











# Closing the ECD Gap: The impacts of a multi-partner approach

Yizani Sifunde Programme Evaluation Quantitative Endline Report

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# **Acronyms**

CEF Cognition & Executive Function (ELOM 4&5 domain)

ECD Early Childhood Development

ELL Emergent Literacy & Language (ELOM 4&5 domain)

ELOM Early Learning Outcomes Measure

ENM Emergent Numeracy & Maths (ELOM 4&5 domain)

FLN Foundational Literacy and Numeracy

FMC&VMI Fine Motor Control & Visual Motor Integration (ELOM 4&5 domain)

LTSM Learning & Teaching Support Materials

YS Yizani Sifunde

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# **Executive summary**

One of the greatest challenges for the South African public education system is that a large proportion of learners, especially from lower socio-economic backgrounds, enter Grade 1 with backlogs in basic learning skills. This backlog means they are not 'school ready', hindering their ability to follow the Foundation Phase curriculum and compounding into deeper literacy and numeracy backlogs throughout their schooling careers. Interventions which successfully reduce these backlogs at ECD (Early Childhood Development) level and increase the proportion of children who are 'on track' for early learning, therefore, can impact the efficacy of the entire schooling system. Catching and ameliorating backlogs early is more resource-efficient and has a greater impact on equity than interventions that attempt to remediate backlogs among older learners.

This report presents the quantitative findings of an independent evaluation of the Yizani Sifunde intervention.¹ The Yizani Sifunde Literacy intervention is a multi-partner initiative supported by Liberty Community Trust and executed by a consortium comprising three established NGOs (Book Dash, Nal'ibali, and Wordworks), together with two Eastern Cape implementation partners (Khululeka (Queenstown) and ITEC (East London)). The intervention seeks to enhance reading and literacy among young isiXhosa-speaking children in rural and peri-urban areas of the Eastern Cape. It targets children in the ECDs along with their educators, parents and communities to shift the early language and literacy skills and reading habits of young children and communities. The intervention seeks to achieve this shift through a combination of strategies and interventions, including

- Materials: providing access to high-quality African storybooks, mainly in isiXhosa and distributing these books to both ECD centres and children's homes, with a target of each child owning 25-50 books by the end of the year; as well as high-quality classroom materials;
- Practitioner Training: delivering a resource-based language and early literacy teacher training programme for teachers of 4-5-year-olds in participating ECD centres:
- 3. **Practitioner Support and Modelling:** supporting ECD practitioners through trained community-based young people called Story Sparkers, who visit each ECD weekly and run story time sessions with the learners;
- 4. **Caregivers:** facilitating awareness-raising and training workshops for parents/caregivers and community volunteers; and
- 5. **Community:** promoting reading and storytelling through reading clubs and community activations.

After a planning and set-up year in 2020, the first year of implementation was 2021, followed by implementation rounds with new cohorts of 40-50 ECD centres annually in 2022 and 2023. 2024 is the final year of the intervention, with a focus on learning and information sharing. In late 2022, The Liberty Community Trust appointed Social Impact Insights Africa (SII Africa) to evaluate the intervention's activities with the 2023 cohort of

<sup>&</sup>lt;sup>1</sup> This report is accompanied by a separate report summarising the findings of the qualitative components of the evaluation methodology, including case studies and sustainability interviews (Zhou & Shilakoe 2024). The two reports should be read together.

ECD centres in East London and Queenstown, as well as assessing evidence of intervention sustainability for the 2022 cohort of ECD centres.

The quantitative elements of the evaluation focused on the following questions:

- 1. **Outcomes**: the extent to which the intervention led to changes in the availability of learning resources and improvements in classroom practices
- 2. **Impacts**: the extent to which learners in the intervention demonstrated improved language and literacy
- 3. **Mediating Factors**: what factors contribute to, mediate, and moderate child language outcomes

Intervention fidelity was not independently evaluated so this report mainly uses monitoring data triangulated with some primary data to establish the extent to which the Yizani Sifunde intervention was implemented as intended. Other evaluation questions, including impact pathways and sustainability, are explored in the case study report (Zhou & Shilakoe 2024).

This evaluation used a mixed methodology to study the impacts of the intervention at 22 ECD centres, 11 in East London and 11 in Queenstown. At each centre, centre managers and practitioners were surveyed, centre infrastructure and basic learner statistics were captured, and a sample of learners aged between 50 and 69 months was assessed. The same learners were tracked as a cohort from baseline to endline, resulting in a final sample of 99 matched learners. The learners were assessed using three domains of the standardised ELOM tool for 4&5-year-olds (Fine Motor Control & Visual Motor Integration, Cognition & Executive Functioning; Emergent Literacy & Language) with some additional items from the ELOM 6&7 tool (Productive Vocabulary and Book Concept). For the endline assessments, the ELOM 4&5 domain Emergent Numeracy & Maths was also added. The Yizani Sifunde consortium furthermore collected extensive internal monitoring data through classroom observations, book distribution records and engagements with practitioners. This data is referred to throughout this report where relevant.

The evaluation also included in-depth case studies of six ECD centres. The qualitative findings from the case studies are described in a separate report which should be read in tandem with the current report. An executive summary of the qualitative findings is included as an Annex to this report and the recommendations section consolidates insights from both qualitative and quantitative methods.

We summarise the quantitative evaluation findings in terms of impacts and outcomes.

### **Impact**

Yizani Sifunde's Theory of Change expresses its intended **overarching impact** as "children are confident in their oral language and excited about stories and reading". The evaluation finds that:

 Learners exposed to the Yizani Sifunde intervention greatly improved their early literacy skills in absolute terms and in relation to national and provincial average scores. At baseline, the Yizani Sifunde learner sample had average ELOM scores for all three measured domains (Fine Motor Control & Visual Motor Integration, Cognition & Executive Functioning; Emergent Literacy & Language) that were below the national and Eastern Cape provincial averages established by Thrive by Five. By the endline, Yizani Sifunde average scores were above national and provincial averages.

- The Yizani Sifunde intervention strengthened underlying learning skills. While designed to target emergent language & literacy, the Yizani Sifunde intervention has also positively impacted the underlying learning skills of Fine Motor Coordination & Visual Motor Integration (FMC&VMI) and Cognition & Executive Functioning (CEF). Yizani Sifunde also improved learners' ability to concentrate on a task (measured as 'task orientation' within the ELOM 4&5 tool). Improvements in these underlying skills may explain how the intervention resulted in a 'spill-over effect' of positive learning outcomes in Emergent Numeracy & Mathematics. Emergent numeracy was not measured at baseline, but at endline, the Yizani Sifunde learner sample achieved scores above the national and provincial average, with 60% of learners considered 'on track' for basic numeracy.
- The Yizani Sifunde learning gains represent 3,8 to 6 months of learning beyond average maturation effects. When taking into consideration the average 'maturation effect' (the expected skills improvement due to eight additional months of ageing), the average improvements in ELOM scores between baseline and endline represent an additional 3,76 months (for Emergent Literacy & Language), 4,64 months (for Cognitive & Executive Functioning) and 6 months (for Fine Motor Coordination & Visual Motor Integration) of learning. This means that Yizani Sifunde delivered 12 to 14 months' worth of learning in an eight-month period. This compares well with other early learning programmes that have been assessed using ELOM tools and can be considered a 'medium to high' effect size (0,17 to 0,41 standard deviations, depending on the ELOM 4&5 domain).
- Yizani Sifunde is a progressive intervention; it was especially effective at improving the performance of low-performing learners. In addition to increasing the percentage of learners 'on track', Yizani Sifunde also greatly decreased the percentage of learners 'falling far behind.' Learners who started out 'far behind' at baseline achieved the largest learning gains of an additional 9,5 to 13 months of learning on top of maturation effects. This means that the intervention was effective at 'catching up' learners who started the year at a severe disadvantage.
- When using multivariate analyses (regressions) to consider what factors contribute to, mediate, and moderate child language outcomes, we find that learner book ownership is a significant predictive variable across aggregate ELOM performance and ELOM 4&5 domains cognitive & executive functioning (CEF) and emergent numeracy & maths (ENM). This finding should not be interpreted to mean that other elements of Yizani Sifunde's multi-dimensional design, such as a structured learning programme, regular practitioner training and story modelling, caregiver engagements and community engagements, are not also effective; it is just that these elements could not be tested in the same way as book distribution due to the lack of linked and varied data. A learner's level of concentration ('task orientation') is also a strong predictor of ELOM outcomes. It is significantly associated with improvements in overall performance and the domains of CEF and ELL.

### **Outcomes**

In terms of the intended intermediate outcomes, the evaluation did not cover the **community level** in detail, although the qualitative evaluation report includes some insights on reading clubs (see <u>Annex B</u> and Zhou & Shilakoe 2024).

Regarding intervention effects at **home**, while the evaluation did not independently verify the home learning environment data collected by Yizani Sifunde, there is sound evidence that the intervention was successful in increasing the number of engaging age- and language-appropriate books in homes, increasing caregivers reading the books with their children, and increasing children's independent interactions with books in the home. Despite parental workshops being one of the more challenging elements of the intervention design for practitioners and Story Sparkers, there is evidence from this evaluation that Yizani Sifunde was successful in its aim to create stronger links between the home environment and ECD centres, with caregivers more likely to ask practitioners for advice on how to support their children's learning at home.

The evaluation found strong outcomes at the **ECD Centre and Practitioner levels**. It confirms high levels of fidelity and quality in the implementation of Yizani Sifunde's activities to support practitioners, including the Little Stars training and materials distribution and regular centre visits by Story Sparkers.

- The intervention successfully increased the availability of learning resources in ECD centres. Evaluator observations and practitioner interviews at baseline and endline confirmed that previously under-resourced centres received and regularly used a wide range of literacy materials.
- Practitioners reported much greater confidence in doing important language and literacy activities, suggesting that classroom practice quality improved. One weakness in intervention outcomes at most ECD centres is that learners were rarely encouraged to engage with books independently.
- While centre management practices were not explicitly targeted by the intervention, the evaluation found increased centre manager support for practitioners in literacy practices, including increased participation in professional learning communities (PLCs).

The Yizani Sifunde evaluation results show that practitioner training based on structured learning materials, delivered by local NGO partners, supported through community-based young people, and combined with the provision of high-quality books in the community's language has great potential to strengthen curriculum delivery and the quality of early language and literacy teaching and learning in under-resourced ECD classrooms.

Such a multi-dimensional intervention can:

- Almost double the percentage of lower socio-economic learners who are 'on track' for early learning
- More than halve the percentage of lower socio-economic learners who are 'falling far behind' for early learning

- Enable more than a third of learners who were 'falling far behind' to catch up to the extent of being 'on track'
- Achieve these shifts in 'school readiness' in less than one year, despite a low starting point in terms of ECD practitioner qualifications and practice, centres with limited resources, and the lack of an enabling home environment for most learners.

This evaluation of the Yizani Sifunde intervention reveals significant strides towards mitigating early learning backlogs among isiXhosa-speaking children in rural and peri-urban areas of the Eastern Cape. Given that the context of low-income communities and underresourced ECD centres is similar in most other parts of South Africa, the results achieved by the intervention are likely to be transferable to other areas. By fostering a culture of reading and enhancing literacy skills at the ECD level, the initiative not only prepares children for formal schooling but also contributes to long-term educational equity and efficiency. The mixed-methodology approach employed in studying 22 ECD centres indicates noticeable improvements in classroom practices and learner literacy, underscoring the intervention's potential for scalability and sustainability. The Yizani Sifunde intervention shows the power of collaborative, multi-dimensional community-based interventions to increase equity in early childhood education outcomes.

### Recommendations

The following recommendations combine insights from the qualitative and quantitative elements of the evaluation.

- 1. Multi-dimensional 'cocktail' of intervention elements: The Yizani Sifunde intervention has shown the value and efficacy for the ECD sector of combining the production and distribution of high-quality home language literacy materials for both ECD centres and homes, with a structured teaching programme (including LTSM and practitioner training) and regular in-centre practitioner support in the form of local youth trained in literacy pedagogies. This 'cocktail' of integrated intervention elements mirrors the growing consensus around effective literacy interventions in the Foundation Phase (LTSM, teacher training and teacher coaching). It is recommended that more ECD interventions be designed with a combination of these elements.
- 2. **Multi-agency collaborative process lessons:** a multi-dimensional intervention requires effective partnerships. In addition to modelling the value of this multi-dimensional intervention design, the Yizani Sifunde consortium modelled the internal processes required to enable a complex multi-agency intervention to be effective, including pro-active partnership management processes and collaborative internal monitoring systems. It is recommended that these process and systems lessons be documented and that donors and NGOs in the education sector support and adopt similar practices to enable more collaborative interventions.
- 3. **Operational improvements:** the evaluation found the following elements of the Yizani Sifunde design to require further adaptation:
  - Encouraging ECD practitioners to support learners to use books independently at centres

- Providing book storage solutions and comfortable reading furniture to ECD Centres
- Supporting centre managers to lead and participate in professional learning communities for and with other practitioners
- Experimenting with revised strategies to increase caregiver workshop participation (see case study report)
- Innovating further with community reading clubs (see case study report)
- 4. Monitoring & Evaluation: Yizani Sifunde's internal monitoring systems, including extensive data collection and integrated data monitoring, are already of a very high standard and should be documented as best practice, possibly with training options for other NGOs in the ECD and foundational education sector. The data challenges which remain to be improved in future iterations of similar interventions are:
  - Tracking caregiver workshop attendance and other forms of caregiver engagement in ways that allow for linkage of this data with learners and therefore inclusion in analyses of learning outcomes.
  - Prioritising the integration of the Socio-Emotional Functioning scale and the Home
    Learning Environment tools from the ELOM suite of tools into the independent
    evaluation so that these dimensions can be included in the analysis of learning
    outcomes. This requires additional time for the evaluation in each centre, which
    impacts on the overall budget. Considerations of the trade-offs between
    time/cost and analysis insight on these dimensions should be an explicit part of
    each intervention and evaluation's initial planning stage.

The areas where data generation and linking challenges were found are mostly related to caregivers and the home environment, both of which are known to be challenging in terms of access and data generation costs. Various attempts were made by Yizani Sifunde and the evaluators to address these challenges, as have other studies, so further experimentation can build on the existing lessons learned.

- 5. **Replication**: Since the intervention has demonstrated significant success in improving early language and literacy outcomes, considerations should be made regarding replicating the intervention in other regions. This would involve adaptations needed for different communities and languages.
- 6. Scaling: given the large amount of monitoring and evaluation data already available about the intervention, a desktop study with a facilitated stakeholder consultation process should be considered to assess the scalability of different aspects of the intervention design, including costs and institutional structures required for application at scale.

# Closing the ECD Gap: the impacts of a multi-partner approach

Yizani Sifunde Programme Evaluation Quantitative Endline Report

# 1. Introduction and background

This report presents the results of the quantitative elements of an independent evaluation of the Yizani Sifunde early childhood development (ECD) intervention as implemented in the Eastern Cape province of South Africa from 2020-2024. It accompanies a separate report on the findings of the qualitative elements of the evaluation (case studies and sustainability interviews), which should be read in conjunction with the current report.

The independent evaluation was carried out by Social Impact Insights Africa and commissioned by the Liberty Community Trust, which funded the Yizani Sifunde intervention. The evaluation covers the intervention's activities with the 2023 cohort of ECD centres in East London and Queenstown and assesses evidence of intervention sustainability for the 2022 cohort of ECD centres.

# 1.1. Significance of Intervention and Evaluation

Early childhood development (ECD) influences not only the foundation of an individual child's future intellectual and social development but also provides the structural basis for an entire society's future. In contexts with high levels of social and economic inequality, like South Africa, reducing inequality is one of the most important imperatives towards enabling the society's future social, political and economic stability. Education is one of the most powerful tools for reducing structural inequality (Abdullah et al 2013). However, access to quality education is also affected by inequality and can therefore reinforce, rather than reduce, such inequality. The Thrive by Five study has emphasised that children from poorer backgrounds are most likely to be 'falling far behind' in age-appropriate learning tasks, with knock-on effects for foundational literacy and numeracy skills and school readiness (Giese et al 2022). Children from homes with limited awareness or capacity to provide early learning support often also have limited access to ECD centres of good quality. Children from lower socio-economic backgrounds are less likely to attend structured ECD programmes before Grade R, and even if they do attend ECD centres regularly the quality of basic language and early literacy teaching at many of these centres is likely to be lower than at centres serving children from higher socio-economic backgrounds.

The resulting early learning backlogs are very difficult to 'catch up' within the public schooling system, with compounded educational backlogs, and therefore inequality of opportunities, growing more and more difficult, time-consuming and expensive to address as children get older. Effective early interventions to reduce inequality in children's foundational learning skills are therefore crucial leverage points for the wider agendas of an effective overall education system, the reduction of inequality and broad social stability. Such interventions must be appropriate for the contexts in which the most vulnerable children live and be designed for application at a large scale.

Within this context, the Yizani Sifunde intervention was designed as an intervention to improve ECD literacy outcomes in low-income socio-economic contexts. Its goal is to improve the quality of early literacy teaching in ECD centres and improve the home literacy environment of learners who attend those centres. While it does not directly address the

challenge of increasing ECD access (increasing the proportion of children attending ECD centres), the intervention is designed to create a wider literacy ecosystem at the community level by raising general awareness about the value of early literacy and through reading clubs.

In terms of systems change, it is a 'mid-level' intervention, larger than piloting and smaller than testing at scale. It builds on proven intervention elements by combining them in novel ways and applying them in a range of low-income community contexts within a province. The intervention design and its novel elements are described further below.

The findings of this evaluation are significant because they provide evidence for decision-making on how to move an intervention of this type forward in the systems learning cycle, thereby contributing to the wider discussion on improving early learning outcomes and reducing inequalities in foundational skills at school entry. This evidence may be used to adapt the intervention design, adapt elements of its implementation and the organisational arrangements used to implement it (perhaps to reduce costs or improve efficiency), test intervention applicability in different contexts, test its scalability or some combination of the above.

# 2. Overview of the Yizani Sifunde Programme

The Yizani Sifunde Literacy Project is a multi-partner initiative supported by Liberty Community Trust and executed by a consortium comprising three established NGOs (Book Dash, Nal'ibali, and Wordworks), together with two Eastern Cape implementation partners (Khululeka (Queenstown) and ITEC (East London)). The intervention seeks to enhance reading and literacy among young isiXhosa-speaking children in rural and peri-urban areas of the Eastern Cape. It targets children in the ECDs along with their educators, parents and communities to shift the early language and literacy skills and reading habits of young children and communities. The intervention seeks to achieve this shift through a combination of strategies and interventions, each supported by previous research, 2 including:

- 1. Access to Appropriate Materials: providing access to high-quality African storybooks in isiXhosa and distributing these books to both ECD centres and children's homes, with a target of each child owning 50 books by the end of the year; as well as high quality classroom materials;
- 2. **Practitioner Training:** delivering a resource-based language and early literacy teacher training programme for teachers of 4-5-year-olds in participating ECD centres:

<sup>&</sup>lt;sup>2</sup> See Annex C for a summary of relevant literature.

- 3. **Practitioner Support and Modelling:** supporting ECD practitioners through trained community-based young people called Story Sparkers, who visit each ECD weekly and run story time sessions with the learners;
- 4. Caregiver Involvement: facilitating awareness-raising and training workshops for parents/caregivers and community volunteers on the benefits of reading with young children and more generally, good parenting practices to grow a child's language and emergent literacy; and
- 5. **Enabling Community Ecosystem:** promoting reading and storytelling through reading clubs and community activations.

After a planning and set-up year in 2020, the first year of implementation was 2021, followed by implementation rounds with a new cohort of 40-50 ECD centres annually in 2022 and 2023. 2024 is the final year of the intervention, with a focus on learning and information sharing. In late 2022, The Liberty Community Trust appointed Social Impact Insights Africa (SII Africa) to evaluate the intervention's activities with the 2023 cohort of ECD centres in East London and Queenstown, as well as assessing evidence of intervention sustainability for the 2022 cohort of ECD centres.

The intervention uses a partnership model, with each NGO in the consortium playing complementary roles by bringing together their respective existing early literacy interventions relating to practitioner training, outreach and materials provision:

Wordworks is the main training partner, using its existing Little Stars structured learning programme. The Little Stars programme includes practitioner guidance materials and training in how to carry out a range of literacy activities in the classroom in 2-week cycles around provided stories and associated materials. Wordworks trains the intervention's two NGO implementing partners (ITEC in East London and Khululeka in Queenstown) to train ECD practitioners in the Little Stars early literacy programme. Practitioners are trained every six weeks. Wordworks and the implementing partners provide ECD practitioners with remote support via WhatsApp throughout the year and visit each site at least once per year to observe and strengthen the implementation and application of the Little Stars structured learning programme in the classroom. Wordworks and implementing partners also train ECD practitioners to run caregiver workshops.

Nal'ibali provides practitioners with ongoing support and modelling of literacy practices. It does this through an adaptation of its existing Story Sparker programme. Story Sparkers are unemployed young people from the same communities as the ECD centres who are recruited and trained to use Nal'ibali reading and storytelling techniques to cultivate interest in reading and make it an enjoyable experience for children. Each Story Sparker is assigned ECD centres which they visit once a week where they do literacy activities with the learners and support practitioners in the implementation of the Little Stars programme and the running of caregiver workshops. The Story Sparkers also carry out the community-level elements of the intervention, including running Nal'ibali community reading clubs, training community members to start reading clubs, and initiating various community reading

activities and awareness-raising campaigns, especially over school holidays. The Story Sparkers are in turn supervised and supported by Nal'ibali Literacy Mentors.

**Book Dash** is the primary **Materials** provision and distribution partner. Book Dash commissions and prints storybooks, Big books, posters and other literacy materials in isiXhosa and distributes them to ECDs and the children in the intervention through both the implementing partners and Story Sparkers (see below). ECDs receive a full library of materials over the course of a year, and storybooks are also distributed to individual learners to take home and own. The intervention's target is for each participating learner to receive and own 25-50 books over one year of intervention exposure to support homebased literacy practices. To further encourage family literacy practices, each parent attending a parent workshop at the ECD can receive five additional books.

While not explicitly framed in this way by the Yizani Sifunde partners, the intervention mirrors the elements of what has come to be called the 'triple cocktail' (Fleisch 2018) in studies of Foundation Phase literacy: materials provision, teacher training (with a structured learning programme) and teacher coaching (through modelling and on-site ongoing support). It augments this 'learning institution-based' approach with activities to support literacy in the home environment, through distributing books for children to take home and workshops with caregivers. In addition, it takes what might be called an ecosystem approach to early literacy, considering and supporting the child's full living and learning environment at the community level.

# 2.1. Theory of Change

The Yizani Sifunde Theory of Change is grounded in a well-established research evidence base (see Annex C) and the experience of the three long-established consortium partner organisations. It shows how the intervention elements described above combine to achieve the overarching impact goal of early literacy: "children are confident in their oral language and excited about stories and reading."

This goal is achieved through intermediate outcomes at three levels:

- **Community level**: engagement of community stakeholders and functional reading clubs in promoting reading & storytelling,
- Practitioner/ECD level: practitioners applying language & literacy enhancing practices,
- **Home level**: caregivers implementing supportive language and literacy practices at home.

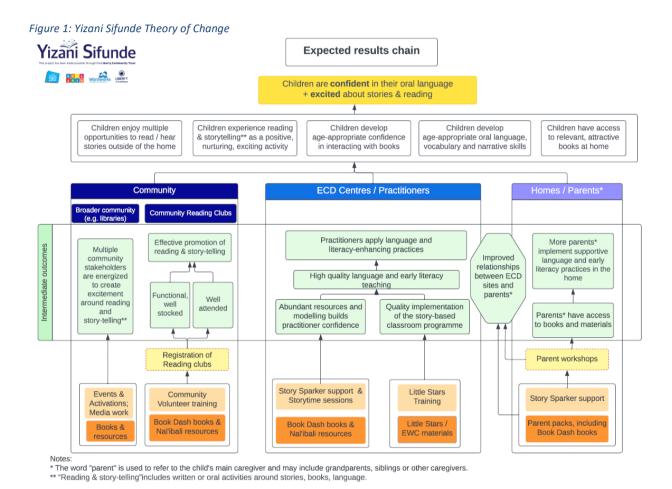
The intervention also aims to create stronger links between these levels, specifically between ECD sites and caregivers.

It is expected that these outcomes will benefit children through increasing

• Access: children have improved access to relevant & attractive books at home and are provided multiple opportunities to read outside the home,

- Motivation: children experience reading & storytelling as a positive and exciting activity,
- **Ability:** children develop age-appropriate oral, language, vocabulary, and narrative skills as well as age-appropriate confidence in interacting with books.

This evaluation was designed to assess each of these elements of the theory of change. The quantitative methods described in the current report focus mainly on the Practitioner/ECD level and on the mechanisms of access and ability.



# 2.2. Partnership Processes

An important element of the Yizani Sifunde intervention design is the partnership itself. Rather than being conceptualised as a multi-faceted intervention implemented by a single organisation, it was an integrated intervention drawing on the experience and capacities of multiple organisations. Given the complexity of the intervention design, it is unlikely that a single organisation would be able to implement all aspects, meaning that future interventions with similar integrated designs would also require a partnership model.

In the case of Yizani Sifunde, the three main consortium members had worked together previously in various ways, but never as a three-way consortium. This arrangement was

initiated at the funder's request, Liberty Community Trust, which brought these organisations together due to their complementary expertise. The existing organisational and personal relationships between the consortium members aided the partnership process, but the successful implementation of a partnership-based intervention model still requires explicit planning and resourcing of the partnership itself.

Effective collaboration is not easy. It is rarely understood as a distinct 'workstream', with its own dedicated activities, personnel requirements, skills and resourcing. Often collaboration processes are either ignored (taken for granted) or retrospectively paid attention to when there are crises or conflicts. One of the valuable lessons from the Yizani Sifunde intervention is how to 'do collaboration' proactively, with intentionality and care. The insights presented in this section are derived from the partners, including the funder, and also encompass reflections from the evaluation team. The partnership dynamic is also described further in the evaluation's case study report.

The Yizani Sifunde intervention did this in the following ways:

- 1. Time for joint planning, experimentation and adaptation: in the 2020 set-up year and the 2021 experimentation year, as well as the thorough review and reflection exercise that took place at the end of 2021, various elements of the partnership could be worked out along with the beneficiary-facing implementation details. This time was necessary to identify the gaps and areas of overlap, neaten the intervention design and achieve successful implementation in 2022 and 2023. Iterative learning was enabled by a supportive donor and consortium members willing to adjust their established ways of working.
- 2. Clearly defined and distributed management roles: rather than having a single 'lead' organisation, the Yizani Sifunde partnership distributed the management and oversight roles across the consortium organisations. From the beginning, the consortium defined formalised administration duties alongside their distinct programmatic roles. Wordworks took on the Monitoring, Evaluation, Research, and Learning (MERL) responsibilities, whereas Book Dash assumed administration and secretariat duties, including communication with the funder and reporting. Nal'ibali led in managing human resources, encompassing recruitment and on-the-ground team training, as well as overseeing media and communications. Regular management meetings included all partners and key decisions were taken jointly.
- 3. Significant investments in collaborative meetings and updates: The team planned for and held regular monthly meetings, which included all partners and their teams, including the funder. These comprehensive meetings facilitated a deeper understanding among the partners of the full spectrum of work and the intersections between partners' respective responsibilities, contributing to developing a culture and a working model witnessed by the evaluation team. The meetings were also a structure that ensured accountability, fostered shared values, and found solutions. Despite having planned for such collaboration time, reflections from partners were that the required time investment to make the partnership successful was underestimated. If all the meeting times were costed for in the original proposal, the

collaborative partnership would have become prohibitively expensive. Since the meetings are necessary for navigating the challenges of a complex partnership, this poses the question of whether participants in partnerships are willing to take on 'unfunded mandates'. In the case of Yizani Sifunde, all partners were able to dedicate the time and resources to the collaboration meetings.

4. Alignment of goals and systems, especially MEL data collection and use: one of the most important enabling elements of the successful partnership was the iterative development of an advanced internal monitoring system for all elements of the intervention. Despite existing shared commitment to education programmes and extensive time spent on planning, the partners in the consortium pointed out the challenges faced in aligning the systems of various organisations. These challenges contributed to some delays in achieving deliverables, such as the establishment of reading clubs. One of the most important systems that was aligned across all partners was the Monitoring, Evaluation, Research, and Learning (MERL) system. This was a particularly important example of effective collaboration and the implementation of this alignment and the ongoing monitoring and data sharing processes also contributed to a continuous deepening of the collaborative relationship. Table 1 illustrates the extent of monitoring data collected by the partners.

Table 1: Yizani Sifunde Internal Monitoring Data for 2022 and 2023

Domain	Contents	Available when	Updates	Source of data
ECD data	List of clusters with ECD sites, addresses & contact details - Signing up of MoU	Dec. 2022 for 2023	as required early in 2023	ITEC & Khululeka
	ECD Profiling information (principal, governing body, practitioners' names, classes, etc.)	early Jan 2023	ad hoc	Yizani Sifunde forms
	Practitioners' bio forms (for the practitioners who will attend the training)	end Jan 2023	ad hoc	Wordworks forms
	List of children attending the ECDs - child attendance data	mid February	continuous	Story Sparkers
	Practitioners' attendance at training	1 week after each training	continuous	ITEC & Khululeka
	Practitioners' feedback from training (with English versioning)	1 month after each training	continuous	ITEC & Khululeka with Wordworks feedback forms
ECD data	Classroom observation data (basic questionnaire, photos and videos)	early March 2023 - TBD	November TBD	Story Sparkers
	Trainers' observations of the practitioners' practices (1 visit per site per year)	Term 2-4		ITEC & Khululeka trainers
Home / parent data	ELOM HLE Data and additional caregiver interview data for +- 100 caregivers	Term 1 - TBD	Term 4 - TBD	Story Sparkers

	Data about parent workshops organised - attendance and parents' response	Term 3		Story Sparkers + practitioners
Community data	Participation in community training	1 month after training		Nal'ibali
	Feedback from community training	1 month after training		Nal'ibali
Reading club data	List of Reading Clubs registered with details of RC leader etc.	from end of Term 2	continuous	Nal'ibali
	High-level updates on functionality of Reading Clubs	Term 3	Term 4	Story Sparkers
Programme implementat ion	Register of all outward-facing activities of story sparkers ("Activity Register")	Term 1	continuous	Story Sparkers using the Nal'ibali app (2021/2022) or google forms (2023)
	Story Sparker surveys	Term 2	Term 4	Story Sparkers
Materials distribution	Detailed register of books and hanging libraries distributed to ECDs	from Term 2	continuous	Literacy Mentors
data	Detailed register of books distributed to children at ECDs	from Term 2	continuous	Story Sparkers
	Register of books distributed during events and activations	as applicable		Literacy mentors (+ Story Sparker activity register)
	Detailed register of books distributed to Reading club leaders	from Term 3	continuous	Literacy Mentors / Story Sparkers
	Register of books and materials distributed to practitioners at training.			ITEC & Khululeka

While assessing the partnership practices of the consortium was not explicitly part of the independent evaluation scope, it is evident that without them, the intervention could not have been implemented as successfully as it was. The positive partnership dynamics were crucial for enabling the highly integrated intervention design (including integrated roles across partnership organisations, such as Story Sparkers who were trained and employed by Nal'ibali who also distributed Book Dash materials and supported ECD practitioners in the use of Wordworks' Little Stars learning programme), as well as the high level of implementation fidelity documented by Yizani Sifunde and observed by the evaluation team.

Furthermore, the detailed monitoring data listed above has enabled the evaluation team to triangulate many of our findings, as noted in various parts of this report.

Further noteworthy insights for other education interventions emerging from this intervention concerning MERL systems include:

### 1. Embedding M&E into planning and execution

MERL was a key component of the planning phase and was embedded in the execution of the intervention across its different components.

### 2. Human capacity for M&E systems

A capable team with clearly defined responsibilities was assigned to handle the MERL function. As the intervention progressed, the scope of the MERL team's responsibilities grew, resulting in an increased budget allocation for 2022 and 2023. This mirrors the intervention's established partnership arrangements, which were formalised and recognised as contractually binding.

### 3. Evaluative thinking & culture

A culture of evaluative thinking and learning was instilled among all contributors, including implementing partners ITEC and Khululeka and Story Sparkers, amongst other stakeholders. The interactions of the evaluation team with these stakeholders reflected this culture. The evaluation team found no attempts to conceal nonfunctional aspects; to the contrary, these were voluntarily disclosed, as they were seen as a valuable contribution to the broader learning process to enhance the intervention.

### 4. Use of Monitoring Data

Regularly, monitoring data is utilised for reflection, learning, accountability, and improving implementation. Several reports are generated from this data for both internal and external purposes. In our view, this approach solidified the significance of being data-driven and enhanced evaluative thinking and contributing towards intervention improvement.

# 3. Evaluation purpose, aim and design

This independent evaluation considers elements of implementation fidelity (whether the intervention was implemented as designed), intermediate outcomes (whether practices at centre level and by practitioners changed due to the intervention) and impact (whether learner literacy and language abilities improved).

While measuring impact is an important element of this evaluation, it is not designed as a conventional impact evaluation. This is due to sample size constraints (22 centres and 99 learners assessed at baseline and endline) and the lack of a counterfactual or control sample. Our assessment of whether improvements in learner results between baseline and endline are greater than expected for a control group depends on comparisons with standardised results from provincial and national datasets using the same ELOM assessment tools (see discussion of methodology below).

# 3.1. Evaluation Framework and Questions

This evaluation used a mixed methodology to answer the evaluation questions set out in Table 2, including learner assessments at baseline and at the endline, surveys of practitioners and in-depth case studies. The results of the six case studies conducted in August-September 2023 are described in a separate report. The evaluation questions addressed in that report are noted in the table below. The current report describes the findings of the quantitative methods, including the learner assessments and practitioner surveys, and addresses elements of implementation fidelity, outcomes and impacts as they pertain to ECD centres and learners at those centres. It does not cover questions relating to caregivers and community-level reading clubs. It also does not address questions of sustainability.

Table 2: Evaluation Framework with reference to Evaluation reports

Evaluation Question	Data Sources	Discussed in which report				
Implementation fidelity	Implementation fidelity					
Which planned activities were and were not implemented?	Programme monitoring data triangulated with primary baseline and endline practitioner survey data and ECD observation data; case study observation and interviews	Quantitative report  Case study report				
Which materials were provided and in what ways were they used?	Programme monitoring data triangulated with primary baseline and endline practitioner survey data and ECD observation data; case study observation and interviews	Quantitative report  Case study report				
Intermediate Outcomes (Centre & Ad	dult Level)					
To what extent is Yizani Sifunde successfully improving literacy materials access and classroom literacy practices in participating ECD centres in 2023?	Primary baseline and endline practitioner survey data and ECD observation data; case study observation and interviews	Quantitative report  Case study report				
To what extent is Yizani Sifunde successfully achieving improved literacy practices in households and communities through working with caregivers and reading clubs in 2023?	Case study interviews with practitioners, caregivers and reading club leaders	Case study report				
Where applicable, which obstacles are hindering the achievement of intermediate outcomes?	Case study interviews with practitioners, caregivers and reading club leaders	Case study report				

Impacts (Learner Level)				
To what extent do the learners attending Yizani Sifunde ECD Centres in 2023 display improved language and literacy?	Baseline & endline standardised learner assessments	Quantitative report		
Can we ascertain which factors contribute to, mediate and moderate child language outcomes?	Baseline & endline standardised learner assessments analysed in relation to data from monitoring data, practitioner survey data and centre observation data	Quantitative report		
Sustainability: Longer term outcome:	s			
What indicators are there for emerging sustainability, based on the reading ecosystem approach in the theory of change?	Case study interviews with practitioners, Story Sparkers and community leaders	Case study report		
To what extent are the same outcomes still evident in the 2022 cohort, in the year post-exit? (secondary evaluation question)	Case study interviews with practitioners, Story Sparkers and community leaders	Case study report		

# 3.2. Quantitative Methods and Tools

This report is based on the analysis of two rounds of data collection: a baseline in February 2023 before the start of the Yizani Sifunde intervention with the 2023 cohort of ECD centres, and an endline in October 2023. The same tools were used in each round, as described in Table 3. The only difference between the baseline and endline tools was the inclusion of the ELOM domain 3 (Emergent Numeracy & Maths) at endline.

Table 3: Data collection tools

### **ECD-Level Assessment Tools**

- 1. Practitioner / Manager Survey Tool
- 2. ECD Centre Observation Tool
- 3. ECD Centre Statistics Datasheet

### **Learner Assessment Tools**

- 1. ELOM 4&5 Domains:
  - Domain 2: Fine Motor Control & Visual Motor Coordination (Baseline & Endline)
  - Domain 3: Emergent Numeracy & Maths (Endline only)

- Domain 4: Cognitive & Executive Functioning (Baseline & Endline)
- Domain 5: Emergent Literacy & Language (Baseline & Endline)

### 2. ELOM 6&7

- Item 3: Productive Vocabulary
- Item 10: Book Orientation and Word Concept

The ECD-level tools were adapted from tools used in other studies, aligned with the Theory of Change, evaluation framework, and other intervention key elements. Care was also taken to align the tools with the monitoring tools to strengthen triangulation. All tools were reviewed and shared with the Yizani Sifunde team for input and contextualisation.

The isiXhosa versions of the full ELOM 4&5 and 6&7 tools were selectively combined for the learner assessments.

The ELOM 4 & 5 Years Assessment is a standardised tool that measures performance across five key developmental domains for children aged 4 and 5 years (50-69 months):

- **Domain 1: Gross Motor Development (GMD):** this domain looks at the child's ability to control the large muscles of the body.
- Domain 2: Fine Motor Coordination and Visual Motor Integration (FMC-VMI) This domain looks at the child's ability to control small muscles and coordinate small movements with visual information perceived by the eyes.
- **Domain 3: Emergent Numeracy and Mathematics (ENM)** this domain looks at early maths skills such as the ability to understand number concept, symbols, shapes and sizes.
- **Domain 4: Cognition and Executive Functioning (CEF)** This domain looks at the child's ability to stay focused, think critically, solve problems, form concepts, attend to instructions, and control impulses.
- **Domain 5: Emergent Literacy and Language (ELL)** This domain looks at the child's ability to communicate effectively. This includes their ability to speak in full sentences, recognise the initial sounds of words, name common objects, relay events and listen to and understand stories told to them.

Domain 1 (GMD) was not assessed since the Yizani Sifunde intervention did not include any activities aimed at improving gross motor development. Domains 2, 4 and 5 were included in this evaluation's assessment at baseline and endline. Domain 3 (ENM) was not included at baseline since the Yizani Sifunde is focussed on literacy and not numeracy. However, since a recent study demonstrated gains in this domain as a result of a similar intervention (Cain et al 2023), we decided to add the ENM domain into the endline assessment to test the extent to which emerging numeracy was affected by a literacy intervention like Yizani Sifunde.

ELOM 4&5 domain results have been standardised by DataDrive 2030<sup>3</sup> for national and provincial populations, with expected standards for children aged 50-59 months and 60-69 months. Scores are categorised within one of three performance bands:

On track for achieving the expected standard for their age			
Falling behind the standard			
Falling far behind and in need of significant assistance to reach the standard			

The Yizani Sifunde intervention emphasises building a combination of oral language proficiency and confidence in engagement with books. These skills are not sufficiently measured through the ELOM 4&5 domains. We therefore included two items from the ELOM 6&7 literacy tools, even though these tools are designed for older children (aged 6 and 7 years, 70-89 months) as a means of assessing 'school readiness'. Item 2 on productive vocabulary provides insights into vocabulary and Item 10 on book orientation and word concept explores a child's understanding of the conventions of the written word (e.g. where to start reading on a page, direction of reading, etc.) and the format of books (how to hold and open a book, how to follow a text on a page, etc.). At the time of writing, the standardisation of the ELOM 6&7 results has not yet been completed and so the results are only described as absolute changes over time for the study sample, not compared with a general age or provincial standard.

The quantitative phases of the evaluation did not include several of the tools included in the ELOM suite, including the Socio-Emotional Functioning tool (learner level), the Learning Programme Quality Assessment Tool (LPQA) (centre level), and the Home Learning Environment (HLE) tool (home level). The LPQA was used in six centres as part of the evaluation's case study methodology (see case study report), augmented by the ECERS-E and ECERS-3 tools (as described in the case study report), but was not implemented as part of the larger 22 centre baseline and endline sample. Some similar variables as the LPQA were measured as part of the other centre-level tools used, such as the Practitioner survey and Observation checklist. Instead of the SEF, assessors scored the learner's level of 'task orientation' or concentration during the ELOM assessment.

The SEF tool requires interviewing practitioners about each assessed learner and the HLE tool requires an interview with each learner's caregiver, either telephonically or by visiting their home. The decision to exclude these tools from the methodology was based on time and budget constraints since it was not possible for two assessors to complete all tools at a centre within a day. Another consideration was that Yizani Sifunde's internal monitoring processes included profiling home environments using the HLE tool, and great efforts were made retrospectively to match these results with the learner assessment results. The practical challenges of accessing parents resulted in insufficient overlap between the HLE and assessment data. Story Sparkers collected HLE data through physical home visits, which enabled verification of the presence and condition of books. It required six weeks of follow-

<sup>&</sup>lt;sup>3</sup> Extensive documentation on the design and interpretation of the ELOM tools can be found at https://datadrive2030.co.za

ups for Story Sparkers to achieve a sample of 130 households across both intervention sites in March 2023, without requiring them to reach the specific households of learners sampled for the evaluation assessments. A matched sample would have taken much longer.

The methods used, including those collected during the evaluation and the internal monitoring data, have produced an aggregate picture of each element of the Yizani Sifunde Theory of Change. However, the necessary logistical and budget trade-offs in how the tools were linked resulted in some limitations to the evaluation's ability to analyse the learner assessment results in terms of each element, e.g. analysing the effect of home environment factors on learner performance. A lesson for future evaluations is to either motivate for the additional time and funding to complete the comprehensive ELOM suite of tools as a linked package within the evaluation data collection process, or to invest additional planning and resources into linking monitoring level and learner assessments at the level of each individual learner. In either case, it is necessary to consider whether the considerable effort and budget required to generate this data is worth the additional insight gained, especially when there is already literature confirming the importance of an enabling home environment and caregiver involved in children's learning.

# 3.3. Data collection

The baseline data collection was conducted in February 2023 and the endline was conducted in October 2023. Assessors were all accredited in the use of the ELOM learner assessment tools. They received an additional three days of training in the ECD-level survey tools and refresher training in the combination of ELOM 4&5 and ELOM 6&7 assessments. The technical support team from DataDrive2030 assisted with the integration of ELOM 4&5 and ELOM 6&7 items into a single assessment form which was completed on the Survey CTO electronic data entry system. Assessments took place at the sampled ECD centres, in a quiet space away from other children. Each assessment took approximately 45 minutes. Assessments were conducted in isiXhosa.

The practitioner and centre data survey tools were collected on the KoboConnect electronic data entry system and were available in isiXhosa and English. The field researchers were native speakers of both languages and could switch to appropriate translations of the survey questions during the interview. They were trained to consistently translate and paraphrase questions to maintain their meaning.

Prior to commencing the data collection phase, the Wordworks team conducted a comprehensive ECD profiling exercise, which provided information about the key characteristics of each ECD centre. Information was also provided about each learner in the school, which helped ascertain the number of eligible learners (i.e., those between 50 and 69 months both at baseline and endline), their gender, and the number of Practitioners in each site. The provided data was generally very reliable and enabled informed logistics planning.

# 3.4. Access and Consenting Procedures

The Eastern Cape Department of Education approved the Yizani Sifunde intervention and access to ECD centres, which included approval for evaluation studies as part of the intervention. For the ECD centres sampled for the evaluation, centre managers were engaged before the baseline and endline data collection rounds to provide consent for data collection at their centres, and information sheets about the study were provided for caregivers.

# 3.5. Sampling and Sample Characteristics

The evaluation assessed change at the level of the centre, practitioner and learner. At centre level, 22 centres were visited at baseline and again at endline. At each centre, at least one and sometimes two practitioners were interviewed. 25 of the practitioners were interviewed at both baseline and endline, providing a matched sample for which changes in practices can be directly linked to the intervention. Three practitioners surveyed at baseline were lost to the endline and four endline practitioners were not interviewed at baseline. Only one centre had a complete change of staff, so there is at least one matched practitioner for 21 of the 22 centres. Finally, a matched sample of 99 learners was achieved. Further discussion of the learner sample, including attrition rates, is provided below.

All samples were well balanced between the two intervention locations: East London and Queenstown.

Table 4: Summary Baseline and Endline Sample Sizes

	Baseline Endline					
	East London	Queens- town	Total	East London	Queens- town	Total
Centres	11	11	22	11	11	22
Manager/ Practitioners	13	16	29	15	15	30
Matched Manager/ Practitioner sample				12	13	25
Learners	69	73	142	56	58	114
Matched learner sample				50	49	99

# 3.5.1. Centre Sample Selection

ECD centres were selected for participation in the evaluation based on the following criteria:

- Geographic spread across both intervention regions
- Diversity in ECD Centre size, including small, medium and large centres (measured in terms of the number of enrolled 4 and 5-year-old learners)

Table 5: ECD Centre Sample by Region and Sub-region (Area)

Region	Area	Total Number of ECDs	Sampled ECDs
East London	Airport Park	5	1
	Bhongweni	3	2
	Bhongweni Ext	1	0
	Egoli Township	4	1
	Fort Grey	2	1
	Leaches Bay	3	1
	Ncera	4	1
	Santa	2	2
East London Total	•	24	11
Queenstown	Ezibeleni	8	2
	Ilinge	2	2
	Machibini	2	1
	Mlungisi	7	5
	Whittlesea	4	1
Queenstown Total		23	11
<b>Grand Total</b>		47	22

Table 6: ECD Centre Sample by 4-5 year-old enrolment numbers

Centre Characteristics	Region			
Centre Characteristics	East London	Queenstown	Grand Total	
Number of 6	enrolled 4-5 year olds <sub>l</sub>	oer Centre		
0 - 6 children	3		3	
7 - 12 children	4	2	6	
13 - 21 children	1	4	5	
More than 22 children	3	5	8	
Total	11	11	22	

The centres selected for the evaluation reflect the overall regional differences between the East London and Queenstown 2023 Yizani Sifunde centre cohorts:

- the ECDs in the East London hub were mostly peri-urban while those in the Queenstown hub included equal numbers of peri-urban and deeply rural ECDs.
- The ECDs in the East London hub were more likely to be small with only one mixedage class, and more likely to be unregistered with either DSD (Department of Social Development) or the ECDoE (Department of Education).

 The ECDs in the Queenstown hub usually had higher enrolment numbers, but their facilities were more basic, lacking space, furniture and access to stationery. They were also more likely to charge very low fees, between R30 and R150 per month.

# 3.5.2. Centre Sample Characteristics

The twenty-two ECD centres sampled for the evaluation have the following characteristics:

Centre registration status: At baseline, 17 centres were registered with the Eastern Cape Department of Education and five not. Two centres reported moving from non-registered to registered by the endline. The Yizani Sifunde intervention did not include support to centres to achieve registration. 21 of the sampled centres were privately owned and independently owner-managed. One centre was a pre-school attached to a public primary school with Grade RR classes.

**Fee levels:** the monthly fees in the sampled centres ranged from R30 at the public school to R350 at one of the small centres in East London. Six centres fall into the R0-R110 fee band (40 of the 99 matched learner sample assessed in this evaluation), 15 centres fall into the R111-R290 fee band (55 learners), with one centre in the higher band at R350. There were no changes in fee levels between baseline and endline.

**Centre sizes – enrolment and staffing**: at baseline, the smallest centre had 21 learners of all ages enrolled. The largest was the public pre-school with 120 learners. The average learner enrolment (excluding the public school) was 41. In most centres the owner/manager was also a practitioner and there was an average of 2,8 practitioners per centre (ranging from one to five practitioners per centre).

**Nutrition:** At baseline, 17 of 22 centres (77%) provided some form of nutrition. At endline, this had increased to 20 (91%). In addition, several centres increased the number of meals provided, i.e. both breakfast and lunch rather than only one, or adding a snack. It is unclear whether this change is related to Yizani Sifunde, since the provision of nutrition or assistance to centres to raise funding for nutrition was not part of the intervention design. Nutrition has been shown to have a significant effect on learning outcomes in previous studies (Giese et al 2022). In the current study only 3 of the 99 matched learners were categorised as 'moderately stunted' at baseline (as per the standard ELOM height and weight measures), with the rest falling into the 'normal' scale.

Centre resources and infrastructure: the evaluation methodology included a checklist of centre infrastructure and resources, completed by the fieldworkers through observation at baseline and endline. Table 3 shows that while most of the centres in our sample had some infrastructure at baseline, such as running water and perimeter fencing, almost half did not have electricity or flush toilets, and most had very limited communications and technology resourcing. Some centres saw limited improvements in their infrastructure over the evaluation period, but the basic pattern of poorly resourced centres did not change, as was to be expected since it was not part of the Yizani Sifunde intervention to improve physical or communications infrastructure. This also shows that any changes in learner outcomes

between baseline and endline are not due to general improvements in centre physical or communications infrastructure.

Table 7: ECD Centre infrastructure and resources at baseline and endline; Classroom Observation (N=22)

	Base	line	End	lline
Physical Infrastructure	Present, functional and in use	Not present	Present, functional and in use	Not present
Complete perimeter fence	21	1	21	1
Secure gate with entry protocol	20	2	21	1
Water supply inside the ECD centre	18	4	19	3
First aid equipment	18	4	16	6
Recreational space/field/play area	16	6	16	6
Kitchen/cooking area	15	7	15	7
Staff flush toilets	14	8	16	6
Electricity	13	9	15	7
Learner flush toilets	13	9	15	7
Staff room	2	20	5	17

Communications Infrastructure	Present, functional and in use	Not present	Present, functional and in use	Not present
Internet/email	8	14	9	13
Computers: Admin. use	5	17	6	16
Copying facility	4	18	7	15
TV/DVD	4	18	3	19
Computers: Staff use	1	21	6	16

# 3.5.3. Practitioner Characteristics

At baseline, the average age of the surveyed practitioners was 49 in both East London and Queenstown, with a range from 29 to 63. All practitioners are female. Years of experience in the ECD sector ranged from zero to 36, with an overall average of 8.8 years (10.5 in East London and 7.5 in Queenstown).

Of the 25 matched practitioners, 9 (36%) had not finished high school, 10 (40%) had matric/national senior certificate, and 5 (20%) had some form of further education (higher certificate, Diploma, Bachelor's or Postgraduate Degree).<sup>4</sup> In addition to these general education levels, most of the practitioners had some form of ECD-specific training (Table 8).

Table 8: Practitioner ECD-specific Training & Qualifications

No ECD specific qualification	4
NQF 2&3: Skills programmes and RPL and NVC 2 &3	2
NQF Level 4 Certificate (ECD) / NVC 4	13
NQF Level 5 Diploma/ ECCE Higher Certificate	2
NQF Level 7 Bachelors degree (Education)/ ECCE Advanced Diploma	1
Other (NGO-supplied short-term training)	3
Total	25

At both baseline and endline, only one practitioner was enrolled in further studies towards an ECD-related certificate. One condition for the selection of practitioners for the 2023 Yizani Sifunde intervention was that they were not concurrently enrolled in further studies, as Yizani Sifunde's experience from the 2021 cohort was that practitioners who were studying were less likely to have high attendance at Little Stars training. Apart from the Yizani Sifunde intervention, there was no major change in practitioner training between baseline and endline.

### 3.5.4. Learner Characteristics

Learners at each ECD centre were sampled based on their age. At the baseline they had to fall between 50 and 61 months so that by the endline eight months later they would still fall within the upper age limit for ELOM 4&5, namely 69 months. Despite some ECD centres having only few learners in the correct age range, we did not include any learners beyond this age limit, as some other studies have done (Dawes et al 2020). The number of assessed learners per centre ranged from two to six. Based on pre-existing learner registers, with learner age and gender, a maximum of six learners per centre was randomly pre-selected

<sup>&</sup>lt;sup>4</sup> One practitioner refused to answer the question about qualifications.

before field entry and provided to the assessors. A replacement list was also provided where there were more than six eligible learners in the ECD centre.

As described in Table 2 above, 142 learners were assessed at baseline, of which 99 were assessed again at endline. An additional 15 learners within the correct age range were assessed at endline (for a total of 114 endline learners) but these additional learners have not been included in the analyses in this report. All learner assessment results only include the 99 matched learners for whom there are both baseline and endline results.

An analysis of the baseline assessment results for learners who were not re-assessed at endline shows that they were, on average, weaker than the learners who were re-assessed. Figure 2 shows this applies across all three ELOM 4&5 domains. The main reasons for learner attrition were that learners were no longer enrolled at the centre or were absent on the day of the assessment. Particularly low frequency of attendance may be correlated with low baseline learning achievement if both are related to a challenging home environment. This attrition effect means that the matched learner cohort results may be slightly better than the results of all learners enrolled in the sampled ECD centres.

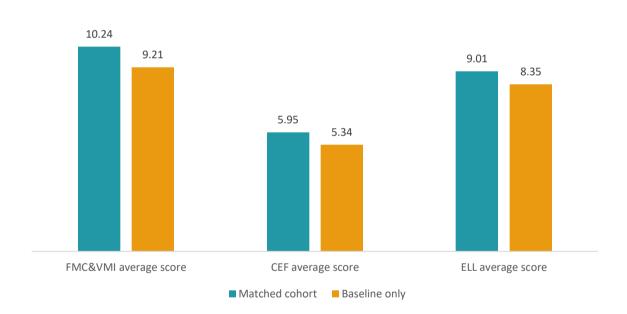


Figure 2: Mean ELOM 4&5 domain scores for Matched (N=99) and Baseline-only (N=43) learners at Baseline

In terms of other characteristics of the matched sample, there is a good balance by gender (54% female, 46% male). At baseline, 81 of the matched learners fell into the 50-59 month age group, with 18 in the older 60-69 month group. By the endline, 21 remained in the younger group and 78 were in the older group. The average age of sampled learners at endline was 63,4 months in East London and 62 months in Queenstown. Only three of the matched learners were found to be moderately stunted (based on measures of height and weight compared to the expected age range), all of whom were at centres in Queenstown.

# 4. Findings

This chapter explores the extent to which the Yizani Sifunde intervention led to changes at centre and practitioner level (outcome variables) and at learner level (impact level).

# 4.1. Centre Conditions (Outcome Variables)

The outcome level variables that the Yizani Sifunde intervention was aiming to affect were the following:

- Availability of learning resources
- Classroom practices that facilitate overall learning and specifically emergent literacy

While the intervention did not intend to impact on Centre Management practices, we consider whether there were any unintended impacts.

# 4.1.1. Availability of Learning Resources

One of the central aims of the Yizani Sifunde intervention was to increase the availability of learning resources in ECD centres and in learners' homes. The intervention distributed storybooks for learners to take home and for ECD centres to keep as a school library, and also distributed teacher activity guides, big books, sequence pictures, and paper puppets as support materials for the Little Stars storytelling activities to accompany the storybooks. The independent evaluation methodology did not include an assessment of the quality of Yizani Sifunde-produced learning materials, nor did it verify the full distribution of these materials.

The distribution of storybooks to learners to take home and keep was a central component of the Yizani Sifunde intervention. During the evaluation baseline, surveyed practitioners at 19 centres reported that "children do not take home books here". Two centres reported that children take home books to keep and one allowed children to borrow and return books. This low level of children's access to books from ECD centres was matched by findings about low levels of book ownership in households. Home environment data was collected by Yizani Sifunde Story Sparkers in early 2022 and early 2023, profiling a combined 246 homes before the start of the intervention in each respective year. This data shows that only 33% of homes had any children's books in the home (23% in Queenstown and 43% in East London) and only 6% had more than 5 children's books. This finding is in line with national trends: the 2022 National Reading Survey found that 35% of homes with children under 10 years of age have any children's books (Polzer Ngwato et al, 2023).

The Yizani Sifunde intervention included Story Sparkers distributing 25 book titles directly to learners. In addition, practitioners received an additional 25 book titles to distribute to their learners each year. Yizani Sifunde's detailed internal monitoring data, generated by the Story Sparkers and centrally managed by the Yizani Sifunde MEL team, shows that in total, across the three implementation years (2021-2023), 83743 books were recorded as

distributed<sup>5</sup> to 3481 children with an average of 24 books per child. This includes distribution directly to learners by Story Sparkers and distribution to learners through the ECD centres. The Yizani Sifunde target was for each learner to receive a personal library of 25-50 books over the course of the year. In 2023, which was the focus of this evaluation, 37794 storybooks were distributed to 1150 children across the cohort of 43 centres in East London and Queenstown, with each child receiving an average of 32 books.

The Yizani Sifunde internal monitoring processes included home visits at which the number of books was verified. At the end of October 2023, most homes were found to have the expected number of books or more (at least 90% of the books that had been distributed to that child during the course of the year), although about a third of visited homes had fewer than expected books (less than 80% of distributed books). In more homes, the books showed signs of being used extensively, without having been damaged, showing both use and respect for the books. This evaluation was not able to independently verify these internal monitoring results in the home environment.

The evaluation did ask ECD practitioners to verify the number of books they had distributed to learners. By the end of the year (the October 2023 endline survey), most practitioners (14 out of 25) reported that their learners had received 20-25 books to take home, while 5 practitioners reported distributing 11-20 books and 3 reported distributing 1-10 books. The practitioners were reporting only on the books they received for distribution, so these are in addition to the books distributed directly to learners by the Story Sparkers.

To verify the arrival of materials at centre level, the evaluation used multiple methodologies to assess changes in the availability of learning materials. First, field researchers independently observed the presence of materials in the classroom at baseline and endline (Table 9). Against the backdrop of ECD centres that were generally poorly resourced throughout the intervention period, as described above in Table 7, the observed level of change in the availability of learning materials is striking.

<sup>&</sup>lt;sup>5</sup> It is worth noting that in 2021 both the book distribution channels and the data systems to track such distribution were imperfect. In 2022, channels and record keeping improved but practitioners were still responsible for recording the books they distributed to learners. In 2023, Story Sparkers recorded books distributed both by practitioners and by themselves. Therefore, it is possible that more books were distributed than what the project has on record.

<sup>&</sup>lt;sup>6</sup> The lower numbers may reflect some managers' or practitioners' decision to keep some of the distributed books at the centres, rather than sending them home with the learners.

Table 9: ECD Centre learning materials at baseline and endline; Classroom Observation (N=22)

	Base	line	Endline		
Learning Materials	Present, functional and in use	Not present	Present, functional and in use	Not present	
Pre-Grade R books and materials	7	15	20	2	
Box libraries or library	3	19	19	3	
Pre- Grade R posters/print rich walls	14	8	18	4	

As a second source of evidence, practitioners were asked in the baseline and endline surveys to confirm which of the listed language and literacy teaching and learning materials were present in their classrooms. As above, there was a marked improvement in the availability of resources (Table 10).

Table 10: ECD Centre learning materials present at baseline and endline; Practitioner Survey (N=22)

Learning Materials	Baseline	Endline
Story books	19	21
Wall charts/Posters	13	19
Pencils, crayons, paint and other art materials	18	18
Book corner/ reading corner/ book area	12	16
Big Books	6	15
Teacher activity guides	7	14
Puppets	3	13
Learner workbooks	3	13
Teacher workbooks	9	12
Sequence pictures	3	12
Book storage solutions (hanging libraries, book shelves)	not asked	12
Clothes and props for the fantasy corner	11	11

Table 10 is derived from practitioner responses to survey questions rather than from independent observation. There are therefore some caveats when interpreting the results. It is notable that practitioners reported the presence of storybooks at baseline while these were only rarely observed by the evaluation team's field researchers. This may be because there were only a few books available at baseline and that these were stored in ways that were not visible (and not accessible to the learners). At endline, while there was a large improvement in reported materials availability across the board, some practitioners did not report having 'Big Books', teacher activity guides or book storage solutions like hanging libraries, although these were distributed to all participating centres (as per Yizani Sifunde's own monitoring data and Story Sparker reports). It is not clear why the practitioners report these not being present.

Yizani Sifunde did not provide learner workbooks but the presence of these nonetheless improved. This may be due to practitioners' and ECD managers' own initiatives to acquire materials, having received training in more interactive teaching techniques.

In addition to the absolute presence or absence of learning materials, it is also important that enough materials are available for the number of learners in a centre. While at baseline most practitioners reported that a shortage of learning materials was 'a very big problem' and none said it was 'not a problem', at endline this had shifted to half saying it was 'not a problem'.

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	Baseline	Endline
Not a problem	0%	50%
A small problem	21%	30%
A big problem	21%	10%
A very big problem	59%	10%
Respondents	29	30

When the sufficiency of materials is broken down in more detail, we see that those materials provided by Yizani Sifunde (storybooks, book corner materials, sequence pictures, teacher activity guides and workbooks, and to a lesser degree wall posters<sup>7</sup>), shifted from not available at all or 'not sufficient' to being available in 'sufficient' or 'very sufficient' (combined in the table below) quantities. The sufficient availability of Big Books and puppets also increased but to a lesser extent.

<sup>&</sup>lt;sup>7</sup> While posters were not a formal part of the Yizani Sifunde resources, there were several contributions that may explain the increase: 1) a sheet with Book Dash book covers was distributed to the ECDs; 2) Nal'ibali provided World Read Aloud Day posters to some (but not all) of the ECDs that joined the campaign; 3) Some Story Sparkers carried out activities with children where they drew hand-made posters to embellish the book corner.

Table 12: To what extent are the following enough for your day-to-day classroom needs...; Practitioner Survey (N=29 at baseline, N=30 at endline)

	Baseline		Endline			
	Not present	Not sufficient	Sufficient	Not present	Not sufficient	Sufficient
Story books	9	17	3	1	1	28
Book corner/ reading corner/ book area	16	10	3	6	3	21
Pencils, crayons, paint						
and other art materials	10	12	7	4	7	19
Sequence pictures	26	3	0	10	4	16
Teacher activity guides	22	5	2	9	5	16
Teacher workbooks	19	7	3	12	3	15
Wall charts/Posters	15	11	3	0	18	12
Learner workbooks	25	3	1	14	4	12
Big Books	22	5	2	9	11	10
Puppets	26	3	0	9	12	9

Yizani Sifunde's internal monitoring by Story Sparkers identified a need for better book storage solutions. Yizani Sifunde provided a branded hanging library to each ECD to go with the distributed books. While Story Sparkers found that 28% of the ECD centres did not have book storage that enabled learners to access the books even towards the end of the intervention period (Figure 3), this was a large improvement on the almost complete lack of book storage before the intervention. Some of the ECD centres were not using the hanging libraries because their walls were made of corrugated iron or another structure that does not allow for items to be hung on walls or doors. Yizani Sifunde's internal review has shown that hanging libraries are durable since ECD centres that received them in 2021 were still using them in 2024.

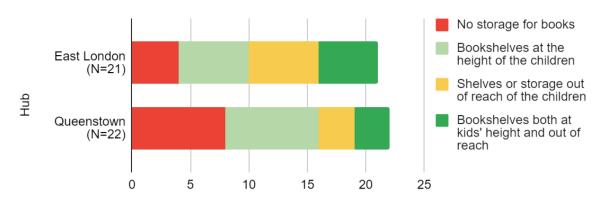


Figure 3: Access to Book Storage – Story Sparker monitoring Sept 2023

In summary, Yizani Sifunde was successful in increasing the availability of language and literacy-related learning resources in both ECD centres and children's homes.

### 4.1.2. Classroom Practices

In addition to increasing the presence of learning materials, Yizani Sifunde aimed to improve learner outcomes by training practitioners to use these materials in specific ways and to carry out particular classroom routines.

The evaluation did not observe or assess the training received by the ECD practitioners, but the practitioner survey at the endline asked a few high-level questions about practitioner experiences with the training. Surveyed practitioners had attended an average of 4,3 training sessions in 2023 (ranging from 1 to 6 sessions per practitioner). Practitioners report being very satisfied with the training they received, giving an average score of 8,7 out of 10.

The training introduced a set of classroom routines, as per the Little Stars early literacy programme, which centre around storytelling and include activities relating to listening and speaking skills, identifying sounds in words, building vocabulary, emergent reading and writing, as well as fine motor activities such as drawing, making 3D-objects and writing for a purpose. These are built into engaging with stories by acting out the stories using puppets and role play, singing, as well as reading the stories from big books and from storybooks.<sup>8</sup>

The baseline and endline practitioner surveys asked practitioners which literacy and language teaching activities they normally included in their daily programme. To assess the impact of the Yizani Sifunde intervention, we compare only the responses of practitioners (not managers who are not practitioners) and only those practitioners who were interviewed at both baseline and endline (N=20).

As we can see in Table 13, the changes in classroom practices are mostly positive but not very large. Some interactive activities were present at baseline already and did not change

<sup>&</sup>lt;sup>8</sup> See https://www.wordworks.org.za/wp-content/uploads/2023/10/BA-LS-research-brief-1\_E\_low-res.pdf for a description of the Little Stars routines

much (storytelling, drawing and singing); some literacy activities have improved somewhat (reading storybooks, building vocabulary, listening for sounds in words, emergent writing); and some important activities are still reported as largely absent (listening exercises, reading Big Books, children using books independently).

The large increase in reported 'emergent writing' is encouraging as this is an activity often missing from ECD practice. The low reported use of Big Books may be due to lack of clarity in the questionnaire, since Yizani Sifunde's internal monitoring, through classroom observations by Story Sparkers, shows the use of Big Books to be one of practitioners' most frequent and favourite activities. The low reported level of children using books independently is a real and concerning finding, as discussed further below.

The reported decline in 'learning about letters' may be due to the Little Stars structured teaching programme not including specific activities for teaching letters. Given the general emphasis on more engaging teaching methods, the reduced frequency may represent a shift from chorusing or singing the alphabet (at baseline) to using more interactive letter engagements, which are less regular (at endline).

Table 13: Presence of classroom practices at baseline and endline (% practitioners who report doing this practice as part of their normal teaching activities); Practitioner Survey (N=20 matched practitioner sample)

Classroom Practice	Baseline	Endline
Story telling	80%	85%
Drawing	75%	85%
Singing	75%	80%
Reading storybooks	60%	70%
Building vocabulary	40%	60%
Listening for sounds in words	45%	50%
Role playing	35%	50%
Use of pictures	65%	50%
Emergent writing (scribbles or pretend writing)	25%	50%
Learning about letters	65%	50%
Listening exercises	40%	35%
Reading big books	20%	20%
Children using books independently (on their own)	15%	15%

When augmenting these results, as self-reported by practitioners, with Yizani Sifunde's internal monitoring of changes in classroom practices using Story Sparker classroom observations at baseline and endline, we see confirmation that important learning activities have increased.

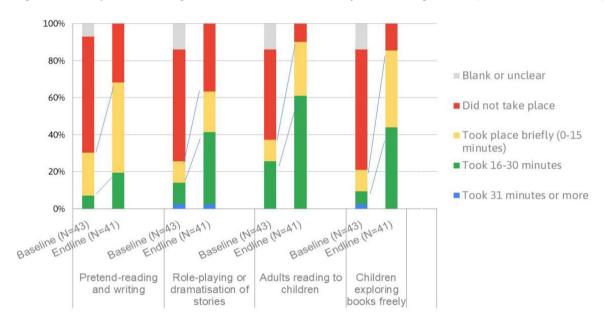


Figure 4: Yizani Sifunde monitoring data on classroom observations of select learning activities (March and October 2023)

In addition to considering the presence or absence of practices, there is evidence that the *quality* of practices improved. In the evaluation survey, practitioners reported much greater confidence in leading these practices (Table 14).

Table 14: Practitioner confidence in classroom practices at baseline and endline (% who find this practice 'very easy' or 'somewhat easy'); Practitioner Survey (N=20 matched practitioner sample) <sup>9</sup>

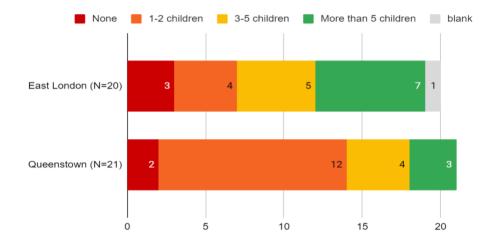
Classroom Practice	Baseline	Endline
Use of pictures	35%	100%
Singing		100%
Using puppets or acting out stories when you read them		100%
Reading storybooks		95%
Story telling	40%	90%
Use of books	55%	85%
Listening exercises	50%	85%
Reading big books		85%

<sup>&</sup>lt;sup>9</sup> The practices with no data in the baseline column were not asked about in the baseline practitioner survey.

Building vocabulary	35%	70%
Learning about letters		70%
Role playing	30%	65%
Listening for sounds in words		65%
Emergent writing (scribbles or pretend writing)	35%	60%

One of the most significant limitations in classroom practices identified by the evaluation is that very few centres or practitioners allowed or encouraged the learners to engage with books independently, even if the centre had set up a reading corner. This was also confirmed through the evaluation's case studies (see Zhou & Shilakoe 2024) and through observations by the Story Sparkers (as reported in the Yizani Sifunde internal monitoring data). This may be because practitioners are worried that learners will damage the books, which are seen as a valuable and limited resource.

Figure 5: How many children did you notice going freely to the book corner (e.g. during free play)? - Story Sparker classroom observation



# 4.1.3. Caregiver engagement

The home environment and levels of caregiver engagement with a child's schooling are crucial contributors to learner literacy outcomes. It was not possible to integrate information about learner home conditions as part of the evaluation's baseline or endline data collection. Learners' home learning environment data was collected in 130 homes by Yizani Sifunde's Story Sparkers in October/November 2023, but not enough of the learners included in the evaluation learner assessments could be matched to the home environment dataset to enable an integrated analysis. Some interviews with caregivers were included in the qualitative elements of the evaluation, as discussed in the separate Case Study Report.

Our current analysis of the intervention's engagement with the home environment therefore focuses on the intervention's efforts to increase caregiver involvement with the ECD centres (as per the Theory of Change described in Section 2.1 above) through the mechanism of parent<sup>10</sup> workshops.

Many studies, including this evaluation, have found low levels of caregiver involvement in young children's education at ECD level, which becomes part of the cycle of disadvantage faced particularly by children from low-income backgrounds. It is also well established that reaching caregivers and shifting their home practices and levels of engagement with ECD centres is one of the most challenging aspects of ECD intervention design. It is a "sticky problem" that does not have quick fixes (Ayob et al 2021).

The Yizani Sifunde intervention included training practitioners to hold parent workshops at ECD centres. Story Sparkers provided practitioners with support in setting up and facilitating these workshops. Yizani Sifunde internal monitoring data shows that 28 of the 43 centres in the 2023 cohort held at least one parent workshop (65%). 15 of these (35%) held between 4 and 6 workshops, therefore covering most of the intended content with parents. The other 13 held 1 to 3 workshops. When considering just the sample of 22 centres included in this evaluation, 16 held parent workshops.

The greatest challenge reported by practitioners and Story Sparkers was parent attendance and especially convincing parents to attend several consecutive sessions. In terms of achieving the targeted number of activities, parent workshops were, therefore, among the least successful of the Yizani Sifunde intervention elements.

Compared to other elements of the intervention, such as book distribution, teacher training and Story Sparker visits, all of which are largely under the control of the implementing consortium members and their local implementation partners, the parent workshops depend on the voluntary attendance of caregivers and are therefore to a significant extent outside of Yizani Sifunde's direct control. Therefore, rather than focusing on the number of workshops or levels of attendance, ECD-based parental workshops should be viewed through a developmental lens that acknowledges the inherent challenges in this type of intervention. Even small shifts in how parents and practitioners understand their roles in relation to each other and the children are important to note.

At baseline, practitioners and centre managers reported that parents asked about their children's academic progress more rarely than they did about school fees and other non-academic aspects of the ECD activities. Questions about helping their children learn at home were the least mentioned topic of engagement (14%). At endline, while the pattern had not changed in terms of parental questions about their children's educational progress at the centre, there was more than double the level of engagement about learning at home (from 14% to 30%) (Figure 5). This may be a sign that the parental workshops were successful in raising awareness about the importance of the home environment for learning or that children were asking their caregivers to read the provided books to them at home, leading parents to ask practitioners how to read the stories in an engaging way.

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<sup>&</sup>lt;sup>10</sup> As per the convention adopted by Yizani Sifunde, the term 'parents' in this report includes all adult caregivers and is used interchangeably with the term caregivers.

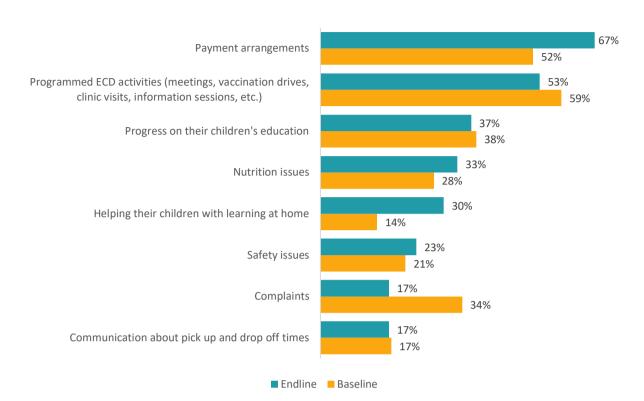


Figure 6: Topics of caregiver engagement with ECD centres (Practitioner Survey, N=29 baseline, N=30 endline)

Similarly, we saw a small improvement when practitioners were asked whether parental engagement in learner activities and ECDs is a problem at their centre (Table 16).

Table 15 Rating of whether parental engagement in ECD and learner activities is a problem (Practitioner Survey, N=29 baseline, N=30 endline)

	Baseline	Endline
Not a problem	14%	27%
A small problem	24%	27%
A (very) big problem	62%	47%

The learner assessment results showed no significant difference between learners at centres that had held parent workshops and those that had not. This does not provide a reliable reflection of the impact of parental engagement on learner outcomes, however, since it was not possible to link the parents who attended workshops with the learners we assessed.

The importance of caregiver engagement is well-established, suggesting that despite the difficulty, it is worth further experimentation and study to establish ways to address the known barriers of caregiver attendance at awareness raising and training events, and secondly, any barriers to their use of information and materials provided at such events. Such experimentation could include different workshop times and venues (e.g. local churches or grant payment venues rather than ECD centres), the provision of small transport stipends for parents, the provision of food (for parents and children) at workshops, or some other form of incentive. A longer-term structured engagement

programme with families beyond a single year could also be attempted, especially if families have multiple children passing through an ECD centre in succession. Finally, in future iterations of similar interventions, it would be worth finding ways to overcome the practical challenges around the tracking of parent attendance to document the link between parent workshop attendance and learner outcomes. Ideally, this would also link learners who are siblings to households to measure the cumulative impact of multiple years of caregiver engagement.

# 4.1.4. Centre management practices

The Yizani Sifunde intervention did not set out to change centre management practices. Management functions can be divided into business functions such as financial management, human resource management and property management, and content functions relating to an enabling environment and quality assurance for the provision of an educational service. While Yizani Sifunde did not engage with centre managers around business functions, it did inadvertently impact on their content functions. In many cases, centre managers were also practitioners in their own centre and so were often trained in the use of Little Stars materials along with the other practitioners. In addition to their own teaching practice, managers also – at least theoretically – have functions that support other practitioners. This includes arranging training for their practitioners and coordinating regular in-house discussions and/or shared professional engagements with other ECDs about literacy practices (e.g. literacy Professional Learning Communities). Yizani Sifunde encouraged managers to use the regular training sessions and the training whatsapp group as spaces for mutual learning and support. In addition to the training in the Little Stars materials and routines received as part of the Yizani Sifunde intervention, centre managers were also more generally connected with the local implementing partners Khululeka and ITEC who offer various other training opportunities.

Some changes in centre manager practices were measured by comparing the baseline and endline results of the Centre Manager/ Practitioner Survey. These include an increase in centre manager support to practitioners around literacy practices. At baseline, 77% of interviewed centre managers (N=22) said they did not have a professional learning community around language and literacy for their staff where issues of literacy were discussed regularly as a group. At endline, 84% (of 19 centre managers interviewed) said they did have a literacy PLC. There were also small reported increases in other forms of literacy support, such as training practitioners within the ECD, opportunities for external training, and regular one-on-one feedback sessions with practitioners. On the other hand, fewer managers reported coaching and counselling their practitioners at endline than at baseline.

Centre management practices are an important component of intervention sustainability. Centre managers are usually the centre owners, and so there is less turnover than with practitioners. As would be the case with primary school Principals or Department Heads, ECD Centre Managers should play a quality control role by ensuring that new and existing practitioners maintain a minimum level of literacy practice and skill. Training managers in their roles as practitioners contributes to establishing a standard of quality but not all managers may translate this to their practitioners and maintain a collective set of standards

for the centre as a whole over time. Therefore, it may be fruitful to explore a model aimed at supporting managers' quality-control role, possibly with tools that managers can use to check their centre environment and practitioner practice, recommended activities (such as regular training/continuous professional development) to maintain quality, and communities of practice specifically for centre managers. This would be a valuable

contribution to the arsenal of tools for the improvement of ECD quality.

Overall, Yizani Sifunde was successful in addressing the three elements of centre practice it intended to address, namely the

Yizani Sifunde successfully addressed the availability of learning materials, practitioner capacity and practice, and parental engagement.

availability of learning materials, practitioner capacity and practice, and to a lesser extent, parental engagement. When centre managers and practitioners were asked about a range of management factors, the availability of learning materials and practitioner capacity & practice improved greatly from baseline to endline, shifting from 'a big problem' to 'not a problem' (Table 16). Parental engagement also improved somewhat, although to a lesser extent, as already discussed. Other common management challenges such as learner absenteeism, late coming and fee payment remained problems across baseline and endline periods since the intervention did not aim to address them.

Table 16: Management challenges at baseline and endline; Practitioner Survey (N=29 at baseline, N=30 at endline)

		Baseline			Endline	
	Not a problem	A small problem	A (very) big problem	Not a problem	A small problem	A (very) big problem
Shortages of learning materials, books, and library materials	0%	21%	79%	50%	30%	20%
Lack of parental engagement in ECD and learner activities	14%	24%	62%	27%	27%	47%
Lack of good opportunities for ECD language and literacy training	17%	24%	59%	60%	13%	27%
Learner late-coming	17%	24%	59%	27%	23%	50%
School fee payment	27%	18%	55%	11%	21%	68%
Learner absenteeism	38%	21%	41%	20%	23%	57%
Retaining ECD practitioners	59%	14%	27%	53%	11%	37%
Teacher late-coming	66%	10%	24%	67%	20%	13%
Teacher leave/ absenteeism	69%	10%	21%	53%	20%	27%
Lack of reliable scholar transport	79%	7%	14%	90%	7%	3%

# 4.2. Learner Outcomes (Impact Variables)

The main aim of the independent evaluation was to assess the extent to which learner outcomes have improved through exposure to the intervention. As described above, we used elements of the ELOM 4&5 and ELOM 6&7 standardised assessments and present each of these results separately below.

## 4.2.1. **ELOM 4&5** Results

We present the results of the ELOM 4&5 assessments in four ways:

- 1. As average ELOM scores per age range (50-59 months and 60-69 months), compared to the average scores for national and Eastern Cape ELOM standards;
- 2. As percentages of learners who have achieved 'on track' learning outcomes, compared to national and Eastern Cape ELOM standards;
- 3. As the average in ELOM score improvement from baseline to endline per domain and per baseline starting point in terms of being 'on track';
- 4. As changes in the mean ELOM scores over time, interpreted as 'effect sizes', adjusted for maturation effects.

## 4.2.1.1. Average Score Comparison

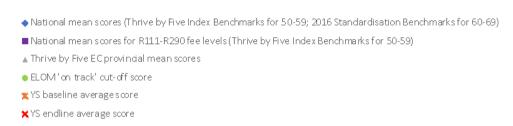
When comparing average scores for the Yizani Sifunde sample of learners with average ELOM scores for the same domain at national and provincial levels, the following considerations apply:

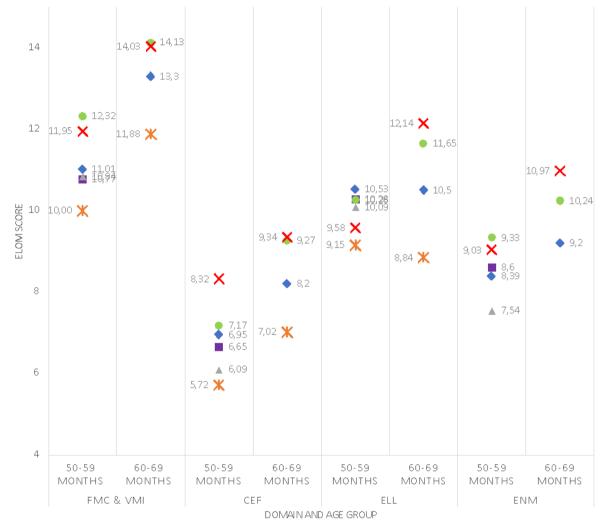
- The Yizani Sifunde sample size is relatively small, especially when broken down by age group. At baseline, 81 of the matched cohort of learners were in the 50-59 month age group and 18 in the 60-69 age group, while at endline, 21 remained in the 50-59 month group and 78 had matured into the 60-69 month group. This means the findings for the older group at baseline and the younger group at endline are less reliable.
- The national and provincial ELOM standards were developed using a representative sample of 4 and 5-year-olds for each province, including the full spectrum of socio-economic backgrounds. In contrast, the Yizani Sifunde sample of learners is exclusively from homes and communities in the lowest socio-economic bracket. This means we would expect the Yizani Sifunde sample to perform worse than the national and provincial standards simply because of their socio-economic home background. Achieving outcomes at or above these comparison averages can be interpreted as achieving beyond what is expected.

Figure 7 shows the Yizani Sifunde baseline and endline average scores per age group for each of the three ELOM 4&5 domains tested at baseline: Fine Motor Coordination & Visual Motor Integration (FMC & VMI), Cognitive & Executive Functioning (CEF); and Emergent

Literacy & Language (ELL). It also includes the endline scores for the Emergent Numeracy & Maths domain (ENM).

Figure 7: ELOM 4&5 Results, compared to National and Provincial standards<sup>11</sup>





<sup>&</sup>lt;sup>11</sup> There is no provincial standard for the 60-69 age group, so only the national average score (2016 national benchmark study) is reported on for this age group.

At baseline, the Yizani Sifunde learner samples for both age groups had average ELOM scores (orange stars) for all three baseline domains that were below the general national average (blue diamonds), the national average for low-fee ECD centres (purple squares), and Eastern Cape provincial

Yizani Sifunde learners moved from below national and provincial average scores at baseline to well above them at endline across all ELOM domains

(grey triangles) averages established by Thrive by Five/DataDrive 2030. By the endline, Yizani Sifunde average scores (red crosses) were above national and provincial averages for all domains and all age groups (50-59 and 60-69 months). The only exception is the 50-59 month age group in Emergent Literacy & Language, probably due to the small sample size (N=21). In the same domain, the 60-69 month age group showed a strong average score increase to above national average scores.

It is notable that the Yizani Sifunde sample average scores for the domain of Emergent Numeracy & Maths at endline were also above national and provincial averages. As noted in the methodology section above, this domain was not included in the baseline assessment. However, there is no reason to believe that Yizani Sifunde learners would have had a better average performance in this domain than in the other domains at baseline. Therefore, we can assume that the Yizani Sifunde intervention contributed to the high scores at the endline.

The Yizani Sifunde baseline and endline scores can also be compared to the score set by the ELOM for being 'on track' for age-appropriate learning (green circle). The baseline average scores for all domains and age groups are far below the 'on track' cut-off. At endline, the Yizani Sifunde average is either at or above the cut-off score for FMC&VMI (60-69 months), CEF (both age groups), ELL (60-69 months) and ENM (60-69 months).

## 4.2.1.2. Learners 'On Track'

This improvement in scores across domains is easier to interpret when using ELOM's standardised ranges for learners considered to be 'on track', 'falling behind' and 'falling far behind'. These performance ranges are already normed for each age group, allowing for the full cohort of 99 matched Yizani Sifunde learners to be combined across the 50-69 month age spectrum.

The following graphs compare the Yizani Sifunde baseline and endline distributions with the Eastern Cape provincial average distribution.

Figure 8: Yizani Sifunde Sample and Eastern Cape Standard - Fine Motor Coordination & Visual Motor Integration

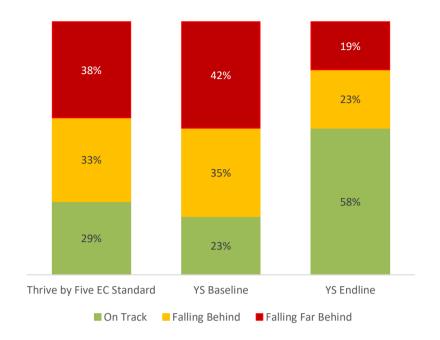


Figure 9: Yizani Sifunde Sample and Eastern Cape Standard - Cognition & Executive Functioning

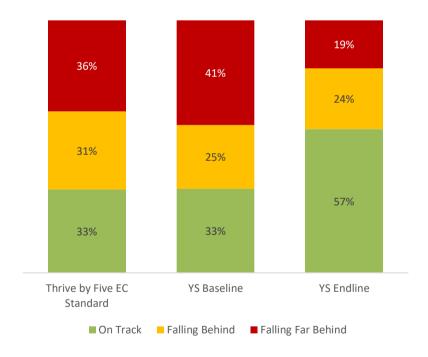


Figure 10: Yizani Sifunde Sample and Eastern Cape Standard - Emergent Literacy & Language

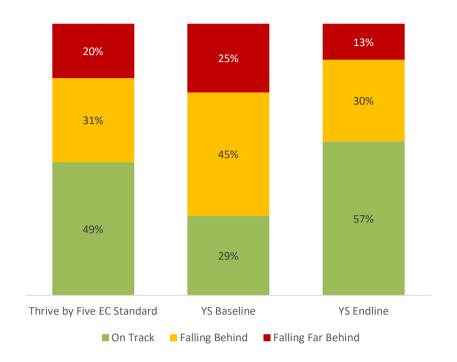
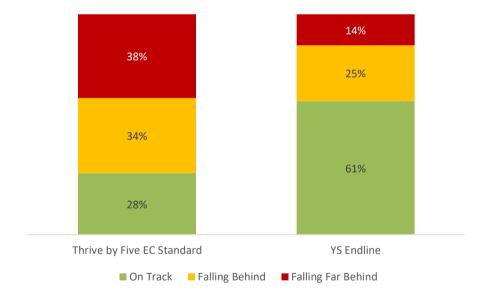


Figure 11: Yizani Sifunde Sample and Eastern Cape Standard - Emergent Numeracy & Maths<sup>12</sup>



 $<sup>^{12}</sup>$  ENM was not measured at baseline and so only the endline results are shown in relation to the provincial standard.

At baseline, the learners at the Yizani Sifunde ECD centres had a similar or worse distribution across performance bands than the Thrive by Five Eastern Cape average, which was to be expected given the low socio-economic home environment for the Yizani Sifunde sample compared to the full spectrum of socio-

At endline, the Yizani Sifunde sample of learners who were 'on track' was far above the provincial standard across all four domains.

economic environments included in the provincial standard. The percentage of learners 'on track' was the same (CEF) or lower (FMC&VMI and ELL), and the percentage of learners 'falling far behind' was higher than the provincial average distributions. At endline, by contrast, the Yizani Sifunde sample of learners who were 'on track' was far above the provincial standard across all four domains. For FMC&VMI and ENM, the Yizani Sifunde learners were twice as likely to be 'on track' than expected for the province.

In addition to increasing the percentage of learners 'on track', Yizani Sifunde also greatly decreased the percentage of learners 'falling far behind', halving the percentage for the Yizani Sifunde also greatly decreased the percentage of learners 'falling far behind'.

FMC&VMI and ENM domains. Across the three domains measured at baseline, a third or more of the learners who had scored 'far behind' at baseline had jumped to 'on track' by the endline, while a third moved up one level to 'falling behind', leaving one third still at 'far behind'. The Yizani Sifunde intervention was therefore effective at 'catching up' a third of learners who started the year at a severe disadvantage.

## 4.2.1.3. Average Score Improvement by Baseline Achievement

Educational interventions often have differential effects on learners, depending on the learner's levels of baseline achievement. Common patterns are for interventions to strengthen already good learners, or to support mid-level learners while leaving struggling learners behind and adding nothing for high-performing learners. Although the weakest learners have the most to gain from interventions, there is often a risk that interventions do not meet these learners where they are, and they are therefore not able to benefit. A truly transformative intervention that can address social structural inequalities as expressed in the classroom needs to primarily enable the lowest-achieving learners to improve and catch up with mid- and high-achieving learners.

An analysis of the Yizani Sifunde assessment data shows it is such a transformative intervention. As shown in Table 17, for all three measured domains the greatest improvement in ELOM points from baseline to endline is found among the learners whose baseline scores for that domain were within the 'falling far behind' range at baseline. The weakest learners improved the most.

Table 17: Average ELOM domain score improvement from baseline to endline, by level of baseline achievement for that domain

Domain-specific achievement at baseline	FMC&VMI	CEF	ELL
On Track	1,5	1,7	1,8
Falling Behind	2,5	3,1	2,0
Falling Far Behind	4,9	4,4	4,3

## 4.2.1.4. Project Effect Size

Finally, we represent the learning gain of the Yizani Sifunde intervention in terms of effect size, expressed in months of learning gains achieved. This calculation considers that learners would be expected to improve their learning outcomes simply by getting older (maturation) over the eight months between the baseline and endline assessments. The real effect of the intervention is the amount of learning that has occurred over and above the expected level of maturation. Table 18 shows these calculations as follows:

- Average change in ELOM points from baseline to endline: the average of the per learner increases in ELOM points from baseline to endline for each domain
- Maturation in ELOM points over 8 months: the monthly expected learning gain in ELOM points due to maturation as provided in the ELOM technical manual (see Technical Annex below), multiplied by the eight months of the Yizani Sifunde intervention
- Programme 'effect size' in ELOM points: the average change in ELOM points minus the maturation effect.
- Programme 'effect' in months: this translates the effect size in ELOM points back into months of learning, now representing the learning effect on top of the maturation effect. For example, for the FMC&VMI domain, the Yizani Sifunde intervention, on average, led to learners achieving six months of learning value on top of the eight months of maturation, meaning they made 14 months' worth of learning progress in an eight-month period. Considering all three measured domains, the Yizani Sifunde intervention delivered 12 to 14 months of learning in an eight-month period.

Table 18: Programme Effect in Months of Learning - full Yizani Sifunde learner sample (N=99)

Domain	Average change in ELOM points from baseline to endline	Maturation in ELOM points over 8 months	Programme 'effect size' in ELOM points	Programme 'effect' in months	Programme 'effect size' in SD	Programme 'effect size' in % of a SD
FMC&VMI	3,22	1,84	1,38	6,00	0,41	41%
CEF	3,16	2,00	1,16	4,64	0,27	27%
ELL	2,47	1,68	0,79	3,76	0,17	17%

The 'effect size' in SD (also shown as a per cent of a standard deviation) shows the size of the effect in a standardised way that can be compared with other programme evaluations. Following Van den Berg's (2021) interpretation of effect sizes for other early learning studies in South Africa (using Kraft 2020), the 17% effect size for ELL can be considered medium, while the effect sizes for CEF (27%) and especially for FMC&VMI (41%) can be considered very large. For comparison, van den Berg's analysis of five other South African interventions found effects of 19%, 40%, 40%, 78% and 82% and he emphasises that his sample is "not representative of the South African ECD programme population" because it is based on ECD centres and playgroups "where the practitioners had been rated as well-functioning by their parent organisations." (van den Berg 2021:10). In contrast, the Yizani Sifunde ECD sample includes the full spectrum of low to high-functioning centres in the intervention.

Importantly, when we look at the effect on the most vulnerable learners, i.e. those who were 'falling far behind' at baseline, we see an even larger effect. The sample sizes are small for this subgroup (FMC&VMI = 41, CEF = 41, ELL = 25) and so the findings are less reliable, but they show that the intervention is progressive in its ability to reduce learning inequalities. Adding the 'intervention effect in months' to the intervention period of eight months (with its expected normal maturation effect), the most vulnerable learners gained 17,5 to 21 months of learning in an eight-month period. This group also gained more in the ELL domain, compared to the more limited ELL effect for the overall sample. Effect sizes of over 0.50 SD are exceptionally high and compare with the most successful interventions reviewed by van den Berg (2021) in the Early Learning Programmes Outcomes Study, which achieved effect sizes of 0.78 and 0.82.

Table 19: Programme Effect in Months of Learning - learners 'falling far behind' at baseline for each domain (FMC&VMI = 41, CEF = 41, ELL = 25)

	Average					
	change in	Maturation	Programme			
	ELOM points	in ELOM	'effect size'	Programme	Programme	Programme
	from baseline	points over	in ELOM	'effect' in	'effect size'	'effect size'
Domain	to endline	8 months	points	months	in SD	in % of a SD
FMC&VMI	4,91	1,84	3,07	13,33	0,90	90%
		2.22	2.22		0.70	<b>-</b> 60/
CEF	4,39	2,00	2,39	9,57	0,56	56%
ELL	4,30	1,68	2,62	12,48	0,56	56%

When combined with the analysis above that shows a large increase in the proportion of learners achieving 'on track' performance across domains within the space of eight months, we can interpret these findings as showing that Yizani Sifunde created a high additional learning effect, despite the highly disadvantaged learning contexts, that was able to greatly reduce early learning backlogs and thereby reduce inequalities at the start of primary education.

<sup>&</sup>lt;sup>13</sup> See further discussion of our interpretation of effect sizes in Annex A.

## 4.2.2. **ELOM 6&7 Results**

Since the ELOM 6&7 assessments have not yet been standardised to national or provincial norms, or categorised into performance bands ('on track', etc.) at the time of writing, we describe these findings as absolute changes in scores across baseline and endline. As described in the methodology section, we included two items from the larger ELOM 6&7 tool in the assessment: Vocabulary (item 3) and Book Orientation & Word Concept (item 10).

On the Productive Vocabulary task, learners on average improved 16% from baseline to endline, with no strong differences between regions or between girls and boys. Since calculations of the maturation effect for ELOM 6&7 items are not yet available, it is impossible to say whether this is an intervention effect or simply a result of learners growing older.

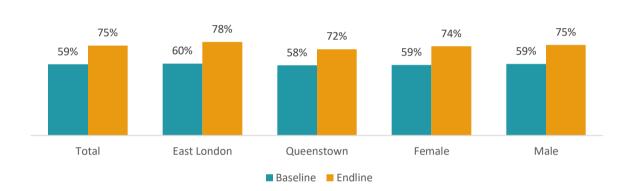


Figure 12: ELOM 6&7 - Productive Vocabulary by Region and Sex (average % correct responses)(N=99)

The baseline-to-endline differential for the Book Orientation items was larger and more strongly differentiated by region (Figure 13).



Figure 13: ELOM 6&7 - Book Orientation and Word Concept by Region and Sex (average % correct responses)(N=99)

While East London and Queenstown learners improved their book orientation scores by a similar amount (c. 22%) between baseline and endline, learners in East London started from a much lower base. By the endline, they had only barely caught up with the levels of knowledge achieved by Queenstown learners at the baseline. The reasons for this regional difference are unclear, as it may relate to differences in home environment or in pre-Yizani Sifunde ECD centre practices. We do not have home learning environment data that is matched to the learners assessed in the evaluation. Considering the broader sample of learners attending all Yizani Sifunde centres in the 2023 cohort, home learning environment data was collected by Story Sparkers in March 2023 and found that homes in East London were more likely to "never" read to children (12 out of 54, i.e. 22%) than in Queenstown (6 out of 69, i.e. 9%). However, the same data collection exercise found that homes in East London were more likely to have any children's books (45%) than in Queenstown (24%). In most cases, homes in both areas only owned 1-5 children's books if they owned any. On average, boys were less familiar with books at baseline than girls, and the differential remained in place, albeit slightly smaller, at the endline.

The baseline results reflect the limited opportunities for children to handle and use books and a lack of modelling of reading by both caregivers and teachers, yielding a very limited knowledge of concepts about print and how written language works. Children are asked things like 'show me the front page of the book'; 'where do I read?'; 'where do I read next', which shows if children have been read to and understand that spoken words are linked to the black marks on the page and that we read from left to right. Since even a 'non-reader' who has some exposure to books would know this, the low baseline results show low exposure to books and reading for most children before exposure to the Yizani Sifunde intervention. The intervention's increased exposure to books, both in centres and in the home, has clearly had a positive effect on basic book concepts. As discussed above, however, children's independent use of books at centres was one of the weakest elements of the intervention.

## 4.2.3. Task Orientation

In addition to assessing learners completing formal learning tasks, the ELOM tool also asks the trained ELOM assessors to rate the learner's level of concentration. The ability to

concentrate on a task is an important skill in preparation for formal schooling. While not included in the standard scoring of ELOM results, we consider this indicator as an additional informal dimension of intervention impact. Since the full ELOM Socio-Economic Functioning (SEF) tool was

The percentage of learners with satisfactory concentration scores almost doubled from baseline to endline.

not included in the assessment, this question acts as a partial proxy. 14

<sup>&</sup>lt;sup>14</sup> It is a very partial proxy only, since the SEF measures a learner's 1. Social relations with peers and adults: including the ability to cooperate without prompting; to work with peers in group activities; to resolve problems without aggression; to seek support, assistance and information from familiar adults. 2. Emotional readiness for school: including the ability to communicate with adults; appropriate expression of needs and feelings; willingness to do things without help; ability to adjust to changes in class or home routine; confidence

As shown in Figure 14, the percentage of learners with satisfactory concentration scores almost doubled from baseline to endline across the entire Yizani Sifunde sample. There was a strong regional effect for this indicator, with learners in Queenstown being much less concentrated at baseline, but then almost tripling their levels of concentration and more than catching up with the East London learners by the endline. Some improvement is to be expected as part of the normal maturation effect over eight months, but the Queenstown effect, especially compared with the East London effect, is likely to be much higher than maturation. Part of the low baseline task orientation levels in Queenstown may have been the lack of secluded assessment spaces in the smaller Queenstown centres, increasing distractions during the assessment, but the learners were able to concentrate better at endline despite this environment not having changed.



Figure 14: Percentage of Children Receiving Satisfactory Concentration Scores from Assessors (N=99)

There was virtually no difference in concentration levels for boys and girls, with both gaining equally from baseline to endline. This is a positive finding, given that many interventions at the ECD level show greater improvements for girls than boys.

While the Yizani Sifunde intervention was not explicitly designed to improve task orientation, the importance of this outcome on the intended language and literacy learning impacts can be seen when analysing determinants of learner ELOM results (section 4.3.4. below). Task orientation is one of the strongest predictors for learning outcomes in the multi-variate/regression analyses.

# 4.3. Impact of Context Factors on Learner Outcomes

Building on the analysis of learner literacy outcomes described so far, the evaluation set out to consider which factors contribute to, mediate and moderate child literacy and language outcomes. We explore several univariate interactions (with other interventions, practitioner/learner ratios, learner attendance), as well as multivariate interactions.

in new experiences; and initiating activities. Furthermore, the SEF tool captures learner's overall levels of concentration and self-regulation based on practitioner reports, while the task orientation question only measures this for the single point in time of the assessment as observed by the assessor.

## 4.3.1. Yizani Sifunde interaction with other interventions

The Yizani Sifunde intervention is not only a collaboration between three NGOs and two implementing partners; it also sees itself as engaging more widely with the wider ECD support ecosystem. Most of the ECD centres included in the current evaluation had previously received support from other interventions and 18 of the 22 were concurrently involved in other support programmes during 2023. The most common was SmartStart, in which half the centres (11) were already participating at baseline, ten of which were still participating at endline. Other parallel interventions that were present in one or two centres include Takalani Sesame, Loaves and Fishes, and Lunchbox Fund. The only public school included in the sample also received support from several maths programmes: MathsUp, Think Equal and Six Bricks.

The presence of other interventions is always an important consideration in terms of attributing change in learner outcomes to a specific set of activities. In this case, the parallel interventions were already present in almost all the centres at the time of the

No ECD context is a blank slate, and all education interventions operate in a complex environment of overlapping influences.

baseline assessment, suggesting that any centre-level effects and impacts on practitioner practice would already be captured in the baseline practitioner survey. For learners who had been present at the centre for some time before the baseline, the baseline assessment measures the effects of the previously present interventions, and the change between baseline and endline measures the additional impact of Yizani Sifunde. For learners joining the centres shortly before the baseline, the change between baseline and endline measures the effects of the combination of all interventions present at the centre. This multi-intervention reality does not minimise the insights to be gained about the Yizani Sifunde intervention. It is simply a reality that no ECD context is a blank slate, and all education interventions operate in a complex environment of overlapping influences.

Given that SmartStart is a well-established programme that includes explicit literacy elements (while most of the other interventions at ECD centres are more child-welfare oriented<sup>15</sup>), and given that it was present in about half of the assessed centres (with 40 learners in SmartStart-exposed classes and 59 in non-exposed classes), we have explored whether there is a difference in learner outcomes by SmartStart exposure. The aim is not to assess SmartStart specifically but to show the efficacy of Yizani Sifunde within a multi-intervention context. As Figure 1 shows, learners at centres with SmartStart performed somewhat better at baseline (with higher % being 'on track') across all domains. At endline, all learners have improved, with the centres without SmartStart having caught up with SmartStart centres in the CEF and ELL domains and even overtaking them for the FMC&VMI domain.

Overall, the learning gains (measured as the increase in the "on track" category) between baseline and endline are largely similar between the children exposed to SmartStart and those not exposed to SmartStart - except for the FMC & VMI domain where the gains

<sup>&</sup>lt;sup>15</sup> The exception are interventions at Grade R level in primary schools (one of which was included in the evaluation sample), which are academic literacy and numeracy interventions.

appear to be higher for children not exposed to SmartStart. This suggests that the Little Stars programme, combined with the rest of the Yizani Sifunde intervention, achieves comparable learner outcomes to more comprehensive quality improvement programmes like Smartstart, and in classrooms where practitioners are using the two programmes, there is no reduced efficacy.

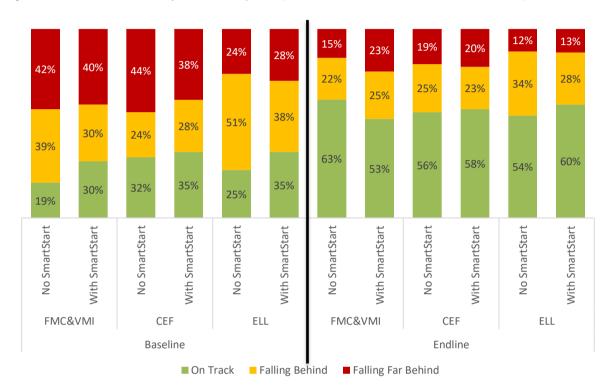


Figure 15: ELOM Domain results by SmartStart exposure (N=99; 40 without SmartStart, 59 with SmartStart)

Given that interventions often overlap in the same centres, it is recommended that future iterations of Yizani Sifunde, and indeed any intervention, explore ways to optimise the implementation of intervention activities in conjunction with other pre-existing programmes.

## 4.3.2. Practitioner Numbers and Ratios

The sample of centres included in this study has high levels of variation (between centres) and high levels of variability (over time at a centre) in practitioner numbers and learner-to-practitioner ratios. High levels of staff turnover are common in the ECD sector, posing a structural challenge for any intervention. We therefore explore whether the Yizani Sifunde intervention is effective even in (the very common) contexts of highly variable learner-to-practitioner ratios.

Over half (14 of 22) of the centres had some change in practitioner numbers between baseline and endline, either increasing or reducing the number of employed practitioners. Overall, the average number of practitioners per centre remained stable at around 2,8.

Similarly, the average learner-to-practitioner ratio remained stable from baseline to endline at around 17:1. This average, however, hides great variation in the ratio from 6:1 at the

smallest centres to 40:1 in the public school's Grade RR classes at baseline (reduced to 27:1 at endline) to 55:1 at endline at one of the private centres that simultaneously grew in enrolment and lost a practitioner between baseline and endline. In 8 of the 22 centres, the learner-to-practitioner ratio changed significantly (increasing or decreasing by over 50%) between baseline and endline due to either large changes in learner enrolment or loss of practitioners or both.

Given the importance of learner-to-practitioner ratios in predicting learner outcomes in studies of foundation phase classes (Köhler 2022), we looked at whether the 11 centres (46 learners) with high learner-to-practitioner ratios (over 15:1 at either baseline, endline or both) had different learner outcome patterns than the 10 centres (33 learners) with lower (less than 15:1) ratios. For this analysis we have excluded the learners who attended the Grade R class of the primary school, since the implementation conditions there are so different from other centres. The assumption is that centres with lower ratios should be able to pay more attention to each learner and therefore have better results.

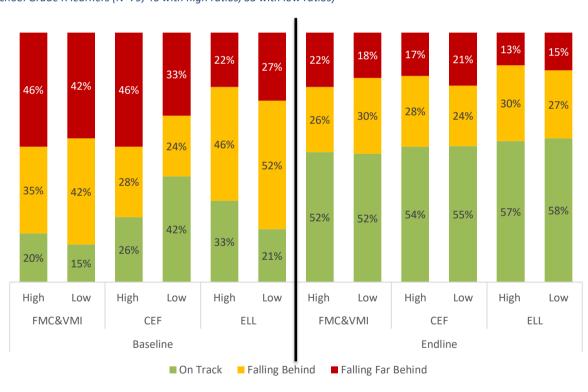


Figure 16: ELOM domain results for learners at centres with high and low learner-to-practitioner ratios, excluding primary school Grade R learners (N=79, 46 with high ratios, 33 with low ratios)

In contrast to this expectation, however, low-ratio centres performed slightly worse in FMC&VMI and ELL at baseline, but better in CEF. It is likely that this effect is less about the learner-to-practitioner ratio and more that these are smaller and possibly overall less resourced centres. The important finding is that by the endline, both high and low-ratio centres had achieved equivalent levels of 'on track' learners for CEF and ELL, although low-ratio (or possibly smaller) centres remain slightly behind in FMC&VMI. We interpret this to mean that interventions such as Yizani Sifunde, which focus on adequately training and

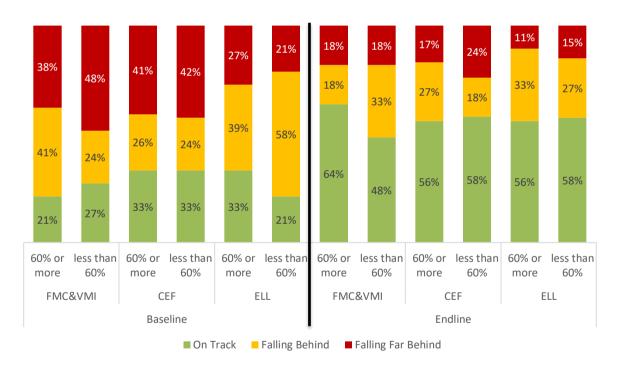
resourcing practitioners, can have a positive effect even when practitioners are working in contexts with high learner ratios.

## 4.3.3. Learner Attendance

Highly variable learner attendance is another common structural factor in the ECD sector, once again posing a challenge to interventions across the sector. The Interventions such as Yizani Sifunde, which focus on adequately training and resourcing practitioners, can have a positive effect even when practitioners are working in contexts with high learner ratios

assumption is that intervention efficacy will be lower for learners who attend the centre less frequently because they will have received less intervention 'dosage'. To explore this, we matched each learner's ELOM results to the learner attendance records kept by the Yizani Sifunde Story Sparkers at each centre visit where books were distributed to learners. We calculated the percentage of visits at which that learner was present. <sup>16</sup> One-third (33) of our matched sample had attended less than 60% of Story Sparker sessions, and two-thirds (66) had attended 60% or more of the sessions. <sup>17</sup>

Figure 17: ELOM Domain results for learners with high and low attendance records (N=99, 66 at 60% or more attendance, 33 at less than 60% attendance)



<sup>&</sup>lt;sup>16</sup> Story Sparkers visited each centre once per week in most cases. Their learner attendance records are therefore not a full reflection of each learner's attendance at the centre, but they do reflect attendance at an important element of the Yizani Sifunde project, namely the Story Sparker sessions and book distributions. Furthermore, since not all participating ECD centres keep consistent daily attendance records, and the existing records are not digitized, the Story Sparker records collected as part of Yizani Sifunde' internal monitoring data are the best source of attendance data available to this evaluation.

<sup>&</sup>lt;sup>17</sup> The 60% cut-off point was chosen based on the distribution of attendance for the matched sample so that there was a sufficiently large number of learners in both groups being compared.

We see in Figure 16 that there was no clear trend across domains at baseline, with low-attendance learners more 'on track' but also more 'far behind' in FMC&VMI, but less 'on track' and also less 'far behind' in ELL,

# Yizani Sifunde even had a positive impact on learners who did not attend ECD centres consistently

and no difference in CEF. This shows that learners with higher and lower attendance did not start with appreciably different levels of overall learning. At the endline, we see that both low and high-attendance learners achieved similarly high levels of 'on track' learning for CEF and ELL. Low-attendance learners made less progress in Fine Motor Control & Visual Motor Integration. Overall, these findings suggest that Yizani Sifunde even had a positive impact on on learners who did not attend ECD centres consistently.

# 4.3.4. Multi-variate interactions: Regression Analysis Results

In addition to the univariate interactions discussed in the sections above, we look at multivariate contributions to explain the learner outcome data. This section seeks to, at least partially, address the evaluation question: "Can we ascertain which factors contribute to, mediate and moderate child language outcomes?"

As above we only include learners in the matched cohort (N=99) in this analysis.

The learner outcomes can be seen through a variety of lenses, representing different aspects of intervention impact:

- 1. An aggregate ELOM 4&5 endline score: this score combines the learner's raw scores for all four ELOM domains measured at endline (FMC&VMI + ENM + CEF + ELL), providing a simple overall 'achievement' score that is a continuous variable. Given that our assessment tools do not include all ELOM 4&5 domains, this aggregate cannot be compared with aggregate ELOM scores in other studies. This aggregate score does not include the ELOM 6&7 items.
- 2. **ELOM 4&5 domain endline scores**: the analyses described above show that the distinct ELOM domains at times follow different patterns. This suggests that they may also have distinct relationships with contributing factors. We explore whether performance in each domain at endline (FMC&VMI (domain 2), CEF (domain 4) and ELL (domain 5)) is determined by different independent variables, and especially whether Emergent Literacy and Language (ELL) performance is related or different to performance in the underlying cognitive skills captured by the other two domains. The endline scores per domain are continuous variables.
- 3. **Being 'on' or 'off track' at endline** (ELOM 4&5 by domain): finally, for each domain we created a dichotomous variable showing whether the learner is 'on' or 'off' track (the latter combines 'falling behind' and 'falling far behind'. This represents the high-level goal of achieving 'readiness' for further education and schooling.

We tested these dependent variables against a range of independent variables to ascertain which variables have significant effects on the dependent variables. Some variables cover

context factors related to centre and learner backgrounds that are external to the intervention but may confound the effects of the intervention.

At centre level, these include:

- region (East London / Queenstown);
- centre learner-to-practitioner ratio;
- centre fee level (which provides information on a centre's level of resourcing but also acts as a proxy for learner's household socio-economic level);
- average learner attendance rate per centre

Learner-level context variables include:

- learner sex (male / female);
- learner age in months at endline (continuous variable between 58 and 69)
- a learner's z-score as a measure of malnutrition 18
- individual learner's average attendance rate
- a learner's task orientation level at endline (poor/satisfactory concentration)

We then include independent variables relating to some of the intervention's key inputs and outputs. These include:

- the number of books received by the learner (book ownership),
- the number of Story Sparker sessions attended by the learner,
- the presence of Yizani Sifunde-provided books and materials at the ECD at the endline,
- whether centres have 'print rich walls' (e.g. posters and other literacy materials on display) at the endline, and
- An overall assessment of implementation quality/programme fidelity (normal and sub-optimal) based on Yizani Sifunde staff judgement19

It was not possible to include variables representing other key elements of the Theory of Change, e.g. practitioner training, changes in classroom practices, caregiver engagement and community engagement. Ideally, these variables would have included the following:

- Teacher variables:
  - o attendance at training
  - o changes in classroom practice
  - quality of teaching
- Home learning environment variables:
  - o caregiver exposure to Yizani Sifunde parent workshops
  - resources (books and toys)

<sup>&</sup>lt;sup>18</sup> This analysis uses z-scores as a continuous variable, but since only three learners were classified as moderately stunted there is not very large variation in this score, which may explain its lack of significance throughout the analysis.

<sup>&</sup>lt;sup>19</sup> Yizani Sifunde M&E staff categorized centres into 'normal' and 'sub-optimal' implementation fidelity. 'Sub-optimal' centres had lower practitioner commitment, low practitioner training attendance or high practitioner turnover during the intervention period. Other centres faced significant infrastructure challenges and one was logistically challenging for the Story Sparker to reach and so received a lower dosage of visits.

- o literacy activities with children
- o time spent with children
- exposure to community reading clubs

In some cases, this data could not be included in the regression because it is not linked to assessed learners. For example, as mentioned above, while there is data on which centres held parent workshops, the parent attendance information is not linked to learner names. While Yizani Sifunde Story Sparkers collected data on the home learning environment for some learners in the 2023 centre cohort, not enough of the learners sampled in the evaluation had linked data. For other indicators, there is insufficient variation to enable analysis. This is the case for practitioner training, since all sampled centres had practitioners who attended 5-7 of the 7 training sessions, and classroom practices relating to the reading of storybooks, since our practitioner survey shows that virtually all practitioners and centres had very high levels of storybook use. Finally, even where there is data, we must be aware of its limitations. While we have included a variable for the number of books the child received to take home as a proxy for materials availability at home, this does not give us reliable information about the extent to which these books are used at home.

There are further caveats about the data that was tested for inclusion in the regression analysis. When we tested for correlations between independent variables, we found that average centre attendance and individual learner attendance are significantly correlated. Individual attendance is also correlated with the number of books received (p-value <0.01) which, in turn, is correlated with the number of Story Sparker sessions the learner attended. When tested against each other, the number of books received (book ownership) was more powerful than the number of Story Sparker sessions attended, so the latter was removed from the analysis. The centre's average attendance rate is correlated with learner age in months (p-value <0.05). Finally, the dichotomous variable for implementation fidelity ('normal' or 'suboptimal') was highly correlated with the presence of Yizani Sifunde-provided books and materials at the centre at endline, and so was excluded from the analysis. Variables with high levels of collinearity cannot be used together in a regression analysis as overlapping variables obscure measures for impact and significance.

For each independent variable listed above, all dependent variables were initially included in the regression (excluding those with high correlations). The variables that were not significant (with a high p-value > 0.7) were then removed from the analysis one by one to improve the f-value (a measure which shows whether a group of variables are jointly significant) until the significant levels of the remaining variables no longer changed. The results in Annex A below show only those variables remaining in the analysis when an acceptable f-value is reached. All variables not reported can be assumed to be not significant above the p<0.05 level.<sup>20</sup>

<sup>&</sup>lt;sup>20</sup> Variables significant at 0.1 level are not reported on.

### Regression results for aggregate ELOM 4&5 performance (FMI&VMI + ENM + CEF + ELL)

The learner's level of task orientation is the most highly significant variable in explaining

aggregate ELOM performance in the Yizani Sifunde sample (p<0.01). Learners with satisfactory concentration are more likely to achieve well than those with poor concentration. The number of books a learner received to take home (book ownership) is also significant at the 0.05 level.

The learner's level of task orientation is the most highly significant variable in explaining aggregate ELOM performance in the Yizani Sifunde sample

Unsurprisingly, a learner's age in months is a significant predictor (p<0.05) of the aggregate ELOM score since the score was not adjusted for maturation effects.

### Regression results for ELOM 4&5 performance by domain

For each domain, we compare the variables that explain an increase in the ELOM score for that domain (continuous variable), on the one hand, and the variables that explain whether a learner is 'on track' for school-based learning or not (dichotomous variable).

When looking at the ELOM score for **Fine Motor Coordination & Visual Motor Integration**, we see once again that child age is highly significant (p<0.01), as is region with Queenstown learners performing significantly worse than learners in East London. Task orientation is not significant for this domain. When considering whether a learner is 'on track', region remains significant (p<0.05). Age is no longer significant since this is factored into the 'on track' score.

For the continuous ELOM score in the domain of **Cognition & Executive Function**, region remains significant (Queenstown continues to perform worse) and task orientation is once again significant (all p<0.05). The book ownership (the number of books a learner has received during the intervention) is also significant at the 0.05 level. Age in months is not significant, despite maturation not being factored into the score. For the 'on track' variable, only region (p<0.05) and book ownership (p<0.01) remain significant.

For **Early Literacy & Language**, the only significant variable is task orientation (satisfactory concentration) (p<0.01). For the dichotomous 'on track' variable, task orientation (p<0.01) remains significant.

For the **Emergent Numeracy & Maths** domain, we only analysed the dichotomous 'on track' variable. This showed that only book ownership was a significant predictor (p<0.01) for being 'on track' in numeracy.

In summary, and given the methodological caveats listed above, these regression results give us the following important insights:

 Book ownership is an important predictor of early learning achievement across several domains. It predicts overall learning, cognitive executive functioning and emergent numeracy. It is important to note that all learners in the evaluation sample had received at least some books (the smallest number received is 12) so the regression finding on book ownership compares learners with fewer versus

# Book ownership is an important predictor of early learning achievement

more books rather than learners with no versus some books. If compared with learners with no books, the effects are likely to be even stronger.

Research has linked book ownership by preschool children with improved learning outcomes through the following mechanisms (Huston 2023):

- promoting verbal interaction with adults, thus building oral language development
- improving children's vocabulary, including receptive and expressive vocabulary
- improving children's ability to manage their attention
- building general knowledge

The book ownership variable may therefore be leading to improved learning outcomes through the task orientation (attention) variable as well as directly through the oral language and vocabulary elements of the ELOM assessments. Qualitative evidence, from the evaluation case studies and from Story Sparker and practitioner accounts, confirms that most learners were using their books at home and pushing their caregivers to read with them regularly, reinforcing the relevance of these pathways to learning.

This finding suggests that ECD improvement programmes should include an element of book distribution to learners and that larger numbers of books are better than fewer books.

The regression results should not be interpreted to mean that other elements of Yizani Sifunde's multi-dimensional design are not also effective or that book ownership leads to increased learning outcomes without scaffolding through a support programme for practitioners, learners and caregivers. As described above, it is, in fact, the consistent success of the training provision and uptake of classroom practices that make it difficult to assess these effects through statistical methods, since there is not enough variation in the endline data and there is no control group. Although we explored the quality of teaching and classroom practices in the case study sites, the sites were selected to represent centres with strong intervention uptake and so there was consistently strong practice (limited variability) here as well. The efficacy of caregiver and community-level elements of the intervention could also not be statistically explored. For consideration of evidence concerning these elements of the intervention design, see report section 5. Conclusions.

Task orientation is another very important predictor of good learning outcomes. It is significantly associated with improvements in overall performance and the domains of CEF and ELL. The finding that the Yizani Sifunde intervention led to large improvements in task orientation (described in <a href="section 4.2.3">section 4.2.3</a>. above) takes on greater meaning due to the clear relationship between task orientation and overall performance. The implication is that future Theories of Change for ECD improvement interventions should include improvements in task orientation as an explicit intermediate step towards 'on track'

learning outcomes, with a clear understanding of how classroom routines contribute to building concentration and confidence. The listening exercises included in the Little Stars routines are an example of this.

- The learners in the Queenstown region performed worse than in the East London region, even when holding constant variables such as learner-to-practitioner ratios and socio-economic status (proxied by fee levels). This suggests that the generally more rural environment has a range of disadvantaging effects on learners beyond these measured centre characteristics. Given the importance of task orientation for overall performance, Queenstown's regional difference in task orientation levels at baseline is notable, but this disadvantage was more than overcome by the endline (see <a href="Section 4.2.3">Section 4.2.3</a>.). While not included in the regression analysis, it is also noticeable that Queenstown learners scored much higher than East London learners with regard to the ELOM 6&7 Book Orientation item, which does not accord with what might be expected of a more rural environment (<a href="Section 4.2.2">Section 4.2.2</a>.). The reasons for this regional difference should therefore be explored more fully.
- It is important to note which variables were found to be not statistically significant in explaining differences in learning outcomes. In terms of context factors, at the learner level, sex had no significant effect. Because of the lack of linked home environment data, we could not test the effects of individualised socio-economic status but when using centre fee levels as a proxy, this was not significant above the 0.1 level. At centre level, learner-to-practitioner ratios were not significant. Attendance rates, whether as an average centre rate or an individual learner rate, are a proxy for intervention exposure dosage and so might be expected to have an effect on learning outcomes, but these were found to be not significant. Z-scores, measuring stunting effects, were probably found not to have a significant effect due to limited variation in the sample.

These findings show that the Yizani Sifunde intervention has an impact irrespective of major pre-existing inequalities in South African society such as gender and socio-economic background (while noting that all centres included in the Yizani Sifunde intervention serve low-income learners, with variation between R30 and R350 fees per month). The intervention is able to raise the majority of learners up from a disadvantaged starting point to an 'on track' learning achievement in eight months irrespective of their background. Furthermore, the intervention is effective even within the institutional constraints of ECD centres in poor communities, where high learner/practitioner ratios and varying levels of learner attendance are common.

# 5. Conclusions

In conclusion, we summarise the quantitative evaluation findings in terms of impacts and outcomes.

#### **Impact**

At the level of **overarching impact** ("children are confident in their oral language and excited about stories and reading") the evaluation finds that:

- Learners exposed to the Yizani Sifunde intervention greatly improved their early literacy skills in absolute terms and in relation to national and provincial average scores. At baseline, the Yizani Sifunde learner sample had average ELOM scores for all three measured domains (Fine Motor Control & Visual Motor Integration, Cognition & Executive Functioning; Emergent Literacy & Language) that were below the national and Eastern Cape provincial averages established by Thrive by Five. By the endline, Yizani Sifunde average scores were above national and provincial averages.
- The Yizani Sifunde intervention strengthened underlying learning skills. While designed to target emergent language & literacy, the Yizani Sifunde intervention has also positively impacted the underlying learning skills of Fine Motor Coordination & Visual Motor Integration (FMC&VMI) and Cognition & Executive Functioning (CEF). Yizani Sifunde also improved learners' ability to concentrate on a task (measured as 'task orientation' within the ELOM 4&5 tool). Improvements in these underlying skills may explain how the intervention resulted in a 'spill-over effect' of positive learning outcomes in Emergent Numeracy & Mathematics. Emergent numeracy was not measured at baseline, but at endline, the Yizani Sifunde learner sample achieved scores above the national and provincial average, with 60% of learners considered 'on track' for basic numeracy.
- The Yizani Sifunde learning gains represent 3,8 to 6 months of learning beyond average maturation effects. When taking into consideration the average 'maturation effect' (the expected skills improvement due to eight additional months of ageing), the average improvements in ELOM scores between baseline and endline represent an additional 3,76 months (for Emergent Literacy & Language), 4,64 months (for Cognitive & Executive Functioning) and 6 months (for Fine Motor Coordination & Visual Motor Integration) of learning. This means that Yizani Sifunde delivered 12 to 14 months' worth of learning in an eight-month period. This compares well with other early learning programmes that have been assessed using ELOM tools and can be considered a 'medium to high' effect size (0,17 to 0,41 standard deviations, depending on the ELOM 4&5 domain).
- Yizani Sifunde is a progressive intervention; it was especially effective at improving
  the performance of low-performing learners. In addition to increasing the percentage
  of learners 'on track', Yizani Sifunde also greatly decreased the percentage of learners
  'falling far behind.' Learners who started out 'far behind' at baseline achieved the
  largest learning gains of an additional 9,5 to 13 months of learning on top of maturation

- effects. This means that the intervention was effective at 'catching up' learners who started the year at a severe disadvantage.
- When using multivariate analyses (regressions) to consider what factors contribute to, mediate, and moderate child language outcomes, we find that learner book ownership is a significant predictive variable across aggregate ELOM performance and ELOM 4&5 domains cognitive & executive functioning (CEF) and emergent numeracy & maths (ENM). This finding should not be interpreted to mean that other elements of Yizani Sifunde's multi-dimensional design, such as a structured learning programme, regular practitioner training and story modelling, caregiver engagements and community engagements, are not also effective; it is just that these elements could not be tested in the same way as book distribution due to the lack of linked and varied data. A learner's level of concentration ('task orientation') is also a strong predictor of ELOM outcomes. It is significantly associated with improvements in overall performance and the domains of CEF and ELL.

#### **Outcomes**

In terms of the intended intermediate outcomes, the evaluation did not cover the **community level** in detail, although the qualitative evaluation report includes some insights on reading clubs (see <u>Annex B</u> and Zhou & Shilakoe 2024).

Regarding intervention effects at **home**, while the evaluation did not independently verify the home learning environment data collected by Yizani Sifunde, there is sound evidence that the intervention was successful in increasing the number of engaging age- and language-appropriate books in homes, increasing caregivers reading the books with their children, and increasing children's independent interactions with books in the home. Despite parental workshops being one of the more challenging elements of the intervention design for practitioners and Story Sparkers, there is evidence from this evaluation that Yizani Sifunde was successful in its aim to create stronger links between the home environment and ECD centres, with caregivers more likely to ask practitioners for advice on how to support their children's learning at home.

The evaluation found strong outcomes at the **ECD Centre and Practitioner levels**. It confirms high levels of fidelity and quality in the implementation of Yizani Sifunde's activities to support practitioners, including the Little Stars training and materials distribution and regular centre visits by Story Sparkers.

- The intervention successfully increased the availability of learning resources in ECD centres. Evaluator observations and practitioner interviews at baseline and endline confirmed that previously under-resourced centres received and regularly used a wide range of literacy materials.
- Practitioners reported much greater confidence in doing important language and literacy activities, suggesting that classroom practice quality improved. One weakness in intervention outcomes at most ECD centres is that learners were rarely encouraged to engage with books independently.

 While centre management practices were not explicitly targeted by the intervention, the evaluation found increased centre manager support for practitioners in literacy practices, including increased participation in professional learning communities (PLCs).

The Yizani Sifunde evaluation results show that practitioner training based on structured learning materials, delivered by local NGO partners, supported through community-based young people, and combined with the provision of high-quality books in the community's language has great potential to strengthen curriculum delivery and the quality of early language and literacy teaching and learning in under-resourced ECD classrooms.

Such a multi-dimensional intervention can:

- Almost double the percentage of lower socio-economic learners who are 'on track' for early learning
- More than halve the percentage of lower socio-economic learners who are 'falling far behind' for early learning
- Enable more than a third of learners who were 'falling far behind' to catch up to the extent of being 'on track'
- Achieve these shifts in 'school readiness' in less than one year, despite a low starting point in terms of ECD practitioner qualifications and practice, centres with limited resources, and the lack of an enabling home environment for most learners.

This evaluation of the Yizani Sifunde intervention reveals significant strides towards mitigating early learning backlogs among isiXhosa-speaking children in rural and peri-urban areas of the Eastern Cape. Given that the context of low-income communities and underresourced ECD centres is similar in most other parts of South Africa, the results achieved by the intervention are likely to be transferable to other areas. By fostering a culture of reading and enhancing literacy skills at the ECD level, the initiative not only prepares children for formal schooling but also contributes to long-term educational equity and efficiency. The mixed-methodology approach employed in studying 22 ECD centres indicates noticeable improvements in classroom practices and learner literacy, underscoring the intervention's potential for scalability and sustainability. The Yizani Sifunde intervention shows the power of collaborative, multi-dimensional community-based interventions to increase equity in early childhood education outcomes.

# 6. Recommendations

The following recommendations combine insights from the qualitative and quantitative elements of the evaluation.

- 1. Multi-dimensional 'cocktail' of intervention elements: The Yizani Sifunde intervention has shown the value and efficacy for the ECD sector of combining the production and distribution of high-quality home language literacy materials for both ECD centres and homes, with a structured teaching programme (including LTSM and practitioner training) and regular in-centre practitioner support in the form of local youth trained in literacy pedagogies. This 'cocktail' of integrated intervention elements mirrors the growing consensus around literacy interventions in the Foundation Phase (LTSM, teacher training and teacher coaching). It is recommended that more ECD interventions be designed with a combination of these elements.
- 2. **Multi-agency collaborative process lessons:** a multi-dimensional intervention requires effective partnerships. In addition to modelling the value of this multi-dimensional intervention design, the Yizani Sifunde consortium modelled the internal processes required to enable a complex multi-agency intervention to be effective, including proactive partnership management processes and collaborative internal monitoring systems. It is recommended that these process and systems lessons be documented and that donors and NGOs in the education sector support and adopt similar practices to enable more collaborative interventions.
- 3. **Operational improvements:** the evaluation found the following elements of the Yizani Sifunde design to require further adaptation:
  - Encouraging ECD practitioners to support learners to use books independently at centres
  - Providing comfortable reading furniture such as mats and cushions to ECD
    Centres to accompany the book storage solutions in order to make reading
    corners attractive for children, or supporting centres to make or source their own
    child-friendly reading furnishings
  - Supporting centre managers to lead and participate in professional learning communities for and with other practitioners as a means of increasing sustainability in centre teaching practices in contexts of high practitioner turnover
  - Experimenting with revised strategies to increase caregiver workshop
    participation, including different times, locations, food, transport support and
    longer periods of time for repeated caregiver engagement. See also case study
    report for further recommendations.
  - Innovating further with **community reading clubs.** See case study report for recommendations.

- 4. **Monitoring & Evaluation:** Yizani Sifunde's internal monitoring systems, including extensive data collection and integrated data monitoring, are already of a very high standard and should be documented as best practice, possibly with training options for other NGOs in the ECD and foundational education sector. The data challenges which remain to be improved in future iterations of similar interventions are:
  - Tracking caregiver workshop attendance and other forms of caregiver engagement in ways that allow for linkage of this data with learners and therefore inclusion in analyses of learning outcomes;
  - Prioritising the integration of the Socio-Emotional Functioning scale and the Home Learning Environment tools from the ELOM suite of tools into the independent evaluation so that these dimensions can be included in the analysis of learning outcomes. This requires additional time for the evaluation in each centre, which impacts the overall budget. Considerations of the trade-offs between time/cost and analysis insight on these dimensions should be an explicit part of an evaluation's initial planning stage.

The areas where data generation and linking challenges were found are mostly related to caregivers and the home environment, both of which are known to be challenging in terms of access and data generation costs. Various attempts were made by Yizani Sifunde and the evaluators to address these challenges, as have other studies, so further experimentation can build on the existing lessons learned.

- 5. **Replication**: Since the intervention has demonstrated significant success in improving early child learning outcomes, considerations should be made regarding replicating the intervention in other regions. This would involve adaptations needed for different communities and languages.
- 6. **Scaling:** given the large amount of monitoring and evaluation data already available about the intervention, a desktop study with a facilitated stakeholder consultation process should be considered to assess the scalability of different aspects of the intervention design, including costs and institutional structures required for application at scale.

# 7. References

Abdullah, A. & Doucouliagos, H. & Manning, E. (2013). Does education reduce income inequality? A meta-regression analysis. Journal of Economic Surveys. 29. 10.1111/joes.12056.

Ayob, Zainab, Christopher, Chantal, & Naidoo, Deshini. (2021). Caregivers' Perception of their Role in Early Childhood Development and Stimulation Programmes in the Early Childhood Development Phase within a Sub-Saharan African Context: An Integrative Review. South African Journal of Occupational Therapy, 51(3), 84-92. <a href="https://dx.doi.org/10.17159/2310-3833/2021/vol51n3a10">https://dx.doi.org/10.17159/2310-3833/2021/vol51n3a10</a>

Cain, K., S. O'Carroll, J. Oakhill, D. Klop & A. Smith (2023). Exploring the impact of a story-based teacher training programme on language and early literacy in 4- and 5-year-olds: A description of the isiXhosa children in the study sample. Wordworks: Cape Town.

Cohen, J. 1988. Statistical power analysis for the behavioral sciences. Hillsdale, NJ: Lawrence Erlbaum.

Dawes, A., L. Biersteker, E. Girdwood, M. Snelling & J. Horler. (2020a). Early Learning Programme Outcomes Study Technical Report. Claremont Cape Town: Innovation Edge & Ilifa Labantwana.

Dawes, A., L. Biersteker, E. Girdwood & M. Snelling. (2020b). Early Learning Outcomes Measure. Technical Manual, 3rd edition (update of 2016 edition). DataDrive2030

Dawes, A., L. Biersteker, E. Girdwood, M. Snelling, & J. Horler. (2020c). The Early Learning Outcomes Study: Research Insights. Claremont, Cape Town: Innovation Edge and Ilifa Labantwana.

Dawes, A. & Henry, J. (2023) Understanding Effect Sizes in Programme Evaluations and Research Using the ELOM 4&5 Assessment Tool, DataDrive How-to Guide - Using Data to Drive Change. DataDrive2030

Fleisch, B. (2018). The education triple cocktail: System-wide instructional reform in South Africa, UCT Press

Giese, S., Dawes, A., Tredoux, C., Mattes, F., Bridgman, G. van der Berg, S., Schenk, J. & Kotze, J. (2022) Thrive by Five Index Report Revised Aug 2022, Innovation Edge, Cape Town. <a href="https://www.thrivebyfive.co.za">www.thrivebyfive.co.za</a>

Köhler, T. (2022). Class size and learner outcomes in South African schools: The role of school socioeconomic status. Development Southern Africa. 39. 126-150. 10.1080/0376835X.2020.1845614.

Kraft, M. A. 2020. Interpreting effect sizes of education interventions. Educational Researcher 49(4): 241–253.

Polzer Ngwato, T., L. Shilakoe,, K. Morse & K. Huston (2023). National Reading Survey 2023 Findings Report. Nal'ibaliTrust.

Vale, B., M. Flowers, J. Ronaasen & M. Rademeyer (2023). The Early Learning Positive Deviance Initiative - Summary of qualitative findings, DataDrive Data Insights. DataDrive20230, <a href="https://datadrive2030.co.za/wp-content/uploads/2023/10/Deviance-study">https://datadrive2030.co.za/wp-content/uploads/2023/10/Deviance-study</a> Qualititative FINAL.pdf

van der Berg, S. (2021). Estimating the impact of five early childhood development programmes against a counterfactual, Ilifa Labantwana & Resep ECD Working Paper Series No. ECD WP 001/2021, <a href="https://resep.sun.ac.za/wp-content/uploads/2021/11/Estimating-the-impact-of-five-early-childhood-development-programmes-against-a-counterfactual-v06.pdf">https://resep.sun.ac.za/wp-content/uploads/2021/11/Estimating-the-impact-of-five-early-childhood-development-programmes-against-a-counterfactual-v06.pdf</a>

Zhou, T., & Shilakoe, L. (2024). How to Close the ECD Gap: process lessons from a multi-partner approach. Yizani Sifunde Programme Evaluation Case Study Report. Social Impact Insights Africa & Liberty Community Trust.

# **Annex A: Technical Statistical Annex**

# **ELOM Analysis**

Table 20: Domain Score Maturation Effect per month and standarised scope points (Source: ELOM Technical Manual)

Domain Score Maturation Effect per month		1 SD = standardised score points
FMC & VMI	0.23 (95% CI: 0.19 - 0.28)	3,39
CEF	0.25 (95% CI: 0.19 - 0.31)	4,27
ELL	0.21 (95% CI: 0.15-0.28)	4,64

The DataDrive2030 practice brief on 'Understanding Effect Sizes in Programme Evaluations and Research Using the ELOM 4&5 Assessment Tool', suggests using Cohen's convention for interpreting effect sizes (Table 19).

Table 21: Standard Deviation Equivalents (ES) of Statistically Significant Mean Score Differences for ELOM 4&5

## **EFFECT SIZE** (Cohen's convention)

	SMALL	MEDIUM	LAF	RGE
Difference between Means	0,20 SD	0,50 SD	0,80 SD	1,00 SD
ELOM 4&5 Total score	2,81	7,04	11,26	14,07
Gross Motor Development (GMD)	0,84	2,1	3,35	4,19
Fine Motor Coordination &Visual Motor Integration (FMC&VMI)	0,64	1,7	2,71	3,39
Emergent Numeracy &Mathematics (ENM)	0,82	2,05	3,28	4,1
Cognition & ExecutiveFunctioning (CEF)	0,85	2,14	3,42	4,27
Emergent Language & Literature (ELL)	0,93	2,32	3,71	4,64

Source: Early Learning Programme Outcomes study

However, when comparing the effect sizes of five ECD interventions in South Africa, van den Berg (2021) argued that using Kraft's logic (2020) is more appropriate, which posits that

lower effect sizes should be considered 'large' for "causal research that evaluates the effect of education interventions on standardized student achievement." While neither the Yizani Sifunde evaluation nor the studies included in van den Berg's study are strictly speaking "causal", they all calculate the effect size in the same way, using the gain in ELOM points from baseline to endline, taking into account maturation). We therefore use the same interpretation logic proposed by van den Berg.

Historically, Cohen (1988) and later Hattie (1994) proposed criteria by which to judge effect sizes in education. However, these effect sizes were quite large, perhaps because they included correlational estimates that were not causal impacts, something that both Kraft (2020) and Evans & Yuan (2020) frown upon. Kraft (2020: 247) proposed, for pre-school (pre-K-12, in American terminology) interventions that effect sizes up to 0.05 SD be considered as small, 0.05-0.20 SD as medium, and above 0.20 SD as large. The estimates presented on the 'programme effect' in the five studies evaluated in this paper cannot really be considered causal in the same way as RCTs. Yet neither are they simply correlational, as would be obtained by simply evaluating gains between baseline and endline. By measuring gains relative to a counterfactual or control group, based on cross-sectional estimates of the gains from ageing, they can probably be considered as closer to causal estimates than would be obtained from simple correlational analysis alone. Thus we may conclude that the effects observed in the five programmes evaluated in 2018 are exceptionally large. (van den Berg 2021: 11)

# **Regression analysis**

#### **Dependent Variables**

- An aggregate ELOM 4&5 endline score (continuous variable): this score combines the learner's raw scores for all four ELOM domains measured at endline (FMC&VMI + ENM + CEF + ELL), providing a simple overall 'achievement' score that is a continuous variable. Given that our assessment tools do not include all ELOM 4&5 domains, this aggregate cannot be compared with aggregate ELOM scores in other studies. This aggregate score does not include the ELOM 6&7 items.
- 2. **ELOM 4&5 domain endline scores (continuous variables):** FMC&VMI (domain 2), CEF (domain 4) and ELL (domain 5).
- 3. **Being 'on' or 'off track' at endline** (ELOM 4&5 by domain): for each domain (FMC&VMI (domain 2), CEF (domain 4) and ELL (domain 5)) we created a dichotomous variable showing whether the learner is 'on' or 'off' track (the latter combines 'falling behind' and 'falling far behind') at endline. This represents the high-level goal of achieving 'readiness' for further education and schooling.

#### List of tested independent variables:

#### Centre level:

- region (East London / Queenstown);
- centre learner-to-practitioner ratio (high/low)<sup>21</sup> (P-L\_ratio\_HL)
- centre fee level (which provides information on a centre's level of resourcing but also acts as a proxy for learner's household socio-economic level) (fee level 6and7)
- average learner attendance rate per centre (Centre Learn Proxy Attend Av)

#### Learner-level:

- learner sex (male / female);
- learner age in months at endline (continuous variable between 58 and 69) (child age w2)
- a learner's z-score as a measure of malnutrition<sup>22</sup> (zha 4and5)
- individual learner's average attendance rate (Indiv\_Learn\_Proxy\_attend)
- a learner's task orientation level at endline (poor/satisfactory concentration) (concentration poor 4and5 w2)

Independent variables relating to some of the intervention's key inputs and outputs:

- the number of books received by the learner (book ownership) (books received)
- the number of Story Sparker sessions attended by the learner,
- the presence of Yizani Sifunde-provided books and materials at the ECD at the endline
- whether centres have 'print rich walls' (e.g. posters and other literacy materials on display) at the endline (EL Pre-Grade R posters/print rich walls)
- An overall assessment of implementation quality/programme fidelity (normal and sub-optimal) based on Yizani Sifunde staff judgement<sup>23</sup>

Variables were tested for collinearity before their inclusion in the regressions. Average centre attendance and individual learner attendance are significantly correlated. Individual attendance is also correlated with the number of books received (p-value <0.01) which, in turn, is correlated with the number of Story Sparker sessions the learner attended. When tested against each other, the number of books received (book ownership) was more powerful than the number of Story Sparker sessions attended, so the latter was removed from the analysis. The centre's average attendance rate is correlated with learner age in months (p-value <0.05). Finally, the dichotomous variable for implementation fidelity

<sup>&</sup>lt;sup>21</sup> Low learner-practitioner ratios are 15:1 and below (averaging baseline and endline ratios for each centre) and high ratios are above 15:1.

<sup>&</sup>lt;sup>22</sup> This analysis uses z-scores as a continuous variable, but since only three learners were classified as moderately stunted there is not very large variation in this score, which may explain its lack of significance throughout the analysis.

<sup>&</sup>lt;sup>23</sup> Yizani Sifunde M&E staff categorized centres into 'normal' and 'sub-optimal' implementation fidelity. 'Sub-optimal' centres had lower practitioner commitment, low practitioner training attendance or high practitioner turnover during the intervention period. Other centres faced significant infrastructure challenges and one was logistically challenging for the Story Sparker to reach and so received a lower dosage of visits.

('normal' or 'suboptimal') was highly correlated with the presence of Yizani Sifundeprovided books and materials at the centre at endline, and so was excluded from the analysis.

All dependent variables were initially included in the regressions (excluding those with high correlations). The variables that were not significant (with a high p-value > 0.7) were then removed from the analysis one by one to improve the f-value (a measure of whether a group of variables are jointly significant) until the significant levels of the remaining variables no longer changed. The results below show only those variables remaining in the analysis when an acceptable f-value is reached.

# **Regression results**

Note: \*p<0.1; \*\*p<0.05; \*\*\*p<0.01

Variables significant at p<0.1 level are not reported on in the analysis above.

W2 stands for 'wave 2' = endline

#### Dependent variable: Aggregate\_w2

RegionQueenstown	-4.733*
	(2.676)
concentration_poor_4and5_w2Satisfactory concentration	10.800***
	(3.088)
books_received	0.286**
	(0.143)
child_age_w2	0.812**
	(0.371)
zha_4and5	0.319
	(1.391)
Constant	-24.545
	(23.878)
Observations	99
R2	0.258
Adjusted R2	0.218
Residual Std. Error	11.445 (df = 93)
F Statistic	6.470*** (df = 5; 93)

# Dependent variable: Continuous FMC&VMI score at endline (domain\_2\_4and5\_w2)

RegionQueenstown	-2.195***
	(0.806)
Indiv_Learn_Proxy_attend	1.813
	(1.529)
books_received	0.075*
	(0.045)
child_age_w2	0.370***
	(0.111)
child_sexMale	-0.662
	(0.712)
zha_4and5	0.112
	(0.431)
Constant	-12.624*
	(7.148)
Observations	99
R2	0.257
Adjusted R2	0.209
Residual Std. Error	3.417 (df = 92)
F Statistic	5.311*** (df = 6; 92)

# Dependent variable: 'On track' FMC&VMI at endline (domain\_2\_cuts\_4and5\_w2\_dich)

RegionQueenstown	-0.247**
	(0.107)
Indiv_Learn_Proxy_attend	0.226
	(0.205)
concentration_poor_4and5_w2Satisfactory concentration	0.090
	(0.128)
books_received	0.012*
	(0.006)
child_age_w2	0.016
	(0.015)
child_sexMale	0.019
	(0.098)
Constant	-1.015
	(0.980)
Observations	99
R2	0.136
Adjusted R2	0.079
Residual Std. Error	0.475 (df = 92)
F Statistic	2.407** (df = 6; 92)

#### **Dependent variable: Continuous CEF score at endline** (domain\_4\_4and5\_w2)

\_\_\_\_\_ RegionQueenstown -2.496\*\* (1.011)2.165 Centre\_Learn\_Proxy\_Attend\_Av (5.049)concentration\_poor\_4and5\_w2Satisfactory concentration 2.450\*\* (1.214)books\_received 0.122\*\* (0.056)child\_age\_w2 0.086 (0.147)child\_sexMale -0.771 (0.932)Constant -3.117 (9.134)Observations 99 R2 0.167 Adjusted R2 0.113 Residual Std. Error 4.460 (df = 92)F Statistic 3.079\*\*\* (df = 6; 92)

## **Dependent variable: 'On Track' CEF at endline** (domain\_4\_4and5\_w2\_dich)

RegionQueenstown	-0.282**
	(0.119)
`P-L_ratio_HL`L	-0.153
	(0.137)
Indiv_Learn_Proxy_attend	-0.246
	(0.232)
concentration_poor_4and5_w2Satisfactory concentration	0.187
	(0.133)
books_received	0.018***
	(0.007)
child_age_w2	0.010
	(0.017)
child_sexMale	0.003
	(0.104)
fee_level_6and7R111-290	0.135
	(0.136)
fee_level_6and7R291-750	-0.092
	(0.309)
zha_4and5	-0.018
	(0.064)
Constant	-0.746
	(1.131)
Observations	98
R2	0.155
Adjusted R2	0.058

<b>Dependent variable: Continuous ELL score at endline</b> (domain 5 4and5 w2)
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RegionQueenstown	0.166
	(0.902)
`EL_Pre-Grade R posters/print rich walls`	-3.039*
Present, functional and in use	(1.658)
Indiv_Learn_Proxy_attend	-1.129
	(1.658)
concentration_poor_4and5_w2Satisfactory concentration	5.053***
	(1.018)
child_age_w2	0.233*
	(0.136)
child_sexMale	-1.032
	(0.821)
fee_level_6and7R111-290	-0.580
	(0.959)
fee_level_6and7R291-750	-5.173*
	(2.624)
Constant	-2.674
	(8.757)
Observations	98
R2	0.298
Adjusted R2	0.235
Residual Std. Error	3.875 (df = 89)
F Statistic	4.727*** (df = 8; 89)

## Dependent variable: 'On Track' ELL at endline (domain\_5\_cuts\_4and5\_w2\_dich)

RegionQueenstown	0.118
	(0.109)
`EL_Pre-Grade R posters/print rich walls`Present, functional and in use	-0.285*
	(0.160)
Centre_Learn_Proxy_Attend_Av	0.557
	(0.594)
Indiv_Learn_Proxy_attend	-0.299
20.11.5.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.	(0.227)
concentration_poor_4and5_w2Satisfactory concentration	0.463*** (0.127)
books received	0.004
books_received	(0.004)
child age w2	0.022
	(0.015)
child_sexMale	-0.039
	(0.095)

Constant	-1.280 (0.950)
Observations	99
R2	0.230
Adjusted R2	0.162
Residual Std. Error	0.456 (df = 90)
F Statistic	3.363*** (df = 8; 90)

Dependent variable: 'On track' ENM at endline (domain_3_cuts_4and	15_w2_dich)
RegionQueenstown	-0.006
	(0.106)
`P-L_ratio_HL`L	-0.067
	(0.102)
Centre_Learn_Proxy_Attend_Av	0.537
	(0.529)
concentration_poor_4and5_w2Satisfactory concentration	0.206
	(0.127)
books_received	0.016***
	(0.006)
child_age_w2	-0.006
	(0.015)
child_sexMale	0.039
	(0.098)
Constant	-0.181
	(0.960)
Observations	99
R2	0.167
Adjusted R2	0.103
Residual Std. Error	0.465 (df = 91)
F Statistic	2.607** (df = 7; 91)

# 8. Annex B: Case Study Report Executive Summary: Findings

This is an extract of a separate report describing the results of the qualitative methods (including case studies and sustainability interviews) included in the independent evaluation. The report is published alongside the current report and should be referred to as Zhou, T., & Shilakoe, L. (2024). How to Close the ECD Gap: process lessons from a multi-partner approach. Yizani Sifunde Programme Evaluation Case Study Report. Social Impact Insights Africa & Liberty Community Trust.

#### Evaluation questions, case study methods and data collection

The evaluation uses mixed methodologies, including learner assessments at baseline and at the endline, case studies and surveys. This report mainly relied on the case study approach to establish if the Yizani Sifunde intervention is delivering its intermediate outcomes. These are related to whether practitioners, reading club leaders and Story Sparkers are incorporating language and literacy-enhancing practices within their classrooms and reading clubs. It also seeks to understand if parents and caregivers implement supportive language and early literacy practices in home environments. Similarly, the case studies seek to understand if there have been notable enhancements in the relationships between ECDs and parents/caregivers. The case study also sought to establish which contextual factors play a role in influencing the capacity of ECDs and practitioners, parents or caregivers, and reading clubs to adopt the literacy-enhancing practices advocated by the project.

The evaluation team, in consultation with the Yizani Sifunde team, purposively selected ECD sites and reading clubs where stronger program uptake was observed and implementation had been relatively smooth. The rationale is rooted in the understanding that numerous examples exist of what does not work within the system. By focusing on successful instances, the goal is to extract valuable insights into the factors and conditions that contribute to favourable outcomes.

Data was collected between August and September 2023 by two field researchers—one proficient in isiXhosa and the other possessing a working knowledge of the language. Both were trained alongside two other researchers in the application of standardised observation tools, namely the Early Childhood Environmental Rating Scale (ECERS-3 and ECER-E)<sup>24</sup> and the ELOM Learning Program Quality Assessment (LPQA). They also administered context tools designed by the evaluation team with inputs from an early learning education expert. The case study spoke to teachers, parents/caregivers, project implementers, and other project agents to gather insights on evaluation questions.

#### **Case Study Findings**

The findings are presented thematically, namely general overall, overarching findings, Classroom Practice as per ECERS and ELOM LPQA findings, and project administration findings. While all these are interconnected, they provide a different perspective.

#### Overarching findings

- 1. In general, all practitioners were observed to be warm, confident, engaging, and considerate of children's feelings.
- 2. Story Sparkers were found to be mature, enthusiastic and well-trained individuals who used a variety of methods and tools to generate learner engagement and interest in reading books and

<sup>&</sup>lt;sup>24</sup> The evaluation team selected one of the six subscales of the ECERS-3 (Language and Literacy), and one of the four subscales of the ECERS-E (Literacy)

- stories. This likely contributed to the project's aim of making children's experiences of reading and storytelling a positive and nurturing activity.
- 3. Teaching was generally learner-centred, and practitioners could explain to the evaluation team why they were using the different methodologies they were trained in. This was generally reflected in classroom practice, with the majority of practitioners successfully implementing key practices that support early language and literacy development.
- 4. Across all the ECDs, the classrooms were generally print-rich and inviting, except for one ECD with severe resource constraints.
- 5. The quality of teaching and learning was visibly much better in the public school compared to the private small ECDs. This was likely supported by the presence of a well-established and better-resourced school, with both qualified teaching staff and effective school management. This school, however, has Grade R classes with mixed ages ranging from 4 6, with only those who reach the required age proceeding to Grade 1.
- 6. Practitioners were confident in storytelling, singing & and cultivating the love for stories in children by showing interest and excitement, drawing them in with animation, participation, questions, and actions. However, none were observed using puppets or props in the process. This could have been influenced by the day of the week the fieldwork was conducted.
- 7. The practitioner and SS were confident in reading books to children/with children during story time they were engaging, animated and drew learners in to participate but they did not use other pops such as puppets and dolls.
- 8. Teaching activities focusing on counting and early maths were weak at most of the ECDs except for the public school.
- 9. As expected, parental/caregiver engagement and parent workshops pose a general challenge with subdued attendance, though the public school and some ECDs in the sample report successful engagement and implementation of parental workshops. Similar pockets of success are noted from monitoring data across the other ECDs in the program. ECD-based parental workshops should, however, be viewed through a developmental lens that acknowledges the inherent challenges that require a paradigm shift from both parents/caregivers and practitioners on how they see their roles. The evaluation thus primarily centred on understanding how successful implementation was achieved in selected sites rather than emphasising the extent to which these practices were universally adopted across the sample.
- 10. Though not part of the evaluation terms of reference, the evaluation team found the Monitoring and Evaluation system for the Yizani Sifunde project robust, encompassing a structured framework for collecting, analysing, and interpreting data, offering in-depth insights into various aspects of the project.
- 11. Community reading clubs did not receive a strong uptake due to mainly a lack of committed community volunteers.
- 12. Self-reported feedback from the cohort of 2022 practitioners, suggest that they sustained most of the practices they carried out in their classrooms by 2022, with storytelling being the most practised classroom activity. Reading of storybooks gained the most practice post project support, with 52% (n=29) of practitioners revealing they practised it more in 2023 than they did in 2022.

#### **Classroom practices**

ECERS-E and ECERS-3 rating scores

 In the assessment of classroom observation using the ECERS-E and ECERS-3 early childhood environmental rating scales, practitioners in the case study outperformed what is typically expected based on scores from similar contexts.

Using the Early Childhood Environment Rating Scales (ECERS-3 and ECERS-E), practitioners performed better than what is expected of scores from countries in similar contexts. Across seven practitioners, the mean score based on the ECERS-E Literacy Subscale was 3.6 out of 7. The overall mean score on the ECERS-3 Language and Literacy Subscale was 3.5.

These results are encouraging because based on the study of the review of scores in LMIC countries, the observation was that LMICS typically score low aggregate scores, with average quality scores falling within the "inadequate" range (scores of 1 or 2). The highest scores observed usually only reach the threshold for being considered "acceptable" (scores of 3 or 4).

The results were strong across all seven practitioners with only one falling below a score of 3. This contrasts with similar studies in South Africa, where a higher percentage of practitioners obtained mean scores in the 'inadequate' range  $(1 \text{ to } 2)^{25}$ .

#### 2. Practitioners recorded strong scores in specific items in the ECERS subscales

Practitioners recorded overall mean scores of 5 out of 7 for "sounds in words", and "adults reading with children" items. They scored a mean score of 4 for the "staff use of books with children" item. These are strong results, given the expected scores for Lower Middle-Income Countries (LMICs) and previous studies. Other well-performing areas where practitioners achieved a mean score of 4 include: "facilitating the use of print in the environment", "encouraging children to use language", "talking and listening" and "helping children expand their vocabulary". The ECERS rating scales only focus on storybook reading and do not include any items related to oral storytelling. As the Little Stars program focuses on storytelling, we adapted the story reading item and gave practitioners credit if they told a story rather than reading one. It was encouraging that practitioners obtained a mean score of 5 out of 7 on this item.

#### 3. Practitioners were rated lower on emergent writing and mark making, with a mean score of 2

The poor findings in this item are related to indicators that are process-related where the majority of practitioners were not observed facilitating emergent writing activities. This finding is consistent with findings from other studies. The limited emergent writing in most classrooms does not seem to stem from the lack of knowledge as they demonstrated in interviews a deep understanding of the Little Stars program and its core methodologies, including emergent writing, and why it was important. The lack of practice could be due to the inability to mediate the emergent writing process for children in purposeful ways. It is also possible that other structural issues observed in some classes, such as space, and lack of resources such as pencils and crayons, may have contributed to poor results.

<sup>&</sup>lt;sup>25</sup> A study (n=240) with results that were generalizable to the Western Cape (Biersterker et al, 2016) had 32% of practitioners achieved a mean score of 1-2. In another smaller study (n=195) with the majority if classes sampled in poor communities 48% of the practitioners had mean scores in the 1-2 range (Van Staden, 2016). Both of these studies used the ECERS-R Language Reasoning subscale, which is comparable to the subscales employed in this case study.

4. Practitioners scored poorly at encouraging children's use of books and book and literacy areas.

Though most ECDs received program books, this did not seem to lead to children showing interest in using books independently. Not a single child chose to use the book corner during free play in all the 7 classrooms observed except on two occasions where children were encouraged by a practitioner to consider the book corner. There were accessible books to children in all 7 classrooms. Programme monitoring data indicate a slightly better scenario, with slightly over 50% of practitioners reporting children independently using book corners.

The low scores on the use of book areas are not a reflection of a lack of books but may rather reflect the fact that the use of the book area is not included as an activity in the daily project or that practitioners do not do enough to mediate the use of the book area, model the use of books or show an interest in children's independent reading.

The low scores on the use of book items are also due to the limited variety of books, primarily fiction and storybooks, with a notable absence of informational/reference, counting/maths, or poetry/nursery rhyme books. Although books were accessible, not all practitioners received credit for indicators related to the book area being comfortable (e.g. rug and cushions or comfortable seating).

#### **ELOM Learning Program Quality Assessment.**

1. All 7 classes in this Yizani Sifunde sample scored moderately on almost all subscales, and their total scores indicate they need some form of assistance to improve their quality.

Most of the ECDs learning programs had an overall score of below  $60\%^{26}$  on the LPQA Total Score with the least performing ECD achieving 32%. The overall average score for the sample was 52%. The ELOM LPQA subscales include: The Learning Environment: Learning materials and classroom set-up (5 items); Assessment of Learning and Teaching: Session planning and progress monitoring (2 items); Relationships and Interactions: Practitioner interactions with children, child interactions, and discipline (4 items); Curriculum: Curriculum content, alignment with the National Curriculum Framework Early Learning and Development Areas and activity plans (5 items) and, Teaching Strategies: Teaching techniques and actions (5 items).

2. The assessment for the curriculum was the best-performing domain, with a mean score of 62,9%

The score, among other variables, likely reflects the benefit of structured learning programs in the case study sample. SLPs (Structured Learning Programs) differentiate themselves by not relying on incidental learning. Instead, they emphasise clear learning goals and they systematically approach curriculum elements to build and scaffold skills. They are also designed to meet the Early Learning Development Areas (ELDAS) and the National Curriculum Framework (NCF)

3. The Assessment for Teaching and Learning sub-scale was the worst-performing domain achieving a mean score of 35,7%

Despite the awareness among practitioners and principals about the necessity to collect and track learner performance data, this was not observed as a regular practice. This suggests that

<sup>&</sup>lt;sup>26</sup> The total score per ECD is obtained by adding up all the scores from the 5 ELOM LPQA sub-scales. The scores are presented as a percentage of maximum total score of 44.

planning and support may not be grounded in systematic observations by practitioners, who acknowledged relying on mostly undocumented informal ad hoc assessments/observations. The execution of these items within this subscale was more successful in the public school, most likely because there are assessment tools and guidelines specifically designed for Grade R, coupled with the presence of a supportive school management team. Notably, the National Curriculum Framework lacks comprehensive guidelines for assessing and monitoring learner performance in pre-Grade R classes. Most ECDs in the sample are informal social enterprises and will likely struggle with adopting and setting up systems such as those for assessing learners.

#### Conclusion

With the Department of Basic Education under pressure to improve the quality of ECD provision and growing awareness of the fact that we must invest earlier to address the literacy crisis in South Africa, this Case Study report is a valuable contribution to the sector.

In selecting a case study approach, depth of coverage is always prioritised over breadth. However, the learning and insights that emerged from the approach validate this decision. These insights are a critical check on whether the project is grounded and responsive to contextual realities, and ensure that adjustments to the design can be made as this important work is replicated.

The report shows, without doubt, the value of donors investing in carefully designed monitoring, evaluation and learning processes. The case study monographs combined with standardised observation tools and questionnaires provide valuable learning for the sector and investors about evaluation designs and methods. By balancing an external 'outsider' view on a project with detailed project monitoring data provided by implementing partners, the report has the integrity and rigour that is needed to both guide further enhancements to the project and drive further investment in the sector.

Through the case study monographs, the report provides a rich and nuanced description of the realities of ECD Centres and practitioners serving under-resourced rural and peri-urban communities in South Africa. Further insights are provided through quantitative data collected using standardised tools. The report captures a multi-layered and complex collaborative project and includes a deep dive into the contributions of different project partners and role-players, while also looking at cross-cutting themes and lessons learnt through this unique partnership model.

The report looks constructively at key areas of the project where reach was not achieved as anticipated (for example, community reading clubs) or where behaviour change was not evident (for example, the extent to which children demonstrated independent reading). Contextual factors that affected the take-up of certain elements are carefully explored and recommendations are made for aspects of project design that could be further strengthened. All stakeholders can draw important lessons for the replication and scaling of this important work going forward.

The report provides evidence that resource-based practitioner training delivered by local NGO partners, supported through community-based young people, and combined with the provision of high-quality books in the language of the community, has great potential to strengthen curriculum delivery and quality early language and literacy teaching and learning in under-resourced ECD classrooms. The report also documents and explores the potential for including parents and caregivers as key role players in supporting early learning. It highlights the value of practitioners engaging parents and caregivers while acknowledging practical constraints and the challenge of changing parents' perceptions about their role in their children's learning. The case studies bring to the fore the potential value of young community members ('Story Sparkers') playing a supporting

role as practitioners reach out to parents. This demonstrates the value of the partnership model, where one aspect of the project serves to amplify and strengthen another aspect. It also encourages an openness to possibilities that might not have been explored in the original model.

In response to the literacy crisis in South Africa, there has not been enough recognition of the important contribution that early childhood practitioners, parents and community members can make. This project and the careful documentation and analysis of the project outcomes show what can be achieved by investing in the adults who support children in this critical phase of their development. The report provides key lessons on aspects of implementation and evaluation that are critical for deepening our understanding of 'what works' and 'why', and for maximising returns on investment in early learning.

#### Recommendations

#### Recommendation 1

Review the exploratory ECD-based parental workshops model to learn from cases of successful implementation for further design improvements. This review may be in the form of reflection workshops within the Wordworks team and project partners. Aspects to consider include:

- a) Exploring approaches to use actively involved parents as catalysts to stimulate interest among less-engaged caregivers/parents.
- b) Reviewing the format and length of parent programmes as well as identifying and addressing potential barriers to attendance
- c) Identifying ways of supporting and motivating practitioners to invest in parental/caregiver engagement work, including shifting their perception on this.

Strengthening this project arm will deepen the impact value chain as the home environment is a critical pillar for entrenching early language and literacy practices.

#### Recommendation 2

Review the recruitment and engagement strategy of community reading club leaders. This should include a review of the Yizani Sifunde organisational arrangements on the formation, support and sustainability of community reading clubs.

#### Recommendation 3

Develop Little Stars training modules for practitioners to strengthen the following:

- Writing children's words and encouraging and mediating children's emergent writing.
- Creating an inviting and comfortable space for children to read books independently, ensuring there are times in the daily programme when children engage in independent reading, and that ECD centres develop a class culture of reading for enjoyment.
- Observing and recording child progress using existing templates and tools provided by the
  Department of Basic Education or from other sources. Integrating the different programs
  implemented in their ECDs to maximise children's early language and literacy outcomes and
  build practitioner confidence.

#### Recommendation 4

Work with ECD NGO partners and ECD Forums to explore the feasibility of establishing or strengthening communities of practice for project practitioners. Communities of practice have been

proven to work to improve teacher practice and provide opportunities for them to share ideas on methodologies they find difficult.

#### Recommendation 5

Consider engaging partners and donors to support ECD's soft furnishings, such as tables, chairs, and reading mats. These would make reading corners an attractive and comfortable space for children. It would also provide options for overcrowded classes with limited learning areas to set up outdoor spaces. Collaborating with programs offering these services is recommended to achieve economies of scale and safeguard alignment with program intent.

#### Recommendation 6

The existence of multiple ECD programs by different organisations in the same schools and communities underscores the importance of thought leadership and collaborative engagement among stakeholders. We recommend fostering this collaboration to deliver increased social returns in vulnerable communities and greater value for funders. Building on the demonstrated capacity of the funder in this project, we recommend that the Liberty Community Trust facilitate this engagement with involved players to maximise the positive impact on early childhood development.

# 9. Annex C: Literature Review

The following literature review is extracted and adapted from Zhou, T., & Shilakoe, L. (2024). How to Close the ECD Gap: process lessons from a multi-partner approach. Yizani Sifunde Programme Evaluation Case Study Report. Social Impact Insights Africa & Liberty Community Trust.

ECD plays a central role in developing a child's brain, language and vocabulary skills, and reading, writing, and social-emotional development. Numerous studies consistently highlight that high-quality early childhood programmes can have enduring effects, contributing to lifelong benefits in these areas. Exposing children to enriching language and literacy experiences during their early years can pave the way toward academic and socioemotional development. This early foundation correlates with heightened academic achievements, improved health outcomes, and, ultimately, reduced societal costs in the long run (Jenkins & Duncan, 2017; Harvard University, 2016)

The unfortunate reality for many children in Lower Middle-Income Countries (LMICs) is that they are not guaranteed access to quality early childhood classrooms, depriving them of this essential aspect of their developmental journey. The majority come from communities and education systems that often struggle to afford this crucial component, making interventions that can strengthen these children's early childhood education experiences necessary.

There is established literature from high-income countries (HICs) and LMICs that provides knowledge of what has improved classroom quality, one of the pillars for improving learner early childhood literacy outcomes. From the outset, it is important to note that the quality of the early childhood classroom learning environment is commonly conceptualised in two broad categories: structural quality variables and process quality variables.

Structural quality, on the one hand, relates to the physical setting and organisational components. Its key variables include physical settings (the classroom's physical environment, including factors such as space, lighting, and safety measures), teacher qualifications, group size and ratios, and the availability and appropriateness of educational resources and materials. Process quality variables, on the other hand, focus on the dynamic and interactive aspects of the learning environment. It includes the quality of classroom interactions between teachers and children and among the children themselves; the teaching methods, strategies, and approaches educators employ; and the extent to which the educational program aligns with a defined curriculum and educational goals (Biersteker et al., 2016).

Structural variables often influence process quality and may be necessary but insufficient to support process quality. For example, a structured curriculum and appropriate stories or books may facilitate the type of questions and conversations that are characteristic of high-quality interaction. However, teachers may have access to such a curriculum and materials but still not use them in ways that facilitate interaction.

## 9.1. Structural quality variables

#### Teacher qualification and training

Although teacher qualification is an important variable of structural quality, various studies, including a recent one from South Africa, show that it does not predict classroom and academic outcomes for children (Dawes et al., 2019). Nonetheless, recent data has shown a correlation between teachers' level of education and some ECER-R scores. This suggests that post-secondary education for teachers working with younger children remains important (Manning et al., 2017). Other studies highlighted the importance of continuing professional development (CPD) and in-service training for teachers, noting their positive impact on improving the quality of classroom processes (Early et al., 2007). Teacher qualifications are thus necessary but insufficient to achieve desired learner outcomes independently.

Important aspects to be included in effective CPD, in both HICs and low-resource contexts, include; mentoring and supervision; focus on practice linked to knowledge; reflection on peer learning; training on interaction skills; and motivational management and leadership (DFID, 2017).

#### Class sizes and ratios

While evidence on the impact of class sizes is mixed, some studies reveal an intriguing dynamic where classes exceeding recommended group sizes demonstrate positive outcomes (Siraj-Blatchford et al., 1999; Tobin, 2005). However, this observation is nuanced by findings from a multi-county study indicating no significant association between ratios and language outcomes (Montie et al., 2006). In instances where positive outcomes were observed in larger groups, the correlation was often linked to enhanced process quality, particularly for infants (Huntsman, 2008). In some contexts, bigger classes may reflect more established ECD centres, with smaller classes more indicative of informal centres. The enhancement of process quality is anticipated in larger classes due to increased opportunities for child-to-child interactions. However, such scenarios are also likely to decrease the quality of teacher-to-child interactions.

#### **Learning materials**

Numerous studies have affirmed the connection between learning outcomes and the availability of learning materials (Montie et al., 2006; Aboud, 2006; Trawick-Smith et al., 2015). Learning materials are instrumental in shaping child learning outcomes by promoting engagement, supporting skill development, facilitating concept understanding, encouraging exploration, promoting language development, catering to diverse learning styles, building independence, and print-rich environments, contributing to creating a positive learning environment. Children raised in literacy-rich environments, including homes with at least 25 books and parents actively engaging them with written material, attain an educational advantage of two years compared to those lacking books at home (Evans et al., 2010). This element is important for any literacy intervention in resource-constrained communities where the ability to afford such resources is beyond their reach.

#### **ECD** management and staff conditions

There is widespread recognition that schools led by effective and inclusive leadership tend to function more efficiently, have higher classroom quality, and often provide supportive conditions of service that elevate teacher morale and cultivate a positive school culture. These schools have also recorded positive child outcomes (Biersteker et al., 2016). Importantly, interventions are more likely to succeed when implemented in schools with a basic level of functionality (Jet Education Services, 2010). However, it is acknowledged that in many impoverished contexts, these conditions are often lacking, and interventions must strategically position their work to enhance the likelihood of sustainably adopting their initiatives.

For instance, in South Africa, an impact study found that although modest Grade R gains persisted into primary school, lower quintile schools (located in the poorest areas) generally did not experience a significant effect on test performance, except in cases where schools were situated in regions with a well-functioning education system (van der Berg, 2013).

#### Age-appropriate curriculum and structured curriculum

Interesting findings reveal that a curriculum that specifically targets certain skills, such as literacy and mathematics, tends to be more effective than programs following a whole child curriculum that addresses these skills incidentally (Phillips et al., 2017). This implies that ECDs with well-defined and structured learning programs incorporating clear learning goals are more successful in promoting school readiness for the children they serve. To be effective, however, research shows that these focused learning programs should enable cumulative and sequenced learning that aligns with each child's developmental stage (Harvard University, 2016).

Research on the appropriate duration of exposure to ECD services shows that children need approximately 15 hours of weekly activities to yield significant results, especially for 4-5-year-olds (Loeb et al., 2007; Sylva et al., 2004). However, it is important to note that findings may vary, as large outcome studies in the United States did not consistently support this notion (Xue et al., 2016). Generally, two years of attendance as opposed to one has been correlated with improved school readiness, especially for children from poor communities (Wechsler et al., 2016)

Structured learning programs also aid teachers in constructing a language rooted in practice, providing a framework for communication and dialogue. In areas with lower skill levels, like in South Africa, these programs lay the groundwork for a community of practice and serve as focal points for ongoing improvement.

# 9.2. Process quality variables

The variables discussed thus far all pertain to evidence regarding what is effective concerning structural quality variables. We now shift focus to process quality variables and what we learn from the literature. Research indicates that process quality variables, compared to structural variables, have a greater influence on child development (Sabol et al., 2013; Rao et al., 2014). The interactions between teachers and children contribute to developing a child's communication skills, cognitive abilities, and capacity to manage

emotions and relationships. Moreover, these interactions instil the skills and confidence necessary for them to be effective learners (Torii et al., n.d).

#### Sensitive, individualised teacher/child interactions

Teachers who cultivate warm, supportive, and encouraging relationships with learners facilitate the development of social and emotional skills essential for a successful school transition. Hamre & Pianta (2005) found that learners with teachers who offered strong instructional and emotional support had higher achievements and better learner-teacher relationships than those who did not. Another study that examined the relationship between children's preschool social and emotional development and their academic success in primary school also revealed that social and emotional development showed significant predictive value for the first three years of primary school outcomes (Shala, 2013).

#### Inclusive practices that emphasise cultural and language sensitivity.

An inclusive curriculum promotes inclusion in early childhood educational settings by building a sense of belonging among children. This involves recognising and valuing their abilities, identities, languages, and worldviews within the early childhood environment. Such recognition creates a sense of belonging that, in turn, positively impacts learning and development outcomes for children. It ensures that the learning experiences are relevant and meaningful (Ministry of Education, 2017; Chan, 2019).

Research conducted in Kenya, Zanzibar, and Tanzania compared children exposed to a culturally responsive curriculum with those who were not. The findings indicated that cultural responsiveness significantly predicted cognitive achievement, particularly among those who experienced a culturally responsive curriculum. There were even greater improvements observed in verbal, non-verbal, and numeric cognitive school readiness in the group exposed to such a curriculum (Malmberg, 2011)

#### Balancing child-initiated play and teacher-initiated play

In a longitudinal cross-country study that sought to understand the connection between process and structural characteristics of the environments attended by children at the age of 4 and their cognitive and language performance at age 7, found that child-initiated activities and small group activities were aligned with developmentally appropriate practices, encouraging active learning. The study, however, also found that children's cognitive performance improved when they spent less time in whole group activities, while their access to various equipment and materials increased. This does not diminish the value of whole-group play but rather contributes to the understanding that individual and peer activities, as well as adult-led group, small, and whole-group activities, are developmentally appropriate (Monte et al, 2006: Phillips et al, 2017; Jenkins & Duncan, 2017)

### Integration of different types of play within learning programs

Studies consistently show that children who have abundant opportunities to engage in child-directed activities, such as free play with their peers, tend to demonstrate higher levels of self-control. The ability to independently choose activities, explore, and interact with others in unstructured settings positively influences the development of self-regulation skills in children (Barker et.al, 2014). However, when learning specific academic content, such as what a particular shape is, studies indicate that children benefit more from adult-

facilitated play than free play with cut-out shapes or direct instruction from practitioners (Fisher et al., 2013). Inclusion of the different types of play is thus developmentally supportive, with free play scaffolded by adult structured activities where the teacher designs and sets rules with a particular learning objective (Jensen et al., 2019; Zosh et al., 2018; Pyle & Daniels, 2017)

This highlights the importance for practitioners and learning programs to inspire and create space for diverse playful activities, adapting their role to match children's evolving challenges. They scout for opportunities to integrate learning goals within play without disrupting the immersive experience. Despite its importance, many adults struggle with this balance, often uncertain about their role in supporting children's learning outcomes in playful settings (Jensen et al., 2019).

#### Learning from interventions with parenting components

Parenting programs were found to be more effective when they went beyond just giving them information and knowledge, targeting a change in parental attitudes, skills, and aspirations. Including an active, skills-based component and allowing parents to practise their newly acquired skills, reinforces this effectiveness. Particularly for improving language and cognition, such programs usually involve activities with the child, training for the parent, and joint activities involving both. Metadata from a rigorous review by DFID revealed that interventions involving both parent and child tended to have larger effects compared to parent-only programs, especially those focused on providing information (Rao, 2014; Grantham-McGrego, 2020)

The preceding discussion provides important insights into the necessary building blocks for an intervention aimed at enhancing early childhood experiences, contributing to learning outcomes, and preparing children for school. A key lever is classroom quality at both structural and process levels. Teacher training, along with the provision of teaching and learning support materials (LTSMs) and other resources, are pivotal components at the structural level. However, teacher training alone is insufficient; it must be complemented by in-service training, mentorship, and specific training focused on nurturing interaction skills to unlock the value of process quality, which holds greater influence in shifting outcomes. Parental involvement is important, but it should extend beyond mere information sharing to active engagement in activities and exercises to empower them and have the agency ask for better service from ECDs. These important findings must be contextualised to LMIC countries that often face constraints to meet some of these.

The Yizani Sifunde intervention integrates, in some form, the majority of components and levers mentioned in the literature, albeit adapted to resource-constrained settings found in the areas it was implemented. The case study thus qualitatively looks at how these components and levers worked in these contexts and explores what factors promoted or hindered their adoption, function and effect.

#### References

Biersteker, L., Dawes, A., Hendricks, L., & Tredoux, C. (2016). Centre-Based early childhood care and education programme quality: A South African study. Early Childhood Research Quarterly, 36, 334–344. <a href="https://doi.org/10.1016/j.ecresq.2016.01.004">https://doi.org/10.1016/j.ecresq.2016.01.004</a>

Barker, J. E., Semenov, A. D., Michaelson, L., Provan, v. S., Snyder, H. R., & Munakata, Y. (2014). Less structured time in children's daily lives predicts vself-directed executive functioning. Frontiers in Psychology, 5, 593.

Chan, A., 2019. Te Whāriki: An Early Childhood Curriculum in a Superdiverse New Zealand. New Zealand Journal of Educational Studies, Volume 54, pp. 245-259

Dawes, A., Biersteker, L., Girdwood, L., Snelling, M. and Horler, J. (2019). Early Learning Programme Outcomes Study Technical Report. Innovation Edge (www.innovationedge.org.za)

Jensen, H., Pyle, A., Zosh, J. M., Ebrahim, H. B., Scherman, A. Z., Reunamo, J., & Hamre, B. K. (2019). Play facilitation: The science behind the art of engaging young children (white paper). LEGO Foundation.

Fisher, K. R., Hirsh-Pasek, K., Newcombe, N., & Golinkoff, R. M. (2013). Takingshape: Supporting preschoolers' acquisition of geometric knowledge through guided play. Child Development, 84, 1872–1878. doi:10.1111/cdev.12091

Geertz, C. (1975). The Interpretation of Cultures. London: Hutchinson.

Hamre, B. K., & Pianta, R. C. (2005). Can Instructional and Emotional Support in the First-Grade Classroom Make a Difference for Children at Risk of School Failure? Child Development, 76(5), 949–967. https://doi.org/10.1111/j.1467-8624.2005.00889.x

Shala, M. (2013). The Impact of Preschool Social-Emotional Development on Academic Success of Elementary School Students. Psychology, 04(11), 787–791. https://doi.org/10.4236/psych.2013.411112

Sabol, T. J., Soliday Hong, S. L., Pianta, R. C., & Burchinal, M. R. (2013). Can Rating Pre-K Programs Predict Children's Learning? Science, 341(6148), 845–846. https://doi.org/10.1126/science.1233517

JET Education Services. The National School Effectiveness Study: Data for Waves 1 to 3. November 2010.

Center on the Developing Child at Harvard University. (2016). From best practices to breakthrough impacts: A science-based approach to building a more promising future for young children and families. www.developingchild.harvard.edu.

DFID. (2017). Evidence Brief Training of Early Childhood Development Workforce in Low-Resource Contexts. Bishop Grosseteste University.

Jenkins, J., & Duncan, G. R. (2017). Do pre-kindergarten curricula matter? The current state of scientific knowledge on pre-kindergarten effects. In Phillips, D., Lipsey, M., Dodge, et al. (pp. 37–44). Brookings Institute.

Torii K, Fox S & Cloney D. (n.d.). Quality is key in Early Childhood Education in Australia. Melbourne. (Paper No. 01/2017). Mitchell Institute Policy . Mitchell Institute. www.mitchellinstitute.org.au

Rao, N., Sun, J., Wong, J. M. S., Weekes, B., Ip, P., Shaeffer, S., ... & Lee, D. (2014). Early childhood development and cognitive development in developing countries: A rigorous literature review. Department for International Development. 100.

Manning, M., Garvis, S., Fleming, C., & Wong, G. T. W. (2017). The relationship between teacher qualification and the quality of the early childhood education and care environment. Campbell Systematic Reviews, 13(1), 1–82. https://doi.org/10.4073/csr.2017.1

Montie, J. E., Xiang, Z., & Schweinhart, L. J. (2006). Preschool experience in 10 countries: Cognitive and language performance at age 7. Early Childhood Research Quarterly, 21(3), 313–331. https://doi.org/10.1016/j.ecresq.2006.07.007

Siraj-Blatchford, I., & Wong, Y. (1999). Defining and Evaluating 'Quality' Early Childhood Education in an International Context: Dilemmas and Possibilities. Early Years, 20(1), 7–18. https://doi.org/10.1080/0957514990200102

Tobin, J. (2005). Quality in Early Childhood Education: An Anthropologist's Perspective. Early Education & Development, 16(4), 421–434. https://doi.org/10.1207/s15566935eed1604 3

Montie, J. E., Xiang, Z., & Schweinhart, L. J. (2006). Preschool experience in 10 countries: Cognitive and language performance at age 7. Early Childhood Research Quarterly, 21(3), 313–331. https://doi.org/10.1016/j.ecresq.2006.07.007

Malmberg, L.-E., Mwaura, P., & Sylva, K. (2011). Effects of a preschool intervention on cognitive development among East-African preschool children: A flexibly time-coded growth model. Early Childhood Research Quarterly, 26(1), 124–133. https://doi.org/10.1016/j.ecresq.2010.04.003

Pyle, A., & Danniels, E. (2017). A Continuum of Play-Based Learning: The Role of the Teacher in Play-Based Pedagogy and the Fear of Hijacking Play. Early Education and Development, 28(3), 274–289. https://doi.org/10.1080/10409289.2016.1220771

Huntsman, L., NSW Centre for Parenting and Research, New South Wales, & Department of Community Services. (2008). Determinants of quality in child care: Literature review. NSW Dept. of Community Services. <a href="http://www.community.nsw.gov.au">http://www.community.nsw.gov.au</a>

Aboud, F. E. (2006). Evaluation of an early childhood preschool programme in rural Bangladesh. Early Childhood Research Quarterly, 21(1), 46–60. https://doi.org/10.1016/j.ecresq.2006.01.008

Trawick-Smith, J., Wolff, J., Koschel, M., & Vallarelli, J. (2015). Effects of Toys on the Play Quality of Preschool Children: Influence of Gender, Ethnicity, and Socioeconomic Status. Early Childhood Education Journal, 43(4), 249–256. https://doi.org/10.1007/s10643-014-0644-7

Zosh, J. M., Hirsh-Pasek, K., Hopkins, E. J., Jensen, H., Liu, C., Neale, D., Solis, S. L., & Whitebread, D. (2018). Accessing the Inaccessible: Redefining Play as a Spectrum. Frontiers in Psychology, 9, 1124. <a href="https://doi.org/10.3389/fpsyg.2018.01124">https://doi.org/10.3389/fpsyg.2018.01124</a>

Xue, Y, Burchinal, M, Auger, A, Tien, H, Mashburn, A, Peisner-Feinberg, E, Cavadel, E, Zaslow, M & Tarullo, L. (2016). Testing for dosage-outcome associations in early care and education. In Burchinal, Zaslow, and Tarullo (Issue Editors). Quality Thresholds, Features, and Dosage in Early Care and Education: Secondary Data Analyses of Child Outcomes. Monographs of the Society for Research in Child Development. Mathematica.

Wechsler, M., Melnick, H., Maier, A., and Bishop, J. (2016). The Building Blocks of High-Quality Early Childhood Education Programs. Learning Policy Institute. https://learningpolicyinstitute.org/product/building-blocks-high-quality-early-childhood-education-programs