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Training early childhood development cadres in low-resource contexts

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Evidence Brief

Training Early Childhood Development Cadres in Low-Resource Contexts

About this brief

This brief summarises findings from an extended literature review on the current status of early childhood development (ECD) cadres training and a Delphi survey of expert consensus on training needs for different ECD cadres operating in low-resource contexts (Pearson et al., 2017) titled *Reaching expert consensus on training different cadres in delivering early childhood development at scale in low-resource contexts*. The work was funded by DFID and led by a team at Bishop Grosseteste University in collaboration with colleagues from The University of Hong Kong, McGill University, University of Nebraska, University of Wollongong and University College London.

The following overarching questions guided this study:

- To whom does the term ‘ECD cadre’ most usefully apply, given the wide range of settings and aims of early childhood development programmes?
- What are expert views on essential knowledge and skills required of ECD cadres working in different contexts?
- What are expert views on appropriate methods for delivery of training, and post-training follow-up, for ECD cadres?
- What are expert views on the necessary conditions for effective scale-up of ECD cadres training?

Rationale

The Sustainable Development Goals (SDGs) signal a greater focus on intersectoral, collaborative approaches to ensuring that *all human beings can fulfil their potential in dignity and equality*. There is now little doubt that positive development and growth during the early years of life can support these efforts. In response, international agencies are calling for Early Childhood Development (ECD) approaches that involve inter-sectoral collaboration in providing integrated health, education and social welfare services to support early health, well-being and learning.

Appropriate, sustainable ECD programming and delivery cannot be achieved without a strong, well-prepared and well-supported workforce. Therefore, it is of paramount importance to better understand the training needs of difference cadres working in the field of ECD. Current literature, however, points to a gap in knowledge of effective provision of training and support for cadres involved in ECD provision. The study was designed to address this gap, by examining consensus among ECD experts on training needs for different cadres involved in the delivery of ECD programmes in low-resource contexts.

Defining Early Childhood Development (ECD)

In its 2001 State of the World’s Children report, UNICEF defined Early Childhood Development (ECD) as a *comprehensive approach to policies and programmes for children from birth to eight years of age, their parents and caregivers* (<http://www.unicef.org/sowc01/1-4.htm>). Recently, the concept of ‘nurturing care’ has been proposed as fundamental to effective delivery of ECD programmes. Reflecting the perspective that immediate home and care settings provide the ‘single most powerful’ context for promoting early learning and development, the concept of nurturing care comprises a ‘core set of inter-related components, including: *behaviours, attitudes, and knowledge regarding caregiving (e.g., health, hygiene care, and feeding*

*care); stimulation (e.g., talking, singing, and playing); responsiveness (e.g., early bonding, secure attachment, trust, and sensitive communication); and safety (e.g., routines and protection from harm)*¹.

Methodology

The study involved two phases. First, a **literature review** was conducted to support definition of key terms and to provide a detailed overview of available evidence on provision of and challenges associated with current approaches to ECD cadres training in low-resource contexts.

Second, a **Delphi study** examined expert consensus on three key areas of interest to follow up on issues identified in the literature: (i) essential skills and knowledge for different ECD cadres; (ii) appropriate methodologies for training, and (iii) conditions for scale-up of training. Fourteen internationally-renowned specialists in the field of ECD, incorporating work across the world regions, participated in the Delphi study.

Key findings from the literature review

1. Literature typically reports on the following 3 primary categories of cadres involved in ECD:
 - a. Certified Education Professionals (e.g. early childhood educator, preschool teacher, teaching assistant)
 - b. Certified Health Professionals (e.g. nursing sister, nurse, health worker, physician, midwife)
 - c. Non-Certified Para-professionals (e.g. Anganwadi Worker, Community Health Workers, Health Support Assistants; Home Visitors, Lady Health Worker, Traditional Birth Attendant, Community Motivator).
2. The literature points to a long-running, severe global shortage in availability of trained cadres to support delivery of ECD programmes².
3. Many cadres working in the field of ECD have low status in the community. There are large numbers of cadres with no defined career path, who work in a voluntary capacity or for payment in kind. This results in the shortages of trained, committed cadres referred to above³.
4. Integrated ECD programmes work best when there is stability, consistency, and systematic, multi-sectoral coordination that incorporates a range of stakeholders⁴. However, interventions have to date been delivered largely in siloes. Literature has tended to report either on early childhood education practitioners or community-based para-professionals working in vertical programmes, or to a lesser extent, health professionals involved in delivery of ECD components. There is limited evidence of integration across these different cadre groups.
5. Work to overcome the siloed approach and harmonise provision of ECD across sectors needs to incorporate efforts to clarify the roles of various ECD cadres involved in implementation of programmes⁵.
6. There is a need to consider how best to provide training in inter-related components for different cadres involved in services that support ECD⁶.

¹ Britto et al., 2017, p.91

² Chen et al., 2004; Chiparange & Saruchera, 2016; Mahmud, 2014; Neuman, Josephson, & Chua, 2015; Rodríguez, Banda, & Namakhoma, 2015; Sun, Rao, & Pearson, 2015

³ Chiparange & Saruchera, 2016; Elzinga, 2005; Gobezaayehu et al., 2014; Huang, Nakigudde, & Brotman, 2015; Neuman et al., 2015; SEAMEO / UNESCO, 2016; Sun et al., 2015; UNESCO, 2006

⁴ Tinajero, 2010, p.30

⁵ Jonker & Stellenberg, 2014; Mkontwana, Steenkamp, & Von der Marwitz, 2013

⁶ Richter et al., 2017; Tomlinson, Swartz, & Landman, 2003; Yousafzai, Rasheed, Rizvi, Armstrong, & Bhutta, 2014

Key findings from the Delphi study

Findings from the Delphi study address issues outlined above, providing valuable insights into expert consensus on delivery of training for the three different ECD cadre groups outlined above. Experts agreed on the importance of key *dispositions, attitudes, knowledge and skills* for the three cadres groups. There was also consensus around *appropriate methods for delivery and scale-up* of ECD training. Items that reached consensus are presented below in boxes, identifying key needs for training that are *shared* across the 3 cadre groups, as well as those that are *distinct* for each group:

1. **Dispositions:** the study identified important dispositions, or characteristics, needed by all cadres to facilitate caring, respectful, responsive and trustful interactions with children, caregivers and communities. Experts also agreed on the importance of dispositions such as curiosity, sensitivity and knowledge of local context. There was consensus among experts that these 'dispositions', or characteristics, should be viewed as malleable. Training should therefore be designed to promote, model and strengthen these dispositions.

Essential Dispositions – all ECD cadres	<ul style="list-style-type: none">• Treats children with respect• Shows empathy and understanding of children and families• Caring• Open to feedback and others' ideas• Respectful of diverse groups• Elicits trust and respect from community• Patient• Knowledgeable and sensitive to local context• Sensitive to needs of target group• Curious and eager to learn / motivated• Open to possibilities for changing / enhancing practice to better suit the needs of children and families
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2. **Essential skills and knowledge:** i) Skills: in line with dispositions that were identified as important, relationship-based principles were supported, with strong consensus that all ECD cadres should be able to apply listening, observation skills and interact responsively with children and parents. Findings indicate that all cadres require skills in promoting early stimulation; effective communication and collaboration; problem solving, and reflective practice.

Importantly, there was consensus that all ECD cadres should be equipped with skills that enable them to modify practice to suit the unique needs of children and their caregivers. This finding supports growing acknowledgment that ECD programmes (and the cadres who deliver them) must be responsive to local, contextual needs and circumstances.

Essential Skills – all ECD cadres	<ul style="list-style-type: none">• Interact responsively with children• Apply good listening, observation and communication skills• Interact responsively with parents• Actively problem-solve and look for solutions to challenges• Work with and involve parents• Reflect on practice and self-evaluate• Work effectively with peers and others
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The Delphi study also pointed to *differences* across cadre groups in required essential skills: for example, there was consensus that education and health professionals should be able to ‘facilitate’, ‘influence’ and work with community members, whereas the focus for non-certified para-professionals should be on enabling skills such as making use of existing resources and connecting with families and communities to understand their needs. There was also strong consensus that health professionals should be able to ‘coach’ and ‘mentor’ others.

In addition,

Certified Education Professionals

- **Modify practice** for individual children's needs
 - **Apply creativity** in developing learning plans and resources
 - Demonstrate strong language skills
 - Facilitate effectively articulate complex ideas in simple ways
 - **Connect with parents, families** and communities
 - **Work with local community members** and value their views
-

In addition,

Non-certified Para-professionals

- **Make use of available resources** to model/set up language-rich, stimulating environments for young children
 - **Connect with parents, families and communities**
 - **Modify practice** for individual children's needs
-

In addition,

Certified Health Professionals

- **Coach** effectively instruct **and mentor** others
 - **Track / monitor children's development**, as well as physical needs
 - **Facilitate effectively - articulate complex ideas in simple ways**
 - **Connect with parents, families** and communities
 - **Use dialogue to communicate**, rather than just instruction
 - Sensitively and effectively influence and challenge perceptions or customs that are counter to child rights
 - **Work with local community** members and value their views
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ii) Knowledge: there was consensus that all ECD cadres should be equipped with knowledge about home and family contexts that impact and shape the nature of early development; child development milestones (as applicable to their own context), and possible signs of developmental delay. Once again, promotion of responsiveness and trust were highlighted as important aspects of ECD cadres training.

Essential Knowledge

– all ECD cadres

- The importance of **quality interactions for infant and child development**
 - Principles of **holistic child development** (multiple domains)
 - Child development milestones (applied appropriately across diverse cultural contexts)
 - **Home and family context** impacts on learning and development
 - How to **respond sensitively to parents** and establish positive, **trusting relationships**
 - How to **identify possible signs of developmental delay** and refer children to appropriate professionals/support
 - How to **locate and work with other sectors in the community** (health; education; welfare and others as appropriate to context / cadre)
 - **Child rights** in the early years
 - How to **monitor children's progress**
-

Knowledge of child-centred learning approaches was highlighted as important for all the cadre groups. *Differences* in training needs for distinct cadre groups included, for education professionals, the importance of knowledge about play-based approaches, as well as knowledge about how to adapt and develop curricula to suit local contexts. For health professionals, there was consensus on the importance of knowledge about maternal and child nutrition; preventive health; identification of physical and mental health risks during pregnancy, and principles of inclusive practice. For para-professionals, knowledge of supportive interactions that promote early stimulation; WASH; first aid and inclusive practice principles were identified as important.

In addition,
Certified Education Professionals

- **Play-based learning approaches** and their importance for children's holistic development
 - How to plan learning experiences/**adapt curriculum to fit individual children's needs**
 - How children learn / **child-centred learning approaches**
 - Classroom management strategies for large and small groups of children
 - How to balance / combine play and directed learning
 - Early childhood competencies and learning activities/experiences that support these
 - How to provide a range of learning experiences including varied themes and areas of learning
 - How to identify and support emergent literacy and numeracy skills
 - **How to develop new activities and materials**
 - How to **adapt curricula to suit local contexts**
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In addition,
Non-certified Para-professionals

- **How to support and guide mothers and primary caregivers in providing early stimulation and warm, responsive care giving**
 - The importance of early stimulation and responsive caregiver / child interactions
 - Parenting and early stimulation for supporting early learning and development
 - How children learn / **child-centred learning approaches**
 - Provision of **first aid**
 - **WASH (Water, Sanitation & Hygiene) guidelines**
 - Principles of **inclusive practice**
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In addition,
Certified Health Professionals

- **Maternal and child nutrition** (breastfeeding support; infant feeding support)
 - Early childhood health and nutrition
 - **Identification of high risk pregnancy** and referral actions
 - **Preventive, promotive health practices** and care for young children and families
 - **Parenting and early stimulation** for supporting early learning and development
 - **Signs of maternal depression** and appropriate support, including referrals
 - **Identifying developmental delay** in infants and young children, and providing appropriate referral advice
 - Maternal and newborn health needs
 - The long-term impact of development during the early years of life
 - The significance of the first 1000 days for later development (including evidence on early brain development)
 - How children learn / **child-centred learning approaches**
 - How to support and promote care during pregnancy in home-based settings
 - Principles of **inclusive practice**
 - How to provide neonatal care in home-based settings
 - How to provide neonatal care in facility-based settings
-

3. Training systems: strong consensus was reached around the need for a clear ‘ladder’ in knowledge development as cadres progress through training levels. Moreover, there was strong consensus across the findings that ECD training systems should be contextually-grounded and based on careful consideration of diverse factors ranging from policy, budgets and available resources, to the role that local values, beliefs and practices play in supporting effective provision of ECD.

There was consensus that, at least for now, training should not be centralised, with the possibility that training could be designed and administered via *partnerships* among government, non-governmental and other agencies working in the field. Open-ended responses provide some insight into this view:

‘Training and professional standards do not always align easily because of different contextual needs and programmes. Standards often need to be more flexible’.

‘Mixed administration for training appears to be preferable at least until countries have developed the capacity to centralise this role. Collaboration between Govts and NGOs will be needed in this process’.

‘In my country experience this [Government centralisation] has led to the erosion of a thriving and deeply experienced NGO training sector while inexperienced government institutions are struggling to offer quality training’.

Training Systems – all ECD cadres	<ul style="list-style-type: none"> • There should be opportunities for both pre-service and in-service training for all ECD cadres • There should be clear professional / training pathways for all ECD cadres • Training for all cadres should incorporate a strong field-based component, where trainees / candidates spend part of their time receiving instruction in formal settings, followed by implementation of what they have learned in their respective professional settings
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Consensus of disagreement

Training should be centralised and administered by government

4. Follow up mentoring and supervision: of all aspects of training covered in the study, consensus around the importance of mentoring and supervision was the strongest. This reflects agreement that short-term training for most ECD cadres should be followed-up with opportunities for continuing professional development, in order to result in sustained effective practice. Aspects of mentoring and supervision that were identified as important included emphasis on the importance of on-site mentoring to follow training, as well as regular opportunities for open dialogue and reflection between mentors / supervisors and cadres. Experts agreed that effective mentoring requires effective mentors / supervisors, who must be trained in these roles. Items indicating the importance of on-going, supportive guidance and opportunities for regular sharing sessions also fit closely with the relationship-focused elements of ECD practice that are indicated throughout the findings.

Training Follow-up (Mentoring and Supervision) – all ECD cadres	<ul style="list-style-type: none"> • Supervision and monitoring should be delivered in a non-threatening manner • Observations of practice as part of supervision should be followed up by dialogue and reflection sessions • Training should be followed by on-site, on-going mentoring and supervision • Effective supervisor training is critical for programme success • Supervisors should be experienced • Training on its own is far less effective than training that is supported by follow-up supportive supervision • Systems of supervision and monitoring should provide opportunities for regular sharing sessions with peers • Supervision and monitoring should promote self-monitoring and reflection
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5. **Training methods and materials:** Round One open-ended responses indicated commonalities across all ECD cadre groups for this aspect of training. Distinct needs were also highlighted for certified education professionals and non-certified para-professionals, but not certified health professionals.

Experts agreed that interactive training techniques and materials should be employed across all ECD cadres groups. There was consensus that training should be participatory and involve ample opportunity for hands-on 'practice', followed by reflection and discussion. Peer to peer learning and an emphasis on supervision and mentorship *as part of the training methodology* were, again, also emphasised.

Teaching Methods – all ECD cadres	<ul style="list-style-type: none"> • Planned refreshers and continuing professional development sessions • Reflection on practice • Participatory/ interactive sessions • Combination of instruction and active learning strategies, such as role-play • Supportive supervision and mentorship by skilled personnel • Interactive sessions (Q & A) • Peer to peer learning in groups • Analysing examples of effective practice
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For both education professionals and non-certified para-professionals, development and use of practical resources is important during training. However, experts agreed on an important distinction between training for education professionals and para-professionals: whereas there was consensus that *training for para-professionals should focus on preparing them for delivery of a specific programme or package*, there was consensus that this *may not be appropriate for training education professionals*. This indicates consensus that focus on specific packages should form part of initial, 'tier one' training for non-certified para-professionals, followed up by subsequent training for more qualified cadres that focuses on developing skills to support *development and adaptation* of curricula to local contexts.

In addition, Certified Education Professionals	<ul style="list-style-type: none"> • Cadres develop and use practical resources during training • Consensus of disagreement - Focus on delivery of a specific curriculum / package, as well as strategies for contextualising curriculum content
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In addition, Non-certified Para-professionals	<ul style="list-style-type: none"> • Cadres have opportunity to observe experienced peers 'in action' in home or early childhood settings • Cadres develop and use practical resources during training, in preparation for implementation in the field • Focus on delivery of a specific programme package, to ensure in-depth knowledge of each aspect and accompanying materials
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6. Scale-up of ECD training: there was strong consensus around the importance of financing plans and allocated budget for scaling up ECD cadres training. This indicates that while provision of training should not yet be centralised, there nevertheless needs to be centralised planning and financing. Based on the items listed below and wider literature, scale-up of ECD cadres training requires, at a minimum:
- Careful policy-setting that incorporates consideration of issues around financing; appropriate pathways for career progression and *realistic* targets for raising qualifications / capacity; access to training for ECD cadres working across diverse settings (e.g. geographically remote or socially or linguistically diverse)
 - A workforce of skilled trainers, mentors and supervisors at *all levels* of implementation, from community to national level, supported by coherent systems of support that involve both formal and non-formal sectors.

Scaling-up Training – all ECD cadres	<ul style="list-style-type: none"> • Financing plan / budget • Availability of a range of trained personnel to support ECD training initiatives - • Stable workforce to support scale-up at all levels • Attention to how to scale to remote areas • Alliance of formal and non-formal sectors to ensure reach/coverage of training to all ECD cadres • Centralised plans for on-going supervision and mentoring • Established, recognised professional standards and clear career pathways that offer progression from basic training through to post-graduate level • Accredited training unit or institute at national/regional level to set policy and procedure • Commitment to intervention and accountability across all levels of administration
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Conclusions and recommendations

ECD provision spans a range of formal and informal settings located across vastly diverse contexts, catering for families and children from different social, cultural, ethnic, religious and linguistic backgrounds. There is consensus across the literature and Delphi results that one-size-fits-all approaches to ECD cadres training are unlikely to result in effective, sustainable and productive outcomes. Rather than focusing singularly on specific methodologies, training should prepare cadres with dispositions and skills that will enable responsive, creative actions (i) in the face of likely challenges around resource provision and other adversities and (ii) in engaging with children, caregivers and communities. Above all, training should support cadres in becoming interested in, and able to develop, strong, trusting relationships with children, caregivers and communities. This will increase the likelihood that messages about how to support and promote positive early childhood development in homes and communities are relevant, meaningful and likely to be actioned. Such skills are necessary for ECD cadres to deliver the kind of ‘nurturing care’ that is currently advocated globally in the field of ECD (Britto et. al., 2017).

Drawing on this set of findings, the following are recommended as potential strategies for enhancing provision of ECD cadres training and professional development:

1. Development of coherent systems to support ECD training and professional development.
 - a. Findings indicate consensus around *commonalities among* and *distinctions between* essential skills and knowledge required for education professionals, health professionals and non-certified para-professional groups. These insights could provide a basis for establishing coherent, joined-up professional pathways and support systems for development of ECD cadres.

- b. Consensus around the *respective roles* of these three cadres is reflected in the distinct training needs outlined for each group. There was consensus that, while non-certified para-professionals require programme-specific training to facilitate delivery of particular tasks, certified education and health professionals require training in more advanced skills such as problem-solving and flexibility. Exposure to a range of different programmes and approaches is required for certified professionals, to facilitate informed decision making around programme development as well as adapting and responding to local contextual needs. These distinctions could provide a basis for establishing clarity in respective roles for ECD cadres.
 - c. There was particularly strong agreement on the need for on-going mentoring and supervision. ECD cadres training sessions must be followed up with opportunities for continuing professional development and systematic support, to facilitate sustained effective practice.
- 2. Ensuring that systems for ECD cadres training are grounded in a strong focus on the importance of contextually-oriented programmes, materials and strategies for implementation.
 - a. There was strong consensus that ECD cadres training should be contextually-grounded to ensure responsive, effective provision. Training should be based on and promote careful consideration of a range of contextual factors that shape provision of ECD, including but not restricted to, national policy, budgets, available resources, local values, beliefs and practices.
- 3. Adoption of the concept of nurturing care as an underpinning principle for provision of ECD cadres training.
 - a. Delphi findings indicate consensus around essential dispositions⁷, or attitudes, required to support caring, respectful, responsive and trustful interactions with children, caregivers and communities. They also indicate that **all** cadres require knowledge and skills in promoting early stimulation; child-centred learning and development; effective communication and collaboration; problem solving, and reflective practice.

These strategies are incorporated in the proposed framework for integrating systems of ECD cadres training presented below. The framework identifies unique roles / training needs for different cadre groups, as well as opportunities for enhancing integration across ECD cadres training systems.

⁷ Experts suggest that these ‘dispositions’, which are essential for effective provision, should be viewed as malleable. Training should work / be designed to promote, model and strengthen these characteristics.

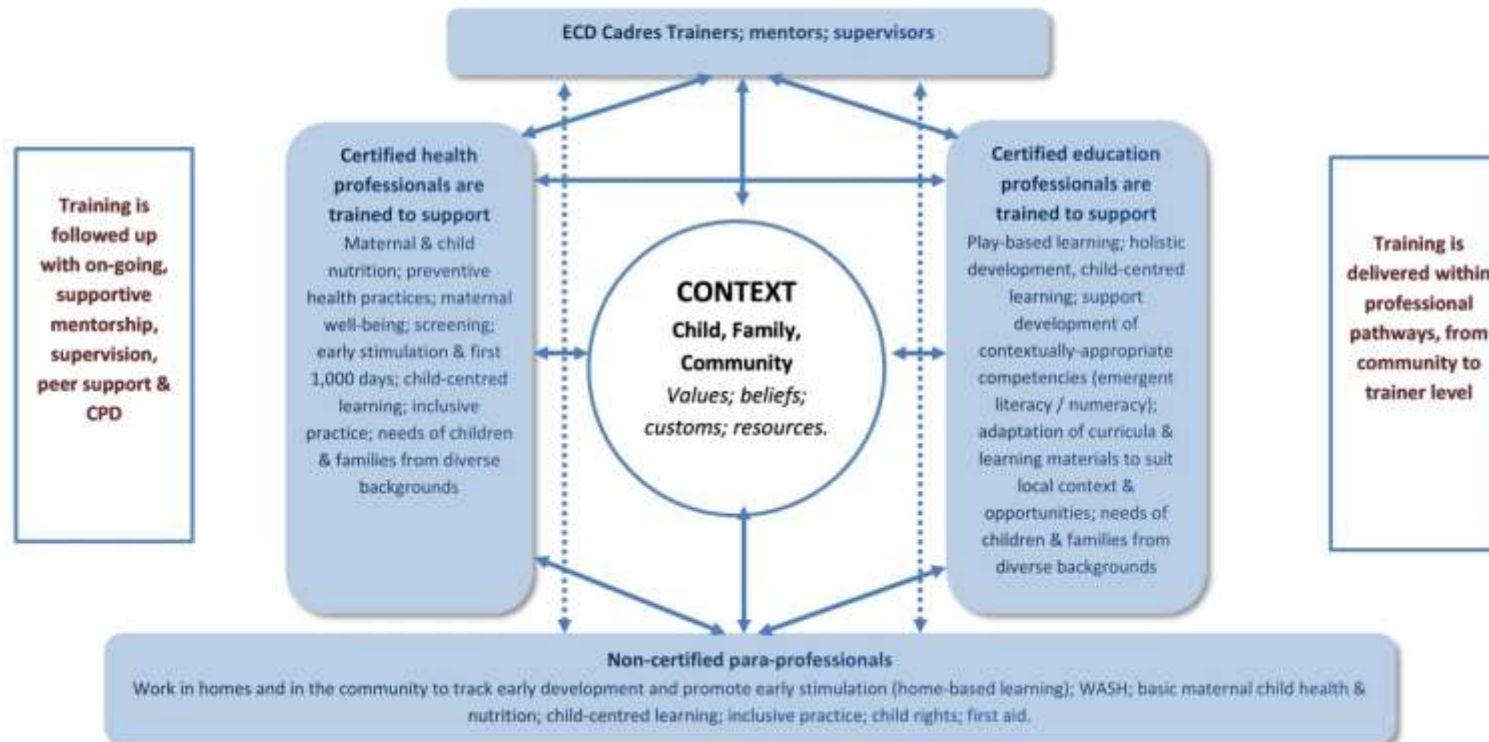
Proposed framework for integrated systems for ECD cadres training

Integrated System for provision of ECD Cadres training

Relationship-based pedagogical approach to promote 'nurturing care' –

ECD Cadres contribute to programmes which 'support stable environments that are sensitive to children's health and nutritional needs, with protection from threats, opportunities for early learning, and interactions that are responsive, emotionally supportive, and developmentally stimulating'¹.

All ECD cadres connect with and respond to local communities; interact responsively with children and caregivers; apply good listening, observation and communication skills; actively problem-solve and look for solutions to challenges; reflect on practice and self-evaluate; work effectively with peers and others.



¹ Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., ... Bhutta, Z. A. (2017). Nurturing care: promoting early childhood development. *The Lancet*, 13. [http://doi.org/10.1016/S0140-6736\(16\)31390-3](http://doi.org/10.1016/S0140-6736(16)31390-3)

References

- Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., ... Bhutta, Z. A. (2017). Nurturing care: promoting early childhood development. *The Lancet*, 1–13. [http://doi.org/10.1016/S0140-6736\(16\)31390-3](http://doi.org/10.1016/S0140-6736(16)31390-3)
- Chen, L., Evans, T., Anand, S., Boufford, J. I., Brown, H., Mushtaque Chowdhury, M. C., ... Wibulpolprasert, S. (2004). Human resources for health : overcoming the crisis. *The Lancet Global Health*, 364, 1984–1990.
- Chiparange, G. V., & Saruchera, K. (2016a). Pre-School Education: Unpacking Dilemmas and Challenges Experienced by Caregivers: A Case of Private Sectors in Mutare Urban-Zimbabwe. *Journal of Education and Practice*, 7(13), 129–141.
- Chiparange, G. V., & Saruchera, K. (2016b). Pre-School Education: Unpacking Dilemmas and Challenges Experienced by Caregivers: A Case of Private Sectors in Mutare Urban-Zimbabwe, 7(13), 129–141.
- Elzinga, G. (2005). Vertical-horizontal synergy of the health workforce. *Bulletin of the World Health Organization*, 83(4), 242–243.
- Gobezayehu, A. G., Mohammed, H., Dynes, M. M., Desta, B. F., Barry, D., Aklilu, Y., ... Sibley, L. M. (2014). Knowledge and Skills Retention Among Frontline Health Workers: Community Maternal and Newborn Health Training in Rural Ethiopia. *JMWH Journal of Midwifery & Women's Health*, 59(s1), S21–S31.
- Huang, K.-Y., Nakigudde, J., & Brotman, L. M. (2015). Use of task-shifting to scale-up child mental health services in low-resource Ugandan schools: role of contextual factors on program implementation. *Implementation Science*, 10(1), A23. <http://doi.org/10.1186/1748-5908-10-S1-A23>
- Jonker, L., & Stellenberg, E. (2014). Missed opportunities in child healthcare. *Afr J Prm Health Care Fam Med*, 6(1), 1–7. <http://doi.org/10.4102/phcfm.v6i1.537>
- Mahmud, M. (2014). *Teacher training in support of Early Childhood Education in Pakistan : A case study of the Teachers ' Resource Centre*. Retrieved from <http://unesdoc.unesco.org/images/0022/002265/226563e.pdf>
- Mkontwana, P., Steenkamp, L., & Von der Marwitz, J. (2013). Challenges in the implementation of the Infant and Young Child Feeding policy to prevent mother-to-child transmission of human immunodeficiency virus in the Nelson Mandela Bay District. *South African Journal of Clinical Nutrition*, 26(2), 25–32. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&AuthType=cookie,ip,shib&db=rzh&AN=2012233584&site=ehost-live>
- Neuman, M. J., Josephson, K., & Chua, P. G. (2015). A Review of the Literature: Early Childhood Care and Education (ECCE) Personnel in Low- and Middle-Income Countries. Retrieved from <http://unesdoc.unesco.org/images/0023/002349/234988E.pdf>
- Richter, L. M., Daelmans, B., Lombardi, J., Heymann, J., Boo, F. L., Behrman, J. R., ... Darmstadt, G. L. (2017). Investing in the foundation of sustainable development: pathways to scale up for early childhood development. *The Lancet*, 1–16. [http://doi.org/10.1016/S0140-6736\(16\)31698-1](http://doi.org/10.1016/S0140-6736(16)31698-1)
- Rodríguez, D. C., Banda, H., & Namakhoma, I. (2015). Integrated community case management in Malawi: an analysis of innovation and institutional characteristics for policy adoption. *Health Policy and Planning*, 30 Suppl 2(suppl_2), ii74-ii83. <http://doi.org/10.1093/heapol/czv063>
- SEAMEO / UNESCO. (2016). *Southeast Asian guidelines for early childhood teacher development and management*. Retrieved from <http://unesdoc.unesco.org/images/0024/002443/244370e.pdf>
- Sun, J., Rao, N., & Pearson, E. (2015). *Policies and Strategies to Enhance the Quality of Early Childhood*

Educators. Retrieved from <http://unesdoc.unesco.org/images/0023/002324/232453e.pdf>

Tinajero, A. R. (2010). *Scaling-Up Early Child Development in Cuba's Educate Your Child Program : Strategies and Lessons From the Expansion Process*. Retrieved from <https://www.brookings.edu/research/scaling-up-early-child-development-in-cuba-cubas-educate-your-child-program-strategies-and-lessons-from-the-expansion-process/>

Tomlinson, M., Swartz, L., & Landman, M. (2003). The Hanover Park Mother-Infant Project : methodological challenges and compromises in a South African context. *Sapsyc South African Journal of Psychology*, 33(4), p.205-211.

UNESCO. (2006). *EFA Global Monitoring Report 2007. Strong Foundations: Early Childhood Care and Education*. Retrieved from <http://www.unesco.org/new/en/education/themes/leading-the-international-agenda/efareport/reports/2007-early-childhood/>

Yousafzai, A. K., Rasheed, M. A., Rizvi, A., Armstrong, R., & Bhutta, Z. A. (2014). Effect of integrated responsive stimulation and nutrition interventions in the Lady Health Worker programme in Pakistan on child development, growth, and health outcomes: a cluster-randomised factorial effectiveness trial. *Lancet*, 384(9950), 1282–1293. [http://doi.org/10.1016/S0140-6736\(14\)60455-4](http://doi.org/10.1016/S0140-6736(14)60455-4)

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