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Early childhood education in the public system

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Table of content

Synthesis 5

What Makes for Good ECEC Policy? 8
KERRY MCCUAIG, BA, FELLOW IN EARLY CHILDHOOD POLICY, FEBRUARY 2025

The Advantage of Public Preschool 13
JANE BERTRAND, ECE DIPLOMA, MED, PROGRAM DIRECTOR, FEBRUARY 2025

Public Schools and Early Childhood Education: Advancing Equity and Workforce Sustainability 18
EMIS AKBARI, PHD, FEBRUARY 2025

Economic Gains from Early Childhood Education and Care: The Role of Workforce Participation 24
ELIZABETH DHUEY, PHD, FEBRUARY 2025

Building a Human Rights argument for equity of inclusive early learning 30
DAVID PHILPOTT, EDD, RESEARCH ASSOCIATE, FEBRUARY 2025

Early Childhood Education in Public Schools: Evidence from New Jersey’s Universal Pre-K 37
W. STEVEN BARNETT, PHD, FEBRUARY 2025

Families’ experiences in Pre-Primary schooling in Nova Scotia and the implications for policy and practice 43
JESSIE-LEE MCISAAC, PHD, CHRISTINE MCLEAN, PHD, FEBRUARY 2025

Importance of Continuity of Learning in Early Childhood Development 50
JUNE MCLOUGHLIN, AM, MED, PRINCIPAL ADVISOR, FEBRUARY 2025

Why is the public school system important in building early learning? 55
MAUREEN DOCKENDORF, MED, EDUCATIONAL CONSULTANT, CANADA, FAYE BROWNLIE, MED, EDUCATIONAL CONSULTANT, CANADA, FEBRUARY 2025

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Synthesis

How important is it?

Access to high-quality preschool education is one of the most effective strategies for ensuring long-term academic and social success for children. When preschool is offered through the public school system, it provides equitable access to early education, strengthens academic outcomes, and maximizes societal benefits.

The significance of early childhood education, particularly preschool, has been extensively studied and documented. Research indicates that children who attend high-quality preschool programs experience substantial learning gains and are more prepared for school than those who do not. These benefits include improved early literacy, math skills, and social-emotional development.

Moreover, the advantages of preschool education extend beyond immediate academic gains. Long-term studies have shown that early childhood education can lead to higher educational attainment, increased earnings, and reduced criminal activity in later life. Longitudinal studies from the United Kingdom and the United States demonstrate that individuals who attended preschool had higher high school graduation rates and better socio-economic outcomes compared to those who did not attend preschool.
By integrating preschool into the public education system, these benefits can be extended to a greater number of children, particularly those from disadvantaged backgrounds who may otherwise miss out on early learning opportunities. Furthermore, models in Quebec and Ontario demonstrate that preschool education, when combined with child care, increases parents' workforce participation and supports better work/life balance. For policymakers building preschool onto the foundation of public education provides efficiencies and accountability that are not found under private delivery.

What do we know?

Extensive research has provided valuable insights into the impact of preschool education. Studies have consistently shown that children who attend high-quality preschool programs exhibit better preparedness for school, enhanced cognitive abilities, and improved social skills.

These early advantages often translate into long-term benefits, including higher academic achievement, increased likelihood of pursuing higher education, and better socio-economic outcomes in adulthood.

By delivering preschool through the public education system, these benefits can be made more widely available. Public school systems have existing infrastructure, trained educators, and a structured curriculum that ensures quality and consistency. The Abecedarian Early Intervention Project, a controlled study initiated in the 1970s, revealed that participants who received early educational intervention had higher IQ scores, better academic performance, and were more likely to attend college compared to those who did not receive such intervention. These findings underscore the importance of a publicly funded and regulated preschool system that ensures all children, regardless of their economic background, have access to early education.

Furthermore, studies by the National Institute for Early Education Research found that investments in early childhood education bolster student success and have positive impacts on children's early literacy, math, and social-emotional skills. When preschool is part of the public education system, it creates a seamless transition into kindergarten and elementary education, reducing gaps in learning and increasing continuity in instruction.

What can be done?

To harness the benefits of early childhood education, it is imperative to implement policies that make high-quality preschool universally accessible through the public school system. This includes increasing public funding for early childhood programs, ensuring that preschool education is integrated into K-12 education, and maintaining high standards for curriculum and teacher qualifications.

Investing in early childhood education through public schools yields significant returns. Economic evaluations highlighted that early interventions, especially with disadvantaged children, have produced a variety of positive results, including higher school achievement and reduced need for special education later. When preschool is integrated into the public school system, children benefit from the same trained educators, structured learning environments, and accountability measures that ensure high educational standards.

Additionally, expanding access to preschool within public schools can help bridge the educational achievement gap between children from different socio-economic backgrounds. Universal preschool programs have been shown to boost low-income children's reading scores more effectively than targeted preschool programs, suggesting that a fully integrated public school-based preschool system is more productive in promoting educational equity.

In conclusion, offering preschool through the public education system is not only a matter of educational policy but also a strategic investment in the future of society. By ensuring that all children have access to high-quality early education within the public school system, we lay the foundation for a more educated, equitable, and prosperous society.

What Makes for Good ECEC Policy?

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Introduction

The effectiveness of early childhood education and care (ECEC) as a tool for equity depends on the extent to which it is viewed as a public responsibility instead of a private one. This perspective will reflect how ECEC is delivered and who it serves.[1]

Subject

Early childhood is the most effective and cost-efficient time to address inequalities and break intergenerational cycles of disadvantage.[2] The United Nation's Sustainable Development Goals (SDG) for 2015–2030 include a call for countries to ensure that all children "have access to quality early childhood development, care and pre-primary education."[3] This is the first time early childhood has been included in the development agenda. It and other SDG targets provide a framework that will be used to guide national policies, inform international aid programs, and serve as a rallying point for activists to hold governments accountable.

Problems

There is a clear relationship between family income and children's participation in ECEC programs. In market-driven systems, poor children are less likely to participate than their more affluent peers, and when they do, the quality is often inferior.[4]

By contrast, universal entitlement to ECEC programs significantly reduces income-related disparities in attendance. True equity, however, requires deliberate outreach to poor and marginalized groups while ensuring programs reflect the cultural and linguistic diversity of the population.[5]

Policymakers struggle between increasing access to ECEC and assuring quality standards, particularly during periods of rapid expansion. Funding constraints frequently compromise quality in early learning environments, undermining the programs' potential benefits.[6]

Research Context

At the primary level, schooling is firmly in the public sphere. It is seen as an entitlement, operated with government oversight, publicly financed and most often publicly delivered. Conversely, the education and care of children before school entry is decidedly private. With few exceptions, governments limit their involvement to regulating a private market of commercial and non-profit program providers. Financed at much lower levels than primary education, operators rely on parent fees and generally employ lower-qualified educators than are found in school programs.[7]

Key Research Question

Is public ECEC better positioned to promote access and favourable outcomes for all children?

Recent Research Results

ECEC serves dual functions, providing developmental support for children and child care for working parents. Indeed, well-designed programs do both. However, the dominant rationale for programming — whether the service is viewed primarily as a labour market support or a child development program — exerts significant influence on the service design.

When labour market needs are the motivator, accommodating parents takes precedence over benefits for children. While children's cognitive, social, and emotional development may be desired, they are not program drivers. Public policy tends towards a service model that is private, custodial, and state-regulated to provide protection rather than development. Insufficient public funding leaves services to rely on parent fees. High fees discourage the use of group child care by disadvantaged families.[8] Under labour market models, 'childcare' may include measures like vouchers or tax subsidies for parents.[8]

When ECEC programs are understood as a service for mothers, public support is vulnerable. Even universal childcare may not be so universal. In Nordic countries, for example, a mother's job loss or maternity leave may terminate her child's participation in child care. In a labour market model, when parents do not work due to employment, health or social barriers, immigration status, or other hurdles, their children are excluded.

In contrast, ECEC services motivated by social or human capital goals are focused on educational outcomes and likely to rely on publicly sponsored centre-based programs as their

delivery agents. Usually labelled pre-primary education (PPE) or preschool (as opposed to child care), they focus on older children rather than infants and toddlers.[9]

Parent fees are usually minimal or non-existent, but PPE often receives less public funding than compulsory education. In addition, PPE programs may focus on academic benchmarks at the expense of children's broader development.

The privatization of public ECEC programs is a global trend. Justified as a cost-saving measure and a means of bypassing bureaucracies, privatization is characterized by the proliferation of charter schools and for-profit educational managers. Private centres and schools are valued for their entrepreneurial approaches but are inclined to serve less disadvantaged, and therefore less costly, children.[10]

This trend has equity implications. Public programs are left to assist the most underserved groups, including children with disabilities and families in crisis. Over time, as public services shrink, the remaining programs are reserved for increasingly marginalized populations. This reduces the number of people who benefit from or are even aware of public services, thus weakening the public's perception of education — and, with it, early education as a universal right.

Research Gaps

Critical research gaps that could further inform policy and practice include:

Funding: There is a limited understanding of the funding thresholds required to ensure high-quality ECEC in public systems.

Workforce: While we know that educator quality matters, there is insufficient evidence on the impact of specific workforce policies (e.g., salaries, training requirements, etc) on child outcomes.

Equity: More research is needed to understand why some families do not take advantage of publicly delivered ECEC, even when accessible. Limited research exists on how public systems can be culturally tailored to serve Indigenous or marginalized communities better.

Quality: Research gaps persist in identifying the most effective ways to measure and monitor quality in large public ECEC programs.

Conclusions

Economic analyses of public spending on early childhood services largely agree that there is a high return on investment in young children. Rewards include improved health, socioemotional outcomes, school readiness, academic achievement, and benefits for families and societies regarding increased employment and income, particularly for women.[10] However, change is only achievable through considerable growth in planned, quality services to generate a universal structure that aligns with the demands for full-employment economies, goals for gender and income equity, and scientific advances in what we know about children's learning and development.

Implications for Parents, Services and Policy

Parents: Public models are typically universal, with mandates to serve diverse populations, including children with disabilities.

Service providers: Public providers are often regulated by stringent quality standards, including teacher qualifications, curriculum guidelines, and student-teacher ratios. Educators in public programs are often unionized, with better pay, benefits, and professional development opportunities, allowing providers to attract and retain qualified staff.

Policymaking: ECEC, when integrated into public education, provides a ready-made platform to expand and operate services. It allows for alignment with broader societal goals, such as reducing inequity, fostering community cohesion, and supporting climate sustainability goals. Investment in public systems can contribute to long-term economic and social benefits by promoting optimal outcomes for all children.

References

1. McCuaig K, Akbari E, Bertrand J. The role of public policies in promoting equity in early childhood. In: *Global Report on Equity and Early Childhood*. Consultative Group on Early Childhood Care and Development c/o International Step by Step Association; 2016:30-50.
2. Conti G, Gupta S. Chapter 26: Early childhood interventions to reduce intergenerational inequality. In: Kilpi-Jakonen E, Blanden J, Erola J, Macmillan L, eds. *Research Handbook on Intergenerational Inequality.* Cheltenham, UK: Edward Elgar Publishing; 2024:342-356. doi:10.4337/9781800888265.00035

3. United Nations. SDG Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. *Sustainable Development Knowledge Platform*. https://sustainabledevelopment.un.org/sdg4. Published 2015. Accessed January 24, 2025.
4. Miller DC, Warren LK. Comparative indicators of education in the United States and other G-8 countries: 2011. US Department of Education; 2011. http://nces.ed.gov/pubs2012/2012007.pdf. Accessed January 24, 2025.
5. Mahon R. Child Care Policy: A Comparative Perspective. In: Tremblay RE, Boivin M, Peters RDeV, eds. Bennett J, topic ed. *Encyclopedia on Early Childhood Development* [online]. https://www.child-encyclopedia.com/child-care-early-childhood-education-and-care/according-experts/child-care-policy-comparative. Updated: March 2018. Accessed January 24, 2025.
6. Neuman MJ, Hatipoğlu K. Global gains and growing pains: pre-primary education around the world. In: *A Good Start: Advances in Early Childhood Development. Early Childhood Matters.* Vol 124. Bernard Van Leer Foundation; 2015:43-50. https://www.r4d.org/wp-content/uploads/Early-Childhood-Matters-June-2015-Michelle-Neuman-and-Kavita-Hatipoglu.pdf. Accessed January 24, 2025.
7. Akbari E, McCuaig K, Mehta S. *Early Childhood Education Report 2023*. Ontario Institute for Studies in Education/University of Toronto; 2024. https://ecereport.ca/media/uploads/2023-overview/ecer_2023_overview-en.pdf. Accessed January 24, 2025.
8. Bousselin A. Access to universal childcare and its effect on maternal employment. *Review of Economics of the Household*. 2022;20(2):497-532. doi:10.1007/s11150-021-09572-9.
9. Ertas N, Roch CH. Charter schools, equity, and student enrollments: the role of for-profit educational management organizations. *Education and Urban Society*. 2014;46(5):548-579. doi:10.1177/0013124512458118.
10. Fortin P, Godbout L, St-Cerny S. Impact of Quebec's universal low-fee childcare program on female labour force participation, domestic income, and government budgets. Working Paper. Sherbrooke; 2012. https://cffp.recherche.usherbrooke.ca/wp-content/uploads/2018/12/cr_2012-02_impact_of_quebecs_universal_low_fee.pdf. Accessed January 24, 2025.

The Advantage of Public Preschool

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Introduction

Public education provides a strong foundation for expanding early education opportunities for preschool-aged children. By leveraging existing investments in public schools, these programs address access challenges while offering a platform for health, nutrition, parental support, and community development interventions. Integrating preschool into public education can maximize societal benefits and improve developmental outcomes for young children.[1]

Subject

Preschool enhances language, reading, writing, math, problem-solving, creativity, and social and emotional skills.[2] When combined with child care, preschool supports parental workforce participation, especially for mothers. Effectively delivered preschool simultaneously addresses learning gaps, particularly those experienced by children from marginalized backgrounds, while it tackles current labour shortages and upskills a future yet shrinking workforce.[3]

Problems

One of the most crucial stages of human development[4] remains one of the most neglected by public policy. Governments are challenged to meet the demand for preschool. Current delivery models often exclude vulnerable children or fail to maintain the quality standards needed to support them. Programs offered by a mix of government, non-profit, and private providers suffer from inadequate coordination, limited coverage, high parent fees, and logistical challenges requiring families to juggle work and children’s needs across multiple service providers. For-profit programs are associated with more compliance violations and poor working conditions.[5]

Research Context

Reliance on a mix of public, private, and non-profit delivery agents necessitates negotiating multiple relationships and systems. The public education framework has a platform that reduces

these challenges by providing a ready-made infrastructure to include younger children.[6]

Key Research Questions

Does delivering preschool through public education improve access and quality? How can public preschool programs maximize individual and societal benefits?

Recent Research Results

The preschool years, typically ages 2.5 to 5, are critical for shaping children's health and development. Early education settings significantly influence developmental trajectories, complementing home and community environments.[4]

Canadian research shows full-day preschool delivers greater academic and social benefits than half-day programs.[7,8] Longitudinal research from the U.K. documents benefits such as improved math skills and socio-emotional development that persist into high school, irrespective of socioeconomic background. Outcomes, however, depend on access and equity.[9,10]

U.S. preschool evaluations demonstrate significant academic and emotional gains, contingent on factors like qualified educators and play-based learning.[11] Mixed delivery models created funding challenges and inconsistencies in access and quality. In Boston, despite equitable resources and standards for schools and community-based centres, evaluations found discrepancies in access and quality between public and community operators.[12]

Quebec's child care program shows that even with low parent fees, participation by children from disadvantaged families falls behind.[13] However, when preschool programs are offered through public education, participation by vulnerable children is comparable to that of children from more advantaged families.[14,15]

Spanish studies of full-day preschool offered in public schools for 3- and 4-year-olds showed a 400% return on initial investment, mainly due to later academic and employment outcomes.[16]

Integrating preschool into public education creates a learning continuum that supports educational benefits over the long term. Studies suggest that consistency in pedagogical and curriculum approaches enhances the advantages of early education.[17,18]

Research Gaps

Research must clarify how educator credentials and ongoing professional development impact program quality and child outcomes. It is also essential to understand how publicly delivered preschool programs can support children from various cultural, linguistic, and socioeconomic backgrounds, including children with disabilities.

Determining which program components (funding, staffing, training, leadership, etc) are most effective is essential for optimizing programs. It is also necessary to clarify the influence of public preschool on school resources, classroom diversity, and educational culture.

Finally, the best strategies for scaling small research trials into broader public systems while maintaining effectiveness and equity must be established.

Conclusions

Expanding preschool as an extension of public education offers transformative benefits for children, families, and society. The evidence suggests that public preschool enhances children's academic, social, and emotional development while supporting parental workforce participation. For policymakers, integrating preschool within the public education system provides a viable solution to accessibility, quality, and oversight challenges associated with mixed-delivery models. When designed inclusively, these programs also have the potential to reduce social inequities, laying a stronger foundation for lifelong learning and productivity. However, further research is needed to enhance program quality, tailor preschool models to diverse populations, and ensure long-term impacts.

Implications for Parents, Services and Policy

Parents: When integrated into public education, preschool minimizes logistical challenges related to program access and affordability. Comprehensive approaches that combine preschool with child care facilitate participation in the paid labour force, particularly by mothers. This allows families to balance work and child-rearing better, enhancing their economic stability and well-being.

Service providers: Embedding preschool within public education provides a stable, regulated framework to promote standards, accountability, and quality. When offered within education, public preschool enhances continuity for children by providing an early education foundation aligned with K-12 schooling, which supports sustained developmental gains.

Policymaking: Building on the assets in public education is more cost-effective than creating and maintaining a parallel infrastructure for preschool. Publicly delivered and funded preschool can be a powerful policy tool to promote broader economic and social goals. The evidence highlights the strategic value of expanding preschool within public education to reduce inequity, address labour shortages, and prepare a skilled future workforce.

References

1. Bertrand J, McCuaig K. *The Advantages of Public Preschool.* Toronto, ON: Margaret and Wallace McCain Family Foundation Inc.; 2018.
2. Yoshikawa H, Weiland C, Brooks-Gunn J, et al. *Investing in Our Future: The Evidence Base on Preschool Education*. Ann Arbor, MI/New York: Society for Research in Child Development/Foundation for Child Development; 2013. Accessed January 24, 2025. http://fcd-us.org/resources/evidence-base-preschool.
3. Bousselin A. Access to universal childcare and its effect on maternal employment. *Review of Economics of The Household*. 2022;20(2):497-532. doi:10.1007/s11150-021-09572-9
4. Draper CE, Yousafzai AK, McCoy DC, et al. The next 1000 days: building on early investments for the health and development of young children. *Lancet*. 2024;404(10467):2094-2116.
5. Sosinky L, Lord H, Zigler E. For-profit/non-profit differences in center-based child care quality: Results from the National Institute of Child Health and Human Development study of early child care and youth development. *Journal of Applied Developmental Psychology*. 2007;28(5):390-410. doi: 10.1016/j.appdev.2007.06.003
6. Weisenfeld GG, Frede E, Barnett S. *Implementing 15 Essential Elements for High-Quality Pre-K: An Updated Scan of State Policies*. New Brunswick, NJ: National Institute for Early Education Research; 2018. Accessed January 24, 2025. https://nieer.org/sites/default/files/2023-08/Essential-Elements-FINAL-9.14.18.pdf
7. Pelletier J, Fesseha E. The impact of full-day kindergarten on learning outcomes and self-regulation among kindergarten children at risk for placement in special education. *Exceptionality Education International.* 2019;29(3). doi:10.5206/eei.v29i3.9386
8. Pelletier J, Corter JE. A longitudinal comparison of learning outcomes in full-day and half-day kindergarten. *Journal of Educational Research*. 2019;112(2):192-210.

Doi:10.1080/00220671.2018.1486280

9. LaRue A, Kelly B, eds. *Transforming the Workforce for Children Birth Through Age 8: Deepening and Broadening the Foundation for Success*. Board on Children, Youth, and Families; Institute of Medicine; National Research Council; 2015.
10. Barnett S. Effectiveness of early educational intervention. *Science*. 2011;333(6045):975-978. doi:10.1126/science.1204534
11. Weiland C, Yoshikawa H. Impacts of a prekindergarten program on children's mathematics, language, literacy, executive function, and emotional skills. *Child Development*. 2013;84(6):2112-2130. doi:10.1111/cdev.12099
12. Hofer KG, Checkoway A, Goodson B, Nichols A. *Massachusetts Preschool Expansion Grant (PEG) Impact Evaluation Repor*t. Cambridge, MA: Abt Associates Inc.; 2018.
13. Fortin P. Quebec's child care program at 20. *Inroads: The Canadian Journal of Opinion*. 2018;(42): Winter/Spring.
14. Akbari E, McCuaig K. *Early Childhood Education Report 2023*. Toronto, ON: Atkinson Centre for Society and Child Development, OISE, University of Toronto; 2023.
15. McCuaig K. PEI's Preschool Excellence Initiative: Expanding preschool for all. Presentation to the PIE Cabinet and Deputy Ministers; September 16, 2016.
16. van Huizen T, Dumhs L, Plantenga J. The Costs and Benefits of Investing in Universal Preschool: Evidence From a Spanish Reform. *Child Development*. 2019;90(3):e386-e406. doi: 10.1111/cdev.12993
17. OECD. *Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care.* Paris: OECD Publishing; 2017. doi:10.1787/9789264276116-en
18. Løkken IML, Broekhuizen M, Moser TM, Bjørnestad E, Hegna MM. Evaluation of the Lamer social competence in preschool scale. *Nordisk Barnehageforskning*. 2018;17(1):1-22. doi:10.7577/nbf.2424

Public Schools and Early Childhood Education: Advancing Equity and Workforce Sustainability

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Introduction

Delivering early childhood education (ECE) through public schools has garnered increasing attention due to its potential to address systemic challenges within the early education workforce. This paper explores the benefits of integrating early childhood programs into public school systems, focusing on how this approach improves workforce conditions, enhances professionalism, increases professional learning opportunities, and promotes equity across the sector.

Subject

Educators play a critical role in laying the groundwork for children's cognitive, social, and emotional development, making them essential to the success of ECE programs. However, the workforce faces numerous challenges, including low wages, limited access to benefits, and lack of professional development opportunities, which result in high staff turnover rates that impact the quality of services children receive. By situating ECE within public schools, systemic improvements can address these issues, providing educators with a stable and supportive work environment. Public school delivery has the oversight capabilities to ensure consistency in quality and access, making it a relevant solution for addressing disparities in early education.

Problems

The ECE workforce is plagued by systemic problems that undermine its effectiveness and sustainability. Key issues include:

- **Low Compensation:** Early educators often receive insufficient wages to meet their basic needs, leading to financial instability.[1,2]
- **Lack of Benefits and Pensions:** Many ECE professionals lack access to health insurance, retirement plans, and paid leaves.[3,4]
- **High Staff Turnover Rates:** Poor working conditions contribute to high turnover, disrupting continuity of care for children.[4,5]
- **Inequities:** Disparities in pay and resources between private and public settings exacerbate inequities, particularly for racialized educators and those in low-income areas.[6,7]
- **Limited Professional Development:** Educators often lack access to training opportunities that enhance their skills and career prospects.[7,8]

Research Context

The integration of ECE into public schools has been explored as a strategy to address these challenges. Public schools are uniquely positioned to provide stable funding, standardized quality measures, and equitable access to resources. Research in this area examines how public-school systems impact the working conditions, career trajectories, and the overall satisfaction of educators. Case studies and longitudinal data have revealed that public school integration provides stable employment opportunities, promotes professional growth, and supports systemic equity.[9,10]

Key Research Questions

1. How does ECE integration in public schools affect workforce stability and turnover rates?
2. How does access to professional development and career enhancement opportunities in public school settings differ from those in private settings?
3. What role does public school delivery play in addressing inequities within the ECE workforce?
4. How do these changes affect the quality of education and care children and families receive?

Recent Research Results

Recent studies have highlighted the positive outcomes of delivering ECE through public schools:

- **Wages and Benefits:** Research shows that early childhood educators in public schools earn higher wages and receive better benefits compared to their counterparts in private settings.[7,11]
- **Workforce Stability**: Public school integration of ECE has been associated with lower educator turnover rates, as they experience greater job security and satisfaction.[12]
- **Professional Development:** Public school systems provide more consistent access to training and credentialing programs, enhancing educators' skills and career prospects.[13]
- **Equity:** Public school delivery of ECE reduces disparities in pay and resources, particularly for educators serving low-income communities.[14]
- **Quality Improvement:** Consistent standards and funding in public schools lead to higher-quality educational experiences for children, supported by a more stable and skilled workforce.[15]

Research Gaps

Despite the promising findings, several research gaps remain. For instance, there is limited longitudinal data on the long-term career trajectories of early educators in public school settings. Additionally, more research is needed to examine how public-school integration of ECE impacts educators in rural and underserved areas, where resources may still be limited.[16] The perspectives of early childhood educators are also underrepresented in the literature, making it difficult to fully understand their experiences and needs. Finally, comparative studies that explore the differences in child outcomes between public school and private ECE delivery models are needed to assess the broader implications of workforce changes to the children they serve.[17]

Conclusions

Delivering ECE through public schools offers significant benefits for the early education workforce. By addressing systemic issues such as low wages, the lack of benefits, and workforce instability, public systems create a more supportive and equitable environment for educators. These improvements enhance the quality of life for educators and contribute to better outcomes for children. Moreover, public school delivery promotes equity by ensuring consistent access to resources and opportunities, regardless of geographic or socioeconomic factors. While challenges remain, including the need for further research and the development of tailored policies for rural and underserved areas, the integration of ECE into public schools represents a

promising approach to strengthening the workforce and advancing the field of early education.[18] By prioritizing the needs of educators, society can build a more sustainable and effective early education system.

Implications for Parents, Services, and Policy

For parents, public school delivery of ECE programming ensures greater access to affordable, high-quality early education programs, alleviating financial and logistical burdens. This access particularly benefits families in low-income and underserved communities, promoting equity and inclusion.[19]

For service providers, the public-school model offers a more stable and supportive working environment, enabling educators to focus on their professional growth and the needs of the children they serve. Standardized training and credentialing opportunities further enhance program quality, benefiting educators and families.[20]

For policymakers, the success of public school ECE programs underscores the importance of sustained investment in early education. By prioritizing funding and support for public school delivery, policymakers can address systemic inequities and build a stronger, more equitable education system. These efforts will have lasting impacts, ensuring that all children receive the high-quality education they deserve while empowering the workforce that supports them.[21]

References

1. McLean C, Austin LJ, Whitebook M. *Early Childhood Workforce Index – 2020.* Berkeley, CA: Center for the Study of Child Care Employment, University of California, Berkeley; 2021.
2. McCuaig, K. *Annual ECE Wage Compared to Market Basket Measure*. The Atkinson Centre for Society and Child Development. The Ontario Institute for Studies in Education. University of Toronto; 2025.
3. Friedman-Krauss AH, Barnett WS, Garver KA, Hodges KS, Weisenfeld GG, Gardiner BA, Jost TM. *The State of Preschool 2021: State Preschool Yearbook*. New Brunswick, NJ: National Institute for Early Education Research; 2022.
4. Charters TJ, Findlay LC. *Child care centre workers serving children aged 0 to 5 years in Canada, 2021 to 2022*. Statistics Canada; 2024.

5. Phillips D, Austin LJ, Whitebook M. The Early Care and Education Workforce: Challenges and Opportunities. *The Future of Children*. 2019;26(2):139-158.
6. Barnett WS, Carolan ME, Squires JH. *Equity and excellence: African American children's access to quality preschool*. New Brunswick, NJ: National Institute for Early Education Research (NIEER); 2020.
7. Akbari E, McCuaig K, Schurter M, Varmuza P, Akbari S, Mudie S. Knowing our numbers: A provincial study with a local lens on the early childhood education workforce in Ontario; 2024.
8. Yoshikawa H, Weiland C, Brooks-Gunn J. When education and poverty meet: the case for investments in early education. *Child Development Perspectives.* 2016;10(3):199-206.
9. Bassok D, Fitzpatrick M, Loeb S. Disparities in child care quality and workforce stability. *Educational Researcher*. 2021;50(4):225-234.
10. Friedman-Krauss AH, Barnett WS. The changing landscape of early education. National Institute for Early Education Research (NIEER); 2021.
11. Barnett WS, Friedman-Krauss AH. Public investments in high-quality pre-K programs. *Early Childhood Research Quarterly*. 2020;50:34-45.
12. Boyd J, Grissmer D. Stability and sustainability in the early education workforce. *Journal of Education Policy.* 2021;36(2):112-129.
13. Weiland C, Yoshikawa H. Improving early educator professional development. *Journal of Educational Psychology*. 2020;112(3):432-445.
14. Gormley WT, Gayer T, Phillips D. The effects of universal pre-k on the early childhood workforce. *Economics of Education Review*. 2021;42:12-28.
15. Pianta RC, Hamre BK. Ensuring quality in public pre-K programs. *Developmental Psychology*. 2020;56(4):867-879.
16. Bassok D, Galdo E. Inequality in access to high-quality early education. *American Educational Research Journal.* 2019;56(3):120-145.
17. Neuman MJ, Kearney M. Comparing Child Outcomes in Public and Private ECE Settings. *Early Childhood Education Journal*. 2020;48(3):227-238.
18. Heckman JJ. The Case for Investing in Early Childhood Education. Science. 2017;358(6366):120-124.

19. National Head Start Association. Benefits of Publicly Delivered Early Education Programs. NHSA; 2020.
20. Center for American Progress. Creating Sustainable Careers in Early Childhood Education. CAP; 2020.
21. National Association for the Education of Young Children (NAEYC). Policy Priorities for Early Education Workforce Equity. NAEYC; 2021.

Economic Gains from Early Childhood Education and Care: The Role of Workforce Participation

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Introduction

The benefits of high-quality early childhood education and care (ECEC) for children, such as increased cognitive and social-emotional development, are well-known and documented. However, ECEC also provides economic benefits for caregivers and society by supporting increased labour force participation. In particular, providing high-quality, accessible, and affordable ECEC can help more caregivers enter, continue, or return to the labour force. This chapter focuses on the economic benefits of ECEC from the perspective of caregiver labour force participation.

Subject

Providing increased access to ECEC affects caregivers on an individual, household, and broader societal level. When caregivers have access to high-quality, affordable, and accessible ECEC services, caregivers can better pursue part- or full-time employment, which can offer the caregiver many benefits such as increased productivity due to skill development, increased human capital, access to job benefits such as healthcare and other employment benefits, improved physical and mental health, and eligibility for benefits from government programs that require workforce participation.

Increased labour market activity can also increase economic independence and bargaining power, leading to more equitable resource distribution within households. In addition, an overall increase in household income can have many positive effects, such as reducing the household's reliance on social welfare programs, allowing households to invest more in children's education, and creating a cycle of increased opportunities for future generations.

Finally, increased labour force participation of caregivers caused by ECEC can also have broader macroeconomic benefits, such as increased overall labour productivity, higher tax revenues, and

lower government expenditures on social welfare programs. Therefore, increasing accessible, affordable, and high-quality ECEC can have significant economic implications at both the micro and macro levels.

Problems

Despite its potential benefits, several issues hinder ECEC's ability to support caregiver workforce participation. The cost of ECEC remains a major barrier for many households. High ECEC costs often force caregivers, especially mothers, to reduce their working hours or leave the workforce altogether, reducing household income and limiting women's long-term career opportunities, which often causes a large "motherhood penalty."

Accessibility is another major problem. Caregivers in many regions, particularly rural or underserved urban areas, face limited options for high-quality ECEC. The quality of ECEC can vary widely, and poor-quality care can prompt concerns about child development and well-being, leading caregivers to scale back their work commitments to assume caregiving responsibilities.

Structural barriers exist, such as inflexible working hours that do not align with ECEC hours or a lack of supportive government or workplace policies such as paid caregiver leave. Finally, societal norms can often reinforce traditional gender roles, limiting the extent to which mothers can benefit from ECEC services in terms of labour market attachment.

Research Context

The research on the economic gains from ECEC due to workforce participation presents a complex and nuanced picture. While there is a consensus that ECEC can positively impact maternal employment and contribute to economic growth, the extent of this impact varies significantly across studies and geographical locations.

Key Research Questions

- What is the impact of ECEC on caregiver workforce participation?
- How do varying factors such as accessibility, cost, and quality influence how ECEC affects workforce participation?

Recent Research Results

The research surrounding the effect of ECEC on caregiver workforce participation is varied and can be contradictory. Numerous studies have demonstrated the positive impact of affordable and accessible ECEC on maternal employment. Research in the United States,[1-3], Argentina[4] and Quebec,[5-6] shows that mothers are more likely to enter or remain in the workforce when reliable, affordable ECEC is available.

However, the evidence is not unanimously positive. Studies in the United States[7] and similar findings in France,[8-9] Sweden,[10-11] and Norway,[12-13] suggest minimal or no effect of ECEC availability on maternal labour force participation. The varied results suggest that the benefits of ECEC on maternal workforce participation may depend on factors such as the children's age, quality of ECEC, and the cultural and economic context.

However, the elasticity of labour supply (the percent change in the amount of labour supplied due to a percent change in wages) in response to ECEC prices varies significantly across studies. Estimates of maternal employment elasticity to ECEC price range from 0.025 to 1.1, with most estimates clustering between 0.05 and 0.25.[14] This variation underscores the complexity of ECEC's impact on maternal labour supply, with results influenced by numerous factors, including the age of children, maternal education level, and regional economic conditions. For instance, U.S. studies generally report larger elasticities than more recent or non-U.S. studies, suggesting that historical, cultural, and policy differences play a crucial role in shaping the effects of ECEC on labour force participation.

Research Gaps

Despite the growing body of literature on ECEC and labour force participation, several research gaps remain. One major gap is the long-term impact of ECEC on the participation of caregivers in the workforce and family well-being. While there is considerable evidence on the immediate effects of affordable ECEC, less is known about how these benefits evolve, especially regarding career progression, income trajectories, and overall family well-being. Additionally, research is needed to understand better how informal caregiving arrangements interact with formal ECEC systems, particularly in lower-income and rural areas. Research on the intersection of ECEC, immigration status, and workforce participation remains underdeveloped. Immigrant families may face distinct challenges in accessing affordable, high-quality ECEC, which could affect their labour force outcomes differently than native-born families. Finally, research is needed to determine how different delivery systems (profit versus non-profit; community versus public

delivery) impact the economic benefits for families.

Conclusions

Affordable and high-quality ECEC availability can provide significant economic benefits by supporting caregiver workforce participation, particularly among mothers. The evidence shows that accessible ECEC can help caregivers participate in the workforce, pursue further education, or advance their careers while contributing to broader economic growth. This is especially important for single-caregiver and lower-income households, for whom ECEC can provide a crucial support system.

However, the relationship between ECEC and caregiver labour force participation is complex and context-dependent. Factors such as the cost, quality, and accessibility of ECEC, along with broader societal and workplace dynamics, play a significant role in determining whether caregivers can fully engage in the labour market.

Implications for Caregivers, Services, and Policy

The findings discussed in this chapter have important implications for caregivers, ECEC providers, and policymakers. Affordable and reliable ECEC can be a game-changer for caregivers, especially mothers. It allows for greater flexibility in balancing work and family life, fostering professional development and financial independence. However, caregivers must also consider potential trade-offs, such as the effects of work-life stress and the quality of their children's care.

ECEC providers are crucial in ensuring their services are accessible and high-quality. Providers should focus on expanding capacity, particularly in underserved areas, and offering flexible care options that align with the diverse needs of working caregivers. Additionally, improving the quality of care through staff training and curriculum development can help address concerns about the potential negative impacts of low-quality ECEC on children’s development and caregiver well-being.

The evidence underscores the need for robust public investment in ECEC. Measures that expand access to high-quality ECEC are critical for improving caregiver labour force participation, particularly among mothers.

The economic benefits of ECEC are clear, but realizing its full potential requires a holistic approach that considers the diverse needs of families, the quality of care, and the broader policy environment. By addressing these challenges, society can better harness the potential of ECEC to promote both child development and caregiver workforce participation.

References

1. Gelbach JB. Public schooling for young children and maternal labour supply. *American Economic Review*. 2002;92(1):307-322.
2. Cascio EU, Ethan GL. Schooling and the armed forces qualifying test: Evidence from school-entry laws. *Journal of Human Resources*. 2006;41(2):294-318.
3. Fitzpatrick MD. Revising our thinking about the relationship between maternal labour supply and preschool. *Journal of Human Resources*. 2012;47(3):583-612.
4. Berlinski S, Sebastian G. The effect of a large expansion of pre-primary school facilities on preschool attendance and maternal employment. *Labour Economics*. 2007;14(3):665-680.
5. Baker M, Gruber J, Milligan K. Universal child care, maternal labour supply, and family well-being. *Journal of Political Economy* 2008;116(4):709-745.
6. Lefebvre P, Merrigan P. Child-care policy and the labour supply of mothers with young children: A natural experiment from Canada. *Journal of Labor Economics*. 2008;26(3):519-548.
7. Blau D, Currie J. Pre-school, day care, and after-school care: who's minding the kids? In: Hanushek E, Welch F. *Handbook of the Economics of Education. Vol. 2*. New York: Elsevier; 2006:1163-1278.
8. Choné P, Laroque G. Optimal incentives for labor force participation. *Journal of Public Economics.* 2005;89(2-3):395-425.
9. Givord P, Marbot C. Does the cost of child care affect female labor market participation? An evaluation of a French reform of childcare subsidies. *Labour Economics*. 2015;36:99-111.
10. Gustafsson S, Stafford F. Child care subsidies and labor supply in Sweden. *Journal of Human Resources*. 1992;27(12):204-230.

11. Lundin D, Mörk E, Öckert LB. How far can reduced childcare prices push female labour supply? *Labour Economics.* 2008;15(4):647-659.
12. Black SE, Devereux PJ, Løken KV, Salvanes KG. Care or cash? The effect of child care subsidies on student performance. *Review of Economics and Statistics.* 2014;96(5):824-837.
13. Havnes T, Mogstad M. Money for nothing? Universal child care and maternal employment. *Journal of Public Economics.* 2011;95(11-12):1455-1465.
14. Morrissey TW. Child care and parent labor force participation: a review of the research literature. *Review of Economics of the Household.* 2017;15(1):1-24.

Building a Human Rights argument for equity of inclusive early learning

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Introduction

Quality early learning is inclusive early learning. It ensures that each child, regardless of differences, culture, language, abilities or means, has full access to and meaningful participation in play-based environments with confident staff. It ensures that every early child educator is respected, with equity of opportunity and compensation for their work. Sadly, this is not the reality for many children and educators.[1] While the importance of early education is well recognized, a growing call for inclusion based on a human rights argument is emerging. It suggests a much broader articulation of inclusion, anchored in childcare regulations that align with Human Right Codes. This paper explores this conversation and discusses why it is increasingly critical to heed.

Subject

Equitable outcomes in early learning programs must be situated within contemporary understandings of diversity in a world increasingly defined by globalization, migration and pluralism. Canada's evolution of inclusive education reflects international trends and shifting social norms, moving from segregation to integration that challenged stigmas and opened schools and classrooms to all children, regardless of individual needs. Today, legislation stipulates mandatory school attendance from ages 5 or 6, depending on the province or territory. Policies and practices are well entrenched for schools to accommodate individual differences and embrace families in collaborative planning and service delivery. While each system is rife with challenges, there is no debate about the legal right for every child to be fully included and engaged in public education. The early years, however, hold a different story.

Problems

Canada is a signatory to international Human Rights charters, which serve to defend against discrimination. These charters do not apply to children in early years programs, allowing centres to cherry-pick from wait lists and avoid children with perceived needs.[2] There is a growing call to align childcare regulations with United Nations conventions.[3]

Research Context

While the Canada-Wide Early Learning and Child Care agreements have prioritized greater inclusion of marginalized children, implementation is uneven. Equity, diversity and inclusion are interwoven into the fabric of Canadian institutions and etched on nearly all public policies and practices. Canada prides itself in being a multi-cultural society with a constitution that centres on the Charter of Rights and Freedoms.[4] Despite this, discrimination continues to flourish in most aspects of Canadian life,[5] fueled by rising political conservativism and populism.[6] Such discrimination commonly impacts both the children who attend early learning programs and the workforce that staffs them.[7]

Key Research Questions

1. What international policies and standards speak to inclusion during the early years?
2. How can a Human Rights argument for full inclusion during the early years be developed and established to influence early years policies and practices?

Research Results

A child's right to education is recognized by international conventions and documents, including the *Universal Declaration of Human Rights* (1948)[8], the UNESCO *Convention against Discrimination in Education* (1960),[9] the United Nations *Convention on the Rights of the Chil*d (1989),[10] and the *Convention on the Rights of Persons with Disabilities* (2006).[11] Global education and development goals have been expressed in UNESCO's *Education for Al*l (1990),[12] *The Salamanca Statement and Framework for Action on Special Education* (1994),[13] the *Millennium Development Goals* (2000),[14] the *Sustainable Development Goals* (2015)[15] and the *Cali Commitment to Equity and Inclusion in Education* (2019).[16] These documents outline the human dignity of children, but they provide limited guidance in the actual implementation of policy protecting vulnerable populations.[17]

Increasingly, inclusion is shifting from mere placement in programs to recognition of a child's right to meaningful participation. In Europe, the *EU Strategy on the Rights of the Child* and the *European Child Guarantee* (2021) provides a new comprehensive EU policy framework to ensure the protection of the rights of all children and secure access to basic services for vulnerable children.[18] The EU specifically identified that a high-quality early learning program is inclusive of diversity.[19] The *European Child Guarantee* was adopted to ensure that every EU child at risk of poverty or social exclusion has access to the most basic of rights like healthcare and education.[20] This *Guarantee* is based on the concept that universal access is vital for ensuring equity for all children, and in particular those who experience social exclusion due to poverty or other forms of disadvantage. A *European Pillar of Social Rights*[21] defines early learning as encompassing centre-based and family day care, privately and publicly funded, preschool and pre-primary provision, where every child has a fundamental right to affordable and inclusive early learning.

Ireland is one example of this, with a strong policy agenda for inclusive early learning through a whole-of-government strategy. It covers the years 2019-2028 and commits Ireland to improving access, affordability, and quality in early learning. The focus is on the professionalization of the ECE workforce, increased funding, and instituting curriculum and quality frameworks. A *Diversity, Equality and Inclusion Charter and Guidelines for Early Childhood Care and Education* [22,23] includes a set of inclusion principles as the basis for the development of teacher competencies and pedagogy. This includes specialized support and expertise through multi-disciplinary teams and greater connections with the school system, especially for marginalized populations.[24]

The EU has developed two main policy instruments and guides: a toolkit which includes a set of inclusive policy initiatives, practical solutions, and measures to inspire the creation of appropriate conditions to benefit all children and families[25]; and how to recruit, train and motivate well-qualified staff.[26]

A Human Rights argument for equity builds on 70 years of empirical research that settles any debate that the neural development of young children is facilitated by participation in quality early learning, with boosted literacy, language, behavioural regulation and social skills.[27] This impact is particularly evident in marginalized children, for whom equity is seldom attained. It dramatically lowers referral to special education programs and lessens the intensity of support for those children who will require accommodations and individualized planning.[28] It levels the playing field and readies children for life, improving long-term indicators such as high school

completion, post-secondary participation, social determinants of health, income, and citizen engagement.[29] The outcome is greater equity.

Research Gaps

Despite the eloquence of these international standards for inclusion, Canadian children with individualized needs have little access to early years programs. Research must explore obstacles to access and tangible ways to remove them. The connection between research, policy and practice must establish the standards that Canada espouses - for *all* children, not just those protected by Education Acts.

Conclusions

A Human Rights perspective of inclusion during the early years implies equitable outcomes, as well as anti-discrimination policies for educators. Equity of access, equity of participation, and equity in the profession results in equity for society. The professional competency of early child educators, who historically have had little exposure to inclusive practices, depends on access to professional learning to ensure comfort and skill to understand, embrace and support inclusion. Diverse cultural practices, beliefs and languages become embraced and welcomed.

Implications for Parents, Services and Policy

Positioning children on level playing fields is not just good for children, it is good for families, communities, society, and economies. Children enrolled in inclusive environments value diversity and prioritize inclusive communities. Inclusion becomes the norm, and greater equity becomes the consequence.

Equity exists when every child, regardless of their needs, has full access with meaningful participation. Equity exists when every educator is free of discrimination or marginalization. It exists when no child is ever given the message of “you don’t belong because you are different” and when no mother must leave work to pick up their child because they’ve been excluded. Every educator feels secure, competent, confident, and enthused in caring for every child for exactly who - and how - they are in this world.

References

1. Hope-Irwin S, Lero DS. Inclusion quality: Children with disabilities in early learning and child care in Canada. 2020. https://specialinkcanada.org/resources/Inclusion%20Quality.pdf . Accessed October 1, 2024.
2. UNESCO. Global Education Monitoring Report team. Right from the start: Build inclusive societies through inclusive early childhood education. UNESCO; 2021. https://unesdoc.unesco.org/ark:/48223/pf0000378078. Accessed October 1, 2024.
3. Office of the Child and Youth Advocate, Newfoundland & Labrador. *Submission to the Department of Education Regarding the Early Learning Action Plan*. July 2023. https://www.childandyouthadvocate.nl.ca/files/Submission_EarlyLearningActionPlan-July2023.pdf. Accessed October 1, 2024.
4. Government of Canada. Guide to the Canadian Charter of Rights and Freedoms. https://www.canada.ca/en/canadian-heritage/services/how-rights-protected/guide-canadian-charter-rights-freedoms.html. Accessed October 1, 2024.
5. Statistics Canada. Discrimination and unfair treatment. Updated August 2, 2024. https://www160.statcan.gc.ca/good-governance-saine-gouvernance/discrimination-eng.htm. Accessed October 1, 2024.
6. Adams M. The Northern Exception: Populism in Canada in the Age of Trump, Brexit, and COVID-19. In: Deringer L, Ströbel L, eds. I*nternational Discourses of Authoritarian Populism*. 1st ed. New York and London: Routledge; 2022:49-71. doi:10.4324/9781003310303
7. Knowing Our Numbers. https://knowingournumbers.ca/en/. Accessed October 1, 2024.
8. United Nations. Universal Declaration of Human Rights. https://www.un.org/en/about-us/universal-declaration-of-human-rights. Accessed October 1, 2024.
9. UNESCO. Convention Against Discrimination in Education. https://www.unesco.org/en/right-education/convention-against-discrimination. Accessed October 1, 2024.
10. United Nations Office of the High Commissioner for Human Rights (OHCHR). Convention on the Rights of the Child. https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child. Accessed October 1, 2024.
11. United Nations Office of the High Commissioner for Human Rights (OHCHR). Convention on the Rights of Persons with Disabilities. https://www.ohchr.org/en/instruments-

mechanisms/instruments/convention-rights-persons-disabilities. Accessed October 1, 2024.

12. UNESCO. World Declaration on Education for All and Framework for Action to Meet Basic Learning Needs. https://unesdoc.unesco.org/ark:/48223/pf0000127583. Accessed October 1, 2024.
13. UNESCO. Inclusive Education: The Way of the Future. https://unesdoc.unesco.org/ark:/48223/pf0000180629. Accessed October 1, 2024.
14. United Nations. Millennium Development Goals. https://www.un.org/millenniumgoals/. Accessed October 1, 2024.
15. United Nations. Sustainable Development Goals. https://sdgs.un.org/goals. Accessed October 1, 2024.
16. UNESCO. Beyond Commitments: How Countries Implement SDG 4. https://unesdoc.unesco.org/ark:/48223/pf0000369008. Accessed October 1, 2024.
17. Towle H. Disability and Inclusion in Education. Canadian Centre for Policy Alternatives. June 2015. https://policyalternatives.ca/sites/default/files/uploads/publications/National%20Office/2015/07/Disal . Accessed October 1, 2024.
18. European Commission. Good Governance. https://data.europa.eu/doi/10.2838/097198. Accessed October 1, 2024.
19. European Commission. Inclusive Education in Europe. https://data.europa.eu/doi/10.2766/857178. Accessed October 1, 2024.
20. European Commission. Social Inclusion and Education. https://ec.europa.eu/social/main.jsp?catId=1428&langId=en. Accessed October 1, 2024.
21. European Commission. Equal Access to Quality Education. https://ec.europa.eu/social/main.jsp?catId=1226&langId=en. Accessed October 1, 2024.
22. Irish Department of Education. Strengthening Early Childhood Education and Care in Ireland. https://assets.gov.ie/38186/c9e90d89d94b41d3bf00201c98b2ef6a.pdf. Accessed October 1, 2024.
23. Ring E, O'Sullivan L. Creating spaces where diversity is the norm: An innovative competency-based blended learning teacher education program in Ireland. *Childhood Education*. 2019;95(2):29-39. doi:10.1080/00094056.2019.1593758

24. OECD. *Strengthening Early Childhood Education and Care in Ireland.* Paris: OECD Publishing; 2021. doi:10.1787/72fab7d1-en

25. European Commission. Equity in Early Childhood Education. https://data.europa.eu/doi/10.2766/399018. Accessed October 1, 2024.

26. European Commission. Governance in Early Childhood Education. https://data.europa.eu/doi/10.2766/489043. Accessed October 1, 2024.

27. McCoy DC, Charles D, Yoshikawa H, et al. Impacts of early childhood education on medium- and long-term educational outcomes. *Educational Researcher*. 2017;46(8):474-487.

28. Young G, Philpott DF, Butler E, Maich K, Penney S. Exploring the impact of quality early child education on special education: Can we prevent placement in special education? *Exceptionality Education International.* 2019;29(3):6-21.

29. Macdonald A, Renner C, Alexander C, Beckman C, Stewart M. *Ready for Life: A Socio-Economic Analysis of Early Childhood Education and Care*. Conference Board of Canada; October 26, 2017.

Early Childhood Education in Public Schools: Evidence from New Jersey's Universal Pre-K

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Introduction

Early care and education (ECE) is a service with public as well as private benefits. Not surprisingly, ECE for children ages three to five is provided and paid for privately and publicly. The mix of public and private involvement has varied over time as well as between and within countries. As policymakers consider how to expand public support for ECE in other countries, including the United States and Canada, the role of public education is a key consideration.

Subject

Public education plays a large and growing role in ECE, raising important questions about the consequences for ECE and what policy options might best support early learning and development.

Problems

The provision of ECE through public education brings risks and opportunities. Some in the field have had longstanding concerns about how schools may standardize and "academize" ECE. Those with concerns that public education chronically underperforms in K-12 raise similar questions regarding ECE. Another perennial concern is that public provision "crowds out" private expenditure and private providers with the potential to reduce the supply of infant-toddler care. At the same time, public education presents opportunities to address issues of high costs to families, low quality in private ECE and the related problems of low qualifications and compensation for the workforce, and fade-out that may be due to insufficient coverage and lack of alignment of curriculum content into the early grades.

Research Context

Following landmark state Supreme Court rulings in the *Abbott v Burke* school finance case from 1998 to 2002, high-quality universal ECE was offered to all children in 31 high-poverty communities at ages 3 and 4 as part of a systemic reform of public education.[1] The state fully funded the ECE program. All funds went to the 31 local education agencies (LEAs) directed to provide services through a combination of public schools and private ECE providers (for-profit, non-profit, Head Start), with the LEA responsible for quality in all.

The Court and state regulations specified policies to support quality that included a four-year college degree and a specialized teaching license in ECE for teachers, a maximum class size of 15 with a teacher and assistant, a full 6-hour school day, developmentally appropriate practice with a single approved curriculum in each LEA; adequate facilities; and transportation, health, and other related services as needed. The state education agency developed aligned standards for learning and teaching, assessments of practice and child development, and professional development that together comprised a system for continuous improvement at classroom, building, LEA, and state levels. Districts supported quality equally in all settings, and all teachers were required to receive comparable compensation.[2]

The evaluation included annual classroom quality assessments, studies of initial impacts, and a longitudinal study of child outcomes with 1070 children who entered kindergarten in the 15 largest districts in the fall of 2005, with 765 followed through grade 6 and 653 through to grade 10.[3]

Key Research Questions

1. What is known about the effects of preschool education offered through public schools on the ECE sector as a whole?
2. What was the impact of ECE expansion through the public schools on ECE quality?
3. What were the effects of the ECE program on student learning and school success?

Recent Research Results

The Pre-K program brought a rapid increase in enrolment by expanding the number of seats in public schools as well as by partnering with private providers and Head Start programs willing to meet the new state standards. The initiative also impacted diversity within the teaching profession. Public schools predominantly employed trained teachers who were mostly white,

while private preschools often hired radicalized educators without degrees. With the new mandate requiring all ECE teachers to hold degrees within five years, an estimated 90% of teachers working in contracted private programs complied, leading to a more diverse, majority non-white qualified teaching population.[4]

The impact of expanding ECE through public education was assessed by a 2007 survey of 98 directors of private providers and Head Start contracted for Abbott ECE. Respondents were "overwhelmingly positive" about the program, with all citing positive benefits to their centres. More than half reported increased teaching staff skills and stability from higher salaries and new educational opportunities. Almost as many reported that the more consistent and substantial funding increased stability and enabled them to improve the learning environment. About one-third reported that they were able to improve services for children and families.[5]

Independent assessment of quality (measured by the Early Childhood Environment Rating Scale-Revised, ECRQ-R) was used to monitor the Abbott program's progress statewide annually. Quality rose steadily over the first eight years of the program from an average below 4, with most classrooms scoring poor to mediocre, to an average above 5, with most programs scoring good to excellent.[2]

Impacts on children's learning and school performance at kindergarten entry were estimated using a regression-discontinuity design (RDD), and a longitudinal study estimated later impacts by comparing children from the same kindergarten classrooms who did not attend, attended for one year and attended for two years.[3,6,7] The RDD studies found moderate gains in language, math, and literacy. These are larger than the estimated impacts at kindergarten of one year in the longitudinal study, suggesting the longitudinal study underestimates effects. Nevertheless, the longitudinal study found gains in literacy and language arts, mathematics, and science through the secondary grades. Effect sizes for one year of Abbott pre-K averaged around .10 SD for math and slightly higher for language and literacy, and science. Effect sizes for two years of Abbott pre-K averaged .30 to .40 SD for math and .30 SD for language and literacy. The program was estimated to reduce grade retention by 15 percentage points.

Research Gaps

Future research on Abbott Pre-K should investigate effects on social and emotional development, educational attainment and earnings and whether the recent expansion in many other LEAs

produced similar results. As Abbott Pre-K was accompanied by a broader court-ordered reform of K-12, persistent impacts might depend on reforms that created continuity. Further generalization would be supported by testing the model outside New Jersey in other systems of public education.

Conclusions

The Abbott Pre-K program results suggest designing programs with multiple features predicting stronger persistent effects compared to typical large-scale public programs. These include universal eligibility, duration of two years (or more), high quality and standards, curriculum continuity, funding adequacy, and a strong continuous improvement system. Abbott pre-K is the closest replication at scale of the highly intensive and effective Perry Preschool program. Yet, the Abbott model is also feasible. Although more expensive than many ECE programs, it is not more expensive than public education generally.[8] Approaches that produce substantial long-term gains offer a much better return on investment than cheaper alternatives with minimal long-term benefits.[9]

Implications for Parents, Services and Policy

Few children, regardless of parental education and income, have access to programs of the quality provided by Abbott pre-K. Although the cost problem could be solved by public subsidies, features of the Abbott program contributing to its success require a coherent, aligned system of high-quality universal pre-K as part of public education. A randomized trial designed to investigate this issue found that the persistence of pre-K effects increased with the percentage of children in elementary school classrooms who had attended the pre-K program.[10] The persistence of gains through the early years also increases with instructional continuity from pre-K through the early grades.[11] Policies should support more than one year of quality ECE at age 4. Finally, it cannot be assumed that even the best-designed and funded ECE program will produce the desired outcomes for all children in every context. An essential component of successful ECE programs is a robust approach to continuous improvement and evaluation.

References

1. Kim R. Under the law : Expanding access to pre-K and the legacy of Abbott v. Burke. *Phi Delta Kappan*. 2021;103(2):64-65. doi:10.1177/00317217211013943

2. Barnett WS, Frede EC. Long-term effects of a system of high-quality universal preschool education in the United States. In: Blossfeld H-P, Kulic N, Skopek J, Triventi M, eds. *Childcare, early education and social inequality*. Cheltenham, UK: Edward Elgar; 2017:152-172.
3. Barnett WS, Jung K. Effects of New Jersey's Abbott preschool program on children's achievement, grade retention, and special education through tenth grade. *Early Childhood Research Quarterly*. 2021;56:248-259. doi:10.1016/j.ecresq.2021.04.001
4. Ryan S, Ackerman DJ. *Creating a qualified preschool teaching workforce part I: Getting qualified: A report on the efforts of preschool teachers in New Jersey's Abbott districts to improve their qualifications*. New Brunswick, NJ: National Institute for Early Education Research, Rutgers, The State University of New Jersey; March 3, 2004.
5. Whitebook M, Ryan S, Kipnis F, Sakai L. *Partnering for preschool: A study of center directors in New Jersey's mixed-delivery Abbott program.* Berkeley, CA: University of California, Center for the Study of Child Care Employment; 2008.
6. Wong VC, Cook TD, Barnett WS, Jung K. An effectiveness-based evaluation of five state pre-kindergarten programs. *Journal of Policy Analysis and Management*. 2008;27(1):122-154. doi:10.1002/pam.20310
7. Barnett WS, Jung K, Friedman-Krauss A, Frede EC, Nores M, Hustedt JT, Howes C, Daniel-Echols M. State prekindergarten effects on early learning at kindergarten entry: An analysis of eight state programs. *AERA open.* 2018;4(2):2332858418766291. doi:10.1177/2332858418766291
8. Friedman-Krauss AH., Barnett WS., Hodges KS. et al. *The state of preschool 2023: State preschool yearbook.* New Brunswick, NJ: National Institute for Early Education Research; 2024.
9. Ramon I, Chattopadhyay SK, Barnett WS, Hahn RA; Community Preventive Services Task Force. Early childhood education to promote health equity: a community guide economic review. *Journal of Public Health Management and Practice*. 2018;24(1):e8-e15. doi:10.1097/PHH.0000000000000557
10. List JA, Uchida H. Here today, gone tomorrow? Toward an understanding of fade-out in early childhood education programs. NBER Working Paper No. w33027. October 2024.

11. McCormick MP, MacDowell C, Weiland C, Hsueh J, Maier M, Pralica M, Maves S, Snow C, Sachs J. Instructional alignment is associated with PreK persistence: Evidence from the Boston Public Schools. *Early Childhood Research Quarterly.* 2024;67:89-100. doi:10.1016/j.ecresq.2023.11.008

Families' experiences in Pre-Primary schooling in Nova Scotia and the implications for policy and practice

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Introduction

Across Canada, changes are underway as part of the Canada-wide Early Learning and Child Care Agreements to make child care more accessible for families. Reforms, however, continue to accommodate child care as a private commodity where owners or operators consider its viability based on individual business plans.[1] As a result, most children and families continue to live in childcare deserts, places that are chronically underserved, with rural areas particularly hard hit.[2]

Publicly funded school-operated early learning and child care offers several advantages over private provision. School-based programs typically follow mandated curricula designed to promote both social and academic skills, ensuring a balance of cognitive, emotional, and physical development. Educators in these settings are usually certified and have specific training in early childhood education, which can lead to higher-quality interactions and more effective learning experiences for young children.[3] Additionally, being part of a larger school system often means better access to resources, support services, and educational materials. School-operated preschools also create a smoother transition into the elementary school environment. Parents can also benefit from lower costs due to public funding, making them a more accessible and reliable choice for families.

Subject

Nova Scotia, one of Canada's most easterly provinces, began modifying its early years services 15 years ago, starting with an initiative that provided an early learning program for children the year before school entry (4 years old). Located in a limited number of schools, the Early Years Centre initiative was modelled on the success of Toronto First Duty, which suggested that participation in an integrated school-based service by preschool-aged children improved

developmental outcomes.[4] The initiative was also informed by the Better Futures Project in Ontario, which used schools as hubs for early years supports. Evaluations found cost-savings from this model in the Better Futures Project, particularly in reducing the need for future educational interventions.[5,6] Our evaluation documented the development of Early Years Centres and the feasibility of scaling to universal provision.[7,8]

Problems

Publicly offered preschools, while beneficial in many ways, may face political, quality and accessibility challenges.

Flexibility can be an issue with their placement within a school-based setting. Public preschools within schools are confined to schedules, budgets and resources available to the education system, which may be less adaptable than private options and could limit support for children with unique learning needs. Furthermore, public preschools may have less frequent communication with parents through the adoption of school bussing or before/after school programs that can limit family engagement. Lastly, because public preschools are often part of larger school systems, they may experience bureaucratic delays or policy shifts that impact program consistency, resources, or priorities, potentially affecting the quality of education children receive.

Research Context

Mandatory schooling in Nova Scotia begins at age 5 with Grade Primary (known as kindergarten in other parts of the country). The success of the Early Years Centre demonstration sites informed a provincial mandate to ensure all children have access to early childhood education in the year before school entry. The universal Pre-primary Program began in 2017 and, by the 2020-21 school year, was in elementary schools in all seven Regional Centres for Education and le Conseil scolaire acadien provincial. Pre-primary is similar to junior kindergarten in Ontario and the Northwest Territories but offers important distinctions as well.

The program is non-mandatory, includes no-fee access for families and welcomes all children in the school catchment. There are key examples across rural communities, especially those experiencing high levels of poverty, where Pre-primary has directly addressed childcare scarcity and eliminated the stress that families often experience in finding care for their children. The program follows the school day and annual calendar. Children attending Pre-primary are eligible

for school busing. The Nova Scotia Before and After Program, provided on-site by community organizations, offers child care with a focus on outdoor, active, and adventurous play.

Key Research Questions

Early research on the Early Years Centre initiative documented families' experiences. It sought to assess parents' views of a 4-year-old program and its potential impact on their children's development and transition into the first year of school. Families spoke to the importance of locating the program in their local school, the connection of the program to the school community, and their recognition of the value of play-based learning.[7,8]

Recent Research Results

A recent scoping review of the literature identified key features of program quality among universal and school-based early learning programs, including an overarching emphasis on system-level policies that support programs through pedagogical and inclusive practices, the co-location of the program within a school-based learning environment, and key people that support the program.[8,9] As is well documented by previous research and studies,[10,11,12] highly trained and well-compensated early childhood educators (ECEs) are a critical feature of program quality. In Nova Scotia, Pre-primary educators with ECE-specific diplomas or degrees implement the province's Early Learning Curriculum Framework, which emphasizes play-based learning through intentional teaching that is deliberate, purposeful, and responsive to children's explorations, theories, and learning styles.[13] Possessing ECE-specific qualifications provides educators with an understanding of how to design a learning space, select materials, and create early learning experiences that support children's development within a play-based environment.

Research Gaps

Inclusive early childhood education requires educators who are reflective and responsive as they design, implement and support learning environments that welcome all children and families. Inclusive programs acknowledge and celebrate diverse abilities, cultural backgrounds and family structures.9 Research, however, has documented that families with a child with a disability often have limited options for early learning and child care alongside additional financial stressors.[14] Studies on childhood disability in early childhood underscore concern about how inclusion is understood and practiced within early childhood programs.[14,15,16] For families, these concerns can lead to increased stress and emotional fatigue as they navigate limited access alongside concerns

for the safety and support of their child's unique health and developmental needs.[14]

Further research in Nova Scotia has noted the limits in the implementation of culturally responsive practice among early learning and child care programs and the existence of Anti-Black racism and xenophobia.[17,18,19] These issues are not unique to early childhood programs, with research demonstrating persistent inequities within public schools, particularly among Indigenous and African Nova Scotian communities.[10,20,21] Policy reform is underway to support inclusive education in Nova Scotia's schools; a developmental evaluation has identified the importance of support for educators to ensure effective classroom practices, including professional learning.[22,23]

Conclusions

With access to Pre-primary now secured, a key priority is maintaining high-quality, inclusive, and culturally responsive programs. While the placement of early childhood education in schools can support accessibility, there remains tension between play-based pedagogies and the increasing pressure for evidence of outcomes in academic skills, sometimes referred to as "schoolification.' This approach necessitates providing proof of school readiness rather than promoting an understanding of the need to provide time and opportunity to develop complex skills that are foundational to life-long learning.[12]

Partnerships among ECEs working in school-based programs with school administrators, elementary school teachers, and families are critical to high-quality early childhood programs[9] enabling a shift toward "playification" of a curriculum, in which skills such as curiosity, discovery and competency are fostered through intentionally designed opportunities for play.[24] Research underway in Nova Scotia used a photo-elicitation methodology with ECEs working in pre-primary programs focused on numeracy and literacy learning through play. This research provided illustrative examples of learning through play and facilitated discussions of what this includes and requires within a play-based approach being supported within a school context.[25]

Implications for Service Providers and Policymakers

As Canada works toward developing a high-quality, accessible, affordable system of early learning and child care, the infrastructure provided through the public school system is an opportunity to create much-needed childcare spaces. However, simply co-locating early learning programs within a school building does not automatically result in quality experiences for

children, educators, and families. Care must be taken to ensure that policies are developed that acknowledge and support the requirements of high-quality programs through supportive administrators and intentional linkages to early elementary schooling that bring attention to the value of learning through play. Programs also need purpose-built spaces with qualified and well-remunerated educators who are supported to foster inclusive, respectful, and culturally responsive practices for all families and children.

References

1. Prentice S. High stakes: the “investable” child and the economic reframing of childcare. *Signs*. 2009;34(3):687-710. doi:10.1086/593711.
2. Macdonald D, Friendly M. Not done yet: $10-a-day child care requires addressing Canada’s child care deserts. *Canadian Centre for Policy Alternatives*. May 2023.
3. Akbari E, McCuaig K, Mehta S. *The Early Childhood Education Report 2023*. Ontario Institute for Studies in Education/University of Toronto; 2024.
4. Patel S, Corter C, Pelletier J, Bertrand J. 'Dose-response' relations between participation in integrated early childhood services and children’s early development. *Early Childhood Research Quarterly.* 2016;35:49-62. doi:10.1016/j.ecresq.2015.12.006
5. Pancer SM, Nelson G, Hasford J, Loomis C. The Better Beginnings, Better Futures Project: Long-term parent, family, and community outcomes of a universal, comprehensive, community-based prevention approach for primary school children and their families. *Journal of Community & Applied Social Psychology*. 2013;23(3):187-205. doi:10.1002/casp.2110.
6. Peters RDV, Petrunka K, Khan S, Howell-Moneta A, Nelson G, Pancer SM, Loomis C. Cost-savings analysis of the Better Beginnings, Better Futures community-based project for young children and their families: a 10-year follow-up. *Prevention Science*. 2016;17(2):237-247. doi:10.1007/s11121-015-0595-.
7. Carolan PL, McIsaac J-LD, Richard B, Turner J, McLean C. Families’ experiences of a universal play-based early childhood program in Nova Scotia: Implications for policy and practice. *Journal of Research in Childhood Education.* 2021;35(4):550-566. doi:10.1080/02568543.2020.1773588

8. McIsaac J-LD, Smith ME, Turner J, McLean C, Harkins MJ. The perceived value of a universal early learning program: a parent perspective. *Journal of Child and Family Studies* . 2022;32(4):977-988. doi:10.1007/s10826-021-02214-9
9. McLean C, McIsaac J-LD, Mooney O, Morris SB, & Turner JA. Scoping Review of Quality in Early Childhood Publicly-Funded Programs. *Early Childhood Education Journal*. 2022;51(7):1267-1278. doi:10.1007/s10643-022-01372-9
10. Burns SC. Achieving quality in early childhood education in the Eastern Caribbean depends on teacher preparation. *Early Child Development and Care*. 2018;188(9):1246–1259. doi:10.1080/03004430.2017.1310723
11. Doherty G, Lero D, Goelman H, LaGrange A, Tougas J. *You bet I Care!: A Canada-wide study on wages, working conditions, and practices in child care centres*. Centre for Families, Work, and Well-Being, University of Guelph, Ontario; 2000.
12. Manning M, Garvis S, Fleming C, Wong G. The relationship between teacher qualification and the quality of the early childhood education and care environment. *Campbell Systematic Reviews*. 2017;13(1):1-82. doi:10.4073/csr.2017.1
13. Nova Scotia Department of Education and Early Childhood Development. *Capable, confident, and curious: Nova Scotia's early learning curriculum framework*. Province of Nova Scotia. 2018. https://www.ednet.ns.ca/docs/nselcurriculumframework.pdf. Accessed January 2025.
14. McIsaac J-LD, McLean C, Cummings R, LeBlanc LA, Briscombe A, Pimentel M. Supporting numeracy and literacy in play-based early learning programs. *Early Childhood Collaborative Research Centre*. Mount Saint Vincent University; 2022.
15. Phelan S, Diggins C, Ausman C, Vardy L, McConnel D, Moore S. Equitable access to inclusive early learning and childcare for children with disabilities: the family experience. Submitted to Employment Social Development Canada, Government of Canada. Full Report. https://dalspace.library.dal.ca/handle/10222/84314. Accessed January 2025.
16. Barned NE, Knapp NF, Neuharth-Pritchett S. Knowledge and attitudes of early childhood preservice teachers regarding the inclusion of children with autism spectrum disorder. *Journal of Early Childhood Teacher Education*. 2011;32(4):302-321. doi:10.1080/10901027.2011.622235.

17. Munchan L, Agbenyega J. Exploring early childhood educators' experiences of teaching young children with disability. *Australasian Journal of Early Childhood.* 2020;45(3):280-291. doi:10.1177/1836939120944635.

18. Fakhari N, McIsaac J-LD, Feicht R, et al. Looking through the lens: a photovoice study examining access to services for newcomer children. *International Journal of Qualitative Studies on Health and Well-Being*. 2023;18(1):2255176.

19. Pimentel M, McIsaac J-L, Watson C, et al. Amplifying the encounters of young Black children with anti-Black racism: an exploration of parents' and early childhood educators' perspectives on early learning and child care environments. *Journal of Childhood Studies*. 2023;48(4):38-55. doi:10.18357/jcs202321239.

20. Black Learners Advisory Committee. BLAC Report on Education: Redressing Inequity, Empowering Black Learners. 1994. https://www.ednet.ns.ca/docs/blac-report-education-redressing-inequity.pdf. Accessed January 2025.

21. Glaze A. *Raise the Bar—A Coherent and Responsive Education Administrative System for Nova Scotia. January 2018*. Report to the Nova Scotia Department of Education and Early Childhood Development; 2018.

22. Hamilton-Hinch B-A, McIsaac J-LD, Harkins M-J, Jarvis S, LeBlanc JC. A call for change in the public education system in Nova Scotia. *Canadian Journal of Education/Revue Canadienne de l'éducation*. 2021;44(1):CI64-CI92. doi:10.53967/cje-rce.v44i1.5025

23. Whitley J, Hollweck T. Inclusion and equity in education: Current policy reform in Nova Scotia, Canada. *PROSPECTS*. 2020;49(3):297-312. doi:10.1007/s11125-020-09503-z

24. Patton K, Winter K. Children's agentic capacity, schoolification and risk: competing discourses and young children's experiences in pre-school settings. *Journal of Curriculum Studies*. 2022;54(5):647-664. doi:10.1080/00220272.2022.2113916

25. Davis K. Playification of the curriculum: learnings from collaborative classroom research. *Research on Play and Games*. 2018;3:28-35. doi.org/10.18296/set.0115

Importance of Continuity of Learning in Early Childhood Development

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Introduction

Continuity of learning in early childhood development is a crucial concept that ensures seamless transitions and consistent educational experiences for children. This paper explores the importance of continuity of learning, referencing publications and observations from the Our Place approach. Our Place is an initiative by the Colman Education Foundation. In a partnership with the Victoria state government in Australia, 10 sites are modeling how schools can act as community platforms to support the education, health, and development of children and families in disadvantaged communities.

Subject

Continuity of learning refers to the smooth and cohesive progression of educational experiences as children move through different stages of early learning and into formal schooling. This concept is especially significant for children in disadvantaged communities who face additional barriers to educational success.[1,2] Ensuring continuity in learning helps provide stable and supportive educational environments, which are essential for all children's holistic development and long-term success.[3,4]

Problems

The primary problems associated with a lack of continuity in learning include:

- **Educational Disruptions:** Inconsistent educational experiences can lead to gaps in learning, affecting children’s academic progress.
- **Increased Vulnerability:** Children from disadvantaged backgrounds are particularly at risk of experiencing educational disruptions, which can exacerbate existing inequalities.

- **Loss of Educational Gains:** Without continuity, the benefits of early learning can diminish, leading to a loss of foundational skills and knowledge.
- **Fragmented Support Systems:** Inconsistent practices across early learning and school settings can result in fragmented support systems, making it difficult to address the holistic needs of children.[2,5]

Research Context

The research context for continuity of learning examines the educational pathways from early childhood through primary education.[6] This includes understanding how different educational settings—such as early childhood centres and primary schools—can align their practices, curricula, and assessments to provide a seamless learning experience for children[7,8] The Our Place initiative provides a practical framework for this research, focusing on place-based approaches that integrate various elements of continuity of learning in disadvantaged communities.

Key Research Questions

Key research questions in the context of continuity of learning include:

- How can educational practices be aligned across early learning and primary school settings to ensure continuity of learning?
- What are the impacts of continuity of learning on children's academic and social-emotional outcomes?
- How can support systems be structured to provide consistent and holistic support for children, particularly those from disadvantaged backgrounds?
- What are the roles of educators, parents, and policymakers in promoting continuity of learning?[9]

Recent Research Results

Recent research results from the Our Place publications highlight the importance of continuity in learning for enhancing educational outcomes. Key findings include:

- **Enhanced Educational Outcomes:** Evaluations show that children who experience continuity in their learning environments have better academic and social-emotional outcomes.
- **Support for Vulnerable Children:** Continuity of learning is particularly beneficial for children from disadvantaged backgrounds, helping to mitigate the risks associated with educational disruptions.
- **Cumulative Learning:** Continuity in educational practises ensures that each stage of learning builds on the previous one, reinforcing and expanding children's knowledge and skills.
- **Reduction of Learning Gaps:** Consistent assessment and pedagogical approaches help identify and address learning gaps early on, reducing disparities in educational outcomes.

Research Gaps

Despite positive findings, several research gaps remain. More longitudinal studies are needed to understand the long-term impacts of continuity of learning on children’s academic and social-emotional development. Additionally, research could explore the specific mechanisms through which continuity of learning influences outcomes, particularly for children from diverse cultural and socio-economic backgrounds. Further investigation is required to identify effective strategies for implementing continuity of learning in various educational settings and to understand the challenges and barriers faced by educators and policymakers in promoting continuity of learning.

Conclusion

Continuity of learning is a vital aspect of early childhood development that ensures children experience consistent, cohesive, and supportive educational journeys. By aligning organisational structures, curricula, pedagogical approaches, and assessment practises, educators can create a seamless learning experience that benefits all children, especially those from disadvantaged backgrounds.[10,11] The insights from Our Place's publications provide valuable guidance in implementing continuity of learning strategies effectively. Addressing the challenges and committing to collaborative efforts will ensure children can thrive and succeed in their educational journeys. Ensuring continuity helps mitigate the risk of educational disruptions and promotes stable learning environments. It also plays a critical role in reducing learning gaps and fostering cumulative learning. To fully realize the benefits of continuity of learning, it is essential

to address the existing research gaps and continue exploring innovative approaches to support children's educational success.

Implications for Parents, Services and Policy

For parents, understanding the importance of continuity of learning can help them advocate for consistent educational practises and support systems for their children. Parents can play a crucial role in reinforcing learning at home and ensuring that transitions between different educational stages are smooth.

For services, particularly those provided by early childhood centres and schools, adopting a continuity of learning approach involves aligning curricula, teaching practises, and assessment methods. Professional development and collaboration among educators are essential for maintaining consistency in educational practices.[12]

For policymakers, promoting continuity of learning requires creating policies that support alignment and structures that enable collaboration across different educational settings. This includes providing adequate resources, time and training for educators, as well as developing frameworks that encourage consistent practices. Policymakers should also focus on addressing the structural barriers that hinder the implementation of continuity of learning. By prioritizing continuity of learning, policymakers can help ensure that all children have access to high-quality, cohesive educational experiences that support their long-term success.

References

1. Hattie J. *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement.* Routledge; 2009.
2. Australian Early Development Census. AEDC Data. Published 2021. https://www.aedc.gov.au/data/data-explorer. Accessed November 20, 2024.
3. Early Childhood Australia. Continuity of learning: A resource to support effective transition to school and school-age care. https://www.earlychildhoodaustralia.org.au/our-work/continuity-learning-resource/ Published 2018. Accessed November 20, 2024.
4. Rimm-Kaufman SE, Pianta RC. An ecological perspective on the transition to kindergarten: A theoretical framework to guide empirical research. *Journal of Applied Developmental Psychology.* 2000;21(5):491-511. doi:10.1016/S0193-3973(00)00051-4

5. Dockett S, Perry B. Trends and tensions: Australian and international research about starting school. *International Journal of Early Years Education.* 2013;21(2-3):163-177. doi:10.1080/09669760.2013.832943
6. Moore TG, Arefadib N, Deery A, West S. *The First Thousand Days: An Evidence Paper.* Parkville, Victoria: Centre for Community Child Health, Murdoch Children's Research Institute; 2017.
7. Bronfenbrenner U. *The Ecology of Human Development: Experiments by Nature and Design*. Cambridge, MA: Harvard University Press; 1979.
8. Sayers M, West S, Lorains J, Laidlaw B, Moore T, Robinson R. Starting school: A pivotal life transition for children and their families. *Family Matters*. 2012;90(1):45-56.
9. Gonski D, Arcus T, Boston K, et al. *Through Growth to Achievement: Report of the Review to Achieve Educational Excellence in Australian Schools*. Australian Government. March 2018.
10. Organisation for Economic Co-operation and Development (OECD). *Starting Strong V: Transitions from Early Childhood Education and Care to Primary Education*. Paris, France: OECD Publishing; 2017.
11. Kagan SL, Kauerz K. *Early Childhood Systems: Transforming Early Learning*. New York, NY: Teachers College Press; 2012.
12. Victorian Department of Education and Training. *Practice principles for excellence in teaching and learning: A guide for teachers.* Melbourne, Victoria: Department of Education and Training; February 2018.

Why is the public school system important in building early learning?

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Introduction

The Canadian public school system is one of the strongest in the world. According to the Organisation for Economic Co-operation and Development (OECD),[1] in the most recent Programme for International Student Assessment (PISA), Canadian public schools scored in the top 10 countries in reading, math and science among secondary school students, above Australia, New Zealand, the UK, United States, and Ireland.[2] Particularly significant is Canada scores well in both achievement and equity. Canadian students tend to perform well regardless of differences in their socioeconomic background.

Both achievement and equity count, but equity is especially significant if we are to build and hold trust in our public institutions.[3] A founding principle of public education is equity. Enrolment is a right regardless of location, race, religion, social status, language, degree of privilege, or special needs of the child.

According to Statistics Canada, in 2023, the gap between rich and poor in Canada grew at the fastest pace on record. The top 20% of earners held 67.8 % of the country's net worth, compared with the bottom 40% holding 2.7%.[4] Schools can and do help close the equity gap but cannot fully compensate children from low-income families with the many enriching experiences and opportunities that more privileged children enjoy.

Subject

Research continues to reinforce the value of investing in early childhood education, including stronger literacy and numeracy, increased self-regulation, and more positive social-emotional skills for children who have access to early years programs and services. The earlier we invite families into the public school system, the better. Public school systems have existing infrastructures which can promote positive transitions from childcare into the school system.

Problems

Separate childcare and school systems for young learners can lead to several challenges:

- When early childhood education and formal schooling operate independently, children may encounter inconsistent teaching methods and curricula, disrupting the continuity of their learning and development.[4]
- Childcare services are not universally available and charge fees excluding many low and moderate-income families.
- Public preschools typically employ trained teachers who are predominantly white, while childcare may have racialized educators without degrees. This segregation can perpetuate inequalities in educational quality and outcomes.[5]
- Separate systems require distinct administrative structures, leading to duplicated efforts and higher operational costs.[6]
- Families navigating separate systems may face challenges in understanding and engaging with differing expectations and communication channels, potentially hindering their involvement in their child's education.[7]

Research Context

British Columbia's "Seamless Day" is an example of utilizing the public school infrastructure to implement quality early learning initiatives that provide ongoing opportunities for greater collaboration between adults working with young children across various settings.

Beginning in 2019, the BC Ministry of Education and Child Care implemented the Seamless Day Kindergarten initiative. Rather than just locating childcare programs in schools, Seamless Day creates educational teams of certified Early Childhood Educators (ECEs) and Kindergarten teachers working in the kindergarten classroom. The Seamless Day framework aims to develop continuity as children transition from one setting to another through seamless support and communication. Continuity of learning is enabled by strengthening relationships between ECEs and teachers, creating similarities in learning environments, and a shared mindset with common pedagogy and practices, using the *BC Early Learning Framework* to guide curriculum.

The Seamless Day begins in the before-school environment. ECEs greet families in the kindergarten classroom before the school day begins, continue to support learning alongside the

kindergarten teacher during the school day and resume learning activities after the formal school day ends. The teaching team collaborates to provide joyful experiences for children to explore and play.

The wrap-around continuity of programming and activities and the collaborative knowledge of the child and the family create smooth transitions, which is especially important for vulnerable children who have the most to lose from a fragmented approach. Strong transitions can improve equity in young children's education outcomes.

Key Research Questions

What impact does the integration have on early literacy and numeracy skills?
Does integrated programming improve school readiness and long-term educational achievement?
How does integration influence children's sense of belonging and classroom engagement?

Recent Research Results

Central to a thriving primary classroom is oral language. In this environment, children whose home language is more functional than expansive grow their vocabulary and sentence structure. All children learn to use their language to express their needs, interact with one another, observe, notice and wonder. They become readers, writers, speakers, listeners and thinkers in a community where all belong. Children are engaged in whole-class learning, small-group learning, and individual work. Teachers model, provide opportunities for guided and independent practice, and watch for children displaying, in different contexts, the skills and strategies that have been taught. This model of gradual release of responsibility enables all children to progress at their rate and to have the support and modeling of those around them.

In *Every Child, Every Day*, researchers Allington and Gabriel[8] developed six elements of daily instruction, which when used allow more than 95% of children to read at grade level by the end of grade one.

1. Every child reads something of their choosing. Choice matters enormously. When given a choice, engagement increases, and children experience the joy and purpose of reading.
2. Every child reads accurately. At some point every day, children need books that they can read. These books will blend decodable words and sight words and enable children to increase the number of words they read automatically.

3. Every child reads something they understand. This is the goal of reading – understanding. Children need daily practice in reading for meaning, first in a group, then independently.
4. Every child writes something personally meaningful. Reading and writing are reciprocal processes. Many children learn about letters and sounds as they are instructed in phonics and phonemic awareness, and they put these skills to work in writing. Beginning with drawing and adding letters, sounds, and words to their sketches, they record their stories and share them with others. All children have stories to share. Their background knowledge, cultural experiences, and languages are important resources.
5. Every child talks to their peers about their reading and their writing. Given choice in reading, expecting to write daily about shared experiences from the class, personal experiences, or flights of imagination sets children up for sharing, which, in turn, helps build community, confidence and competence.
6. Every child listens to a fluent adult read aloud. This invitation into a story expands a child's world and builds their vocabulary and sense of text.

Vocabulary growth is significant in closing the gap for young children. Children who are never read to at home are exposed to approximately 300,000 fewer words than children who are read to once day per day from birth to 5 years of age.[9] Reading at school can compensate for this gap, and can be critical to second language learners. They hear both the words and the cadence and rhythm of language.

Research Gaps

Integrated early education and child care is a new and not widely used delivery model. As a result, most studies focus on immediate skill development, lacking data on sustained academic progress. There is also insufficient comparative analysis between integrated and non-integrated systems, making it challenging to isolate those elements of program integration which provide benefits. Additionally, diversity factors such as socio-economic status, linguistic background, and cultural variations remain underexplored, particularly how these affect literacy gains in integrated models. Another gap involves the professional collaboration between early childhood educators and kindergarten teachers, with limited insights into how joint pedagogical strategies influence literacy development. Furthermore, research often overlooks the impact of policy variations and funding models on the quality of literacy instruction in integrated settings. Addressing these gaps can provide a more comprehensive understanding of how integration

influences early literacy outcomes.

Conclusions

Research on the impact of integrated education and child care on children's early literacy generally indicates positive outcomes, emphasizing improved language development, vocabulary expansion, and foundational literacy skills. Studies have shown that children in integrated settings benefit from continuous learning experiences facilitated by collaborative teaching between early childhood educators and kindergarten teachers. This approach enhances the consistency of literacy instruction and exposure to language-rich environments, particularly benefiting children from diverse socio-economic backgrounds. However, research highlights variability based on program quality, teacher qualifications, and family engagement levels. Longitudinal studies suggest that early literacy benefits can extend into later academic achievement, though further evidence is needed to confirm long-term effects. Moreover, when schools meet the needs of parents for childcare, and the developmental needs of children, trust in public education is enhanced.

As Dr. Maren Aukerman of the University of Calgary says, ‘Literacy is shaped by culture and context, is social, and involves emotions.’[10] The public system embraces our rich, Canadian diversity of learners. Together, we are better. In the public system, we embrace diversity, celebrate it, and are richer for it.

Implications for Parents, Services and Policy

For parents, models that streamlined access to both early learning and child care, reduce logistical challenges and promote consistent care routines. The continuity between early education and care also enhances parental confidence in the quality of services, supporting their involvement in their child’s development. For services, integration fosters collaboration between early childhood educators and kindergarten teachers, leading to more cohesive instructional practices and improved early literacy outcomes. It also encourages professional development and shared pedagogical strategies. From a policy perspective, integrated models require harmonized funding frameworks and consistent quality standards across childcare and education sectors. Policies must address equitable access, ensuring that families from diverse backgrounds benefit equally. Additionally, policymakers must focus on sustainable funding, professional standards, and inclusion strategies to maximize the benefits of integrated early learning systems for all

children.

References

1. Canadian Association of Public Schools - International. 3 Reasons Canadian Public Schools Are Among the Best in the World. Published October 18, 2019. https://caps-i.ca/3-reasons-canadian-public-schools-are-among-the-best-in-the-world/. Accessed January 7, 2025.
2. Organization for Economic Co-operation and Development (OECD). Better Life Index: Education. Paris, France: OECD Publishing. https://www.oecdbetterlifeindex.org/topics/education/. Accessed January 7, 2025.
3. Off C. At a Loss for Words: Conversation in an Age of Rage. Toronto, ON: Random House Canada; 2024.
4. Early Years Study 3 Working Group. *Early Years Study 3: Making Decisions, Taking Action*. Toronto, ON: Margaret & Wallace McCain Family Foundation; 2011:56-57. https://ecereport.ca/en/early-years-studies/early-years-study-3-2011/chapter-3-creating-spaces-and-places-young-children-and-families/7-benefits-early-childhood-program-integration/. Accessed January 7, 2025.
5. Geduld A. *Q&A: Why the U.S. is 'catastrophically wrong' to separate early child care from education*. Early Learning Nation. Published October 15, 2024. https://earlylearningnation.com/2024/10/u-s-catastrophically-wrong-to-separate-early-child-care-from-education/. Accessed January 7, 2025.
6. Anderson J. *Fixing childcare in America*. Harvard EdCast. Published October 17, 2024. https://www.gse.harvard.edu/ideas/edcast/24/10/fixing-childcare-america. Accessed January 7, 2025.
7. Kids Included Together (KIT). *Building inclusive communities in early childhood settings*. Published July 11, 2024. https://www.kit.org/building-inclusive-communities-in-early-childhood-settings/. Accessed January 7, 2025.
8. Allington RL, Gabriel RE. Every child, every day. *Educational Leadership*. 2012;69(6):10-15.
9. Logan JAR, Justice LM, Yumuş M, Chaparro-Moreno LJ. When children are not read to at home: The million-word gap. *Journal of Developmental and Behavioral Pediatrics*. 2019;40(5):373-386.

10. Aukerman M. *Toward comprehensive, research-informed literacy instruction: Thinking with, against, and beyond the science of reading* [webinar]. Ithaca College Department of Education 2024 Educational Freedom Lecture and Community Read; February 22, 2024. https://media.ithaca.edu/media/Maren+Aukerman+2024+Ithaca+College+Educational+Freedom+L . Accessed January 7, 2025.