

Global gains and growing pains: pre-primary education around the world

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The diversity of delivery models makes ensuring quality and equity difficult but also presents an opportunity for creative responses.
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With a view towards the post-2015 agenda, this article takes stock of the current accessibility of pre-primary education, the main forms of delivery, and the key challenges. It reviews current global trends and highlights lessons learned from country case studies, drawing on data from the UNESCO Institute of Statistics (UIS), the World Bank and other international agencies as well as innovative preschool programmes featured by the Center for Education Innovations².

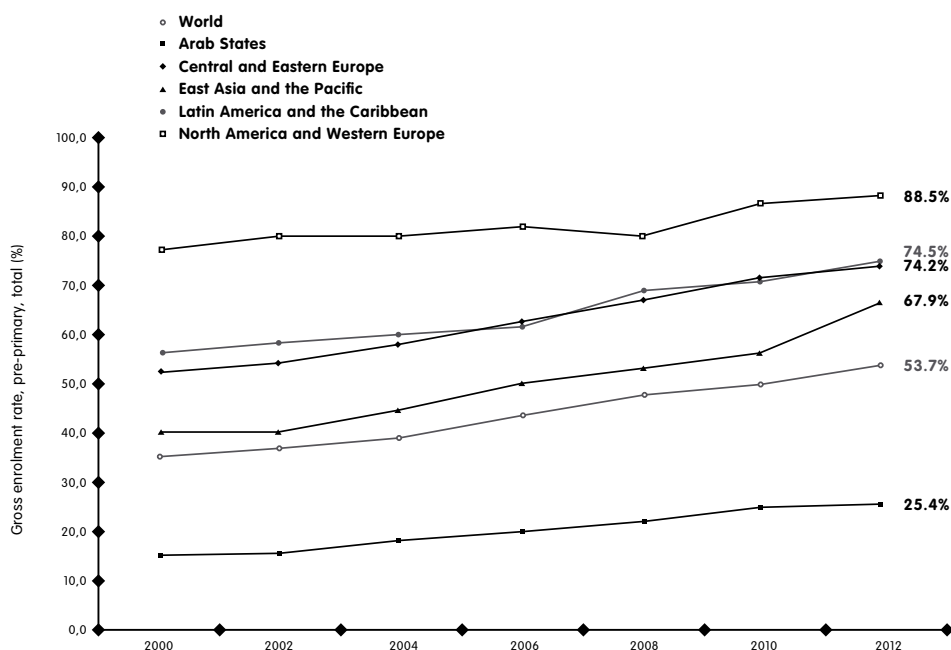
Pre-primary education³ (often referred to as ‘preschool’, ‘pre-kindergarten’, ‘Grade R’, or ‘zero class’) is gaining ground on the global agenda. While the Millennium Development Goals did not include any attention to education for children before the start of primary schooling, the proposed targets for both the Sustainable Development Goals (SDGs) and the post-2015 education

agenda offer greater concentration on early childhood development and specifically mention pre-primary education.⁴ At the country level, too, new policies and programmes are emerging that expand pre-primary education in the year or two prior to compulsory schooling, or efforts to improve quality of these services.

This increased focus is not surprising given the growing evidence from around the world on the benefits of participation in pre-primary education for children’s school readiness, transition to school, and performance in the early grades and beyond. In addition to the often-cited longitudinal studies from the USA and the UK (see Chambers *et al.*, 2010, and Yoshikawa *et al.*, 2013 for reviews), studies in low- and middle-income countries also demonstrate significant, positive effects:

- In Argentina, one year of pre-primary school led to an average increase of 8% in grade 3 language and

Figure 1 Global gains in pre-primary enrolment



Source: UNESCO Institute for Statistics (online)

mathematics scores, and had positive effects on non-cognitive behavioural skills (Berlinski *et al.*, 2009).

- In Bangladesh, children in a high-quality preschool programme outperformed a control group in verbal and non-verbal reasoning, as well as school readiness (Aboud, 2006).
- In Mozambique, in comparison to a control group, children at a rural preschool were 24% more likely to enrol in primary school and showed improved cognitive abilities, fine-motor skills, and behavioural outcomes (Martinez *et al.*, 2012).

In addition, recent data from the Program for International Student Assessment (PISA) show that 15-year-old students who participated in at least one year of pre-primary education outperformed those students who had not. This difference holds when taking into

consideration students' socio-economic status (OECD, 2014).

The rest of this article explores three challenges that need to be addressed. First, expansion of pre-primary has been uneven across regions and within countries, leading to inequities. Second, while there are diverse strategies to achieve quality in pre-primary provision, doing so at scale remains difficult. And finally, the early childhood workforce is key to improving both access and quality provision, but has received little attention from researchers or policymakers.

Patchy progress in increasing access

According to the latest Education for All (EFA) Global Monitoring Report (2015), enrolment in pre-primary education has increased by nearly two-thirds (to 180

million) over the past decade. Although it is encouraging to see that the gross enrolment rate⁵ increased from 32.8% in 1999 to 53.7% in 2012, only a small percentage of children (17%) in low-income countries had access in 2012 (see Figure 1). These statistics also mask wide regional disparities. Among low- and middle-income countries, the highest rates of participation are in Latin America and the Caribbean (LAC) (74.5%), while the lowest rates are in sub-Saharan Africa (19.5%). South and West Asia and East Asia and the Pacific have made the most progress in enrolling students in pre-primary in recent years (UNESCO Institute for Statistics Data Centre, online).

Country-level estimates also hide large discrepancies in coverage and access depending on location, which reinforces the indication that progress has not benefited all children equally. Many countries in East Asia and sub-Saharan Africa, for instance, experience large differences across wealth quintiles, between urban and rural areas, and between ethnic groups, with the most disadvantaged children least likely to receive a pre-primary education (UNICEF, 2012; EFA Global Monitoring Team, 2015).

Most countries spend less than 10% of their education budgets on the pre-primary years. In low-income countries, this share is typically even lower. As a result, and not surprisingly, households are expected to cover most of the costs associated with enrolment (EFA Global Monitoring Report Team, 2012). In many cases, the high fees for private programmes make pre-primary education beyond the reach of the poorest households (EFA Global Monitoring Team, 2011, 2014a, 2014b, 2015; UNICEF, 2012).

Globally, pre-primary education is delivered through a variety of public and private settings. These can include classrooms attached to primary schools, standalone centres run by non-governmental organisations (NGOs), or religious providers. The share of enrolment in private provision – including NGOs – rose from 28% to 31% from 1999 to 2012 (UNESCO, 2015), though the size of the private sector varies significantly by region. In the Arab

States and sub-Saharan Africa, the majority of pre-primary providers are in the private sector, while in the LAC region, Eastern Europe, and Central Asia, public provision dominates the space. Low-cost private schools are increasingly popular for pre-primary as well as primary in the urban areas (Bidwell and Watine, 2014). For example, recent formative studies in peri-urban centres in Ghana, Kenya, Nigeria and South Africa have shown a thriving pre-primary sector⁶, with enrolments ranging between 70% and 90%, and provision dominated by the private sector. While private sector growth can increase access in some situations, there are concerns that high fees, limited regulation of services, and lack of provision in rural and sparsely populated areas may exacerbate inequality in others (Woodhead and Streuli, 2013; EFA Global Monitoring Team, 2015).

Beyond efforts to boost access and enrolment, a focus on equity and ensuring quality services, especially for the most vulnerable, is also taking hold (UNICEF, 2015; see Case Study 1). There is a trend towards including at least one year of free pre-primary education as part of the formal education system in Europe, North America and Latin America, as well as in some countries in sub-Saharan Africa (for example, Grade R in South Africa, Kenya, Lesotho) to address these equity issues (Biersteker *et al.*, 2008); the most recent Global Monitoring Report recommends a year of compulsory pre-primary education (EFA Global Monitoring Team, 2015). Other countries have established efforts to improve quality for the most marginalised. Indonesia's Early Childhood Education and Development project established community-led playgroups for children aged 4 to 6 across nine high-need districts; the intervention helped improve school readiness and close the achievement gap between the richest and poorest children (Jung and Hasan, 2014). Whether delivered in schools or, less commonly, in community-based settings, efforts to promote compulsory pre-primary and additional services for vulnerable populations are intended to level the playing field before children begin primary schooling (see Case Studies 2 and 3).

While all regions have demonstrated progress, there is a

long way to go to achieving equitable preschool access for all. A recent literature review suggests that increasing pre-primary enrolment and early childhood services takes time and requires effective leadership, partnership between the public and private sectors, a focus on quality and staff development and participation from multiple sectors (Woodhead *et al.*, 2014).

Case Study 1: Addressing inequality in access to pre-primary in Laos

Laos (Lao People's Democratic Republic) is one of the most ethnically and linguistically diverse countries in East Asia. This diversity, however, is reflected in unequal access to pre-primary services for many groups.

- As few as 1% of children from the poorest households attend preschool, compared to nearly half of those from wealthier families.
- In 2011–2012, only 14.5% of 3 and 4 year olds attended kindergarten in the rural Salavan province, compared to 57.4% in the capital of Vientiane.
- 90% of all children enrolled in early childhood education services belong to the Lao-Tai ethnic group. Lao-Tai, however, comprises only 67% of the country's population.

In early 2014, the Lao Ministry of Education and Sports began a five-year Early Childhood Education Project with support from the World Bank to improve both access to and quality of pre-primary education in disadvantaged districts of the country. The project includes construction and infrastructure improvements, teacher training, and strengthening project management, monitoring and evaluation.

Sources: EFA Global Monitoring Team, 2014; World Bank, 2013

Case Study 2: Making pre-primary education compulsory in Mexico

Mexico made pre-primary education compulsory with a constitutional amendment in 2002 and rolled out the expansion in stages, requiring all children aged 3 to 5 to attend by 2008. The law was supported strongly by the National Teacher's Union and requires parents to send

their children to either a public or private preschool, though the private sector is relatively small. While the federal government supervises preschool education, implementation is decentralised and ultimately the responsibility of individual states. Progress has been steady, but net enrolment rates are still lower for 3 year olds (around 40%), while 4 and 5 year olds both have net enrolment rates of 85% or above. Overall, Mexico has achieved a gross enrolment rate above 100% and gender parity in pre-primary education.

Gaps in quality, however, remain an ongoing challenge among the three different types of public preschools: general, indigenous, and community-run. The last two models generally have poorer infrastructure, fewer resources, and less-qualified teachers.

Sources: OECD, 2006; Pérez Martínez, 2010; Secretaría de Educación Pública, 2014; Sistema Nacional de Información Estadística Educativa (SNIEE), 2014; UNESCO Institute for Statistics, online

Enhancing quality in diverse settings

The greatest benefits from early childhood education accrue from quality provision (Aboud, 2006; Naudeau *et al.*, 2010 ; Rao *et al.*, 2012). Yet no single recipe for delivering quality pre-primary education exists – it can be compulsory or voluntary; public or private; or based in schools, centres, or homes. Programmes can be organised in different ways to provide safe and rich learning environments and meaningful interactions between adults and children. In situations where children suffer from poor health and nutrition, quality preschools need to support children's overall well-being and coordinate with relevant allied services, such as health, nutrition, and social protection.

The diversity of delivery models makes ensuring quality and equity difficult but also presents an opportunity for creative responses. Experiences in low- and middle-income countries suggest that quality services can be delivered as well in a well-resourced, permanent classroom as they can with materials developed from everyday objects, under a tree. Educational television

and radio programming have also demonstrated positive effects in Bangladesh, Turkey, and Zanzibar (Engle *et al.*, 2011; See Case Study 4). In East Africa, the Madrasa Early Childhood Programme⁷ community partnerships have led to positive impacts on child outcomes and process quality with very few formal resources (Malmberg *et al.*, 2011). The community commits to identifying a teacher and helping to build the facility, and provides learning materials from recycled or hand-made objects. Educators are trained in a child-centred methodology and receive ongoing technical support and mentoring from the central resource centres.

Other home and community-based preschool programmes have demonstrated positive effects for children's language, mathematical and reasoning skills (Engle *et al.*, 2011; Bernal and Fernandez, 2013). While small, the *Huellas de la Esperanza*⁷ programme in Colombia supports high-risk preschool and primary children through real-world, culturally appropriate activities that also engage their families and communities, such as the operation of an orchard, vegetable garden, and hen house. Not rooted in a single location, the mobile *ger* kindergartens⁷ in Mongolia follow the nomadic herder communities, setting up services in tents at each location during the warm season. While these promising examples support quality delivery on a small scale, more needs to be known about how to support quality services across pre-primary settings in a comprehensive, sustainable way.

Parent demand for preschool is strong even in low-resource contexts. Parents often view pre-primary as a foundation for later schooling and private services as offering better quality than public programmes (Bidwell and Watine, 2014). However, parent perception of quality is often characterised by a narrow view of school readiness, which focuses only on demonstrable academic skills (O'Gara, 2013). No matter the setting, continuity between preschool and primary school is important; however, the teaching methods and expectations of primary should not be 'pushed down' to pre-primary education (Woodhead and Moss, 2007; EFA Global Monitoring Report Team, 2012; O'Gara, 2013).

Case Study 3: Expanding Grade R in South Africa

For more than 20 years, South Africa has developed policies and programmes recognising the broader benefits of early childhood development for the population. In 2001, the Department of Basic Education established a 'Reception Year' education programme, or 'Grade R', for children aged 5 with the goal of achieving universal enrolment by 2014. Accredited Grade R programmes can be delivered within public primary schools, community-based early childhood development centres, or at independent private institutions.

By 2011, the nation had a 79% gross enrolment rate in Grade R, with 89% of public primary schools offering this reception year. Despite strong growth in access to and provision of Grade R, a recent study found that:

- Grade R did not have a significant effect on the learning outcomes of children from low-income quintiles, who are more likely to attend low-quality schools
- across all wealth quintiles, Grade R's overall impact on the effectiveness of future learning is equivalent to only 12 days of learning gains in mathematics and 50 days in the home language.

There is a need to focus on quality through adapted Grade R curricula and teacher training, in addition to greater investments targeting the schools and children with the greatest needs.

Sources: Biersteker, 2010; van der Berg, 2013

Supporting the workforce

Regardless of the setting in which pre-primary takes place, support for the early childhood workforce is essential. Studies demonstrate the importance of high-quality adult-child interactions to positive early childhood outcomes and the critical role of teacher training and support (EFA Global Monitoring Team, 2006, 2015; Mtahabwa and Rao, 2010; Hardman *et al.*, 2012). Yet there is often a disconnect between official standards and the level of education and training early childhood educators receive (World Bank, 2012).

Although pre-primary education is often integrated structurally with the primary school system, pre-primary teachers may not have access to the professional development activities within the schools. Moreover, many pre-primary programmes take place outside the formal education system and rely on community workers and volunteers with limited formal pre-service or in-service training (Hardman *et al.*, 2011; Jung and Hasan, 2014).

Despite the importance of quality educators for children's outcomes, very little is known about the credentials and training of the existing workforce in low- and middle-income countries. According to the UIS, in the 69 countries reporting data, more than two-thirds of pre-primary teachers are trained. This is encouraging but tells us little about the quality and relevance of the training (EFA Global Monitoring Report Team, 2012). Some concerns include the short duration of training (often only a few days) and focus on theory over practice. Another issue is that training requirements are often inconsistent across public and private provision and by geographical area. In rural and marginalised areas, children at the margins may be taught by those who are also at the margins of the profession. Given what we do know about the diverse profiles of those already working in the field, there is a need to develop a career lattice that allows for various points of entry and diverse in-service and upgrading opportunities.

As pre-primary programmes expand, and in some cases becomes compulsory, the supply of qualified pre-primary teachers will continue to be a major constraint to both access and quality. Increasing supply requires time and financial investment in professional development, training and credential opportunities. For example, achieving universal coverage of preschool in Colombia, as defined in their 2011 national early childhood development strategy, would require nearly ten times the number of currently qualified providers (Bernal, 2013). Rapid expansion without concomitant attention to staff training, ratios, group sizes, and working conditions will almost surely lead to a deterioration in quality (see Case Study 3, for example). Finally, the

poor pay and status of the early childhood profession is another barrier to attracting and retaining strong early childhood educators to the field (EFA Global Monitoring Team, 2015). Even in high-income countries, working with young children is poorly remunerated, including relative to primary school teachers, and high turnover affects the stability and quality of service provision (OECD, 2006).

There are promising examples of state and non-state initiatives to strengthen pre-service and in-service training of early childhood educators, including efforts to use technology, including radio instruction (see Case Study 4). Mentors and scripted lessons can also improve teacher skills, monitor performance, and provide regular feedback to teachers. A few innovative approaches include:

- The Hand in Hand⁷ train-the-trainer model in China reached nearly 10,000 educators, paediatricians and government staff within five years of operation. The programme uses QQ, a popular instant messaging service, to facilitate continued peer learning after the training.
- The Brighter Futures Programme⁷, working in close collaboration with the Ghana Educational Service, supports school infrastructure and teacher training for children in rural areas. Their comprehensive training includes a focus on activity-based lessons, local material development, formative child assessment, and parent engagement as well as providing continued monitoring and evaluation support.

However, we do not know much about the comparative effectiveness of these approaches, nor about what would be needed to scale them up to reach more children. Given the importance of the workforce issues and the limited information available in low-resource settings, additional research is urgently needed.

Case Study 4: Using technology to support the early childhood workforce

In Zanzibar, the Government is focusing on reducing the school entry age from 7 to 6 and providing two years of compulsory pre-primary education as part of the basic education system. The Radio Instruction to Strengthen Education (RISE) programme – a partnership between the Ministry of Education and Vocational Training, the Education Development Centre and communities – promotes quality learning in areas with a shortage of qualified teachers, preschools and learning materials.

Locally produced, 30-minute radio sessions guide untrained or undertrained preschool and early primary teachers with provided math, Kiswahili, English and life skills lessons for children in community-based settings or in regular primary schools (Christina and Morris, 2010). The programme increased access to early learning for more than 20,000 children in remote areas who otherwise probably would have waited until age 9 to enter school; access to preschool increased from 13.8% in 2006 to 34% in 2010.

An evaluation compared children aged 3–5 years in preschools with radio instruction versus standard preschools. Children in classes with radio instruction had significantly higher scores on all outcomes (Morris *et al.*, 2009). Radio has been implemented at scale in Bolivia, Honduras, Indonesia and El Salvador (Ho and Thukral, 2009).

Conclusion

Targeting these three challenges – addressing the inequitable access to preschool, scaling-up innovative approaches to quality, and strengthening the early childhood workforce – will take time as well as political and financial commitment. It also requires thinking creatively about staffing, delivery mode, partnerships between the public and private sectors, promoting promising innovations, and new ideas to spark collaboration and cross-country learning.

Notes

- 1 The authors would like to thank Kimberly Josephson and Fatine Guedira for their excellent research and editorial assistance in the preparation of this article.
- 2 More information about the Center for Education Innovations is available at: <http://educationinnovations.org/> (accessed April 2015).
- 3 This article uses the International Standard Classification of Education (ISCED) Level 0 definition of pre-primary education as programmes designed for children aged 3 years to the start of formal or compulsory primary education (ISCED 1). These pre-primary years often include play-based activities, facilitated by responsive interaction with peers and educators, that support the development of language, social, and logical skills. ISCED Level 0 also covers early childhood educational development programmes designed for children age 0 to 2 years (UNESCO Institute for Statistics, 2012).
- 4 SDG Target 4.2: 'by 2030 ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education'.
- 5 The gross enrolment rate is the total enrolment at a specific level of education, regardless of age (UNESCO, 2009).
- 6 Study was conducted by Innovations for Poverty Action (IPA); the four study sites included Ashaiman in Accra, Ghana, Soweto in Johannesburg, South Africa, Agege in Lagos, Nigeria, and Mukuru in Nairobi, Kenya (see Bidwell and Watine, 2014).
- 7 Information about the Madrasa Early Childhood Programme (MECP), *Huellas de la Esperanza*, Mongolia's mobile *ger* kindergartens, Hand in Hand, and the Brighter Future Programme is available on the 'Programs' pages of the Center for Education Innovations website at: <http://educationinnovations.org/programs> (accessed May 2015).

References

- Aboud, F.E. (2006). Evaluation of an early childhood preschool program in rural Bangladesh. *Early Childhood Research Quarterly* 21(1): 46–60.
- Berlinski, S., Galiani, S. and Gertler, P. (2009). The effect of pre-primary education on primary school performance. *Journal of Public Economics* 93(1–2): 219–34.
- Bernal, R. (2013). *The Challenges of Colombia's 'De Cero a Siempre' Strategy*, First Steps Blog, Inter-American Development Bank website. Available at: <http://blogs.iadb.org/child-development/2013/03/11/the-challenges-of-colombias-de-cero-a-siempre-strategy/>
- Bernal, R. and Fernandez, C. (2013). Subsidized childcare and child development in Colombia: effects of *hogares comunitarios de bienestar* as a function of timing and length of exposure. *Social Science and Medicine* 97: 241–9.
- Bidwell, K. and Watine, L. (2014). *Exploring Early Education Problems in Peri-urban Settings in Africa: Final Report*. Newhaven, CT: Innovations for Poverty Action.
- Biersteker, L. (2010). Scaling-up early child development in South Africa: introducing a reception year (Grade R) for children aged five years as the first year of schooling. *Wolfensohn Center for Development Working Papers*, No. 17. Washington DC: The Brookings Institution.
- Biersteker, L., Ngaruiya, S., Sebatane, E. and Gudyanga, S. (2008). Introducing pre-primary classes in Africa: Opportunities and challenges. In: Garcia, M., Pence, A. and Evans, J.L. (eds) *Africa's Future, Africa's Challenge: Early childhood care and development in Sub-Saharan Africa*. Washington DC: The World Bank.
- Chambers, B., Cheung, A., Slavin, R.E., Smith, D. and Laurenzano, M. (2010). *Effective Early Childhood Education Programs: A Systematic Review*. Baltimore, MD: Center for Research and Reform in Education, Johns Hopkins University.
- Christina, R. and Morris, E. (2010). *Interactive Radio Instruction (IRI) for early childhood education: A cost-effective solution to problems of scale and quality*. Paper presented at 54th Annual Conference of the Comparative and International Education Society (CIES), Chicago, IL. Available at: http://citation.allacademic.com/meta/p400261_index.html
- EFA Global Monitoring Report Team. (2006). Summary, *EFA Global Monitoring Report 2007. Strong foundations: Early childhood care and education*. Paris: UNESCO.
- EFA Global Monitoring Report Team. (2011). *Regional Overview: East Asia and the Pacific*. Paris: UNESCO.
- EFA Global Monitoring Report Team. (2012). *Expanding equitable early childhood care and education is an urgent need*. Policy Paper 03. Paris: UNESCO.
- EFA Global Monitoring Report Team. (2014a). *EFA Global Monitoring Report 2014. Teaching and Learning: Achieving quality for all*. Paris: UNESCO.
- EFA Global Monitoring Report Team. (2014b). *Sub-Saharan Africa Factsheet*. Paris: UNESCO.
- EFA Global Monitoring Report Team. (2015). *EFA Global Monitoring Report 2015. Education for All 2000–2015: Achievements and Challenges*. Paris: UNESCO.
- Engle, P.L., Fernald, L.C., Alderman, H., Behrman, J., O'Gara, C., Youssafzai, A., *et al.* (2011). Strategies for reducing inequalities and improving developmental outcomes for young children in low-income and middle-income countries. *The Lancet* (9799): 1339–53.
- Hardman, F.C., Abd-Kadir, J. and Tibuhinda, A. (2012). Reforming teacher education in Tanzania. *International Journal of Educational Development* 32(6): 826–34.
- Hardman, F.C., Ackers, J., Abrishamian, N. and O'Sullivan, M. (2011). Developing a systemic approach to teacher education in sub-Saharan Africa: Emerging lessons from Kenya, Tanzania, and Uganda. *Compare: A Journal of Comparative and International Education* 41(5): 669–83.
- Ho, J. and Thukral, H. (2009). Tuned in to student success: assessing the impact of Interactive Radio Instruction for the hardest-to-reach. *Journal of Education for International Development* 4(2).
- Jung, H. and Hasan, A. (2014). *The Impact of Early Childhood Education on Early Achievement Gaps: Evidence from the Indonesia early childhood education and development (ECED) project*, Policy Research Working Paper 6794. Washington DC: World Bank.

- Malmberg, L.-E., Mwaura, P. and Sylva, K. (2011). Effects of a preschool intervention on cognitive development among East-African preschool children: a flexibly time-coded growth model. *Early Childhood Research Quarterly* 26(1): 124–33.
- Martínez, S., Naudeau, S. and Pereira, V. (2012). *The Promise of Preschool in Africa: A randomized impact evaluation of early childhood development in rural Mozambique*. Washington DC: World Bank/Save the Children.
- Morris, E., Philip, M., Othman, A.F. and Mitchell, J. (2009). *Radio Instruction to Strengthen Education (RISE) in Zanzibar*. Boston: Education Development Center.
- Mtahabwa, L. and Rao, N. (2010). Pre-primary education in Tanzania: observations from urban and rural classrooms. *International Journal of Educational Development* 30(3), 227–35.
- Naudeau, S., Kataoka, N., Valerio, A., Neuman, M.J. and Elder, L.K. (2010). *Investing in Young Children: An early childhood development guide to policy dialogue and project preparation*. Washington DC: World Bank.
- OECD. (2014). *PISA in Focus*. Available at: [http://www.oecd.org/pisa/pisaproducts/pisainfocus/pisa-in-focus-n40-\(english\)-final.pdf](http://www.oecd.org/pisa/pisaproducts/pisainfocus/pisa-in-focus-n40-(english)-final.pdf) (accessed April 2015).
- OECD. (2006). *Starting Strong II: Early Childhood Education and Care*. Paris: OECD.
- O’Gara, C. (2013). Education based approaches to early childhood. In: Britto, P.R., Engle, P.L. and Super, C.S. (eds) *Handbook of Early Child Development Research and Its Impact on Global Policy*. New York: Oxford University Press.
- Pérez Martínez, M.G. (2010). *La educación preescolar en México: Condiciones para la enseñanza y el aprendizaje [Preschool Education in Mexico: Conditions for teaching and learning]*. Mexico City: Instituto Nacional para la Evaluación de la Educación (INEE).
- Rao, N., Sun, J., Pearson, V., Pearson, E., Liu, H., Constan, M.A., et al. (2012). Is Something Better Than Nothing? An evaluation of early childhood programs in Cambodia. *Child Development* 83(3): 864–76.
- Secretaría de Educación Pública. (2014). *Educación preescolar (Preschool education)*. In: *Sistema Educativo de los Estados Unidos Mexicanos: Principales Cifras 2013–2014*. Mexico City: Secretaría de Educación Pública.
- Sistema Nacional de Información Estadística Educativa (SNIEE). (2014, online). *Estadísticas Educativas (Education Statistics)*. Available at: http://www.sniee.sep.gob.mx/estadisticas_educativas.html (accessed May 2015).
- UNESCO. (2009). *Education Indicators: Technical guidelines*. Available at: <http://www.uis.unesco.org/Library/Documents/eiguide09-en.pdf> (accessed April 2015).
- UNESCO Institute for Statistics. (2012). *International Standard Classification of Education: ISCED 2011*. Available at: <http://www.uis.unesco.org/Education/Documents/isced-2011-en.pdf> (accessed April 2015).
- UNESCO Institute for Statistics Data Centre. (online). *UIS Stat*. Available at: <http://data.uis.unesco.org/> (accessed April 2015).
- UNICEF. (2012). *Inequities in Early Childhood Development: What the data say*. New York: UNICEF.
- UNICEF. (2015). *The Investment Case for Education and Equity: Executive summary*. New York: UNICEF.
- Van der Berg, S. (2013). *The Impact of the Introduction of Grade R on Learning Outcomes*. Pretoria: Department of Performance Monitoring and Evaluation.
- Woodhead, M., Bolton, L., Featherstone, I. and Robertson, P. (2014). *Early Childhood Development: Delivering inter-sectoral policies, programmes and services in low-resource settings*. Oxford: Health & Education Advice & Resource Team (HEART).
- Woodhead, M. and Moss, P. (2007). *Early Childhood and Primary Education: Transitions in the Lives of Young Children. Early Childhood in Focus*. Milton Keynes: The Open University.
- Woodhead, M. and Streuli, N. (2013). Early Education for All: Is there a role for the private sector? In: Britto, P.R., Engle, P.L. and Super, C.M. (eds) *Handbook of Early Childhood Development Research and its Impact on Global Policy*. Oxford: Oxford University Press.
- World Bank. (2012). *Tanzania: Early Childhood Development. SABER Country Report 2012*. Washington DC: World Bank.
- World Bank. (2013). *Ethnic Group Development Plan. Lao PDR*. Available at: <http://documents.worldbank.org/curated/en/2013/12/186999940/lao-pdr-early-childhood-education-project-ethnic-group-development-plan> (accessed April 2015).
- Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M.R., Espinosa, L.M., Gormley, W.T. et al. (2013). *Investing in Our Future: The evidence base on preschool education*. New York, NY/Ann Arbor, MI: Foundation for Child Development/Society for Research in Child Development.