



DATA INSIGHTS

The Early Learning Positive Deviance Initiative - Summary of qualitative findings

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TABLE OF CONTENTS

Abstract.....	3
List of terms and acronyms	4
Introduction	5
Methods.....	6
Sampling	6
Data collection	7
Data analysis.....	7
Ethics	7
Limitations.....	8
Descriptive overview of PD sites	8
Case study centres.....	9
Remote interview centres.....	12
Results of thematic analysis: an ecosystem to support Positive Deviance.....	13
Community embeddedness.....	13
Relationships with caregivers and families.....	14
Community involvement in governance.....	15
Reflections on quantitative findings on community embeddedness.....	16
Summary of community embeddedness.....	16
Leadership.....	19
Summary of leadership.....	20
Organisational culture.....	21
Attentiveness.....	21
Staff collaboration.....	22
Summary of organisational culture	24
Reflections on quantitative findings on organisational culture.....	25
Pedagogy.....	25
Routine	25
Attentiveness as a teaching and learning practice	27
Embedded learning.....	29
Summary of pedagogy.....	30
Reflections on the quantitative findings on pedagogy.....	32
Theory of Change	34
A nested ecosystem.....	34
Attentiveness.....	35
Participation.....	35
Responsiveness	36
Next steps.....	36

ABSTRACT

DataDrive2030's Positive Deviance Initiative aims to identify and explore factors associated with 'positive deviance' in early childhood development (ECD) outcomes for South African children.

Positive Deviance (PD) is an approach to social and behavioural change grounded in the idea that there will be some individuals or entities that, when confronted with similar challenges and constraints as their peers, emerge as 'outliers' because of uncommon practices and strategies that facilitate their thriving. This study of PD is interested in the practices and contexts that influence why some children thrive against the odds.

The first quantitative phase of this project analysed a nationally-representative meta-dataset of 12,719 children (aged 50-69 months) to identify those children that – after controlling for age, gender, geography, and socio-economic status – outperformed their peers on a range of Early Learning Outcome Measures (ELOM). Researchers also identified ECD centres and wards that were producing a significantly higher-than-expected proportion of positive deviant children. The quantitative study identified several key variables positively associated with PD.

At the child level, these included socio-emotional functioning and task orientation. At the household level, these included practitioner and caregiver engagement. At the ELP level, variables related to PD included practitioner engagement during play, small group work, and a range of infrastructural and management variables – a full list is provided below.

The purpose of this qualitative phase of the study was to enhance the rigour and nuance of these findings by understanding the mechanisms and connections behind quantitative associations, the social contexts in which they are generated, and how practitioners, principals and caregivers at PD centres understand and approach early learning and development. Six PD facilities were selected as case study sites across three provinces (Mpumalanga, Eastern Cape, and Western Cape).

Data collection included semi-structured interviews with practitioners, principals, community members and caregivers, as well as three days of observation. Case study data were supplemented by remote interviews with a further seven PD facilities spread across five additional provinces. The full sample included a mix of urban and rural sites, located in both PD and non-PD wards, and of varying sizes.

The theory of change emerging from this study suggests that ECD centres are more likely to have a higher proportion of positive deviant children when their environment offers children consistency, psychosocial safety, as well as timely and continuous

support that responds to their emergent needs, capacities, and contexts. This environment is nurtured when centres collaborate with their communities, solve problems collectively, combine child and practitioner-led activities, and adopt practices that embed attentiveness and responsiveness to children's emergent developmental needs. Often, these practices are driven by highly motivated and networked leadership, empowered and collaborative staff, and positioning one's centre as a community asset.

Community level findings: PD centres are deeply embedded in their communities. This is reflected, and reproduced, by the length of time they had been in operation (most over a decade) and the depth of their relationship with caregivers and local stakeholders. Most centres in this sample participated in active local ECD forums through which they shared learning, planned programming, and were supported in applying for state and non-state funding. Many positioned their ECD centres as community assets, creating jobs, supporting caregivers, and advancing children's futures. Strong relationships with caregivers, local businesses, NGOs, and forums operated as forms of social insurance, contributing to centres' endurance.

Facility level findings: Centres were also often characterised by a culture of continuous learning, in which practitioners regularly recorded and reflected on their practices and worked collectively to solve problems, often together with community stakeholders. Strong leadership was a common characteristic of sample facilities: principals were highly networked and motivated, adopting collaborative leadership styles that nurtured the confidence, participation, and well-being of staff.

Practitioner-child level findings: Practitioner-child interactions at sample facilities could be characterised by attentiveness and responsiveness, with practitioners remaining proximate to children's play, learning and interactions while offering timely and targeted support, praise, and prompts. This proximity enabled practitioners to prompt learning by asking questions, as well as giving children praise where appropriate. Nearly all centres adopted a mix of child and practitioner-led activities and were attentive to children's socio-emotional cues, noticing changes in children's engagement, prompting healthy child-child interactions, and embedding routines that encouraged children to express their feelings. Optimal learning environments were facilitated by ensuring that two meals and a snack were given each day and that children's safety and psychosocial well-being were prioritised.

Household level findings: By building communicative, supportive, and trusting relationships with caregivers, centres stayed responsive to needs arising from children's

home environments, created a sense of shared guardianship with caregivers, and promoted a continuity of learning and development across home and ECD centres.

ACKNOWLEDGEMENTS

Our thanks go to DataDrive2030 for supporting this work; all the centres and participants who volunteered their time to share their expertise and insights with us; our extraordinary team of observers and interviewers without whom this

work would not have been possible; and to all the caregivers, community organisations, businesses and individuals working with extraordinary resourcefulness and dedication to secure the future chances of the country's children.

LIST OF TERMS AND ACRONYMS

Caregiver – adult primarily responsible for the care and guardianship of a child. A caregiver is not necessarily the child's biological parent; caregivers include grandparents, relatives, and other primary guardians. For the purpose of this report, a caregiver is not a member of ECD staff.

Early childhood development (ECD) centre – defined by the National Childcare Protection Policy as "any building or premises maintained or used, whether or not for gain, for the admission, protection and temporary or partial care of more than six children away from their parents". Depending on registration, an ECD centre can admit babies, toddlers, and/or preschool aged children. In this report, ECD centres include facilities in which young children receive teaching and early learning from trained and untrained practitioners, who care for these children in the absence of their parents/primary caregivers. This study recognises that quality early learning programmes can be delivered through a range of modalities (like playgroups and day mothers), but the sample for this study includes only centre-based programmes.

Early Learning Programme (ELP) – a programme of teaching, learning and nurturing care for young children. This can occur within an ECD centre, or in a playgroup, toy library or home-based environment. In this report, all ELPs are run through ECD centres. For this reason, we have chosen to use the term ECD

centres to refer to all the sites discussed here.

Early Learning Outcome Measures 4-5 (ELOM 4-5) tool – a tool used to assess children's early learning and development. The ELOM tool consists of five domain scores (20 points each), which sum to a total ELOM score out of 100. The domains are Gross Motor Development (GMD), Fine Motor Coordination and Visual Motor Integration (FMC-VMI), Emergent Numeracy and Mathematics (ENM), Cognition and Executive Functioning (CEF), and Emergent Literacy and Language (ELL).

Positive Deviance (PD) – an approach to social and behavioural change grounded in the idea that, when confronted with similar challenges, and constraints to their peers, there will be some individuals or entities that emerge as 'outliers' because of uncommon practices and strategies that have facilitated their thriving.

Practitioner – a member of ELP teaching staff, sometimes referred to as a 'teacher'

DSD – Department of Social Development

DoH – Department of Health

DoE – Department of Basic Education

NQF – National Qualifications Framework

SGB – School Governing Body

INTRODUCTION

The Early Learning Positive Deviance Initiative aims to identify and explore factors associated with Positive Deviance in early childhood development (ECD) outcomes for South African children.

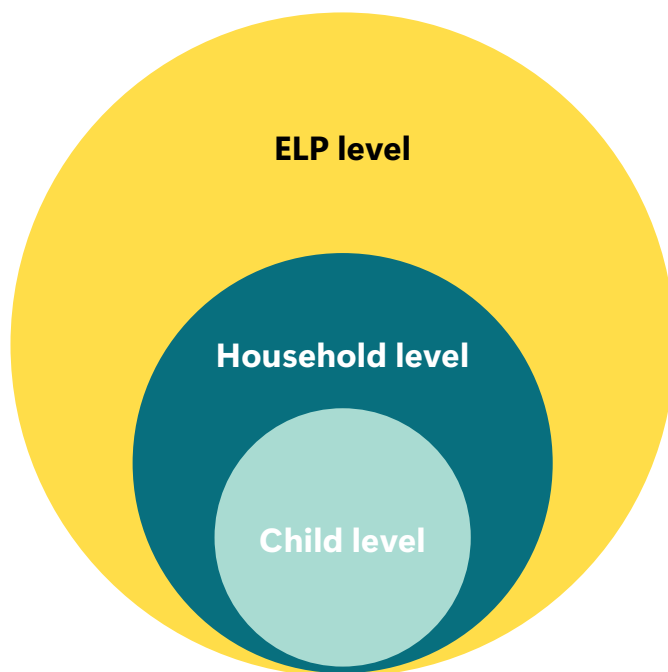
Positive Deviance (PD) is an approach to social and behavioural change grounded in the idea that there will be some individuals or entities that, when confronted with similar challenges and constraints to their peers, emerge as 'outliers' because of uncommon practices and strategies that facilitate their thriving. This study of PD is interested in the practices and contexts that influence why some children thrive against the odds.

The initial quantitative phase of this project drew from DataDrive2030's nationally representative meta-dataset. The data in this set come from research studies and programmes that used Early Learning Outcome Measures (ELOM) tools between 2016 and 2022 to assess children aged 50-69 months enrolled

in Early Learning Programmes (ELPs) across South Africa. The domains measured by ELOM are Gross Motor Development, Fine Motor Coordination and Visual Motor Integration, Emergent Numeracy and Mathematics, Cognition and Executive Functioning, and Emergent Literacy and Language. A total of 12,719 children across 1,975 ECD centres were included in the analysis (10,129 after filtering on the desired socio-economic status proxies).

Using carefully designed quantitative methods, DD2030 were able to identify early learning programmes and wards that were producing a higher-than-expected proportion of results on children's total and domain-level ELOM scores relative to their peers. After controlling for unchangeable or structural factors – including age, gender, province, and socio-economic status – quantitative analysis found a range of variables to be significantly correlated with ELOM scores, reflected in Figure 1 below.

FIGURE 1: SUMMARY OF QUANTITATIVE FINDINGS



Child level

- Social-emotional functioning
- Task orientation: focus, persistence curiosity
- Specific items in the ELOM tools
- Exposure to ELP

Household level

- Engagement with mother/grandparent/aunt, uncle
- Less engagement with siblings

ELP level

- Practitioner engagement- joining children's play to help them learn
- Individual or alone, pair or small group activities
- Time spent engaged in free play / play that promotes child agency
- Separate classes for different ages
- Learning materials, accessibility of materials
- Having a tippy-tap for handwashing
- Being in an ECD centre/school based
- Practitioner has a matric/NSC/ NQF4-5
- ELP is open during school holidays/ longer hours
- Being registered (partially/fully) with government
- Being funded by donations/ government subsidy
- Parents have been in contact with practitioners
- Keeping records of child grant/ background information
- ELP is part of a network
- First aid training
- Having someone check who enters or exits the facility*

*Mixed findings, but mostly positive

While quantitative research can signal factors that co-occur with positive deviance, it cannot tell the story of how, when, why, and under what circumstances these are connected. More so, because quantitative surveys, by definition, ask a predetermined set of questions, they can miss unexpected or lesser-considered practices, norms and attitudes that might be shaping children's

developmental outcomes. Asking qualitatively oriented questions about what the quantitative data reveals and obscures can facilitate a more nuanced, integrated analysis of emerging findings while informing and targeting further research. As such, this second phase of the research selected a subsample of positive deviant ECD centres for in-depth qualitative investigation.

METHODS

This was a multi-method qualitative study, leveraging remote, semi-structured interviews as well as on-site interviews and observation. It collected a wide variety of qualitative data, including images, videos, field notes, interview transcripts, and participant text messages. Participants included ECD principals, practitioners, and support staff; caregivers; and

community members spread across eight remote ECD centres and six case study centres. Thematic codes were developed from the data, in conversation with findings from the quantitative phase, but not from preconceived hypotheses. Stakeholder interviews served as a bridge between the quantitative and qualitative phases, informing research design.

SAMPLING

The DataDrive2030 quantitative study produced lists of top-performing PD centres. These became the starting point for qualitative sampling.

Sampling followed a 3-step process:	PD centres were excluded if:
1. Prioritisation was given to higher-ranking centres	<ul style="list-style-type: none"> ● Contact information was missing from the primary data
2. In many instances, centres were unreachable due to outdated contact information. This meant that traceability became a major inclusion criterion	<ul style="list-style-type: none"> ● They were a Grade R programme ● They were unreachable despite our best efforts
3. For case study centres, consideration was given to the proximity of the selected centres to one another, to local airports, and to the fieldwork team to ease fieldwork logistics and expenses	<ul style="list-style-type: none"> ● For case study centres: they were too far away and would incur significant travel costs ● We had already reached our target in that province

Sample centres

Top-performing ECD centres were clustered in the Western and Eastern Cape, with mixed findings about the third-ranking province (either Mpumalanga or Limpopo). Mpumalanga was selected for logistical reasons. Six case study centres were selected across the Eastern Cape, the Western Cape and Mpumalanga, two per province. For each province, we aimed to include one PD

facility located in a PD ward and one PD facility located in a ward that was not PD, although this case mix was not always achieved. Data from case study ECD centres was nested in a larger body of interview data, gathered remotely from PD centres in other provinces across the country, including Northern Cape (2), Limpopo (1), Free State (2), North West (1) and Gauteng (2).

Data collection

Fieldworkers participated in two preparatory online training sessions and were equipped with video guides and in-field support from the senior research team. Prior to fieldwork, case study centres were invited to join a WhatsApp-based Community of Practice, to which the research team sent routine prompts over the course of two to three months. The three days of fieldwork were organised as follows:

- **Days 1-2:** two fieldworkers were allocated to each centre, with one fieldworker dedicated to 'following children' and their interactions from arrival to departure, and another with the freedom to conduct interviews with

practitioners, caregivers, and community members.

- **Day 3** (one week after the first two-day visit): The same two fieldworkers were on site, with one dedicated to observation and the other to asking follow-up or validation questions.
- Remote interviews were conducted telephonically over a six-week period.

Interviews conducted in a language other than English included in-situ translation. All formal interviews were recorded, while informal conversations were recorded in field notes.

Data analysis

Analytic methods were designed for iteration, member checking, and self-reflexivity; with multiple coders working to sense-check and deepen analysis. Analysis began concurrently with data collection, with remote interviews starting before fieldwork and informing research design. Fieldworkers submitted voice notes, theoretical memos, field notes and images electronically and in real time, allowing real-time feedback and follow-up questions from the rest of the team. Whilst codes were developed from the data, coding was also attuned to the research

aims and variables of interest, which signalled some passages as more relevant than others. Once the initial codes had been developed, the team, with input from fieldworkers and specialist advisors, engaged in a process of conceptual mapping or second-level coding.¹ Coding was done manually, using Excel and Google collaboration software. Codes were checked and validated by a team of researchers, fieldworkers, interviewers, and expert advisors in weekly pattern recognition meetings.

Ethics

Principle	Practice
Informed, voluntary consent	Informed, written and/or audio consent was sought from all interviewees and participating centres. For case study centres, SGBs and caregivers were notified of the study prior to field work and given the opportunity to surface questions and concerns.
Confidentiality and data storage	All ECD centres and participants are anonymised in this report through pseudonyms. All data are anonymised and stored in a password-protected folder accessible only to the research team and in accordance with the Protection of Personal Information Act of South Africa. Fieldworkers sent field work data in real-time (or at the end of the day) via WhatsApp, which is automatically encrypted. As soon as data had been downloaded into the research team's folders, it was deleted off the WhatsApp platform.
Protection of children	No names or images of children were captured and where children's faces did unintentionally appear in images, these were edited out. Fieldworkers did not engage with children unless other ELP staff were present. Fieldworkers committed to, as far as possible, not interrupt the usual ELP routine during their visits. Before commencing field work, every fieldworker read, signed, and committed to a 'Code of Conduct for Working with Children'.

1. M Miles and A Huberman, *Qualitative Data Analysis: An Expanded Sourcebook* (California: Sage, 1994).

Limitations

Remote interview sample: because the research team did not have the benefit of observation at remote interview centres, there are likely to have been important practices that were missed. Similarly, because data on case study centres is significantly richer, there is a bias towards these centres in our representation of the data.

Translation: there may have been misinterpretations or over-simplifications in the process of in-situ translation. While interpretations were checked with fieldworkers during analysis meetings, and occasionally through member-checking, fieldworkers did not read original transcriptions to cross-check translations.

Observational data: because field teams only spent three days at case study centres, only a portion of classroom interactions, lessons, and activities were observed. A fuller picture of the curriculum (whether formal or informal) and its implementation could have been further elucidated by regular visits over a longer period.

No counterfactual: since there were no non-PD sites in the sample, researchers were unable to compare practices between PD and non-PD sites.

Change over time: the identification of selected sites as PD is reliant on data collected at the end of 2021. Much could have changed at these centres in the interim period. To account for this, we integrated questions about change in our research tools. In most cases, the ECD centres we spoke to had seen positive change at their centres over the past few years. Part of why these centres had emerged as PD was their competencies in leveraging networks and community support to not only keep their centres open, but gain access to training, funds, or in-kind donations. Some centres had been able to upgrade infrastructure in the interim years between the initial data collection and our contacting them. Some had received water tanks and tippy taps as part of Covid-19 relief programmes. There were certainly centres that were facing newfound financial hardship and taking on increasing numbers of no-fee paying children. Many would also have seen changes to their staff complement, although principals had remained largely consistent.

DESCRIPTIVE OVERVIEW OF PD SITES CASE STUDY CENTRES

Three (half) of the case study centres are situated in informal settlements, two are rural sites and one is situated in a farming community. Five of the six sites are registered, with one waiting for infrastructural improvements before registration is approved. This centre is also the newest, while others have been open for at least 18 years, two for more than 25 years

and one for 33 years. In addition to five centres benefitting from the government ECD subsidy, all leverage additional support from NGOs, local businesses, and their surrounding communities. Still, maintaining financial viability was noted as an ongoing challenge across sites. A summary is provided in Table 1 on the next page.

TABLE 1: SUMMARY OF CASE STUDY CENTRES

Province	ECD Centre	Location	Registration status	Number of years open / Opening hours	Number of children enrolled (2023)	Number of staff	Sources of support
Eastern Cape	Centre L PD ward	Joe Slovo, Gqeberha (informal settlement)	Registered	18 years open Hours: 7:00am - 2:30pm	45	4 Qualifications: Principal - NQF4	Caregiver fees: R200 per month <ul style="list-style-type: none"> ✓ ECD forum ✓ SmartStart ✓ DBE: ECD subsidy ✓ Early Inspiration ✓ Calabash Trust
	Centre S PD ward	Greenbushes, Gqeberha (informal settlement)	Registered	18 years open Hours: 5:30am - 5:30pm	45	5 Qualifications: Principal - NQF5	Caregiver fees: R400 for 1-2-year-olds R300 for 3-5-year-olds <ul style="list-style-type: none"> ✓ ECD forum ✓ Government subsidy ✓ Community ✓ Local Clinic ✓ SoulFood ✓ Local churches ✓ Boxer Store ✓ Caregivers
Western Cape	Centre BK PD ward	Koue Bokkeveld, Cederberg	Registered	33 years open Hours: 7:00am - 5:00pm	19	4 Qualifications: Unknown	Caregiver fees: R300 per child <ul style="list-style-type: none"> ✓ Government subsidy ✓ Local primary centre ✓ Farm owner ✓ Community ✓ Caregivers ✓ NGOs provide educational materials
	Centre LK Non-PD ward	Outside Worcester (informal settlement)	Registered	27 years open	46	5 Qualifications: Principal: NQF5 Practitioners: 1 X NQF1 2 X NQF4	Caregiver fees: R300 per month for 0-5-year-olds R200 for 2-4-year-olds <ul style="list-style-type: none"> ✓ Government subsidy ✓ Rotary ✓ Boxer and Pick n Pay ✓ NGOs ✓ Caregivers ✓ Community ✓ Local clinic
Mpumalanga	Centre E Non-PD ward	Nkomazi (rural area)	Registered	28 years open Hours: 7:30am - 2:30pm	61	7 Qualifications: Principal and both practitioners - NQF4	Caregiver fees: R150 per child per month <ul style="list-style-type: none"> ✓ SGB ✓ The Do More Foundation ✓ Ntataise (NGO) ✓ Local clinic ✓ Local forum
	Centre M Non-PD ward	Nkomazi (rural area)	Not registered (infrastructure)	5 years open Hours: 6:30am - 2:30pm	32	5 Qualifications: Principal - primary school teacher	Caregiver fees: R250 per month per child <ul style="list-style-type: none"> ✓ Ntataise ✓ The Do More Foundation ✓ Social workers/dieticians

Centre BK, Western Cape

Centre BK is located on a farm in the Koue Bokkeveld and has, for the past 33 years, catered specifically for the children of its farm workers. This means that the children, caregivers, and staff at Centre BK are part of a close-knit community. One cohort of alumni has already reached adulthood and are now sending their own children to this ELP. Each morning, the principal and teachers meet the children and their caregivers at a central location on the farm, and a tractor transports the children to and from the centre.

Centre BK funded, in part, by the farm owner, who owns several farms across the country. Caregivers pay fees from their wages. Given their employment on the farm, these wages are small, but secure, which gives the centre some income stability. The farm owner's wife serves as a local coordinator, driving fundraising for the centre, and building relationships with other ECD centres in the area.

One farm worker, whose child used to attend Centre BK describes the centre's embeddedness this way: "From our principal to any of the staff, we all have a good understanding of one another..."



[The staff are] people who are also parents, who also had children at the centre. Some of their children are already married, some of their children have good jobs outside [not on the farm] ... and some of them have grandchildren here and it still remains a good relationship that we have built up over the years. It is always good to know that your child is at a place where you know the people."

Centre LK, Western Cape

Centre LK is situated on the outskirts of Worcester in the Western Cape in a community where many people are unemployed. It was founded in 1996 and registered in 2004, moving to its current location in 2011. The principal is the owner of the centre and is originally from the Eastern Cape.

There is a culture of multilingualism at Centre LK. The Centre is also deeply supportive of, and supported by, the community. Centre LK gives leftover donations of clothes or porridge to community members. It has a strong local reputation, with caregivers regularly being referred by community members whose children are attending or have attended the centre. Staff and caregivers shared responsibility for the children's well-being and staff share their daily roles with each other. Still, the centre had the least structured programming of those in the sample and the fewest learning materials.



The principal of Centre LK is a highly networked and collaborative woman. She is well respected by the caregivers and community at large, and cares deeply about the children; conducting home visits when she is concerned for a child's well-being. Caregivers describe the principal as very caring, a leader in the community, and 'spreading the love' wherever she goes.

Centre S, Eastern Cape

Centre S is situated in Greenbushes, Gqeberha. It was started in 2005 when the founder moved into the area and felt that there were too many children roaming the streets. She started Centre S in her own home and over time, the building has expanded to accommodate the growing number of children. The founder's daughter is now the principal of Centre S.

The surrounding area consists of a rapidly growing informal settlement based on the outskirts of Gqeberha, with limited access to resources and infrastructure. The founder explained how she leaves extra donations in the street for other community members to take as they walk past.



Centre S exudes a feeling of warmth and homeliness. The staff value teamwork and good communication both among centre staff and with children's caregivers. Centre S accommodates working caregivers by opening their site to the children as early as 5:30am.

Centre L, Eastern Cape

Centre L is situated in Joe Slovo, an informal settlement in Gqeberha. Centre L was started in 2005 by an NGO funder called Calabash Trust. At that stage, there was no principal and only a few practitioners, one of whom is now the current principal who started this role in 2007. Calabash still supports Centre L by funding the salaries of the principal and one practitioner.

The culture at Centre L is one of both consistency and responsiveness to children's needs. The programme is well-planned and routinised, with a strong use of theme tables, but practitioners remain in daily conversation about how to iterate programming for the next day.



The principal of Centre L is a highly networked and collaborative woman who is well-versed in children's home environments and attentive to their socio-emotional needs. The principal and practitioners participate regularly in Early Inspiration training workshops and other trainings offered through forums.

Centre M, Mpumalanga

Centre M is in Nkomazi in rural Mpumalanga. Among the few that have jobs in the area, many are employed to work on surrounding sugar cane farms. There is a local clinic and Shoprite in the area, but for other resources, community members must travel between 30 and 50 kilometres.

After being granted the land by the local chief in 2018, the principal built Centre M. Since opening, she has extended the building through community donations.

Centre M is highly organised and fuelled by passion and faith. According to caregivers and practitioners, there is a strong commitment to high-quality teaching and learning with an emphasis on learning English in preparation for primary school. The staff encourage communication with caregivers who seem to be involved in their children's teaching



and learning. Centre M is regarded as a community asset and the principal is a highly respected woman among staff and community members.

Centre M's principal has attended many training workshops, run through the Young Child Forum, and creates her own resources and toys from waste materials. Despite not being registered, she has mobilised support from her community and local forum and is a diligent record-keeper striving to meet registration eligibility criteria.

Centre E, Mpumalanga

Centre E is also situated in Nkomazi in rural Mpumalanga. It has been running for 28 years and was started by two grandmothers. When one of the grandmothers passed away, the centre temporarily closed. The current principal is local to the community. When she completed her tertiary education, she started liaising with community members about starting an ECD centre. Through these networks, she met one of the centre's founders and together they reopened the ECD centre with strong support from the community. The other staff are also local to the community and there is a sense of shared responsibility between the principal and practitioners. They rotate through various trainings, which fieldworkers felt leads to a less hierarchical atmosphere. The financial burden and investment are also shared amongst staff; when the government subsidy is paid late, none of the staff receive their salary and instead the available funding goes towards buying the children's food. Only when the ECD centre receives their subsidy, do the staff get paid.



Children arrive in the morning with a driver and are greeted at the gate by the gateman. Together with the driver, he directs children to the classrooms where children are welcomed by practitioners. The practitioners follow a basic routine including free play, mealtimes, nap times and story time.

Centre E is characterised by strong teamwork, shared learning and problem-solving, and good communication, both between staff, and between practitioners and caregivers, some of whom are members of the SGB and involved in the running of Centre E.

REMOTE INTERVIEW CENTRES

Among our remote interview centres, three are in rural areas, three in peri-urban informal settlements, one in an urban city centre, and one in a peri-urban suburban area. Centre SC and Centre K in Gauteng have been operating for 23 and 19 years respectively; Centre R in the Free State for 18 years, while Centre

BP and Centre T in the Northern Cape have been open for 36 and 15 years respectively. Like the case study centres, these long-standing ECD centres appear to be respected and established institutions within the communities they serve. A summary is provided below in Table 2.

TABLE 2: SUMMARY OF REMOTE INTERVIEW SITES

Province	ECD Centre	Location	Registration status	Number of years open	Number of children enrolled (2023)
Northern Cape	Centre T PD ward	Rural; small village	Registered	15	25
	Centre BP Non-PD ward	Rural area	Registered	36	165
Free State	Centre MK PD ward	Rural area	Registered	16	148
	Centre R Non-PD ward	Informal settlement (peri-urban)	Registered	18	Around 60
Gauteng	Centre K Non-PD ward	City centre (Jeppestown)	Registered	19	120
	Centre SC Non-PD ward	Informal settlement (peri-urban)	Lapsed	23	59
Limpopo	Centre MC	Peri-urban suburb	Registered	27	19
North West	Centre KD Non-PD ward	Informal settlement (peri-urban)	Registered		55

RESULTS OF THEMATIC ANALYSIS: AN ECOSYSTEM TO SUPPORT POSITIVE DEVIANCE

Note: in the write-up below, all case study centres are marked with an asterisk *

COMMUNITY EMBEDDEDNESS

A common characteristic of sample centres is their extent of embeddedness in their surrounding communities. This was, in part, a feature of having been operational for long enough that their centre had become a known and valued community institution. Caregivers had often sent multiple children to these centres, creating long-established relationships between ECD centres and families. ECD centres provided multiple essential services to their communities, serving as educational resource hubs, sources of childcare support, and job creators. They also received various types of community support, whether through donations, volunteers, referrals, or community governance. PD centres in our study had relationships with local businesses, NGOs, social services, and clinics, facilitating local intersectoral collaboration within the ECD sector. For example, Centre LK* in the Western Cape, Centre S* in the Eastern Cape and Centre KD in North West had built relationships with local retailers to secure food donations. Many also had strong relationships with local public services, including local clinics and dietitians, the Department of Social Development, and neighbouring primary schools.

There appeared to be a bi-directional relationship between an ECD centres' local embeddedness and their endurance: the longer they endured, the more embedded they became in the fabric of families. Conversely, the more embedded they were, the more likely they were to garner support from caregivers and community members to sustain their operations. This suggests that sustaining centres might have a direct effect on children's outcomes.

There were, nevertheless, also newer centres in our sample, like Centre M* in Mpumalanga, which had been open for only five years. Still, the extent of community embeddedness at Centre M* was remarkable. The centre had been built after the local chief granted land to the principal, who then went door-to-door to tell community members about the new centre. The centre, which is the only one in the sample that is not registered, has been built through contributions from community members and caregivers, with support from the local forum

and NGOs. The implications for this are that new ECD centres are most likely to flourish if they have support and buy-in from the local community and traditional leaders. Strong ECD centre leadership where future principals are already community leaders and have the ability to network within their community will be an important facilitator of out-performing and long-lasting ECD centres.

Because of their framing as community assets, centres in our sample were often described as a route to community upliftment, breaking cycles of intergenerational poverty. It was not unusual for caregivers and community members to talk about the centres in our sample as sites of educational attainment and aspiration. Academic excellence was something caregivers looked for in centres and something centres took pride in.

The longevity of many centres, along with their strong relationship with caregivers and community members, has meant that they can track the progress of their alumni, creating a powerful feedback loop for caregivers and staff and affirming the aspirational intentions.

"Centre BK is one of our community's biggest priorities because our interests lie here."*

– Community member, Western Cape

"... This community centre, this is our belonging, inside and outside."

– Principal, Northern Cape

"All the children started...at this creche and most of them have matric and passed with bachelors. Most of the parents I asked, recommend this one."

– Caregiver, Centre S*, Eastern Cape

Relationships with caregivers and families

● SUPPORT FOR CAREGIVERS

Among the characteristics of and contributors to an embedded ECD centre are the relationships between centres and families. This is, in part, about the support that caregivers give centres, through fees, fundraising events, and other forms of participation and involvement. At Centre K in Jeppestown, Gauteng, caregivers volunteered to help clean the centre. At many centres, including Centre E* in Mpumalanga and Centre BK* in the Western Cape, caregivers, often as part of the centre governing bodies, were involved in fundraising or made donations during times of financial distress.

Just as caregivers supported centres, centres also gave support to caregivers. Having a trusted ECD centre to which to send their child, gave caregivers sufficient psychological comfort to seek or earn income, which in turn, reinforced their ability to pay fees and support the centre.

Of our six case study centres, five had extended opening hours to cater for working caregivers: either opening early, staying open late or both. Three centres open at or before 7:30am (e.g. 5:30, 7 and 7:30) and two stay open until 5pm and 5:30pm.

"I could go to work with peace of mind because my child was at a safe place."

– Caregiver, Western Cape

Recognising the economic hardship of caregivers, Centre K in Gauteng sends interested caregivers to accredited courses in cooking, home-based care and cleaning. A handful of caregivers at Centre K had been trained as practitioners and three others as support staff. While they may not have had the resources to support caregivers' job-seeking, other centres in the sample also recognised and responded to caregivers' hardships. Centre LK* in Worcester, Western Cape, sends a small bag of mielie pap home with children on weekends to ensure they have something to eat at home. Centre S* in Gqeberha, Eastern Cape, collects second-hand clothes for children. The principal also makes home visits when she senses that there are challenges in the home environment. Five out of six case study centres accommodated no-fee paying children to support struggling caregivers. This was also mentioned by a further two remote interview centres.

● CAREGIVER INVOLVEMENT

Trusting and supportive relationships with caregivers were enabled through strong communication between caregivers and centre staff. At many centres, this is facilitated through practices like caregiver WhatsApp groups, as well as routine and bi-directional check-ins, in which caregivers and practitioners report to one another regularly about the child's progress and well-being. This is usually facilitated informally during pick-up and drop-off.

"Our parents are leading us... Sometimes we have meetings with parents at 8 o'clock in the morning. We show them their children's work, we ask them if they can help us with reading, numbers, whatever... we show the parents... They start asking children what did they do today? They ask us what toys to buy for their children... We also ask them to come and play with their children at the centre."

– Principal, Centre R, Free State

At some centres, caregivers were invited for meetings and/or to observe their child at play.

Through strong communication, centres work deliberately to capacitate and involve caregivers in their children's learning. At Centre S*, in Gqeberha, Eastern Cape, the principal designs at-home activities for children and their caregivers. One of these practices is to send children home with seedlings. The principal checks up on the seedlings regularly and sends pictures on the caregiver WhatsApp group to illustrate what the seedlings should look like. In Mpumalanga, the DoMore Foundation offered training to support caregivers in reading with their children. Involving caregivers often lent itself to a continuity of practice and pedagogy that bridged the child's home and centre environments.

Trust and communication with caregivers also facilitated continuity in socio-emotional learning. Principals and practitioners across centres were often acutely aware of the challenges in children's home environments. At Centre L* in the Eastern Cape, practitioners used a Persona Doll, which was ascribed a name, a history and a biography that mirrored children's own contexts. Through role

play, the children advised the doll how best to express her feelings and confront socio-emotional challenges. At Centre BK* in the Western Cape, children role played with a teddy bear. They pretended the teddy bear was a caregiver, sibling or relative and were able to practise expressing emotion or saying sorry. This tool is often used in play therapy to assist children to process their emotions.

"Each and every thing that happens to a child, she [the principal] involves caregivers each and every time. When she sees something is not going well about a child, she calls that parent and that parent goes to Centre M and they talk about what's wrong with this child and what's going on. Can I help?"*

– Fieldworker, Centre M*, Mpumalanga

● COMMUNITY INVOLVEMENT IN GOVERNANCE

Many PD centres had strong governing bodies, and highly active local forums. Community-led SGBs pooled funds or undertook fundraising to support ECD centres under financial stress. Some communities were also involved in making staff appointments. At Centre E* in Mpumalanga, for example, the principal describes how she and past principals were appointed "by the community" (the SGB) in service to the community.

Five of the six case study centres belonged to strong local ECD forums, along with at least five remote interview centres. These forums gathered regularly to share learnings and resources and plan ECD programming and projects. Many centres also accessed training through their local forums. In Nkomazi, Mpumalanga, the local forum is not only facilitating training and workshops but is also amplifying the voices of ECD practitioners in the Integrated Municipal Development Plan, meaning that they advocate for practitioners at a policy level.

Despite being both highly networked and highly resourceful, many centres in this study still confronted funding challenges. During interviews, several centres mentioned issues related to funding, with a lack of funding impacting their ability to implement the planned menu or access learning resources.

Three of the centres mentioned that a lack of funds impacts on staff wages, with staff either not earning enough or not earning anything at all. The financial support received from the government subsidy at

"We are working hand-in-hand with the other ECD."

– SGB Member, Centre M, Mpumalanga

Centre L* in the Eastern Cape, for example, only covers the payment of one of the four staff members, while the wages of the other staff members are taken from school fees. This can be problematic as not all caregivers are able to pay school fees. This was a common challenge amongst centres visited.

Centre K in Gauteng, as well as Centre KD in North West, described how joining the local forum increased their knowledge of sources of ECD funding as well as their ability to meet eligibility requirements for registrations and subsidies. Centre E* in Mpumalanga and Centre LK* in the Western Cape had experienced late payments of subsidies from the Government. Both contacted their local forums who supported them in advocating for payment. Centre M* in Mpumalanga, is receiving support from the local forum to understand and meet the requirements to qualify for the subsidy. Local forums also acted as a form of social insurance ('stokvels') when subsidies were late.

The role of well-functioning ECD forums as sources and distributors of information, as essential links to external institutions and resources, as spaces of shared programming, and as catalysts of community activism and engagement is supported in the literature.²

2. J Blom, "The Role ECD Forums Play in Strengthening ECD Centres," in Thought Leaders on Early Childhood Development in South Africa: A Collection of Thought-Provoking Essays (Centre for Early Childhood Development, 2021).

● REFLECTIONS ON QUANTITATIVE FINDINGS ON COMMUNITY EMBEDDEDNESS

In the quantitative analyses, variables such as 'caregiver contact', 'practitioner interaction with caregivers', and 'being a part of a network' were found to be associated with positive deviance. The qualitative phase illustrates that these variables are indeed significant and can be both drivers and outcomes of community embeddedness because the relationship is bi-directional: ELPs that are positive deviants are responsive to caregiver and

community needs, and vice versa. The qualitative phase showed that community embeddedness is also connected to other quantitative variables such as 'access to funding and donations'. More so, the qualitative research showed that 'caregiver contact' is not simply about advancing continuity of learning and development for the child, but also about being responsive to caregiver needs and creating a sense of shared ownership of the centre.

● SUMMARY OF COMMUNITY EMBEDDEDNESS

There are four behaviours that contribute towards the embeddedness of an ECD centre into the local Community (Figure 2):

FIGURE 2: BEHAVIOURS THAT CONTRIBUTE TOWARDS COMMUNITY EMBEDDEDNESS

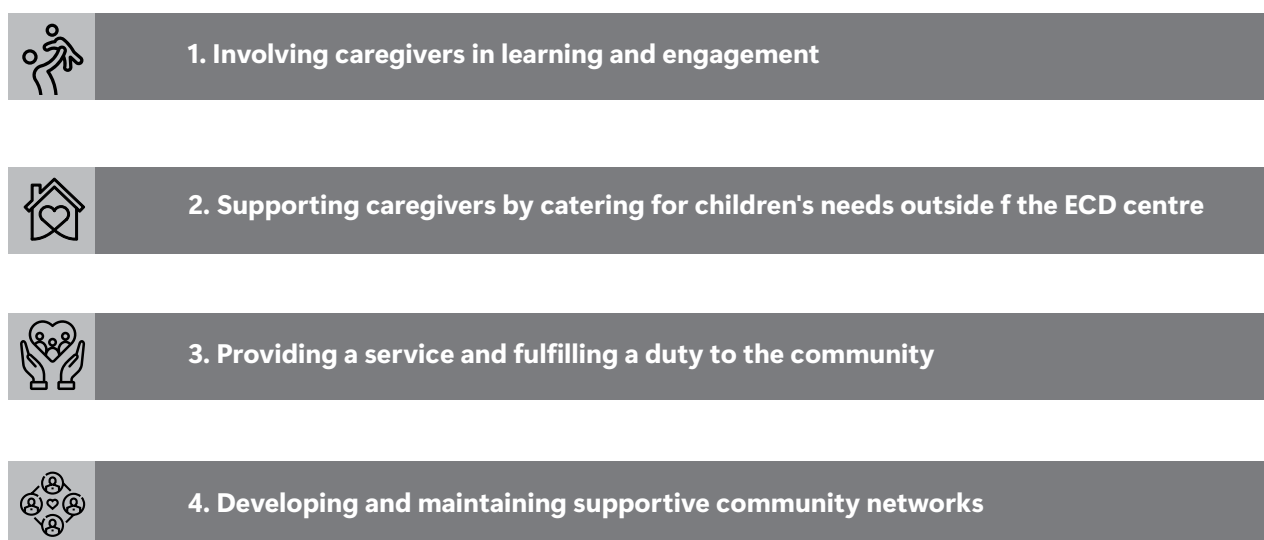



TABLE 3: FACILITATORS, BARRIERS, AND OUTCOMES OF BEHAVIOURS THAT CONTRIBUTE TOWARDS COMMUNITY EMBEDDEDNESS

 1. INVOLVING CAREGIVERS IN LEARNING AND ENGAGEMENT			
Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ Designing activities for children to take home and do with caregivers (for example, sending seedlings home, and then following up on WhatsApp regarding how they should look at timepoints) ✓ Inviting caregivers to come to the ELP to observe their children ✓ Holding meetings and gatherings at the ELP ✓ Communicating with caregivers regarding their child's progress or well-being (or when something is wrong) ✓ Routine check-ins with caregivers on children's well-being and development ✓ Visiting the homes of children who are academically or emotionally struggling ✓ Involving caregivers in centre fundraising and upkeep through volunteering (e.g. cleaning) 	<ul style="list-style-type: none"> ✓ Caregivers who live near the centre ✓ Access to WhatsApp/ means of communication ✓ Caregivers that sit on the school governing body are interested in the decision-making regarding governance of the ECD 	<ul style="list-style-type: none"> ✓ Caregivers of children who arrive at the ECD centre with transport, will have less day-to-day contact with practitioners ✓ Caregivers who travel from far may also have less day-to-day contact with practitioners 	<ul style="list-style-type: none"> ✓ Promotes a sense of trust and shared guardianship of the children ✓ Fosters a feedback loop between caregivers and the home environment which improves continuity in learning



2. SUPPORTING CAREGIVERS BY CATERING FOR CHILDREN'S NEEDS OUTSIDE OF THE ECD CENTRE

Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ ECD centres that had extended opening hours to support working caregivers (before 7am and closing after 2:30pm) ✓ Supplementing household food with leftover donations ✓ Absorption of no-fee paying children ✓ Conducting home visits ✓ Using Persona Dolls to role play ✓ Taking children to the clinic 	<ul style="list-style-type: none"> ✓ Principal needs to be motivated (this is beyond their bounds, requires an intense passion for what they do) ✓ Supportive organisational structure ✓ Adequate resources (including time) ✓ A flexible schedule ✓ Strong leadership that encourages home-ELP communication 	<ul style="list-style-type: none"> ✓ Could result in an increase of operational costs for the ECD centre ✓ Potential fatigue and burnout of ECD practitioners ✓ Redistribution challenges when surplus of donations is insufficient 	<ul style="list-style-type: none"> ✓ Increased cognitive bandwidth – caregivers are less likely to worry about their child's well-being, which provides flexibility for job seeking and employment ✓ Potential increase in enrolment ✓ Potential competitive advantage ✓ Potential increase in positive reputation ✓ Fosters a feedback loop between caregivers and the home environment, which improves continuity in learning ✓ Promotes a sense of trust and shared guardianship



3. PROVIDING A SERVICE AND FULFILLING A DUTY TO THE COMMUNITY

Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ Academic excellence which contributes, in the long run, to upliftment of the community 	<ul style="list-style-type: none"> ✓ Strong leadership with previous experience in education and/or community work ✓ Long-lasting centres that are deeply embedded in the community ✓ Principals and practitioners that have a deep passion for working in the ECD sector and serving their community? 	<ul style="list-style-type: none"> ✓ High staff turnover can weaken leadership and academic excellence ✓ Lack of resources to compensate for no-fee paying children 	<ul style="list-style-type: none"> ✓ ECD centres are perceived by ECD principals, practitioners, caregivers and community members as assets to the community ✓ Potentially higher staff retention as principals and practitioners feel duty-bound to the community ✓ Community gratitude towards the ECD centre which results in long-lasting support and ECD centres that remain open for many years ✓ Potential increase in positive reputation ✓ Potential increase in enrolment



4. DEVELOPING AND MAINTAINING SUPPORTIVE COMMUNITY NETWORKS

Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ Participating in local forums, which involved structured and regular programmes with strong coordinators and included the involvement of local NGOs and businesses ✓ Involving caregivers and staff and fundraising initiatives, staff appointments and governance of the ECD centre 	<ul style="list-style-type: none"> ✓ Long-lasting centres that are deeply embedded in the community ✓ Strong leadership with good people skills and ability to network 	<ul style="list-style-type: none"> ✓ Principals or practitioners who are not local to the community may initially struggle to develop these networks ✓ Resource constrained community might lack monetary support for ECD centres ✓ Lack of local ECD forum 	<ul style="list-style-type: none"> ✓ Community members feel a sense of joint guardianship over the ECD centre and therefore assist in keeping centres open ✓ Long-lasting ECD centres that are embedded in the community

LEADERSHIP

All principals at case study centres boasted leadership qualities that undeniably contributed towards the PD of their centres: most spoke about their passion for children. Although their primary aim was to offer a safe-haven and springboard for children, their reports also reflected a deep awareness and understanding of the contextual issues faced by caregivers in their communities. They saw their centres as community resources, offering support to working and unemployed caregivers alike, keeping children off the streets, improving education and alleviating unemployment, which is supported in the literature.³ Principals in this study occupied several, often concurrent, roles:

An attentive supervisor providing oversight and monitoring standards. As the principal at Centre R expressed: “as a manager, I do the overview of the children and the teacher where they are teaching. Like I always check on how they’re doing their work so that they [the children] cannot go without being taught or without gaining something new for the day.”

A joint guardian working in partnership with caregivers. While children were under their care, principals ensured their health and safety (sometimes taking them to the clinic), helped them process events at home, and stayed in close communication with children’s caregivers about their needs and progress.

A community leader: not only did many principals see their centres as collectively rather than individually owned, they also described themselves first and foremost as community leaders, rather than business owners. As one Gauteng principal says, “I’m doing the daily running at school, because I am here every day and all of the problems of the community and for the teachers and for all the children here, I am there for them.” Often, principals occupied multiple leadership roles in their communities as principals, church leaders, and chairpersons of their local forum.

“The staff tell me that to solve this problem (lack of funds), we need to call the parents and the SGB to have a way forward and say let’s write letters or ask for donations. Nearby shops gave us donation like mielie meal, bread and vegetables so that we can feed the children.”

– Principal, Centre E*, Mpumalanga

A collaborator: principals were often key drivers of a collaborative culture among staff. This included sharing of knowledge, encouragement of role-sharing, attentiveness to staff well-being and interpersonal dynamics, and joint problem-solving.

3. Sibonelo Blose and Evelyn Muteweri, “Tapping into Leadership in Early Childhood Development Centers: Learning from the Lived Experiences of Principals in South African Townships,” SAGE Open 11, no. 4 (October 2021): 215824402110613, <https://doi.org/10.1177/21582440211061395>.

A networker: principals in this study are often highly networked within their community but also among government officials and donors. As one Northern Cape practitioner said, “I am a link from departments, the NPOs, the clusters, the practitioners, the traditional counsellors at our centre... I am a link.” Principals used their ability

to network as a problem-solving and resource-mobilisation strategy.

The importance of leadership was not captured in quantitative findings, due to a lack of best practices for measurement, and routine collection of this information. This highlights the importance of incorporating it into data collection practices.

Summary of leadership

There are two behaviours that principals and practitioners engaged in that contributed towards their leadership ability (Figure 3).

The facilitators, barriers, and outcomes of each of these behaviours are summarised below (Table 4).

FIGURE 3: BEHAVIOURS THAT CONTRIBUTE TOWARDS LEADERSHIP

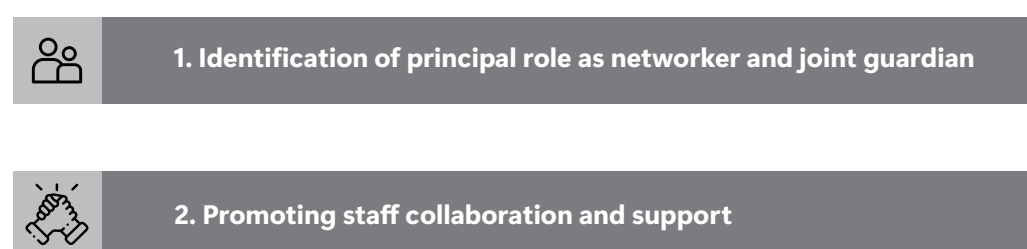


TABLE 4: FACILITATORS, BARRIERS, AND OUTCOMES OF BEHAVIOURS THAT CONTRIBUTE TOWARDS LEADERSHIP

1. IDENTIFICATION OF PRINCIPAL ROLE AS NETWORKER AND JOINT GUARDIAN			
Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ Principals self-identified as community leaders ✓ Principals attend community and church meetings and events ✓ Maintaining regular communication with caregivers ✓ Identifying and responding to challenges in the children’s home environment ✓ Conducting home visits ✓ Taking children to the clinic 	<ul style="list-style-type: none"> ✓ Pre-existing experience in community or education (linked to providing a service and fulfilling a duty to the community) ✓ Well-known and respected and actively engaged within the community ✓ Have developed community networks that garner support ✓ Recognised as leaders by staff and community members 	<ul style="list-style-type: none"> ✓ Resource constraints might make it difficult for leaders to access further training ✓ Administrative burden can act as a diversion ✓ Communities that face adverse environments (i.e. socio-economic challenges and/or cultural barriers) may require first building a sense of trust within the community (linked to providing a service and fulfilling a duty to the community) 	<ul style="list-style-type: none"> ✓ Increased knowledge of funding opportunities ✓ Assistance with eligibility requirements and subsidy support through local forums ✓ Food donations from grocery stores such as Boxer and Pick n Pay ✓ Participation in local events, organisations and forums lends itself to visibility and respect, which in turn attracts resources and relationships ✓ Reflects, and reproduces, strong, trusting relationships with caregivers, in which caregivers feel supported, informed and involved



2. PROMOTING STAFF COLLABORATION AND SUPPORT

Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ Encourage staff participation in training and professional development opportunities, thereafter encourage a cascaded training at facility (peer to peer learning) to promote shared learning ✓ Encourage check-ins with staff (attentive to staff well-being and interpersonal dynamics) ✓ Encourage role-sharing ✓ Encourage joint problem-solving ✓ Promote open and honest communication 	<ul style="list-style-type: none"> ✓ Involvement in networks that provide opportunities for training and regular touch points with other ECD practitioners ✓ Role sharing that requires staff to be flexible ✓ Shared problem-solving amongst staff ✓ Leaders with communication and conflict resolution skills ✓ Promoting equal opportunity for staff participation in external training and events ✓ Clear communication strategies ✓ Staff recognition ✓ Leading by example 	<ul style="list-style-type: none"> ✓ Limited/ no access to development opportunities ✓ Potential resistance to change from practitioners and other staff members ✓ Lack of trust between principal and staff ✓ Work schedules that are too busy to accommodate for professional development and staff well-being 	<ul style="list-style-type: none"> ✓ Motivated team and well-functioning ECD centre with a positive emotional climate ✓ A non-hierarchical culture amongst staff within the ECD centre ✓ Improves visibility and respect of the ECD centre within the community, which then attracts further networks and resources ✓ Less likely to have a high staff turnover ✓ All these outcomes contribute to the longevity of the ECD centre ✓ Strong teamwork ✓ Retainment of highly motivated staff

ORGANISATIONAL CULTURE

Attentiveness

● ATTENTIVENESS TO SAFETY

When interviewing caregivers, most mentioned physical safety as a priority when selecting an ECD centre for their children. Fieldworkers witnessed an attentiveness to, and regular conversation about, safety during their visits to sample centres. For example, principals and practitioners kept a watchful eye over the children's safety and hygiene practices and stayed near them throughout the day.

The principals are not the only attentive guardians. Three case study centres, and at least one remote interview site, had guards or gardeners appointed solely for the purpose of monitoring safety.

"We show them how to wash their hands [and there are] pictures around the washing stations on the tanks that show how to wash and then we explain to them how to wash. The teacher is always there showing them how to wash and giving them soap."

– Principal, Centre L*, Eastern Cape

● ATTENTIVENESS TO CHILDREN'S PHYSICAL NEEDS

Among centres in our study, principals and practitioners play a significant role in meeting children's basic needs of food and hygiene.

All the case study centres offer children three meals a day. Fieldworkers described how during toilet time, children are taught to queue and wait their turn, with practitioners remaining proximate and watchful, prompting where necessary. The queuing as well as the actual toileting is supervised for safety reasons,

but also to prompt children to 'share' and 'take turns'.

"I keep an eye over everything that is happening here. When a child is playing outside and gets hurt, I act fast." –

Principal, Centre E*, Mpumalanga

● ATTENTIVENESS TO RECORD-KEEPING AND SELF-REFLECTION

Many principals are required to submit monthly attendance registers to DBE to access their subsidies or apply for additional funding. This required a high level of up-to-date record-keeping which was witnessed at many of the case study centres. Record-keeping, minutes, and note-taking also facilitated self-reflective leadership. One fieldworker in Mpumalanga described how the principal at Centre E kept detailed records so that she could identify areas for self and team improvement.

At Centre M* in Mpumalanga, which is still working to meet the requirements of registration, fieldworkers and NGO allies remarked on the principal's thorough attention to record-keeping and office work.

At Centre K in Gauteng, record-keeping extended to tracking the progress and achievements of alumni through their foundation phase of schooling, building a case for their own impact on children's futures.

A detail-oriented approach to record-keeping combined with the utilisation of data for self-reflection is an essential feature of professional development for ECD practitioners⁴ and may be an important driver for PD sites. This concept is emphasised as good practice within the South African National Curriculum Framework, which requires practitioners to reflect on their practice with children to address the complexities in children's development.

"She [the principal] always records everything, she doesn't want to miss anything. She records everything so that in her spare time, she can go back and think 'Where did I lack? Where did I go wrong? Where did I go right?'" –

Fieldworker, Centre E* Mpumalanga

Staff collaboration

Many of our sample centres were characterised by a high degree of staff collaboration. Practices that facilitated staff collaboration included attending and reporting-back on regular training, collective problem-solving, and the willingness of staff to take on roles outside of their scope. At many of

the centres in this study, staff are also local to the community, which often facilitated shared problem-solving with stakeholders beyond the centre. Principals also play a critical role in facilitating staff collaboration and attending to the socio-emotional well-being of their staff contingent

4. Hasina Ebrahim et al., Curriculum, Pedagogy and Assessment: A Handbook on Early Childhood Education in South Africa (Pearson, 2021).

● ATTENDING TRAINING

Practitioners typically accessed training through their local forums or NGO networks and were encouraged to share their knowledge with peers on their return, fostering positive collaboration.

Regular training equipped practitioners with the opportunities to continuously improve the quality of teaching and learning, while also giving them regular touchpoints with a wider network of ECD centres, programmes, and practitioners. This may also contribute to staff retention as practitioners feel

supported and are more likely to stay at the same centre over a long period of time.

"For the practitioners, I come back and tell them this is what I have learned and introduce it so it benefits them because by doing that, they also transfer it to the children if it needs to be heard by the children." – Principal, Centre L, Eastern Cape

● STRONG COMMUNICATION AND SHARED PROBLEM-SOLVING

Many of the principals spoke about how they encourage open and honest conversations with their practitioners. When they see that there is a problem,

they address it immediately by talking it through as a team.

"So, I don't take myself as a principal. We work together, we help each other. If somebody's struggling with the kids, we help, even if in the kitchen or outside we are one thing. We don't say that one it's for the 4-5-year-olds or 0-3, no we help each other in the centre – that's what makes our centre special."

– Principal, Free state

● SHARING OF ROLES

Principals spoke about how each staff member has their unique role, but nevertheless shares the responsibilities of keeping the centre running. Everyone steps up to fill in the gaps and as such, many principals don't identify themselves as the 'leader' because of the collective work in keeping the centre running.

● PRIORITISING STAFF WELL-BEING AND RELATIONSHIPS

Sample centres often paid concerted attention to staff well-being and nurtured interpersonal relationships.

One practitioner at Centre S in Gauteng described this ethos as 'happy teacher, happy child'. Similarly, a Do More Foundation representative described how the principal at Centre M* in Mpumalanga "takes

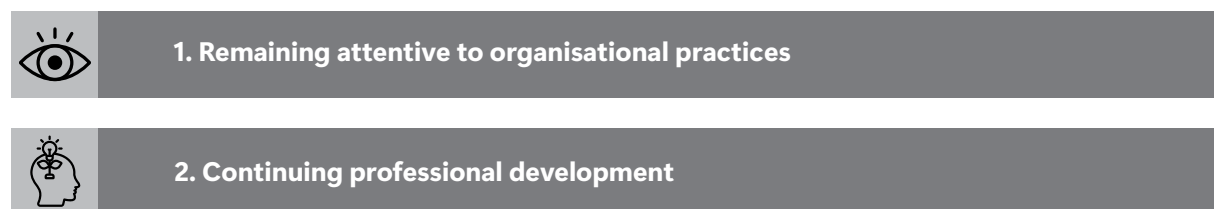
the time in the morning to ask how you are arriving today emotionally, with her staff, so when you go to the children, you are fully present."

Attentiveness to staff's professional development and socio-emotional well-being was a contributor to staff morale, but also their confidence as practitioners.

Summary of organisational culture



There are two behaviours (Figure 4) that principals and practitioners engaged in that facilitated a strong organisational culture:

FIGURE 4: BEHAVIOURS THAT CONTRIBUTE TOWARDS ORGANISATIONAL CULTURE



The facilitators, barriers, and outcomes of each of these behaviours are summarised below (Table 5).

TABLE 5: FACILITATORS, BARRIERS, AND OUTCOMES OF BEHAVIOURS THAT CONTRIBUTE TO ORGANISATIONAL CULTURE

 1. REMAINING ATTENTIVE TO ORGANISATIONAL PRACTICES			
Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ Routine monitoring and remaining proximate to children during hygiene practices and mealtime ✓ Diligent record-keeping (meeting minutes, attendance registers, documents for subsidies), which creates opportunities for self-reflection ✓ Regular reflection on areas for improvement ✓ Keeping children's identity and health records 	<ul style="list-style-type: none"> ✓ Organised and motivated leadership ✓ Training on administration processes and government requirements ✓ Sufficient staff capacity and resources 	<ul style="list-style-type: none"> ✓ A heavy workload can reduce available time for attentive organisational practices ✓ Lack of professional development for accurate record keeping 	<ul style="list-style-type: none"> ✓ Attentiveness to safety and hygiene extended into pedagogical practices ✓ Record-keeping facilitated continued funding
 2. CONTINUOUS PROFESSIONAL DEVELOPMENT			
Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ Attending training workshops run by various organisations such as SmartStart and Early Inspiration ✓ Role-sharing and peer-to-peer support after training workshops ✓ Implementing lessons from training workshops 	<ul style="list-style-type: none"> ✓ Being a member and participating in local forums and ECD networks ✓ Networking and relational skills ✓ Active and invested community networks and NGOs that provide opportunities for training courses 	<ul style="list-style-type: none"> ✓ No access to a local ECD forum ✓ No culture of staff collaboration to encourage peer-to-peer learning ✓ Generating interest from NGOs and local businesses in contexts that have few or none ✓ Limited awareness of community networks and support 	<ul style="list-style-type: none"> ✓ Improved staff collaboration and competence ✓ Assistance with eligibility requirements and subsidy support

Reflections on quantitative findings on organisational culture

● REGISTRATION, RESOURCES, AND TRAINING

The quantitative study found a positive, curious association between having a tippy tap and PD. This is likely because the use of tippy taps often happens under practitioners' guidance and monitoring – practitioner attentiveness. In centres that had both tippy taps and running water, fieldworkers observed that monitored handwashing routines were more likely to take place around the tippy tap. Tippy taps were also often donated, signalling a relationship with donors.

Attentiveness to safety and to hygiene practices might, in turn, be a proxy for wider practices of attentiveness that extend to pedagogy, children's socio-emotional cues and staff well-being.

● FACILITY PRACTICES

Extended school hours and remaining open during holidays might be proxies for supporting caregivers and their ability to work (and therefore pay fees). Both these variables were positively associated with PD in the quantitative study.

The quantitative study found that keeping records of child background information was positively associated with PD which corroborates qualitative findings on record-keeping. Maintaining accurate child records might therefore be a proxy for good centre-based management practices, which aid reflective learning, formative assessment, funding eligibility and donor reporting.

PEDAGOGY

While there was undoubtedly variation in the teaching and learning activities of the ELPs in this study, especially given vast differences in access to learning materials, there were nevertheless some striking similarities.

Routine

Thirteen of the 14 centres in our study followed a predictable daily programme with an emphasis on routine. Having a routine provides structure and guidance both for children and practitioners, allowing both to anticipate and plan for the next activity. Routine can also create an environment of reliability and consistency that supports children's sense of safety and facilitates (perhaps counter-intuitively) their ability to learn and experiment.

Daily programme time	ACTIVITY	Age 4-5 girls ELBAS
6:30-7:00	Teachers AND Children A/V	
7:00-7:30	Scanning and Toilet routine	
7:30-8:30	MORNING RING	
8:30-8:45	TOILET Routine	
8:45-9:15	Creative Art Activity (motion)	
9:15-9:20	Cleanup And Toilet routine	
9:20-9:50	BREAKFAST, Break Fast	
9:50-10:10	Toilet Routine	
10:10-10:40	Songs and Rhythms, math+ counting	
10:40-10:50	Clean up and sanitise (entire)	
10:50-11:20	FREE Play outdoor	
11:20-11:30	Toilet Routine & Sanitise	

Visible daily routine, Centre M*, Mpumalanga

"Their routine is the same. And the practitioners are the same also themselves... It's not like today they feel tired and then they just shuffle around the routine. They stick to their routine. And they know what to do each and every day."

– Field notes from Centre L*, Eastern Cape

Days generally structured around mealtimes and toileting, as well as periods of indoor and outdoor play.

Many centres had menus on their walls, although did not always abide by them. Significant effort was made to adapt the menu based on affordability and local availability. Breakfast was almost always porridge, with centres often including either vegetable or meat proteins in their lunch menu. Beyond their nutritional value, meals often became an anchor point for daily routines. Many households also relied on centre-provided food to support them in meeting their children's needs. Knowing where a child's next meal was coming from offered both caregivers and children a critical safety net.

Five out of six case study centres displayed the daily programme on the wall of their centre. All the centres split the children into age groups during teaching and learning activities to promote age-appropriate activities. In two of the case study sites, fieldworkers observed that the structure of the daily teaching programme was not consistently followed, save for mealtimes and toilet routines. In these centres, there seemed to be a prioritisation of children's physical sustenance and psychosocial safety.

Morning routines were of particular importance: in most cases, staff welcomed children to the centre when they arrived in the mornings, often taking the opportunity to check in with their caregivers on any of the child's emergent needs. At all the centres, except Centre LK*, children are greeted on arrival either by the gateman, principal, or practitioners. Five of the six case study centres also have a morning ring, which looks different at each centre, but typically includes prayer time, singing, a check-in with how each child is feeling, and the weather of the day. Morning rings, in addition to offering routine, are also a key programmatic element in which practitioners sometimes introduce the daily theme. By making this expression of feeling and individuality routine, these practices are also normalised for children.

One principal (from Centre S*, EC) had made the choice to discard their structured daily teaching programme, saying she found implementing it very difficult. During the morning ring, children were often restless and struggled to stay still and attentive. This, she says, is when she decided that children could be taught while they were 'just playing'. She said, "if a child is playing with a ball, you can teach them while they are playing with the ball." This practice of 'learning while doing' was a feature of many of our sample centres, even those few that referenced being guided by a specific curriculum or framework. 'Learning while doing' is treated as part of an embedded learning approach, discussed below.

Across most centres, practitioners spoke about the importance of developing both big muscles (gross motor) and small muscles (fine motor) and the age-appropriateness of one set of activities relative to

the other. Outdoor activities are usually less guided than indoor activities, although these are all overseen by a practitioner. During indoor time, some ELPs leveraged the use of activity stations, between which children were rotated. Stations regularly included fantasy play, artmaking, books, and puzzles or building blocks. While Centre L* in the Eastern Cape, for example, seemed to practise a structured rotation between labelled stations with children being told where to go; Centre S* in the same province offered more free choice, creating separate piles with different categories of toys, and inviting children to choose and move between stations at their own pace.

"The morning ring is good for them because we are checking how they feel today. And we teach them how to pray. And teach them how to sing. And looking at the weather chart, birthdays, and news."

– Principal, Centre M*, Mpumalanga

Almost all centres in our sample had scheduled story time, even when the books were handwritten by practitioners. And all leveraged songs and rhymes both to teach and to signal new activities. Most of the centres had weekly and monthly themes that added structure to their programming. Centre K in Gauteng and Centre L* in the Eastern Cape, for example, create weekly themes around letters of the alphabet.

● LEARNING MATERIALS

Blocks were the most common learning material among PD facilities in the sample, followed by fantasy toys, art material, books, and puzzles. The most common outdoor toys were plastic motorbikes followed by balls, spades and buckets

and tyres. At centres that did not have much in the way of learning resources, the scope of learning activities was more limited. At Centre M* in Mpumalanga, fantasy toys, shapes and building blocks were handcrafted from waste materials.

● TRANSITION SIGNALS

Daily rituals were sometimes marked with transition signals – strategies to signal the transition between activities. These included ringing a bell for mealtimes, singing or reciting rhymes that indicate 'breakfast time' or time to wash hands, as well as visual signals like laying children's lunch bags out for snack time. Some of the centres incorporate the use of 'workstations' for activities and the setting up of these stations signals the next activity. These signalling strategies are efficient for the



Ringing the bell to signal mealtime, Centre M, Mpumalanga*

practitioners and provide a sense of security and predictability for the children.

Transition signals are acknowledged in the literature as a form of positive behaviour support,⁵ while also

creating a predictable learning environment for children.

● MIX OF CHILD-LED AND PRACTITIONER-LED ACTIVITIES

At most centres, there was a deliberate mix of practitioner and child-led activities in daily programming, with practitioners joining the children. As an example, in Centre E* in Mpumalanga the practitioners demonstrated and then participated in 'horse jumping' (jumping between hoops laid out on the ground) as well as in sack races. In another case study site, Centre LK*, practitioners did similarly, by joining in three-legged races.

At other times of the day, children led activities and practitioners offered support, guidance, or affirmation, often joining in themselves. Combining child-led and adult-led activities might reflect practitioners' understanding of the National Curriculum Framework (NCF), which recommends both approaches as valuable to child development. The NCF also recommends 'incidental learning', which is a type of unplanned learning that arises from other activities. In this report, this is referred to as 'learning while doing' (a type of embedded learning), discussed further below.

"You do it like them [the children], jump like them. If they go down, you must also go down. It's a nice feeling and then they are going to love it, you see?"

– Principal, Centre S*, Eastern Cape

Researchers acknowledge⁶ that one of the challenges practitioners experience in implementing child-led play is its inherent lack of structure: practitioners cannot predict the toys children will choose or the stories they will seek to play out, which makes it difficult to plan how best to integrate academic skills or identify opportunities for learning. Achieving this demands "the ability to observe and recognise these opportunities"⁷ as well as significant expertise and resourcefulness, which many practitioners at our sample centres demonstrated. Part of what sets practitioners in this study apart is their high levels of attentiveness during child-led play, which enabled them to prompt the children and identify learning moments.

Attentiveness as a teaching and learning practice

One of the most noticeable approaches to learning was the emphasis on attentiveness. It was commonly understood at the sites visited that to safeguard and optimise children's learning environment, a practitioner needed to be a) proximate (close to the children), b) identifying opportunities for learning wherever children were, c) giving specific praise and affirmation, and d) offering targeted support based on the needs of each child. Doing items b-d

well demands being close and observant so that interventions are responsive to what is emerging in the classroom or playground. An attentive pedagogical culture was often an extension of a wider organisational culture of attentiveness (discussed above). Practitioners and principals who paid diligent attention to children's learning, were also often attentive to their safety and hygiene, to the upkeep of the centre grounds, and to their own record-keeping.

● ATTENTIVENESS TO PLAY

All centres created significant room for children's free play, with practitioners remaining proximate and watchful, offering intermittent guidance and stoking children's curiosity. Fieldworkers observed this practice in five of our six case study centres.

"They have lots of time for free playing, even if the teachers keep on checking, 'are they playing in a good way? Are they playing with good toys? Are they safe?'" – Fieldworker, Centre E*, Mpumalanga

5. E. Benedict, R. Homer, and J. Squires, 'Assessment and Implementation of Positive Behaviour Support in Preschools', *TECSE* 27, no. 3 (2007): 174–92.

6. H. Jensen et al., 'Playing with a Goal in Mind: Exploring the Enactment of Guided Play in Canadian and South African Early Years Classrooms', *Early Years* 41, no. 5 (2021): 491–505.

7. H. Jensen et al., "Playing with a Goal in Mind: Exploring the Enactment of Guided Play in Canadian and South African Early Years Classrooms," *Early Years* 41, no. 5 (2021): 491–505.

Similarly, at Centre BK* in the Western Cape, fieldworkers noted that practitioners often asked children what they were doing while they were engaged in free play to identify opportunities to augment learning.

A prime example of child-led play complemented by practitioner attentiveness was exhibited by Centre S* in the Eastern Cape. One afternoon, during observation, practitioners dispensed buckets of miscellaneous toys and objects in piles on the

floor. Children were free to choose toys that piqued their interest. Some played alone. Others found a classmate to play with. One child took out a truck, while another found a doll which they then put in the back of the truck for a ride. Others turned circular Tupperware containers into imaginary steering wheels to transport themselves around the room. All the while, practitioners stayed close and looked on. They prompted sharing, asked children what they were doing, and made suggestions.

● ATTENTIVENESS TO SOCIO-EMOTIONAL CUES

Attentiveness was also core to how centres nurtured socio-emotional development among children. This involved paying attention to children's interactions, behaviour, and socio-emotional cues, and offering timely and targeted follow-up where needed. It also meant paying attention to, and recognising, children's individuality, independence, and achievement. To add to this, almost all centres spoke about strategies for handling classroom disruption and child conflict and preventing escalation. Principals across the study also reported

paying close attention to children's participation in various activities as an indication of confidence, expression, and emergent needs. Four out of six case study centres used the practice of 'morning ring' to check how children were arriving on any given day and encouraged them to articulate their feelings or share about events in their households. In other instances, practitioners looked for other signals of their emotional state, including paying attention to children's engagement in daily singing and recitation to sense their mood.

● ATTENTIVENESS AND PROXIMITY

Both attentiveness to play and attentiveness to socio-emotional cues demand a level of proximity from the practitioner. This proximity aids their ability to notice and guide children's learning and interactions; but the closeness of practitioners can also, in itself, aid learning. Indeed, 'Proximity Control'⁸

is an established practice for managing disengaged or disruptive behaviours and boosting engagement among young children. In a Dutch study, continuous proximity was found to improve children's (aged 2-3) play engagement and reciprocal interactions between practitioners and children.⁹

● ATTENTIVENESS TO CHILDREN'S INDIVIDUALITY AND ACHIEVEMENT

Attentiveness also extended to noticing and recognising children's milestones as well as their individuality. This was evidenced in the culture of recognition at Centre BK* for example, where practitioners always called individual children by their names and encouraged them to clap for their peers when they completed a task.

Behaviour-specific praise recognises when the child is meeting expectations, and as such, operates as a form of 'pre-correction' – preventing problematic behaviours by prompting and reinforcing social and academic expectations.

"Everyone is the same to us, they are unique and special in their own way and each one will get the attention and love they must get."

– Cook, Centre BK*, Western Cape

"If the child's work is good or they've done well, they [the practitioners] praise the child." – Principal, Centre MC, Limpopo

8. EJ White and B Redder, 'Proximity with under Two-Year-Olds in Early Childhood Education: A Silent Pedagogical Encounter', *Early Child Development and Care* 185, no. 11 (2015): 1–18.

9. E Singer et al., 'The Teacher's Role in Supporting Young Children's Level of Play Engagement', *Early Child Development and Care* 184, no. 8 (2014): 1233–49.

Embedded learning

A third pedagogical approach that emerged as a common practice was that of embedded learning – an approach to learning that identifies teachable

moments in a range of everyday activities (i.e. learning while doing), and draws on the surrounding environment to facilitate learning.

● LEARNING WHILE DOING

Finding teachable moments in everyday activities often involves pairing two activities. For example, learning to count while being pushed on the swing or identifying colours while beading a necklace. Many practitioners also used story time as an opportunity to embed emergent literacy and learning. Rather than reading books word for word, they paused to identify shapes in the pictures (i.e. the roof of the hut is a triangle) or to ask children about the feelings that characters were expressing.

Teachable moments are unplanned opportunities that are uniquely timed and where children are collectively engaged and open to learning something

new. For practitioners to maximise these moments, they need to be attentive to children's thoughts, impulses, interests, and feelings so as to meet the child where they are in their developmental process.¹⁰

"You know, you can teach while she is there playing... doing her own thing, but bear in mind, she is listening. What you're teaching there, she's listening, while she's playing her ears are there."

– Principal, Centre S*, Eastern Cape

● DRAWING IN THE ENVIRONMENT AS A LEARNING RESOURCE

In many centres, teaching and learning were distinctively localised, drawing on local language, practice, and resources. In Mpumalanga, children were taught about seasonal vegetables at snack time, including harvesting and eating the mielies grown in the centre's garden. They made fantasy toys from paper mache, including local animals and huts. Often centres drew children's attention to the weather and the seasons.

In other words, through activities that encourage children to identify and name the weather, the colours in their environment, or the feelings of a storybook character, children are being taught to pay attention to the world around them and to seek out opportunities for learning. In Mpumalanga, this included finding imaginative ways to repurpose tractor tyres as outdoor play equipment. This approach to learning is promoted in the National Curriculum Framework which describes as one of its outcomes: that children "learn to demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation".

"We teach the weather so children learn they are in the world. When it's cold, people wear long jackets. When it rains, they use an umbrella."

– Principal, Centre L*, Eastern Cape



Toys from paper mache, Centre M, Mpumalanga

10. Eunsook Hyun and J. Dan Marshall, 'Teachable-Moment-Oriented Curriculum Practice in Early Childhood Education', *Journal of Curriculum Studies* 35, no. 1 (January 2003): 111–27, <https://doi.org/10.1080/00220270210125583>.

● RESPONSIVENESS TO SOCIAL AND ENVIRONMENTAL CONTEXT

Across several centres, we observed an adaptation of learning content to meet the needs of children's contexts. This included climate adaptations (adapting Western climate examples to local examples), recognising the importance of saving and reusing water, growing organic food, and creating toys and play materials from waste. It also included teaching children the social and cultural norms of their community. In some places, this locally specific socio-emotional development was considered as important, if not more so, than educational outcomes. Practitioners noted that children had to learn manners, how to respect adults, and how to carry themselves in the world.

Literature on ECD in African contexts suggests that pedagogy can be immensely alienating when programming is removed from the daily life of the rest of the community.¹¹

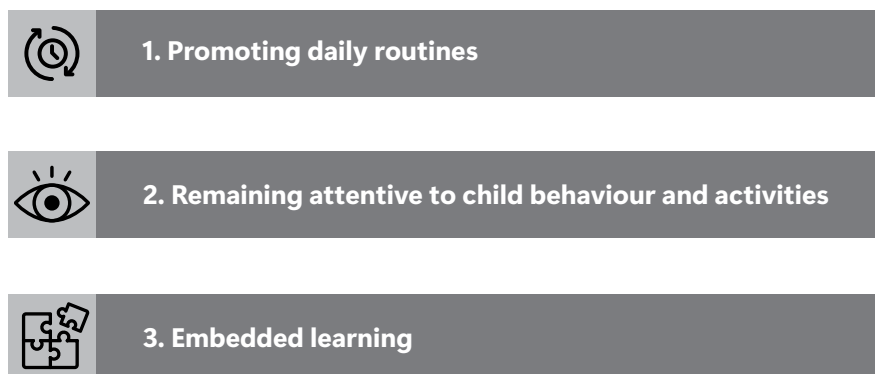
"The ubiquity of Western-style schooling in Africa is problematic when measured by the criteria that education must 1) be locally relevant and 2) transmit a society's enduring values and best traditions across generations."¹²

Embedded learning is, by its very nature, responsive, flexible, context-specific, and child-specific. It cannot operate amid rigid, standardised curricula. Practitioners in this study had certainly been influenced by curricula but remained open and adaptive. In the Northern Cape, this was described as "teaching children all these small things without really using a manual or a book." Rather than detailed lesson plans, it demands highly skilled practitioners who are observant, ingenious, and intuitive in their teaching, responding to children's particular learning needs. Here, routine, and daily programming offer a scaffolding and sense of safety, in which child-led learning can flourish.

Summary of pedagogy

There are three behaviours that are associated with the pedagogy observed during the site visits and remote interviews (Figure 5):

FIGURE 5: BEHAVIOURS THAT CONTRIBUTE TOWARDS PEDAGOGY





These behaviours are summarised on the next page (Table 6).

11. K Marfo and L Biersteker, 'Exploring Culture, Play and Early Childhood Education Practice in African Contexts', in *Rethinking Play and Pedagogy in Early Childhood Education*, 1st ed. (Routledge, 2011).

12. K Marfo and L Biersteker, "Exploring Culture, Play and Early Childhood Education Practice in African Contexts," in *Rethinking Play and Pedagogy in Early Childhood Education*, 1st ed. (Routledge, 2011).

TABLE 6: FACILITATORS, BARRIERS, AND OUTCOMES OF BEHAVIOURS THAT CONTRIBUTE TOWARDS PEDAGOGY

 1. PROMOTING DAILY ROUTINES			
Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ Regular and consistent mealtimes, nap times, morning rings, toilet times ✓ Visual programme on the wall as a nudge ✓ Work stations to delineate activities ✓ A clear allocation of daily duties to staff members that also incorporates role sharing 	<ul style="list-style-type: none"> ✓ Auditory and visual signals that allow for transition between activities (such as having a visual schedule, singing, a bell, or a certain activity like placing bags out on the floor) ✓ Adherence to and the development of a routine typically involving greeting the children on arrival, mealtimes, nap times and morning ring ✓ Staff collaboration on implementing routines (i.e. ensuring food is cooked when it needs to be, mattresses are set up etc.) 	<ul style="list-style-type: none"> ✓ Lack of resources needed to create visual schedules if they aren't readily available ✓ Insufficient space for activity stations ✓ Insufficient staff capacity ✓ Large group sizes during activities, such as the morning ring 	<ul style="list-style-type: none"> ✓ Continuity in socio-emotional learning of children ✓ Children are able to anticipate and emotionally prepare for the next activity ✓ Regular and nutritious mealtimes result in improved learning outcomes

 2. REMAINING ATTENTIVE TO CHILD BEHAVIOUR AND ACTIVITIES			
Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ Joining in on free play versus observing while children play ✓ Monitoring safety and hygiene ✓ Giving responsive and specific praise and affirmation ✓ Offering targeted support ✓ Identifying opportunities to extend learning during child-led play and practitioner-led activities 	<ul style="list-style-type: none"> ✓ Always staying physically close to children to effectively observe play and interactions ✓ Ability to identify opportunities to join play and when to observe ✓ Understanding that a mix of child-led and practitioner-led activities is important ✓ Supportive supervision and working environments ✓ Access to materials and resources to facilitate ability to create and monitor engaging environments ✓ Identifying opportunities to join in on play and when to observe, or when activity should be child-led or not – mix of child-led and practitioner-led activities – practitioners are aware of the importance of remaining proximal and responsive 	<ul style="list-style-type: none"> ✓ A heavy workload can be exhausting to constantly monitor and remain attentive, which is why a collaborative environment is important ✓ Lack of structure or professional development 	<ul style="list-style-type: none"> ✓ This proximity to children seemed to facilitate close observation, which in turn, allowed for timely intervention to support positive child-child interactions, notice socio-emotional cues or extend learning ✓ Evidently, the more practitioners observed children, the better at observation they became ✓ This potentially results in improved child socioemotional outcomes ✓ Continuity in socioemotional learning ✓ Identification of targeted support required at the child level ✓ Identification of emotional climate of all children



3. EMBEDDED LEARNING

Examples from the data	Facilitators	Barriers	Outcomes
<ul style="list-style-type: none"> ✓ Encouraging children to count as they jump between hoops ✓ Encouraging children to identify colours as they build with blocks ✓ Encouraging children to identify colours as they run through the garden ✓ Asking children to name shapes in the pictures of storybooks ✓ Prompting children to identify and name their snack during snack time, such as getting them to say 'water' or 'fruit' ✓ Using the environment as a learning resource: teaching local rhymes and songs, the weather, the seasons and locally grown or sourced vegetables, and re-using waste materials for toys ✓ Teaching prayers and hymns, having multilingual interactions, teaching cultural norms around manners and greetings, and the use of clan names 	<ul style="list-style-type: none"> ✓ The skill of bringing two task requirements into a single activity ✓ Adaptable and creative practitioners ✓ Awareness of local context and social norms ✓ Remaining proximal to children or observant 	<ul style="list-style-type: none"> ✓ Limited staff and staff capacity which leads to stress and burnout ✓ Lack of creativity and flexibility from staff ✓ Poor staff collaboration and learning from each other ✓ Viewing role as carer only and not as a teacher ✓ Constantly identifying and assessing opportunities requires knowing balance (possibly through training or experience) 	<ul style="list-style-type: none"> ✓ Improved learning outcomes for children ✓ Better carry-over to home environment when learning is embedded in the child's surroundings

Reflections on the quantitative findings on pedagogy

● LEARNING PRACTICES

The qualitative findings emphasise the importance of 'embedded learning', which encourages children to learn while doing, and through practitioner attentiveness, guidance, and participation, maximises opportunities for learning in child-led play. These findings provide a richer understanding of the quantitative associations between PD and 'practitioners joining in play' and 'balancing child-led and adult-led activities.' The qualitative results showed that through attentiveness and responsive teaching, practitioners were able to identify when to

step back and when to step forward during a child's learning, and carefully target both the timing and nature of their support.

Splitting children into different age groups was found to be significantly associated with PD in the quantitative study. The qualitative study showed that this not only facilitated attentiveness, giving practitioners smaller numbers of children to focus on, it also allowed for the targeting of interactions based on the age-based needs of children.

● LEARNING RESOURCES

While the quantitative study found multiple types of learning materials associated with positive deviance, the accessibility of the learning materials (to children) emerged as a significant finding. This may be because accessibility signals a practice of children being able to choose toys and direct their own learning. Given the diversity of learning materials at PD centres in this study (with blocks and books being the only constant), it does not seem to be the types of materials, but rather how these are used, that is most important. Practitioners were able to follow the children's lead as they played, while also identifying opportunities to enhance

and maximise learning, and using the surrounding environment as a learning resource.

Interestingly, blocks and books were used in a variety of creative ways by practitioners and children. Stories were central to many PD programmes, with practitioners often encouraging children to respond to what was happening in the story and using stories and pictures to serve the identification of colours, emotions, and shapes. Blocks were used not only for fine motor development, but also to categorise colours and facilitate imaginative play, in which children, for example, said they were building a replica of the local mall or a church.

● CHILDREN'S SOCIO-EMOTIONAL DEVELOPMENT

Whether or not teachers believed children were meeting socio-emotional benchmarks was significantly associated with PD in the quantitative study and was unarguably one of its most emphasised findings.

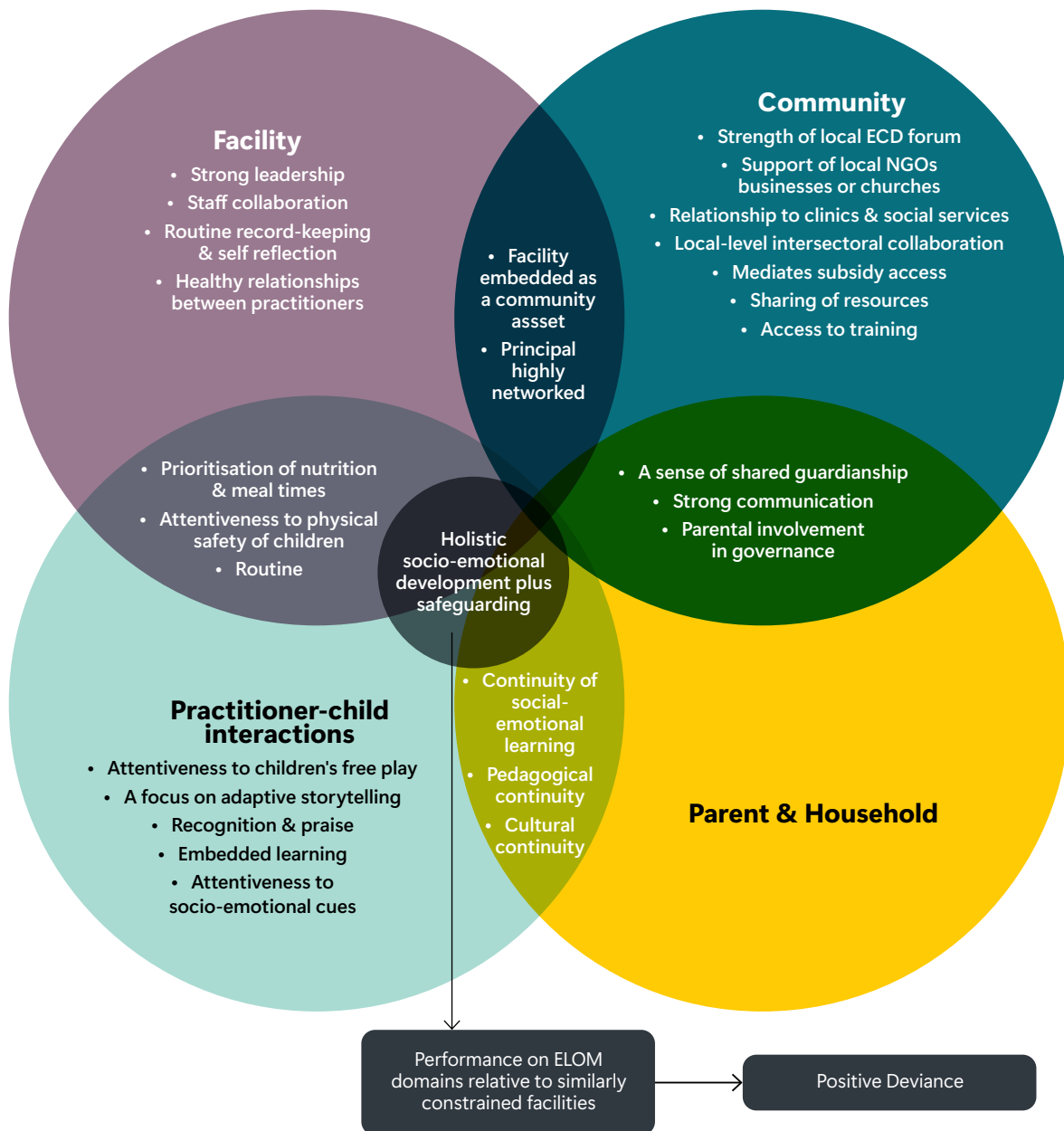
The qualitative study unearthed what socio-emotional development meant to principals, caregivers, and practitioners. Common articulations of socio-emotional development included: 1) positive child-child interactions in the form of sharing, praising their peers, and restoring relationships after conflict, 2) children identifying and expressing

their own feelings, 3) children understanding good manners, traditional greetings, and practices of social respect.

Children's level of task orientation also emerged as an important variable in the quantitative study, which suggests that practices to enhance child engagement are important. In the qualitative study, proximity, routines, specific praise, clear transitions between routines, and guided play were common across sites. All these practices are proven strategies to increase child engagement and positively reinforce expected behaviour.

THEORY OF CHANGE - A NESTED ECOSYSTEM

FIGURE 6: FACILITATORS, BARRIERS, AND OUTCOMES OF BEHAVIOURS THAT CONTRIBUTE TOWARDS PEDAGOGY



As seen in many ecological models of change, the conceptual framework best supported by this study's findings (Figure 6 above) suggests that higher-than-expected child outcomes at the facility/centre level emerge from a set of nested behaviours, practices and relationships that often cut across one or more levels: practitioner, facility, home, and community. Together, these cross-cutting

behaviours, practices and relationships are believed to create an environment of holistic socio-emotional development and psychosocial safety, which in turn facilitate positive practitioner-child and child-child engagement and better learning outcomes. Attentiveness, participation and responsiveness are discussed below as key, cross-cutting features of outperforming ECD centres:

Attentiveness

Many practitioners in this study practised attentiveness at the level of pedagogy, remaining proximate and observant in ways that helped them identify opportunities for learning in children's free play as well as extend learning by stacking teachable moments (i.e. learning while doing) upon other activities. Attentiveness also helped practitioners identify changes in children's mood or participation, as well as child-child interactions, that presented opportunities for socio-emotional learning. Finally, attentiveness at the pedagogical level also facilitated practitioners' responsive and timely engagement in play, as well as an organic interplay of child-initiated and practitioner-initiated engagement.

Research suggests that one of the key barriers to playful learning for children is a pervasive, but false, dichotomy between play versus learning, free play versus instruction.¹³ For the most part, practitioners in this study did not hold to this dichotomy but instead exhibited a range of practices on a continuum. Being able to spot learning opportunities in playful moments has been correlated with children's capacities to act, choose and develop¹⁴ (a socio-emotional outcome). But it also demands a level of responsiveness that research suggests might elude those teachers that feel beholden to a standardised implementation of a prescriptive curriculum.¹⁵

The attentiveness reflected in the classroom extended to organisational culture. Practitioners, along with support staff, were regularly paying attention to the

safety and security of the premises. Many principals saw their role as a 'supervisor' or 'monitor' of everyday activities, as did gatemen and gardeners. Caregivers also regularly mentioned trust and safety as key assets of their chosen centres. The knowledge that their children were being 'watched over' gave them the comfort they needed to go to work or attend to other responsibilities, providing much-valued support to caregivers.

Practitioners across sites also spoke about being attentive to children's physical needs – their nutrition and hygiene practices, as well as signals of illness or injury. Together with routine, attentiveness can create a sense of psychosocial safety for children, optimising the environment for learning.

Finally, attentiveness was also reflected in practices of diligent record-keeping. Principals and practitioners were often collaborating to keep diligent records of both the centre itself (including spending, income, staff training etc.) and of the children. This facilitated their ability to apply for, and access, funding, sustain funding, or meet the requirements of government registration. It also contributed to a self-reflective practice at centres in which attention was turned to one's own practices and behaviours, and areas for improvement. Indeed, in their everyday interactions with one another and the centre, practitioners were often modelling a practice of attentiveness to children, which if adopted, would facilitate their own curiosity, learning and socio-emotional maturity.

Participation

At all levels of interaction, practitioners in this study were elevating the importance of relationships and participation. There was reference to 'closeness' and 'strong bonds' with children, which often included rich knowledge of children's individual developmental and psychosocial needs;¹⁶ and importantly, an encouragement of their participation through child-led play.

Relationships with caregivers were prioritised across most of our sites. In many cases, caregivers were involved not only in the facilitation of continuous learning and development for their own children, but also in the running and governance of centres. Many centres also had a deliberate culture of nurturing healthy relationships between staff. This included collaborative participation, non-hierarchical leadership

that encouraged shared problem-solving, as well as attentiveness to staff's own psychosocial well-being, which could impact their teaching. Finally, there was a concerted investment in building relationships and opportunities for collaboration outside the centre, with local forums and NGOs, as well as local businesses, community leaders, clinics, and public services. Many of our centres were highly networked across public and private spheres in their region. This facilitated their ability to access resources, support, training, and funding, contributing to their endurance and continuous improvement. While local networks often supported centres in becoming eligible and applying for funding from the government or larger donors, they also occasionally acted as a form of social insurance when centres were struggling financially, sharing and pooling resources.

13. T Toub et al., "Guided Play: A Solution to the Play versus Discovery Learning Dichotomy," in *Evolutionary Perspectives on Child Development and Education*, 2016, 117–41.

14. N Shaik and HB Ebrahim, "Children's Agency in Grade R: A Case for a Child Participation Focus," *South African Journal of Education* 35, no. 2 (2015): 256–100.

15. Shaik and Ebrahim.

16. This is arguably aligned with what has been termed a 'Nurturing Care Framework.'

Responsiveness

While there was clear evidence of practitioners' practices having been informed by the National Curriculum, a common feature of centres in our study was their ability to remain adaptive and responsive, both to the needs of children and to their context. The context was drawn into teaching using multiple languages, local rhymes, as well as locally specific imagery and storytelling. It was also drawn into practices for nurturing children's socio-emotional development. Here, imparting values like 'respect', including how to greet and interact with elders and how to have good manners, were often treated as part of what it meant to imbue local social and moral codes. Some caregivers described looking at children's behaviour, and particularly their ability to meet local expectations of social interaction, as signs of positive development. Religious practices, whether in the form of prayer or song, formed part of the routine and transition signals (i.e. before mealtime), but also taught children the social lexicon of their commonly Christian homes and neighbourhoods.

Responsiveness to context also meant responding to community needs. By framing their centres as community assets, principals also took on a sense of responsibility for the community and not just the children in their care. This included supporting caregivers in their role as caregivers, taking on co-guardianship, particularly when children are ill or distressed, and in relation to their safety and readiness for school. It also meant offering a form of trusted childcare that would 'keep children busy and off the streets' and allow caregivers to work. In some cases, centres also created work and opportunities for caregivers.

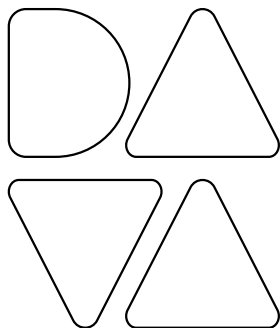
Beyond caregivers, some centres also found ways to care for the wider community, sharing donations for example. Finally, centres often saw themselves as critical levers in achieving a more positive future for their children, and relatedly, their neighbourhoods. They spoke about the academic achievements of their alumni, and in some cases, the 'good jobs' some have gone on to attain, breaking cycles of intergenerational poverty.

NEXT STEPS

This study has elucidated, with richness and rigour, common characteristics, and practices of PD facilities, as well as how these seem to be interacting to improve child outcomes. Not all our findings are easily replicable, such as highly motivated principals or an invested community. Still, several critical recommendations are suggested by the data. These include targeting networking and leadership skills at facilities, fostering a sense of community embeddedness that incorporates caregivers and the larger community/networks in the functioning

of the facility, targeting pedagogical practices that focus on attentiveness to the child, and embedded learning opportunities.

As a next step, DataDrive2030 will use the collated findings from the quantitative and qualitative analyses to pilot the feasibility of interventions that can facilitate behavioural change at scale. This phase will incorporate the application of a behavioural framework to our findings, and leverage partnerships with organisations and experts in the field.



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