrap Statutory Reception Baseline Assessment in England?" *Education 3-13* 52 (8): 1193–1206. <https://doi.org/10.1080/03004279.2022.2143240>.
- Milbank, S. 2025. "Don't Blame the Internet for Youthful Disaffection." *The Critic*, February 1. <https://thecritic.co.uk/dont-blame-the-internet-for-youthful-disaffection/>.
- Moss, P., and M. Urban. 2024. "The Organisation for Economic Co-operation and Development's International Early Learning and Child Wellbeing Study: Here We Go Again!" *Contemporary Issues in Early Childhood* 25 (3): 371–375. <https://doi.org/10.1177/14639491241266320>.
- Muhonen, H., L. Saranko, M. Sulkanen, M. Alasuutari, and M.-K. Lerkkanen. 2024. "Kaksivuotisen esiopetuksen kokeilun opettajien käsityksiä viisivuotiaiden lasten esiopetuksen ja varhaiskasvatuksen eroista." *Journal of Early Childhood Education Research* 13 (2): 215–246. <https://doi.org/10.58955/jecer.131857>.
- Murray, J. 2023. "What Is the Purpose of Education? A Context for Early Childhood Education." *International Journal of Early Years Education* 31 (3): 571–578. <https://doi.org/10.1080/09669760.2023.2238399>.
- Noddings, N. 2005. *Happiness and Education*. Cambridge: Cambridge University Press.
- OECD. 2017. "Is Too Much Testing Bad for Student Performance and Well-Being?" PISA in Focus #79. https://www.oecd.org/content/dam/oecd/en/publications/reports/2017/12/is-too-much-testing-bad-for-student-performance-and-well-being_139f29cd/2109a667-en.pdf.
- OECD. 2025a. "Program for International Student Assessment (PISA)." <https://www.oecd.org/en/about/programmes/pisa.html>.
- OECD. 2025b. "International Early Learning and Child Well-Being Study (IELS)." <https://www.oecd.org/en/about/projects/international-early-learning-and-child-well-being-study.html>.
- OHCHR. 1989. "UN Convention on the Rights of the Child." <https://www.ohchr.org/sites/default/files/crc.pdf>.
- OHCHR. 2006. "UNCRC. General Comment No.7 (2005). Implementing Child Rights in Early Childhood. CRC/C/GC/7/Rev.1. <https://www.refworld.org/legal/general/crc/2006/en/40994>.

- O'Neill, K. 2024. "Young Workers Exhausted: Burnout Rife Among Gen Z, Millennials." *HR Leader*, November 5. <https://www.hrleader.com.au/wellbeing/26149-young-workers-exhausted-burnout-rife-amongst-gen-z-millennials>.
- Pink, D. 2009. *Drive*. New York: Riverhead Hardcover.
- Psacharopoulos, G., and H. A. Patrinos. 2018. *Returns to Investment in Education: A Decennial Review of the Global Literature*. Policy Research Working Paper No. 8402. Washington, DC: World Bank. <http://hdl.handle.net/10986/29672>.
- Reimers, F. M. 2024. "The Sustainable Development Goals and Education, Achievements and Opportunities." *International Journal of Educational Development* 104:102965. <https://doi.org/10.1016/j.ijedudev.2023.102965>.
- Ryan, R. M., and E. L. Deci. 2018. *Self-Determination Theory: Basic Psychological Needs in Motivation*. New York: Guilford.
- Schleicher, A. 2023. "Programme for International Student Assessment PISA 2022 Insights and Interpretations." https://www.oecd.org/content/dam/oecd/en/publications/support-materials/2023/12/pisa-2022-results-volume-i_76772a36/PISA%202022%20Insights%20and%20Interpretations.pdf.
- Steiner-Khamsi, G., and F. Waldow. 2018. "PISA for Scandalisation, PISA for Projection: The Use of International Large-Scale Assessments in Education Policy Making – An Introduction." *Globalisation, Societies and Education* 16 (5): 557–565. <https://doi.org/10.1080/14767724.2018.1531234>.
- United for Global Mental Health. 2025. "Child and Youth: The Challenge." <https://unitedgmh.org/child-and-youth/>.
- United Nations (UN). 2015. "Transforming Our World: The 2030 Agenda for Sustainable Development." <https://sdgs.un.org/sites/default/files/publications/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>.
- United Nations (UN). 2024. *The Sustainable Development Goals Report 2024*. Paris: United Nations.
- WorkL. 2024. "Global Workplace Report 2024." <https://www.flipsnack.com/workl/global-workplace-report-2024/full-view.html>.
- World Economic Forum. 2025. *The Future of Jobs Report 2025*. Geneva: World Economic Forum. https://reports.weforum.org/docs/WEF_Future_of_Jobs_Report_2025.pdf.
- World Health Organisation. 2024a. "Mental Health of Adolescents." <https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health>.
- World Health Organisation. 2024b. "Adolescent Mental Health Is a Growing Concern Across the WHO European Region." <https://iris.who.int/bitstream/handle/10665/379214/WHO-EURO-2024-10632-50404-76093-eng.pdf?sequence=4>.
- Zhao, Y. 2020. "Two Decades of Havoc: A Synthesis of Criticism Against PISA." *Journal of Educational Change* 21 (2): 245–266. <https://doi.org/10.1007/s10833-019-09367-x>.

Jane Murray

Centre for Education and Research, University of Northampton, Northampton, UK

 jane.murray@northampton.ac.uk  <http://orcid.org/0000-0001-7000-0901>