### Shifting Landscapes in Early Childhood Education

### Jane Murray

#### Introduction:

Change occurs in young children's lives as a matter of course. Healthy children grow and develop (Berk, 2012). They make multiple horizontal transitions daily, for example moving from mealtime to play, and navigate major vertical transitions, such as starting school (Kagan and Neuman, 1998). Children experience changes to their routines at home when their parents make adaptations to working practices (Kim, 2020; Snyder, Rech, Masuda and Dinkel, 2021), and they experience new approaches to curriculum and pedagogy at first hand in their settings (Manning, Thirumurthy and Field, 2012; Murray, 2017; Yang, Xu, Liu and Li, 2022). When educators leave early childhood education (ECE) settings, it is children who must adjust to new educators. Whilst ECE educators may move to new settings for their professional development in strong workforce systems, in weaker systems educators' dissatisfaction results in the ECE workforce attrition that results in change for children (Nutbrown, 2021). War wreaks havoc in children's lives, often displacing them from their homes and the carers and educators they know (Korp and Stretmo, 2020). In recent decades, the pace and variety of change in young children's environments, including their experiences of ECE, have increased exponentially, affecting young children's lives in many different ways (Clark, 2022). While young children appreciate novel experiences (Murray, 2022), they also thrive on continuity and routine (Clark, 2022; Zigler and Kagan, 1982); balance may therefore be important. In this short critique of some of the shifting landscapes in ECE, I discuss ways the field is transforming at the macro-policy level, before considering some of the changes experienced by children and adults who care for them. The focus of this editorial on 'Shifting Landscapes in Early Childhood Education' was inspired by the articles included in this issue of International Journal of Early Years Education. Each addresses one of four shifting landscapes in the ECE field: transformations in early childhood policy and provision, transitioning between locations in early childhood, young children's encounters with illness or death, and innovations with digital technologies in the early years.

## Transformations in early childhood policy and provision:

A critical mass of research revealing the powerful effects of early experiences on human lifetime outcomes has led to policymakers across the world accepting the robust evidence and beginning to respond (Shonkoff and Richter, 2013). Consequently, we have witnessed an exponential expansion of 'policyfication' for early childhood education (for example, Alexiadou, Hjelmér, Laiho and Pihlaja, 2022; Himmelweit and Lee, 2022). These policies are evident in the upward shift in global ECE enrolment trends for pre-primary education (3 years to starting school) from 33% in 2000 to 61% in 2022 (UNICEF, 2022a). Nevertheless, this trend is unequal, with the percentage of children enrolled in pre-primary education far lower in poorer countries than high-income states (20.2%/85% in 2020) (UNESCO, 2022).

Arguably, the United Nations (UN) (2015) Sustainable Development Goal, Target 4.2 has the potential to be among the most influential of ECE policies, given its status as the first global target for early childhood development. States parties are charged with securing 'quality early childhood development, care and pre-primary education' for all children by 2030 (UN, 2015, 4.2). 'Quality' is defined in UN indicators for this target:

'4.2.1: Proportion of children aged 24–59 months who are developmentally on track in health, learning and psychosocial well-being, by sex

4.2.2: Participation rate in organized learning (one year before the official primary entry age), by sex' (United Nations, 2022a: 5/23)

According to this definition, 'Quality early childhood development, care and pre-primary education' is also conceptualised by the UNICEF (2022b). For example, for Indicator 4.2.1, UNICEF (2022b) conceptualises 'health' as 'gross motor development, fine motor development and self-care', 'learning' as 'expressive language, literacy, numeracy, pre-writing, and executive functioning', and 'psychosocial well-being' as 'emotional skills, social skills, internalizing behavior, and externalizing behavior'. The Early Childhood Development Index 2030 (ECDI2030) (UNICEF, 2021) is the UN's recommended measure for determining this conceptualisation of quality. However, in common with the *International Early Learning and Child Well-Being Study* (IELS) (Organisation for Economic Co-operation and Development (OECD) 2023), ECDI2030 (UNICEF, 2021) decontextualises what children know and can do and assumes a reductionist orientation by limiting recognition of children's rich capacities to a narrow homogeneous rubric positioned in developmental psychology (Moss and Urban, 2020). What is more, these restrictive measurement tools fail to capture the multiple complex transformations reified by authentic learning (Donovan, Bransford and Pellegrino, 1999; Mezirow, 2000).

Putting quality measurement to one side, given what is known about the importance of early experiences (Centre on the Developing Child, 2023), the UN's (2015, 4.2) ambition to 'ensure that all girls and boys have access to quality early childhood development, care and pre-primary education' by 2030 appears positive, prima facie. However, the UN rationale for that provision is included in the SDG target: 'so that (children) are ready for primary school' (UN, 2015, 4.2). The focus on preparation as the purpose for ECE diminishes each child's inestimable value to that of a unit of human capital (Clark, 2022): in this paradigm, a child's education is an investment to be returned when they join the future workforce. Inherent within the paradigm is the assumption that the young child is deficient, so must be shaped to conform to a narrow template that fits them for compulsory education that is itself moulded to a specific form: the 'banking' model for which 'knowledge is a gift bestowed by those who consider themselves knowledgeable upon those whom they consider to know nothing' (Freire, 1970: 53; Moss, 2013). Herein lies danger. The imposition of the time-bound imperative within SDG 4.2 risks denying each young child their individuality. It disrupts children's naturally heterogeneous developmental pathways. It pressurises early childhood educators to move away from rich, holistic social pedagogy to focus on externally imposed taught content drawn that has reproduced inequalities among previous generations by privileging dominant classes and cultures. However, as adults, today's young children will inhabit a future world that is not known to us today (Wiliam, 2011). Therefore, should not macro-level aspirations for ECE centre on facilitating early childhood educators to cherish and nurture each unique child within their own context, in terms of what they know to be important for that child now (Arndt, Smith, Urban, Ellegaard, Swadener, and Murray, 2021)?

# Transitioning between locations in early childhood:

As I have indicated, one effect of framing children's readiness for primary education as the global policy justification for investment in universal quality early childhood provision (UN, 2015, 4.2) is that it reduces the work of early childhood educators to schoolification practitioners (Dyer, 2016; Moss, 2017). Another potentially damaging effect is that it disincentivises primary schools from readying their environments to accommodate children starting school (UNICEF, 2012:2). Nevertheless, despite global policy (UN, 2015, 4.2), many early childhood educators hold on to what they know to be appropriate for young children, so early childhood settings continue to cleave to social pedagogy (Vandenbroeck, 2021). However, most primary schools tend to align with the transmissive banking model (Freire, 1970; Moss, 2013). These two approaches reveal divergent conceptualisations of the child

and childhood adopted by each phase, such that many children find school culturally and organisationally different from their early childhood experiences (Moss, 2013). Yet all too often, young children must navigate their own way to make sense of this discontinuity. Consequently, the experience of starting school is difficult for many children (Kaplan, Mart and Diken, 2022).

For decades, educators have recognised that children's vertical transition into school can present challenges, so have adopted many varied strategies designed to ease the move (Early, Pianta, Taylor and Cox, 2001; Kagan and Neuman, 1998). These strategies include schools' engagements with whole new classes of children and their families, for example meetings at the new school, or with individual children and their families, such as a home visit. Some take place before children start school, some once children are in school, and some involve schools working with ECEC settings or with their wider communities (Early et al., 2001). Yet whilst transfer strategies may make the move to school easier for some children, discontinuities children encounter as their educational provision shifts from home or an early childhood setting to school can present problems (Andrews et al., 2017; Pianta, Cox and Snow, 2007). This is significant because starting school is a major event for young children that can be powerful in determining long-term outcomes (Andrews, Robinson and Hutchinson, 2017).

### Young children's encounters with illness or death:

Whereas starting school is a change in the lives of most young children, relatively few young children encounter serious illness and death in those close to them. The experience of a close relative or friend becoming seriously ill or dying is a traumatic life-changing event, not least for a child (Burrell, Mehlum and Qin, 2020; Faugli, Kufas, Haukland, Kallander, Ruud, and Weimand. 2021). Before the COVID-19 pandemic, around 5% of children in the United States and 15% of children in Africa experienced the death of at least one parent (Clabburn, Knighting, Jack, and O'Brien, 2019; Deininger, Garcia and Subbarao, 2003). However, the pandemic caused many more millions of people across the World to become seriously ill, and over 6 million deaths globally at the time of writing (January 2023) (World Health Organisation, 2023). Consequently, a much higher number of children experienced illness or bereavement at first hand – including losing close family members - during the pandemic than at other times (Harrop, Goss, Longo, Seddon, Torrens-Burton, Sutton, Farnell, Penny, Nelson, Byrne and Selman, 2022). Children's experiences of illness and death during COVID-19 have constituted further shifts in the ECE landscape, reflected in submissions to International Journal of Early Years Education. As I have observed previously (Murray, 2021), most children's lives were transformed and inequalities increased during COVID-19. Children were not able to go out or attend formal ECE provision, and they lost play opportunities and established routines. Instead, young children spent their days at home, experiencing social isolation and parents' teaching. The full effects of these changes on children's lives remain a shifting landscape: only time will reveal them fully. However, we know that children who experience the death of a primary carer are likely to experience adverse effects, including mental health, psycho-social and academic difficulties, and these may affect lifetime outcomes (Harrop et al., 2022; Larson, Guldberg and Kring, 2023). Such difficulties may be alleviated if children have opportunities for open communication with adults they know well, and if they can access specialist support, including therapy, through their educational settings, or bereavement organisations (Haber, Kumar, Puttre, Dashoush, and Corriveau, 2022; Harrop et al., 2022; Larson et al., 2023).

### Innovations with digital technologies in the early years:

The final shifting landscape in early childhood education addressed in this paper concerns innovations in digital technologies experienced by young children. Digital technologies are at the heart of a social and educational revolution that may still have some way to go at the time

of writing (Kumpulainen, Kajamaa, Erstad, Mäkitalo, Drotner and Jakobsdóttir, 2022). In 2011, Sigman highlighted advantages and disadvantages of digital technologies in early childhood, and the issue remains contested (Mertala and Koivula, 2020). Among the arguments, young children are positioned variably as unempowered, as participants, and as agentic in their engagements with digital technologies (Hooft Graafland, 2018; Mertala and Koivula, 2020). In a related debate, Prensky (2001) adopted the term 'digital natives' to describe children born in the digital age as empowered in their uses of digital technologies, contrasting them with ther 'digital immigrant' educators, a polarisation that has since been rejected as simplistic (Benini and Murray, 2013). It is, however, indisputable that young children's access to devices and the internet is unequal, with children in lower-income countries tending to be disadvantaged (Ayllón, Holmarsdottir, and Lado, 2023). Alongside these and other issues, young children's educators and parents juxtapose considerations of online risks for young children with potential creative, social, linguistic and other benefits they may enjoy from digital engagement (Burns and Gottschalk, 2019).

Nevertheless, whether at home or in their ECE settings, most young children regularly access one or more technological devices (Burns and Gottschalk, 2019) and numerous studies support these engagements. Davidson, Danby, Ekberg, and Thorpe (2021) found that when parents spend time interacting with young children at home to support them to read aloud from a screen device, the device becomes an important information source for the children. Arnott and Yelland (2020: 124) advocate for the inclusion of 'new and continually evolving technologies as artefacts that inhabit the contemporary child's lifeworld' in early childhood pedagogical planning. Equally, the adoption of the Internet of Toys as part of early childhood pedagogy is also recommended as a beneficial 'platform for children's rich symbiotic explorations, creativity, collaboration and problem solving' (Kewalramani, Palaiologou, Arnott and Dardanou, 2020). Increasingly, early childhood educators feel pressure to use digital technologies - and justify their uses - in settings (Daniels, Bower, Burnett, Escott, Hatton, Ehiyazaryan-White and Monkhouse 2020). Teachers' beliefs about digital technologies are therefore a consideration in terms of whether and how they include them in their settings: Dong and Mertala (2021) highlight the importance of socio-cultural contexts in shaping new teachers' beliefs about digital technologies in early childhood. Mantilla and Edwards (2019) provide 17 guidance points related to healthy practices, relationships, pedagogy and digital play to help adults support young children aged 0-8 years engaging with digital technologies. Indeed, as we look to the future of digital technologies in early childhood, further exponential change is on the horizon. For example, Mertala (2020) highlights children's increasing engagements with the Internet of Things and ubiquitous computing in their play with digitally enabled toys, while Yang (2022) proposes that early childhood programmes should now include artificial intelligence (AI) literacy education.

Overview of articles in this issue of International Journal of Early Years Education: The four shifting landscapes in early childhood that I have discussed above are examples of change experienced by many young children worldwide in the C21st, selected on the basis of articles submitted recently to International Journal of Early Years Education. They are developed in detail in the four collections of articles that make up this issue: transformations in early childhood policy and provision, transitioning between locations in early childhood, young children's encounters with illness or death, and innovations with digital technologies in the early years. The articles in each collection are introduced below.

The first collection features six articles focused on transformations in early childhood policy and provision. 'Evaluating the impact of early childhood education on child development in Lao PDR' by Yusuke Kamiye and Marika Nomura opens this collection, followed by 'Supporting Practice Change in Early Years Classrooms: Australia and Turkey as Case Studies' by Andrea Nolan, Louise Paatsch, Selda Aras and Aybuke Tiryake. Next come

articles by Angela Choi Fung Tam - 'Transforming preschool language teachers' beliefs of implementing play-based learning in a professional learning community' – and Liang Li and Marilyn Fleer – 'Children's perspectives and experiences in rural Chinese Kindergartens: Curriculum reforms as a productive force for the development of new play practice'. Finally in this section, Melissa Sherfinski invites us to consider 'Spaces for Coping with Change: Kindergarten Educators' Emotional Refuges' and Aysun Ata Akturk and Serap Sevimli-Celik share their article 'Creativity in Early Childhood Teacher Education: Beliefs and Practices'.

Four articles comprise the second collection about young children's encounters with illness or death, beginning with 'When young children grieve: daycare children's experiences when encountering illness and loss in parents', authored by Martin Lytje, Atle Dyregrov and Carol Holliday. This is followed by an article by Yuli Kurniawati Sugiyo Pranoto and Branislav Pupala about 'Indonesian Children's Voices of the School-from-Home Policy'. The third article in this collection is "Distance creates distance": Preschool Staff's Experiences and Reflections Concerning Preschool Introduction During the Covid-19-Pandemic', by Martina Søe, Elinor Schad and Elia Psouni. Last in this collection is an article by Arifur Rahman, Shahidul Islam and Wendy Boyd that focuses on kindergarten teachers as they supported children and families during the COVID-19 pandemic: 'Kindergarten teachers' experiences during the COVID-19 pandemic in Bangladesh'.

The focus of the third collection is on transitioning between locations in early childhood, opening with 'School readiness – what does this mean? Teachers' perceptions using a cross sector comparison' by Elizabeth Rouse, Maria Nicholas and Rosemarie Garner. The second article in this collection is 'Parents' Reactions to their Child's Placement in Special-Education Kindergartens', by Bilha Paryente and Yael Barak Levy. Nicola Yelland and Elise Waghorn are the authors of the third article - 'STEM learning ecologies: Collaborative pedagogies for supporting transitions to school' – and 'Beyond the preschool gate: Teacher pedagogy in the Australian "bush kinder"' by Chris Speldewinde, Anna Kilderry and Coral Campbell completes this collection.

This first issue of 2023 ends with a collection of three articles focused on innovations with digital technologies in the early years. Rachel Ralph's article 'Measuring Theory of Mind (ToM) with preschool-aged children: Storybooks and observations with iPads' opens the collection, followed by Maryam Bourbour's 'Using digital technology in early education teaching: Learning from teachers' teaching practice with Interactive Whiteboard'. 'Digital Literacy in Early Childhood Education: What can we learn from innovative practitioners?' authored by Iris Susana Pereira, Maria Cristina Cristo Parente and Maria Cristina Vieira da Silva completes this collection, and concludes this issue of International Journal of Early Years Education focused on four shifting landscapes in early childhood.

#### In conclusion...

Change is inevitable. It may be positive, but that is not always the case. Change is prominent across the shifting landscapes of early childhood so young children experience it as a matter of course. However, change presents disequilibrium that young children may need time and support to accommodate. Young children also benefit if we ensure their experiences of change are balanced with the security afforded by continuity and routine.

Professor Jane Murray PhD

Centre for Education and Research, University of Northampton, UK

ORCiD: 0000-0001-7000-0901

- Alexiadou, N., C. Hjelmér, A. Laiho and P. Pihlaja. 2022. "Early childhood education and care policy change: comparing goals, governance and ideas in Nordic contexts." *Compare: A Journal of Comparative and International Education*, DOI: 10.1080/03057925.2022.2092451
- Arnott, L. and N.J. Yelland. 2020. "Multimodal Lifeworlds: Pedagogies for Play Inquiries and Explorations." *Journal of Early Childhood Education Research*. 9 (1): 124–146.
- Ayllón, S., H. Holmarsdottir, and S. Lado. 2023. "Digitally Deprived Children in Europe." *Child Indicators Research*. DOI: 10.1007/s12187-022-10006-w
- Andrews, J., D. Robinson, and J. Hutchinson. 2017. Closing the Gap? London: EPI.
- Arndt, S., K. Smith, M. Urban, T. Ellegaard, B.B. Swadener, and C. Murray. 2021. "Reconceptualising and (re) forming early childhood professional identities: Ongoing transnational policy discussions." *Policy Futures in Education*. 19(4): 406–423. DOI: 10.1177/1478210320976015
- Benini, S and L. Murray. 2013. "Critically Evaluating Prensky in a Language Learning Context: The 'Digital Natives/Immigrants Debate' and its Implications for CALL." In 20 Years of EUROCALL: Learning from the Past, Looking to the Future. Proceedings of the 2013 EUROCALL Conference, Évora, Portugal, edited by L. Bradley and S. Thouësny. Pp. 25-30. Dublin/Voillans: © Research-publishing.net DOI: 10.14705/rpnet.2013.000134
- Berk, L. 2012. Child Development. New York: Pearson.
- Burns, T. and F. Gottschalk (Eds.) 2019. "Educating 21st Century Children: Emotional Wellbeing in the Digital Age." Paris: OECD Publishing. DOI: 10.1787/b7f33425-en
- Burrell, L.V., L. Mehlum and P. Qin. 2020. "Educational attainment in offspring bereaved by sudden parental death from external causes: a national cohort study from birth and throughout adulthood." *Social Psychiatry and Psychiatric Epidemiology*. 55 (6): 779–788 DOI: 10.1007/s00127-020-01846-4
- Centre on the Developing Child 2023. Science. https://developingchild.harvard.edu/
- Clabburn, O., K. Knighting, B.A. Jack, and M.R. O'Brien 2019. "Continuing bonds with children and bereaved young people: a narrative review." *OMEGA: Journal of Death & Dying.* 83(3): doi: 10.1177/0030222819853195.
- Clark, A. 2022. Slow Knowledge and the Unhurried Child: Time for Slow Pedagogies in Early Childhood Education. Abingdon: Routledge.
- Daniels, K., K. Bower, C., Burnett, H. Escott, A. Hatton, E. Ehiyazaryan-White and J. Monkhouse. 2020. "Early years teachers and digital literacies: Navigating a kaleidoscope of discourses." *Education and Information Technologies*. 25: 2415–2426. DOI: 10.1007/s10639-019-10047-9
- Davidson, C., S. Danby, S. Ekberg, and K. Thorpe. 2021. "The interactional achievement of reading aloud by young children and parents during digital technology use." *Journal of Early Childhood Literacy*. 21(4): 475–498. DOI: 10.1177/1468798419896040

- Deininger, K., M. Garcia and K. Subbarao. 2003. "AIDS-Induced Orphanhood as a Systemic Shock: Magnitude, Impact and Program Interventions in Africa." *World Development*. 31(7): 1201-1220.
- Dong, C. and P. Mertala. 2021. "It is a tool, but not a 'must': early childhood preservice teachers' perceptions of ICT and its affordances." *Early Years*. 41(5): 540-555. DOI: 10.1080/09575146.2019.1627293
- Donovan, M.S., J.D. Bransford, and J.W. Pellegrino. 1999. *How People Learn: Bridging Research and Practice*. Washington, DC: National Academy of Sciences.
- Dyer, M. 2016. "Professionalism and the early years practitioner." *BERA Blog.* https://www.bera.ac.uk/blog/professionalism-and-the-early-years-practitioner
- Early, D.M., Pianta, L.C., Taylor, R.C., and Cox, M.J. 2001. "Transition Practices." *Early Childhood Education Journal*. 28 (3): 199-206.
- Faugli, A., E. Kufas, M. Haukland, E.K. Kallander, T. Ruud, and B.M. Weimand. 2021. "I have cried a lot': a qualitative study on children experiencing severe parental illness." *Scandinavian Journal of Caring Sciences*. 35 (4): 1196–1206. DOI: 10.1111/scs.12938
- Freire, P. 1970. Pedagogy of the Oppressed. London: Penguin
- Hooft Graafland, J. 2018. "New technologies and 21st century children: Recent trends and outcomes." *OECD Education Working Papers*, No. 179. Paris: OECD Publishing. DOI: <u>10.1787/e071a505-en</u>
- Haber, A.S., S.C. Kumar, H. Puttre, N. Dashoush, and K.H. Corriveau. 2022. "Why Can't I See My Friends and Family?': Children's Questions and Parental Explanations About Coronavirus." *Mind, Brain and Education*. 16(1): 54-61.
- Harrop, E., S. Goss, M. Longo, K. Seddon, A. Torrens-Burton, E. Sutton, D.J.J. Farnell, A. Penny, A. Nelson, A. Byrne and L.E. Selman. 2022. "Parental perspectives on the grief and support needs of children and young people bereaved during the COVID-19 pandemic: qualitative findings from a national survey." *BMC Palliative Care*. 21: 177. DOI: 10.1186/s12904-022-01066-4
- Himmelweit, S.M. and S.-H. Lee. 2022. "Ideas, Coalition Magnets and Policy Change: Comparing Variation in Early Childhood Education and Care Policy Expansion across Four Latecomer Countries." *Government and Opposition*. 1-20. DOI: 10.1017/gov.2022.35
- Kagan, S.L. and M.J. Neuman. 1998. "Lessons from Three Decades of Transition Research." *The Elementary School Journal*. 98 (4): 365-379.
- Kaplan, G., S. Mart, and H. Diken. 2022. "Transition to school process of children with disadvantages." *Journal of Childhood, Education & Society.* 3(1): 28-47.
- Kewalramani, S., I. Palaiologou, L. Arnott, and M. Dardanou. 2020. "The integration of the internet of toys in early childhood education: a platform for multi-layered interactions." *European Early Childhood Education Research Journal*. 28 (2): 197–213. https://doi.org/10.1080/1350293X.2020.1735738

- Kim, J. 2020. "Workplace Flexibility and Parent-Child Interactions Among Working Parents in the U.S." *Social Indicators Research.* 151 (2): 427-469.
- Korp, H. and L. Stretmo. 2020. "The predicament of the child refugee—understanding health and wellbeing in the daily life of migrant children and young people." *International Journal of Qualitative Studies on Health and Well-being*. 15 (Sup2): 1843268, DOI: 10.1080/17482631.2020.1843268
- Kumpulainen, K., A. Kajamaa, O. Erstad, Å. Mäkitalo, K. Drotner, and S. Jakobsdóttir. 2022. Nordic Childhoods in the Digital Age: Insights into Contemporary Research on Communication, Learning and Education. Abingdon: Routledge.
- Larsen, L.H., A. Guldberg, and V. Kring. 2023. "A Group Therapy Program for Parentally Bereaved Young Adults With Grief Complications: Rationale, Method and Case Examples." *OMEGA Journal of Death and Dying.* 86 (4): 1212-1234
- Manning, J. P., V. Thirumurthy, and H. Field. 2012. "Globalization or hegemony? Childcare on the brink: Hints from three geographically distant localities in North America." *Contemporary Issues in Early Childhood.* 13(1): 4-16.
- Mantilla, A. and S. Edwards. 2019. "Digital technology use by and with young children: a systematic review for the Statement on Young Children and Digital Technologies." *Australasian Journal of Early Childhood*. 44(2): 182-195. https://doi.org/10.1177/1836939119832744
- Mertala, P. 2020. "Young children's perceptions of ubiquitous computing and the Internet of Things." *British Journal of Educational Technology*. 51(1): 84-102. 10.1111/BJET.12821
- Mertala, P. and M. Koivula. 2020. "Digital Technologies and Early Childhood: Guest Editorial." *Journal of Early Childhood Education Research*. 9 (1): 1-5.
- Mezirow, J. 2000. Learning as Transformation: Critical Perspectives on a Theory in Progress. San Francisco, CA: Jossey-Bass
- Moss, P. (Ed.) (2013) Early Childhood and Compulsory Education: Reconceptualizing the relationship. Abingdon: Routledge.
- Moss, P. (2017) "Power and resistance in early childhood education: From dominant discourses to democratic experimentation." *Journal of Pedagogy*. 8(1): 11-32. DOI: 10.1515/jped-2017-0001
- Moss, P. and M. Urban. 2020. "The Organisation for Economic Co-operation and Development's International Early Learning and Child Well-being Study: The scores are in!" *Contemporary Issues in Early Childhood*. 21(2): 165–171. DOI: 10.1177/1463949120929466
- Murray, J. (Ed.). 2017. Early Childhood Pedagogies: Creating spaces for young children to flourish. Abingdon: Routledge.
- Murray, J. 2021. "Informal early childhood education: the influences of parents and home on young children's learning." *International Journal of Early Years Education*. 29 (2): 117–123https://doi.org/10.1080/09669760.2021.1928966

Murray, J. 2022. Research Report: The National Gallery Take One Picture Programme for Northampton Primary Academy Trust Partnership 2021. Northampton: University of Northampton.

Nutbrown, C. 2021. "Early childhood educators' qualifications: a framework for change." *International Journal of Early Years Education*. 29 (3): 236–249. DOI: 10.1080/09669760.2021.1892601

Organisation for Economic Co-operation and Development (OECD). 2023. *International Early Learning and Child Well-Being Study* (IELS). https://www.oecd.org/education/school/early-learning-and-child-well-being-study/

Pianta, R.C., M.J. Cox, and K.L. Snow. 2007. *School Readiness and the transition to kindergarten in the era of accountability*. Baltimore: BPC.

Prensky, M. 2001. "Digital natives, digital immigrants, part 1." *On the Horizon*, 9(5): 1-6. DOI: 10.1108/10748120110424816

Shonkoff, J.P. and L. Richter. 2013. "The Powerful Reach of Early Childhood Development: A science-based foundation for sound investment." In *Handbook of Early Childhood Development Research and its Impact of Global Policy*, edited by P.R. Britto, P.L. Engle and C.M. Super, pp.24-34. Oxford: Blackwell.

Sigman, A. (2011) "Does not compute, revisited: Screen Technology in Early Years Education." In *Too Much, Too Soon*, edited by R. House. Stroud: Hawthorn Press.

Snyder, K., J.P. Rech, K. Masuda and D. Dinkel. 2021. "Perspectives of infant active play: a qualitative comparison of working versus stay-at-home parents." *BMC Public Health*. 21(1) 250-259. DOI:10.1186/s12889-021-10286-x

UNESCO. 2022. World Conference on Early Childhood Care and Education. Education starts early: Progress, challenges and opportunities. Conference Background Report. Paris: UNESCO. <a href="https://unesdoc.unesco.org/ark:/48223/pf0000383668">https://unesdoc.unesco.org/ark:/48223/pf0000383668</a>

UNICEF. 2012. School Readiness: A conceptual framework. New York: United Nations Children's Fund.

UNICEF. 2021. Early Childhood Development Index 2030 (ECDI2030). https://data.unicef.org/resources/early-childhood-development-index-2030-ecdi2030/

UNICEF. 2022a. Pre-Primary Education. <a href="https://data.unicef.org/topic/education/pre-primary-education/">https://data.unicef.org/topic/education/pre-primary-education/</a>

UNICEF. 2022b. *ECDI2030 Report Template*. <a href="https://data.unicef.org/wp-content/uploads/2022/03/ECDI2030-Report-Template\_EN.docx">https://data.unicef.org/wp-content/uploads/2022/03/ECDI2030-Report-Template\_EN.docx</a>

United Nations. 2015. Transforming Our World: The 2030 Agenda for Sustainable Development.

 $\underline{https://sdgs.un.org/sites/default/files/publications/21252030\%20Agenda\%20for\%20Sustainable\%20Development\%20web.pdf}$ 

United Nations. 2022a. Global indicator framework for the Sustainable Development Goals and targets of the 2030 Agenda for Sustainable Development. A/RES/71/313.

https://unstats.un.org/sdgs/indicators/Global%20Indicator%20Framework%20after%20202 2%20refinement Eng.pdf

Vandenbroeck, M. (Ed.) 2021. Revisiting Paolo Freire's Pedagogy of the Oppressed: Issues and challenges in early childhood education. Abingdon; Routledge.

Wiliam, D. 2011. "How do we prepare students for a world we cannot possibly imagine?" *Salzburg Global Seminar, December 2011.* Accessed November 7, 2022.

World Health Organisation. 2023. WHO Coronavirus (COVID-19) Dashboard. https://covid19.who.int/

Yang, W. 2022. "Artificial Intelligence education for young children: Why, what, and how in curriculum design and implementation." *Computers and Education: Artificial Intelligence*. 3 (2022) 100061

Yang, W., P. Xu, H. Liu and H. Li. 2022. "Neoliberalism and sociocultural specificities: a discourse analysis of early childhood curriculum policies in Australia, China, New Zealand, and Singapore." *Early Child Development and Care*. 192(2): 203-219, DOI: 10.1080/03004430.2020.1754210

Zigler, E. and S.L. Kagan. 1982. "Child development knowledge and educational practice: Using what we know." In *Policy making in education. Eighty-first yearbook of the National Society for the Study of Education*, edited by A. Lieberman and M. McLaughlin. Pp. 80-104. Chicago: University of Chicago Press.