THE LEARNING TRUST

An exploration into ECD centre sustainability: Results of a small pilot study in Vrygrond

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Executive Summary

In March 2013, The Learning Trust embarked on a process to build their organisational knowledge in the early childhood development (ECD) arena, specifically regarding the financial sustainability of ECD centres and the opportunities for educational enrichment that centres could offer. Working together with True North, a well-established organisation focused on the young children of the Vrygrond community, this research piece was conceived to provide evidence-based support to both establishments. Essentially, there were two elements to this investigation. Firstly, it involved a detailed investigation into the **cost base of ECD centres** to accurately assess a cost per child of programme delivery in Vrygrond**.** Secondly, it explored how early childhood centres could best support the **cognitive and non-cognitive development** of their children.

In total, approximately half of Vrygrond's child care centres were sampled (11/23 centres) covering a total of 835 children. The selection of the specific sites was of key importance: a cross section of sites reflecting varying degrees of formality and competence was felt to be ideal in understanding the robustness of this small investigation's results. There was also an interesting dynamic regarding centre size and its concomitant financial sustainability, and thus both large scale centres and 'organic Vrygrond' home-based centres were scrutinised.

There was a startling difference in costs for essentially the same service – full day child care in a poor community: data on costs clearly indicated that a one-size-fits-all average cost per child per day in Vrygrond was not going to provide an accurate snapshot of reality. Three categories were thus created, reflecting the natural clustering of centre costs.

- Cluster 1: Centres with high costs, significant external funding and Department of Social Development (DSD) registration. **Cluster 1 had an average cost of R66 per child per day.**
- Cluster 2: Centres with medium costs and some external funding support or strong fundraising initiative. This cluster included both DSD registered and unregistered centres. **Cluster 2 had an average cost of R16 per child per day.**
- Cluster 3: Centres with low costs, a heavy reliance on donations, for example, food, but no fundraising to cover costs. Most of these centres still have a long road to travel before they would be eligible for DSD registration. **Cluster 3 had an average cost per child per day of R8.**

Despite significant differences in costs frameworks, few centres were operating at a loss. For most facilities, there is a fair match between income and expenditure, though there were a few cases that deviated

substantially from the zero profit or loss line. The two centres in the sample currently reflecting a loss are on the cusp of becoming registered. They may have upped the quality offered by their centre by either attracting better qualified (and thus more expensive teachers), or lowering their enrolment numbers for the purposes of passing the registration requirements, but now find themselves in the vulnerable position of still relying on fee revenues alone. A closer look at the decomposition of revenue streams showed the importance of fundraising.

The report then examined the differences between sustainability and subsistence, and detailed two possible sustainable options: the first taken from data recorded by the large-scale Public Expenditure Tracking Survey (PETS) of ECD facilities across three provinces in 2010, the second using what we now know about average fee revenues in Vrygrond specifically. Sustainable ECD centre costs are between R29 - R22 per child per day based on the current daily subsidy of R12, whether external funding can be found, and fee levels on average R10 a child a day. Without state or external community support, revenues are solely derived from fees, and costs are concomitantly low. At R9.60 a child a day, this is what subsistence in ECD provision probably looks like. Finally, to frame the subsistence and sustainable debates, the costs of a number of international and domestic ECD programmes were examined.

The report concluded with the following key messages:

1. **Sustainability is a hollow concept without some tie to quality.** The PETS study highlighted how facilities with inadequate or poor programmes detract from the overall cost-efficiency of the investment in ECD. If government or donors spend money on ECD programmes but get little more than an environment where children are "looked after," the intention of the expenditure – to provide early educational benefits that could place children on a trajectory that could eventually improve their overall quality of life – will not be achieved. A poor quality programme is therefore an indirect "leakage" point in the expenditure cycle.
2. **The quality of centre-based provision is a significant predictor of children's development at school entry.** Measuring the quality of care offered can be done either by directly assessing the children's outcomes, which may become a prohibitively resource-intensive exercise, or by assessing the centre in general. The Early Childhood Environmental Rating Scale (ECERS) tools relating directly to children's cognitive and socio-behavioural development have proven effective in centre self-assessment & improvement both internationally and locally. They would provide a reliable measure of quality against which to provide support, measure improvement, and contribute to answering the all-important question: what is affordable quality in low income ECD provision?
3. **Urgent attention and support is needed by those centres ALMOST able to register**. These centres are almost at the standard required by the DSD and so seem to require less support from a facilitating organisation such as True North. However, they are in a vulnerable position financially given the demands of the registration process and in reality need urgent and focused support to achieve DSD registration.
4. **The DSD registration process may lead to the targeting of SA poor**. Foreign children do not access the Child Support Grant which could compromise their families' capacity to pay fees. Similarly, they do not automatically qualify for the state subsidy should they be enrolled in a registered ECD centre. Those centres operating at the margin may start selecting South African nationals over foreigners because of these key financial implications. In addition, the numbers of foreign children in the area provide additional complexity: they join an already multi-lingual environment in which language and emergent literacy is impaired by the poor quality of English instruction.
5. **There may be a developmental graduation that occurs when centres move from a reliance on donations to active fundraising.** While the pool of possible spare cash in and around Vrygrond may appear to be limited, a few of the centres have focused on developing their community support networks. Those that have, have been successful. However, this may simply be evidence of a self-help attitude that permeates

throughout the functioning of a successful ECD centre. Nonetheless there is the potential to encourage active fundraising.

6. **There is limited evidence of convergence of salaries with qualifications in the area**. Similarly, the importance of stipends to supplement practitioner salaries is key to the viability of some of the centres, a practice which is quite possibly unsustainable.

Background

In March 2013, The Learning Trust embarked on a process to build their organisational knowledge in the early childhood development (ECD) arena, specifically regarding the financial sustainability of ECD centres and the opportunities for educational enrichment that centres could offer. True North, a well-established organisation focused on the young children of the Vrygrond community, welcomed the potential both to build its knowledge base regarding the centres it works with, and to formalise and authenticate the learning and good practice built over the last few years within the organisation. This research piece was conceived to provide evidence-based support to both establishments.

Research priorities

Essentially, there were two elements to this investigation. Firstly, it involved a detailed investigation into the **cost base of ECD centres** to accurately assess a cost per child of programme delivery in Vrygrond**.** In our experience, this is not something most practitioners spend much time on, and is a key area of meaningful intervention, both in order to contextualise centres' unique funding needs and petitions to the Learning Trust, and to assist True North with its support model. This is part of a broader agenda around 'Subsistence to Sustainability' and the catalytic support both the Learning Trust and True North can provide at certain stages in the development of ECD centres. This has been support-focused: together with focused financial training from True North, ECD centre managers have been given a benchmarking tool in an accessible excel format to assist them in developing a sustainability plan for the centre.

Secondly, the Learning Trust wanted to understand how early childhood centres support the cognitive and non-cognitive development of their children. Embedded in this second theme is the concept of assessment of both facilities and children. True North is aware that many teachers, especially those working in the more disadvantaged schools, struggle with observation and assessment. Once again, the goal of this section of the investigation would be to develop a functional support tool for ECD centre managers and the True North team to regularly gauge their impact on their children's outcomes. This is a terribly important contribution, and goes beyond the 'brick and mortar' requirements of the Provincial Department of Social Development's (DSD) registration process by bringing the focus back directly onto child outcomes.

Number and selection of centres

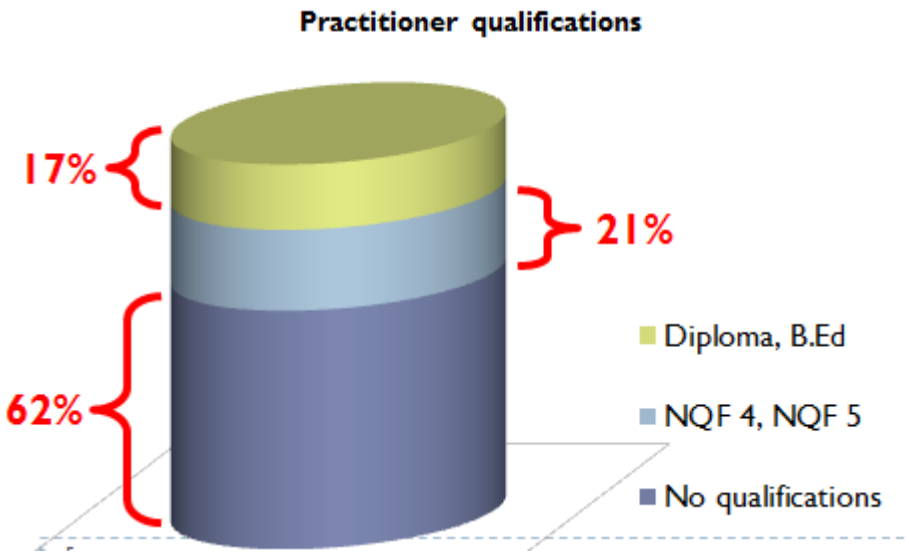
True North is currently supporting 23 ECD centres in Vrygrond, and ideally would have liked to audit each of these centres. The Learning Trust wanted this assignment initially to bring out the broader, shared issues, and thus a compromise of 11 centres was made. The selection of the specific sites was of key importance. A cross section of sites reflecting varying degrees of formality and competence was felt to be ideal in understanding the robustness of this small investigation's results. There was also an interesting dynamic regarding centre size and its concomitant financial sustainability, and thus both large scale centres and

'organic Vrygrond' home-based centres were scrutinised. A six page questionnaire was drafted and sense-checked with True North staff. All interviews with principals were preceded by an initial visit introducing the researcher to the centre staff, and highlighting the reasons for the research and the confidentiality of the data collected. A good working relationship was key to enabling constructive engagement around the sensitive issue of finance.

A brief snapshot of the sampled ECD centres

In total, approximately half of Vrygrond's child care centres were sampled (11/23 centres) covering a total of 835 children. Four of the centres are currently registered with the DSD, covering almost 60% of sampled children. No centres are currently registered with Department of Basic Education (DBE), although one centre is in the process of registering. All centres offered full day care, averaging 10.5 hours per day. Over 80% of sampled centres were established within the last 10 years, possibly an indication of the success the DSD subsidy has had in encouraging both the demand (parents wanting their children to access the subsidy and therefore placing them in educares) and supply side (practitioners expanding their services) of the ECD market. English is the chosen language of instruction despite Afrikaans and Xhosa home language dominance, and importantly, few practitioners are fluent in English. As depicted in Figure 1, most practitioners are not trained to work with children.

Figure 1: Practitioner qualifications



Monthly fees ranged from an average of R275 per child per month for those children still in nappies, to R190 for those children 'potty-trained' (out of nappies), as shown in Figure 2. However, if one removed the two outlying low fee preschools (charging R100 and R50 respectively), the average monthly fee was R216 per child.

The Western Cape's DSD Audit of Unregistered Facilities in 2011 found fees to be on average between R90-R240 a month. And the large-scale Public Expenditure Tracking Survey (PETS) of ECD facilities across three provinces in 2010 found, on average, monthly fees to be approximately R181.

The comprehensive 2012 Diagnostic Review of Early Childhood Development was clear that mechanisms should be in place to enable parents to demand ECD for their children, to hold the state accountable should there be a failure of provision in terms of access and quality, and be able to pursue resolution through legal channels (Richter et al., 2012). However, the power of the user-fee model was not recognised: that the short route of accountability though parents' direct relationship with the providers of services to their children is a

quicker, more effective mechanism, especially in the absence of established and legislated School Governing Bodies as in the ECD sector. Accountability to fee-paying parents puts pressure on service providers to provide a service perceived by parents to be of good quality and at relatively low cost. For this key reason, the PETS' report recommended retaining fees for registered community-based ECD centres, even for the poorest centres (van der Berg et al., 2010).

Figure 2: Average monthly fees

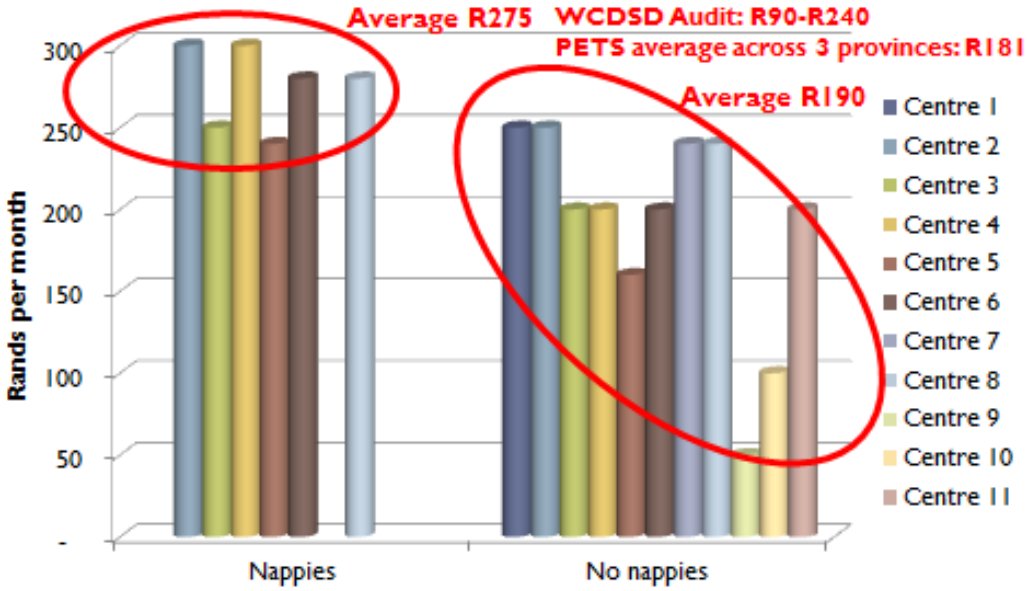
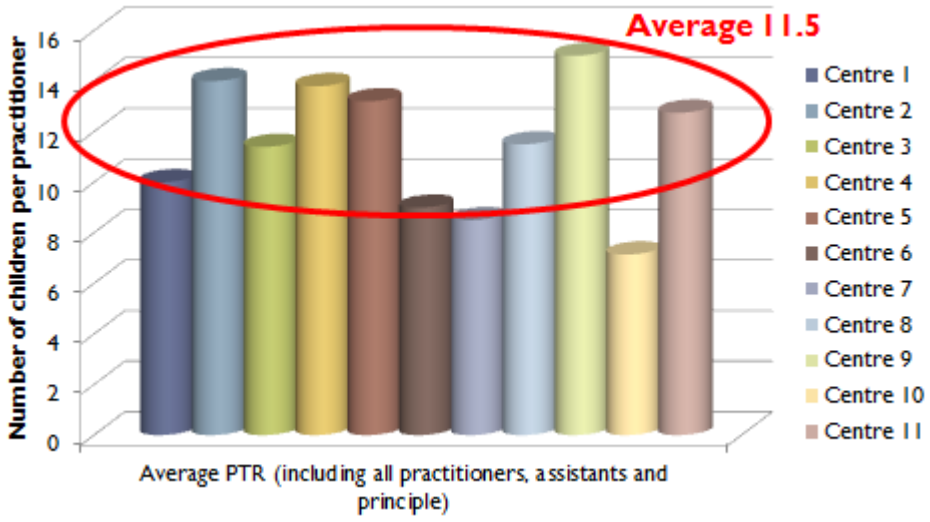


Figure 3 shows that, on average, child-practitioner ratios in the sampled centres were within the DSD guidelines. To calculate this, all practitioners, assistants **and the principal** were included as the total staff contingent divided by the reported number of children. However, it was difficult to assess age norms for ratios as children were seldom organised into the age breakdowns given by the DSD norms and standards. In most cases, the centres' reported number of children was either identical or remarkably similar to the numbers that True North had on record for each centre. Current DSD regulations require a ratio of 1:6 for children 0-18 months, a ratio of 1:12 for children between 18 months-3 years, and a ratio of 1:20 for the 3-4 year group, and 1:30 plus an assistant for children aged 5-6 years (Grade R). All sampled centres had more than 20 children and so could theoretically qualify for the DSD subsidy.

Figure 3: Average child-practitioner ratios



ECD centre costs per child per day

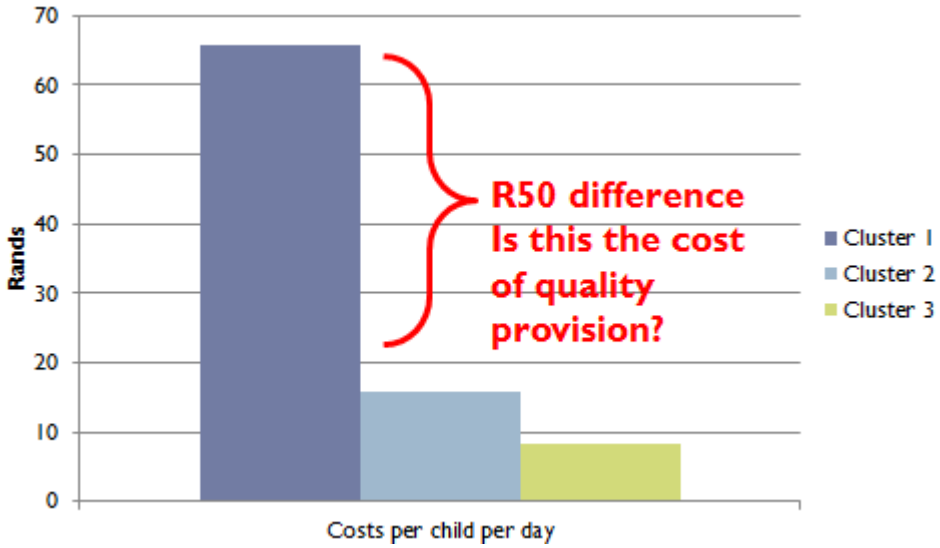
The literature on costing early learning programmes is thin. Methods for estimating the cost of providing young children with access to high-quality early learning services seem often systematically biased to produce high estimates. For example, Carter et al (2008)'s South African ECD centre costing study calculated per child unit costs using the highest salaries found, and food and learning materials based on what 'should' be provided to ensure a minimum standard of care, rather than on what is actually provided. This was done intentionally: the authors claim that many centres under-pay staff and do not spend as much on learning materials and other running costs as they should, and therefore trying to replicate actual practices is likely to lead to under-estimating the required costs. Their costing study determined the value of resources that **should** flow to centres to ensure the provision of quality services, rather than maintaining the status quo. For this reason, it provides an important touchstone against which to assess any costing models.

In this study, data on costs clearly indicated that a one-size-fits-all average cost per child per day in Vrygrond was not going to provide an accurate snapshot of reality. Three categories were thus created, reflecting the natural clustering of centre costs.

- Cluster 1: Centres with high costs, significant external funding and DSD registration.
- Cluster 2: Centres with medium costs and some external funding support or strong fundraising initiative. This cluster included both DSD registered and unregistered centres.
- Cluster 3: Centres with low costs, a heavy reliance on donations, for example, food, but no fundraising to cover costs. Most of these centres still have a long road to travel before they would be eligible for DSD registration.

There is a startling difference in costs for essentially the same service – full day child care in a poor community. As depicted in Figure 4 below, Cluster 1 had an average cost of R66 per child per day. Cluster 2 had an average cost of R16 per child per day. Cluster 3 had an average cost per child per day of R8.

Figure 4: Costs per child per day



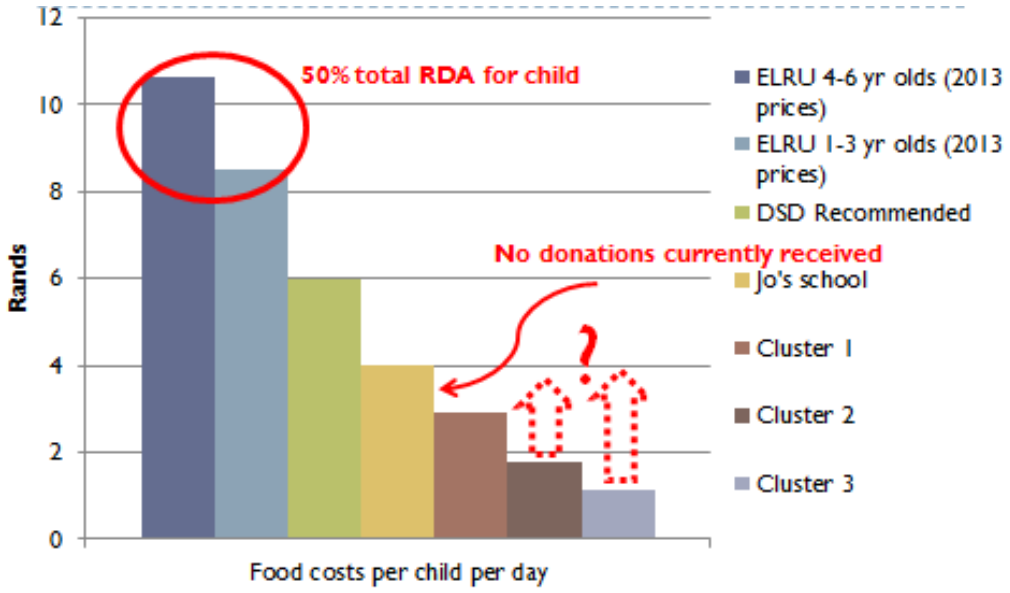
The report will now unpack the key elements that make up this total cost figure, and try to understand what creates this large differential.

Let's start with food costs. Food and nutrition security is a problem in disadvantaged communities. The nutrition provided to children during their years prior to formal schooling is a significant contributor to their

healthy development. All centres surveyed indicated that some form of nutrition was provided: most often, two main meals and two snacks were offered throughout the day. Parents contribute to snack time in all but 1 sampled centre.

Figure 5 provides some more information on food expenditure. This is a detailed and full graphic which tries to include some interesting benchmarks. On average, food expenditure in Vrygrond was extraordinarily low at R1.70 per child per day, but as we've discussed, this average figure is relatively meaningless as it differs significantly according to the three clusters. This figure does NOT include the value of the donated food received from Stop Hunger Now and the ad hoc donations received from Foodbank. Figure 5 posits that these donations may mean that the value of food provided in these crèches puts them at a par with Jo's school. Jo's school, with an expenditure of R4 a child a day, has been isolated here as they currently don't receive any donations nor allow parent contributions of food. Despite this, they manage to keep costs low by buying food in bulk from Makro or Bidvest and being vigilant about leakage. The DSD currently recommend that half of the ECD per capita R12 daily subsidy is spent on food, which amounts to R6 per child per day. The other benchmarks which are of interest are the food menus for children 4-6 years and 1-3 years created for the 2008 Carter et al costing study. Good nutrition does not equal how many meals are provided (for example one or two meals a day), and these menus cost what it takes to provide a child with 50% of its Recommended Daily Allowance of nutrients. Here the items were re-priced at Shoprite Checkers to ensure 2013 price accuracy. According to these menus, it costs R8.51 and R10.63 to feed a child of 1-3 years or 4-6 years respectively in 2013. However, while this graphic points to possible underinvestment in the nutrition of Vrygrond's children, is clear that this area would benefit from further investigation.

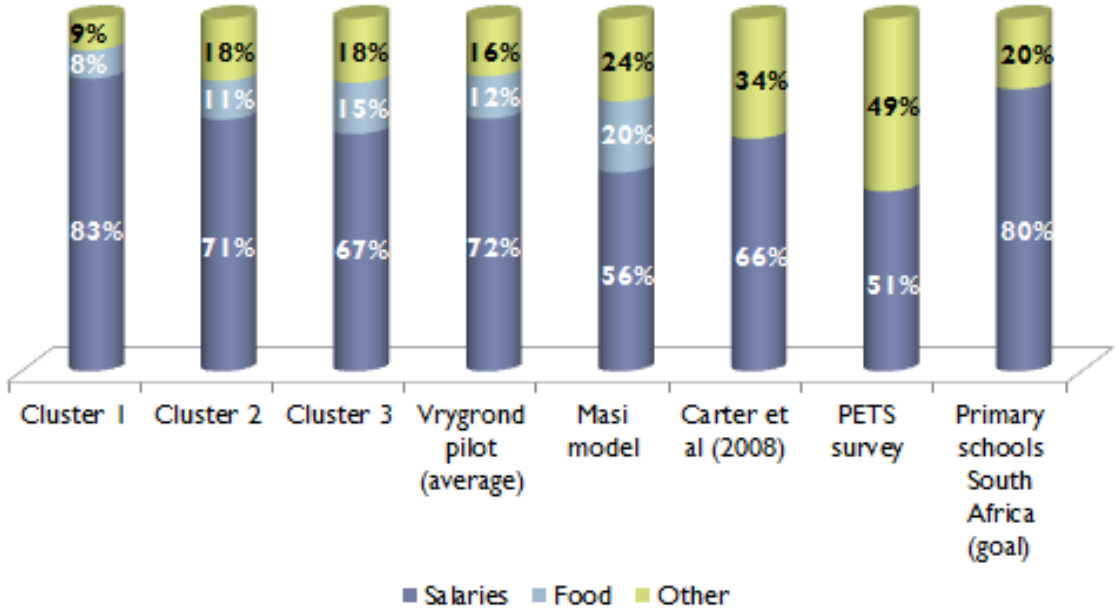
Figure 5: Food expenditure per child per day



In reality, food costs turned out to be a relatively small proportion of total ECD centre costs. Total cost composition varied quite significantly depending on which Cluster was examined. Figure 6 shows that on average, Vrygrond centres spend 12% of their total costs on food, although the variety shown in the Clusters describes the actual pattern more accurately. It is self-evident that low cost centres would spend a higher proportion of their daily expenditure on food. Included in Figure 6 are a few other benchmarks: the Masi model is a theoretical financial model for a crèche in Masiphumele, a township of similar size and income distribution to Vrygrond. It is included here given its relatively higher food budget. The final three models in Figure 6 unfortunately do not earmark food expenditure: it falls into the 'Other' category. However, the Carter et al and PETS report models show substantially less spent proportionally on practitioner salaries. The

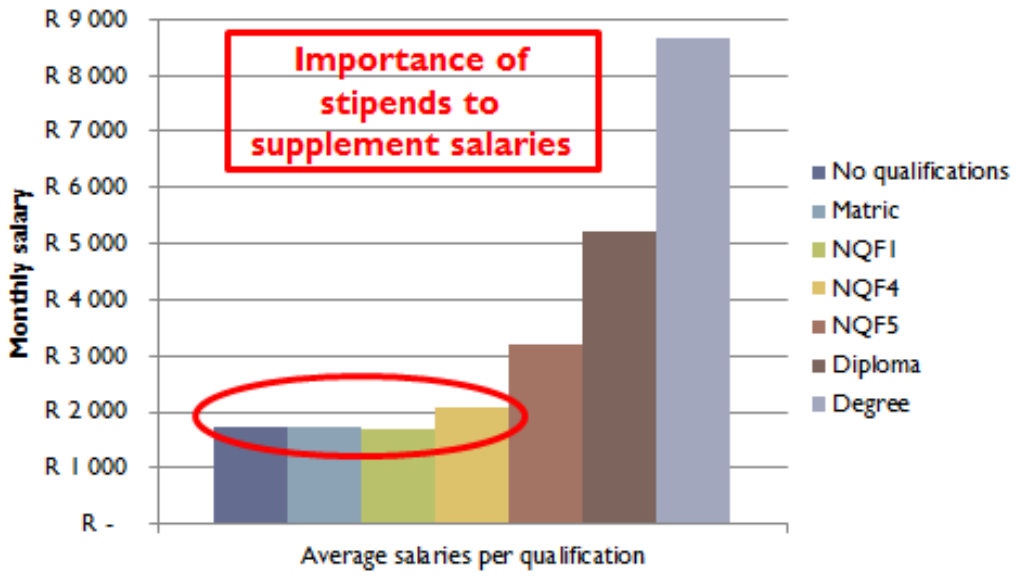
final benchmark is the cost model for South African primary schools: here over 80% of daily expenditure goes on teacher salaries.

Figure 6: Cost composition of clusters and benchmarks



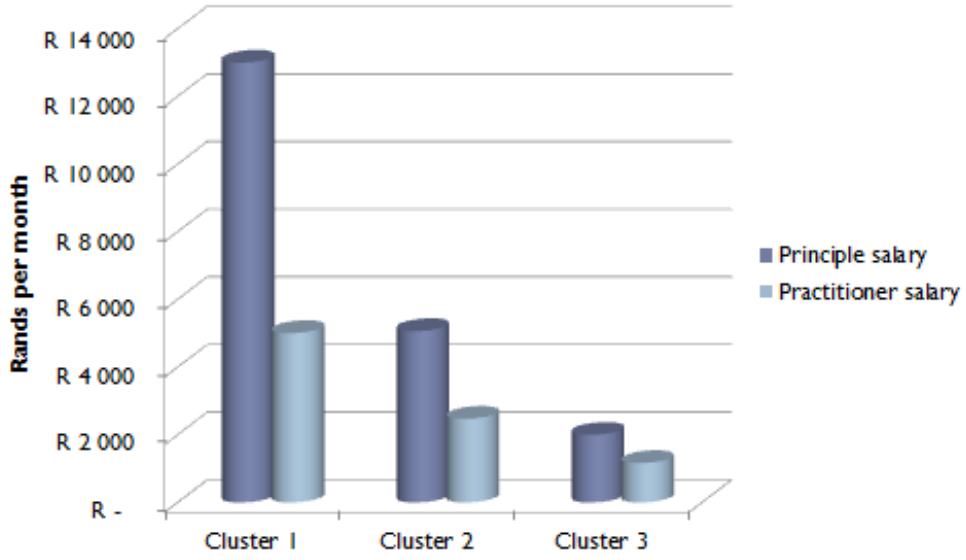
So let us now focus on practitioner salaries, as they form the core element of centre cost structures. The analysis in Figure 7 shows that there was no real difference in salaries at the lower levels of practitioner qualifications. However, it is important not to take these averages to mean anything more than rough guide, as the sample size was too small to benchmark accurately. Also, the common practice of using training stipends to supplement practitioners' salaries would have dampened the actual salaries reported for those working towards an ECD Level 1 (NQF1) or an ECD Level 4 (NQF 4) qualification.

Figure 7: ECD centre staff salaries



As detailed in Figure 8, while principals earn a premium over practitioners, their salary depends more on which centre they belong to than their qualification. This is not an earth shattering observation: it seems to hold true for most jobs worldwide.

Figure 8: Differences in salaries between principals and practitioners



Internationally, teaching staff are often paid less in preschool than they are in primary education; on average, a teacher salary in preschool would represent about 81% that in primary education (Hyde, 2006). In South Africa there is currently strong pressure to pay practitioners in community-based centres for children aged 0-4 'adequate salaries', which are compared directly to the salaries paid to Grade R teachers in community-based centres by the Department of Basic Education (Richter et al., 2012).

The PETS report revealed the disparities in salaries for practitioners of Grade R. Teachers employed by School Governing Bodies (SGBs) earn almost twice what community-based Grade R practitioners earn, but are only paid about 42% as much as their public sector counterparts paid through Persal, the public sector electronic salary system. Such teachers do not appear less qualified than their Persal-paid counterparts. Van der Berg et al (2010) run a regression equation capturing all qualifications which shows a premium of almost R2000 for those being paid through Persal. This premium was about as large as the effect of fifteen years of additional experience. The authors thus question whether public salary levels are inflated compared to market demand and supply, as clearly, many people are willing to work in ECD facilities at far lower salaries.

Figure 9 provides domestic benchmarks from the two studies already mentioned. Salaries observed by both the PETS report and the Carter et al (2008) study were similar, and so were first averaged together, and then a combined average of the teachers and principal salaries was created to be the '*observed*' variable. The '*recommended salaries'* are the highest salaries found and recommended by the Carter et al (2008) research.

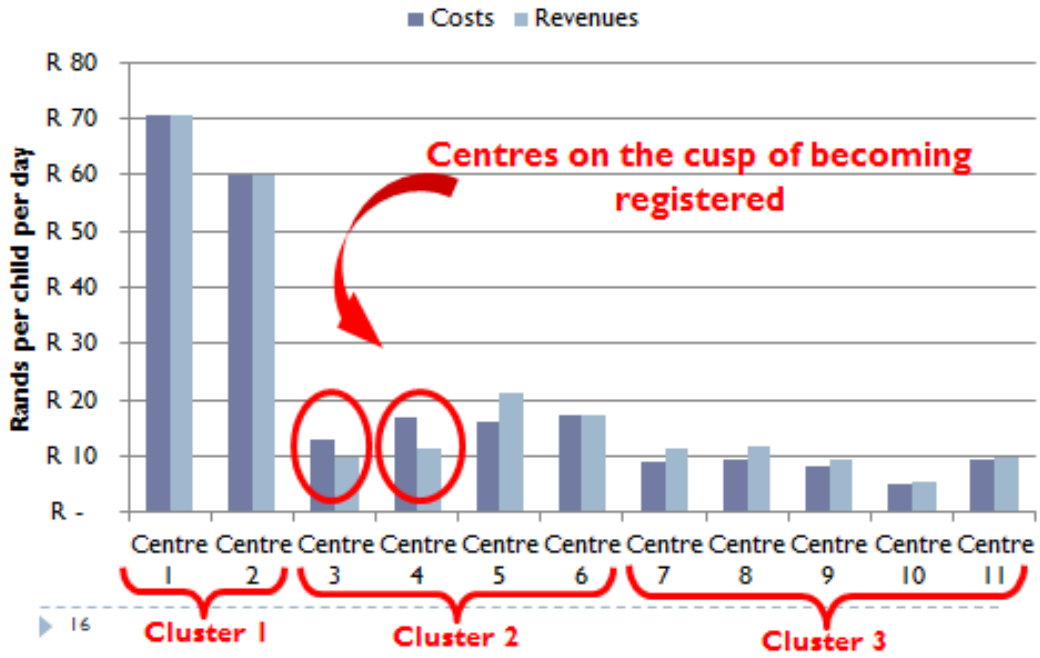
However, it is useful to bear an important caveat in mind which is repeated throughout the literature: paying someone a certain salary in no way guarantees either a certain quality level of care, or the sustainability of the centre (Carter et al., 2008). A final pertinent observation is taken from data collected recently by a University of Stellenbosch labour market survey of youth: 25% of the sample is working for R1500 or less, and 73% of surveyed participants would chose to work at R1500 if work was nearby. It is perhaps more appropriate to use data such as this when making sense of the salary levels within this sector as opposed to that from the formal education sector.

Figure 9: Benchmarking salaries: recent studies

	Average of PETS survey & Carter et al (2008) study: Observed salaries			Recommended salaries: Carter et al (2008)		
	Per month	Per annum	pc GDP	Per month	Per annum	pc GDP
Principals	R3 426	R41 112	50%	R7 575	R90 898	111%
Teachers	R2 217	R26 601	33%	R5 303	R63 629	78%
Assistants	R1 894	R22 725	28%	R3 535	R42 419	52%

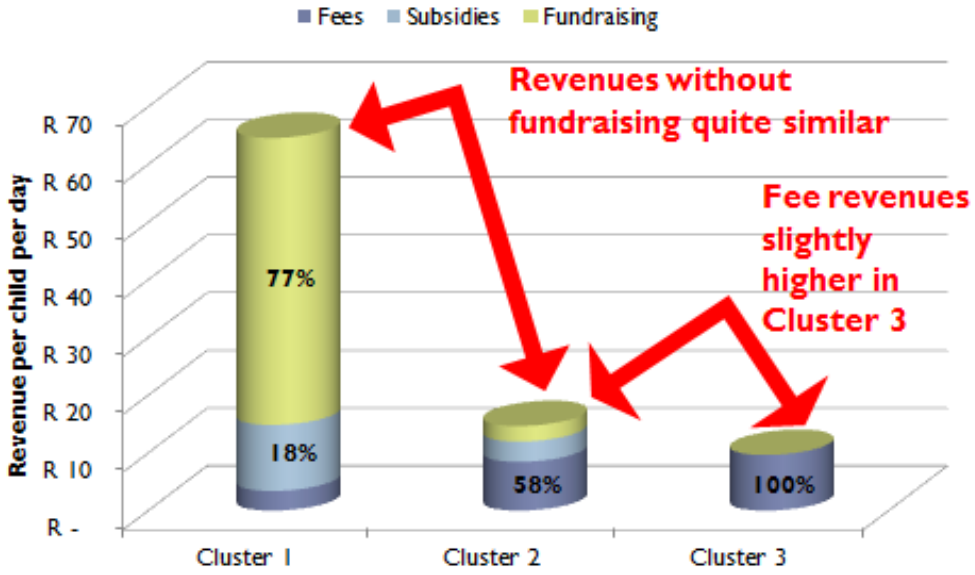
Despite significant differences in costs frameworks, few centres were operating at a loss. Figure 10 below shows that for most facilities, there is a fair match between income and expenditure, though there were a few cases that deviated substantially from the zero profit or loss line. Small facilities of this nature cannot on a continuous basis make a loss and keep functioning. A loss in any particular year is possible for those facilities that may have accumulated reserves, but this is likely to be a small number and would not be sustainable. It became clear that the two centres currently reflecting a loss are on the cusp of becoming registered. They may have upped the quality offered by their centre by either attracting better qualified (and thus more expensive teachers), or lowering their enrolment numbers for the purposes of passing the registration requirements, but now find themselves in the vulnerable position of still relying on fee revenues alone.

Figure 10: Costs and revenues of individual centres



A closer look at the decomposition of revenue streams shows the importance of fundraising. Figure 11 shows that average fee revenues are slightly higher in Cluster 3 than Cluster 2, while total revenues from fees together with subsidies in Cluster 1 and 2 are similar. The only real difference between Cluster 1 and Cluster 2 is the extent of their external fundraising, which amounts to 77% of Cluster 1's total revenues.

Figure 11: Key revenue streams per cluster



Subsistence versus sustainability

But what is sustainability and what is subsistence? If a centre is breaking even, is it sustainable or subsisting? If it is making a profit, is that then more economically sustainable? If a centre is operating exclusively from fee revenue, is that less sustainable than the centre that receives government subsidies in addition to fee revenues? Is a centre that receives no external funding more sustainable than a centre that receives the majority of its revenues through fundraising efforts? Is a centre wholly reliant on government subsidies in a sustainable position?

These questions are not straightforward. Let us look at a couple of options. Figure 12 details two possible sustainable options: the first taken from data recorded in the PETS report, the second using what we now know about average fee revenues in Vrygrond specifically. The PETS report found government subsidies covering 43% of centre costs, fees covering 41% and external funding the remaining 16%. This totals R29 per child per day based on the current daily subsidy of R12. The hypothetical Vrygrond model conservatively presumes that no external funding can be found, that fee levels are on average lower at R10 a child a day and that the R12 subsidy is received. Thus the total hypothetical Vrygrond model would cost R22 a child a day.

Figure 12: Sustainability through the state subsidy

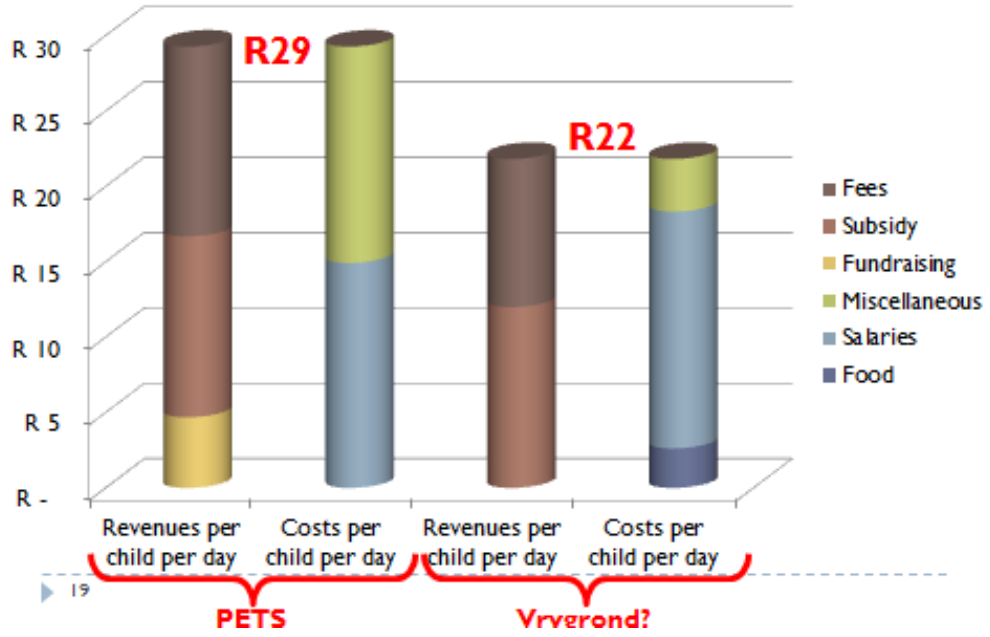
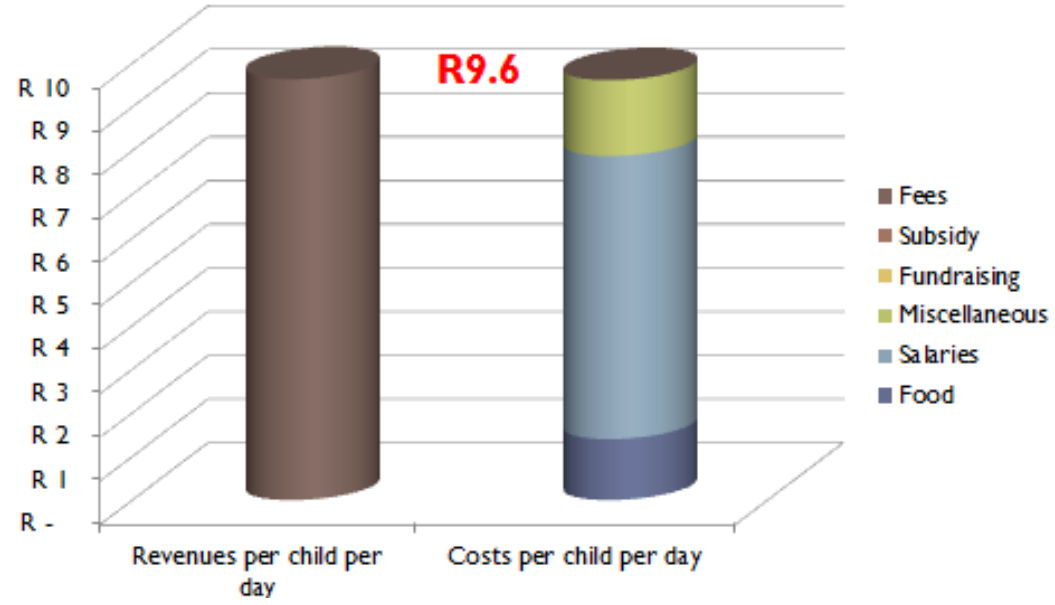


Figure 13 then looks at what the model looks like without state or external community support. Here revenues are solely derived from fees, and costs are concomitantly low. At R9.60 a child a day, this is what subsistence in ECD provision probably looks like.

Figure 13: Subsistence without the state subsidy



Benchmarking centre-based ECD unit costs

The final Figure 14 below is important to frame the subsistence and sustainable debates. Here a number of international and domestic ECD programmes are listed as well as the costs of the three Vrygrond clusters. It can be seen that there is possible convergence in the costs of four programmes: the universal pre-school programme in Uruguay, what Grade R in community-based centres is costed at according to the DBE's White Paper 5, what the current DSD subsidy covers, and what Cluster 2 is costing.

Figure 14: Benchmarking centre-based ECD unit costs as a proportion of national per capita GDP and in Rands.

		ECD unit cost as a % of national pcGDP PPP	ECD unit cost as a proportion of domestic GDP in 2012 Rands
International benchmarks	Central and Eastern European countries	27.5%	R22 441
	US: Perry Preschool Programme	27%	R22 055
	OECD countries	19%	R15 505
	Average sub Saharan Africa	17%	R13 873
	Uruguay	5%	R4 080
	Community preschools West Africa	4.2%	R3 427
South African benchmarks	SA Primary School spend per pupil (UNESCO)	14%	R11 047
	Grade R in public schools (WP5: 0.7 X primary school spend per pupil)	9.5%	R7 733
	Grade R in community centres (WP5: 0.4 X primary school spend per pupil)	5.4%	R4 419
	DSD current annual subsidy per child	4.9%	R3 960
Vrygrond pilot	Cluster 1	19%	R15 321
	Cluster 2	5%	R4 184
	Cluster 3	3%	R2 237

Assessing Quality Outcomes

The tools available for assessing young children, their cognitive and non-cognitive development and their environments have increased vastly in number and variety in recent years. Advances in child development research and demands from educators, evaluation researchers, and policy makers have converged to provide a dizzying array of assessment options, some of which are detailed in Figure 15 below. It also became clear that the costs of administering such tests are significant: few, if any, can be administered by an untrained professional, a scarce resource in and of itself, and all are relatively time intensive. In the South African context, when such individual child tests are administered, they are normally done as part of a major, and well-funded research study (such as the Sobambisana evaluation) or as a once-off, pro bono gift (such as the school readiness suite of tests administered to the Jujurha pre-schoolers in the Bulungula Incubator).

Thus, a more scale-able, yet still rigorous assessment of the quality of the **ECD centre itself** was sought. Observational measures serve a number of purposes. First, they can be used for practitioner professional development as they can call practitioners' attention to their own behaviours and practices that might promote positive child outcomes. Administrators of formal early care and education programmes—such as educare centres, crèches, pre-schools, pre-kindergartens—can also use classroom observation measures as part of their practitioner evaluation strategy, as a more objective, sharable set of criteria for observation. The rating of the environment is used not only as a contributor to the summary rating of quality, but also as a source of detailed information about the facets of quality that need improvement and in which changes will help progress to the next quality rating.

Several promising professional development programmes use observational measures as the basis for improving quality of child care. In the US for example, Pianta and colleagues use their tool, the CLASS (Pianta,

La Paro, and Hamre, 2007), to promote more intentional instruction, classroom management, and emotional support in the classroom through their professional programme, My Teaching Partner (Kinzie et al., 2006). The Quality Interventions for Early Care and Education (QUINCE) intervention and evaluation, which uses on-site technical assistance to improve the quality of home-based as well as centre-based child care, uses the environmental ratings scales, ECERS-R (Harms, Clifford, and Cryer, 1998), to promote the use of age-appropriate activities and enhance teacher-child interactions in their programme, which follows the Partners for Inclusion model (Bryant, 2007; Wesley, 1994). Since 1980, and with its revision in 1997, the Early Childhood Environment Rating Scale (ECERS-R) and its curricular extension (ECERS-E) have provided a quality assessment instrument of established reliability and validity. As a tool for research, self-evaluation, audit and inspection, the ECERS suite is considered internationally both sufficiently rigorous for research and also has credibility within the ECD practitioner community. For example, the longitudinal Effective Provision of Pre-school Education (EPPE) project which followed the progress of approximately 3000 children from ages 3-11 in the UK from 1997 to 2003 used the scales to great effect. Through this study, amongst others, it became clear that high quality pre-school settings must provide pre-school children with developmentally appropriate activities to promote literacy, mathematics and science without becoming rigid and academically inappropriate. Locally, the Sobambisana Initiative successfully used the ECERS both prior to and post intervention, and found it to be an effective lever of quality and support, especially as it measured those factors that principals can directly control (Dawes, Biersteker, & Hendricks, 2011). Through the ECERS tools, the following subscales are examined: space and furnishings, personal care routines, language-reasoning, activities, interaction, programme structure, parents and staff, literacy, mathematics, science and environment and diversity.

Figure 15: A few child-focused early learning/development/disability assessments

Authentic Curriculum Consistent Measures

1. Multi-domain Assessment tools
2. Ages and Stages questionnaire
3. Battelle Developmental Inventory
4. Child Observation Record
5. Developmental Assessment of Young Children
6. Developmental Continuum
7. Developmental Observation Checklist system
8. Early Screening Profiles –Revised
9. Learning Accomplishment Profiles
10. The Grover-Counter Scale of Cognitive Development
11. The Peabody Picture Vocabulary Test (PPVT4)
12. The Sobambisana Language Development Standards Assessment based on the National Early Learning Development Standards assessment and adapted for each language in the Sobambisana initiative
13. The Academic Readiness and Resilience subscales of the South African Child Assessment Scales (SACAS)
14. The Numerical and Counting Concepts tests from the Evaluation Scale for Cognitive and Motor Development Tasks for Black Children
15. Basic Schools Skills Inventory
16. Bracken Basic Concepts Scale
17. Boehm Test of Basic Concepts
18. Kaufman Survey of Early Academic and Language Skills
19. Young Children's Achievement Test
20. Devereaux Early Childhood Assessment Programme
21. Pre-school and Kindergarten Assessment Scales
22. Social Skills Rating System
23. Vineland Social Emotional Early Childhood Scales

Specific Early Learning Skills Measures

1. Comprehensive test of phonological and print processing
2. Dynamic Indicators of basic emergent literacy skills
3. Early Literacy skills assessment
4. Phonological awareness literacy screening
5. Test of early reading ability
6. Diagnostic Evaluation of Language Variation
7. Test of Early Language Development
8. Oral Written and Language scales
9. Test of Early Mathematics Ability

Disability sensitive Measures

1. Adaptive Behaviour Assessment Scale Two
2. Ages and Stages Questionnaire – Developmental, Social/Emotional
3. Assessment, Evaluation and Programming System
4. Carolina Curriculum for pre-schoolers with special needs
5. Communication and Symbolic Behaviour Scale
6. Every Move Counts
7. Pediatric Evaluation of Disability Inventory (PEDI)
8. Temperamental and Atypical Behaviour Scale

Conclusion and Discussion

1. **Sustainability is a hollow concept without some tie to quality.** The PETS study highlighted how centres with inadequate or poor programmes detract from the overall cost-efficiency of the investment in ECD. If government or donors spend money on ECD programmes but get little more than an environment where children are "looked after," the intention of the expenditure – to provide early educational benefits that could place children on a trajectory that could eventually improve their overall quality of life – will not be achieved. A poor quality programme is therefore an indirect "leakage" point (or waste) in the expenditure cycle.
2. **Not all ECD centre principals prioritise an environment that facilitates early stimulation.** Measuring the quality of care offered can be done either by directly assessing the children's outcomes, which may become a prohibitively resource-intensive exercise, or by assessing the centre in general. The quality of centre-based provision is a significant predictor of children's development at school entry. The Early Childhood Environmental Rating Scale (ECERS) tools have proven effective in self-assessment & improvement both internationally and locally. The ECERS E assessment relates directly to children's cognitive development, while the ECERS R is a more sensitive measure of children's socio-behavioural development. Together they would provide a reliable measure of quality against which to provide support, measure improvement, and contribute to answering the all important question: what is affordable quality in low income ECD provision?
3. **Urgent attention and support is needed by those centres ALMOST able to register as a Partial Care Facility in terms of the Children's Act 38 of 2005**. These centres are almost at the standard required by the DSD and so seem to require less support from a facilitating organisation such as True North. However, they are in a vulnerable position financially given the demands of the registration process, and in reality need urgent and focused support to achieve DSD registration.
4. **The DSD registration process may lead to targeting of SA poor**. This is a concern based on off the record conversations with a few savvy principals both in Vrygrond and Masiphumele. Foreign children do not access the Child Support Grant which could compromise their families' capacity to pay fees. Similarly, they do not automatically qualify for the state subsidy should they be enrolled in a registered ECD centre. Those centres operating at the margin may start selecting South African nationals over foreigners because of these key financial implications. In addition, the numbers of foreign children in the area provide additional complexity: they join an already multi-lingual environment in which language and emergent literacy is impaired by the poor quality of English instruction.
5. **There may be a developmental graduation that occurs when centres move from a reliance on donations to active fundraising.** While the pool of possible spare cash in and around Vrygrond may appear to be limited, a few of the centres have focused on developing their community support networks. Those that have, have been successful. However, this may simply be evidence of a self-help attitude that permeates throughout the functioning of a successful ECD centre. Nonetheless there is the potential to encourage active fundraising.
6. **There is limited evidence of convergence of salaries with qualifications in the area**. Similarly, the importance of stipends to supplement practitioner salaries is key to the viability of some of the centres, a practice which is quite possibly unsustainable.
7. **It was near impossible to determine establishment costs.** The piecemeal nature of building over time and the significant and ad hoc donations of materials made recording the costs of developing a centre fit for DSD registration unreliable.

True North focused recommendations

1. **Financial confidence and competence for all principals a priority:**
    - Use the developed financial spread sheet model as support tool for financial planning workshops/training for all Vrygrond principals.
    - Encourage fundraising and a self-help attitude with ideas and concrete training as centres graduate from a reliance on donations to active fundraising.
2. **Focus urgent attention on those centres ABOUT to register!** These centres are almost there and so seem to require less support from a facilitating organisation such as True North. However, they are in a vulnerable position financially and in reality need urgent and focused support to achieve DSD registration as soon as possible.
3. **Employ Active Learning staff member focused on child outcomes as soon as possible.** There has already been firm interest from an Australian funder to financially support this role within True North, and the Learning Trust has assisted with the development of a clear job description for an experienced and fully qualified ECD person.
4. **Move beyond a focus on DSD registration to real centre quality by actively using the Early Childhood Environmental Rating Scale (ECERS) as a tool to improve quality and focus support**.
5. Look to build a True North-affiliated 'A team' of child psychologists, occupational therapists, etc that can be called in as and when needed.
6. Think strategically about the steps that can be taken now to build a research agenda over the next few years that contributes to the national dialogue:

    - What is affordable quality?
    - What happens to the fee levels of centres once they become registered?
    - Does registration change the entrance criteria for children? There are signs that the DSD registration process may lead to the targeting of SA poor. Foreign children do not access the Child Support Grant which could compromise their families' capacity to pay fees. Similarly, they do not automatically qualify for the state subsidy should they be enrolled in a registered ECD centre. Those centres operating at the margin may start selecting South African nationals over foreigners because of these key financial implications.
    - How to support emergent literacy in a multi-lingual environment? The numbers of foreign children in the area provide additional complexity: they join an already multi-lingual environment in which language and emergent literacy is impaired by the poor quality of English instruction.
    - Do parenting programmes change behaviour and have an impact on child development?

The Learning Trust focused recommendations

In concluding this first research study, the Learning Trust has asked what meaningful next steps it can take to continue the learning and relationships Herewith a few ideas:

1. **Sustainability within the ECD sector is a hollow concept without some tie to quality.** The PETS study highlighted how facilities with inadequate or poor programmes detract from the overall cost-efficiency of the investment in ECD. If government or donors spend money on ECD programmes but get little more than an environment where children are "looked after," the intention of the expenditure – to provide early educational benefits that could place children on a trajectory that could eventually improve their overall quality of life – will not be achieved. A poor quality

programme is therefore an indirect "leakage" point (or waste) in the expenditure cycle. **We now have a clearer idea of what the cost framework of township ECD centres looks like, but we need to understand whether such costs are able to produce environments which significantly improve their children's outcomes.**

2. **The quality of centre-based provision is a significant predictor of children's development at school entry, but not all ECD centre principals prioritise an environment that facilitates early stimulation.** True North is aware that most Vrygrond practitioners struggle with observation and assessment of their children and have limited understanding of what quality should look like. Assessing the quality of provision in early childhood services is more challenging than for schooling (Myers 2004). Achievement tests and competency assessments are largely absent at this level, especially in developing country contexts. Furthermore, a wider range of outcomes than those related to learning achievement is needed to judge programme quality, especially in developing countries. However, simply creating a quality index when we don't know for sure what the key variables may be completely inappropriate. For example, the weighted indices used in the Nationwide Audit of ECD Provisioning (Department of Education, 2001) included: an *infrastructure* index; a *support* index: a combination of items regarding degree of financial and educational support provided to the site by government, parents and educator training providers; *a programme* index: a measure of educational activities and programmes at the site; and an *educator information*: a combination of highest school grade achieved, highest ECD qualification years of experience of educators at the site. To highlight just one of these indices, that focused on the educator, Early et al (2007) found contradictory associations between teacher education levels and classroom quality, suggesting that raising the effectiveness of ECD services would require a broader range of professional development activities and supports than practitioner training alone. In South Africa Dlamini et al (1996) and the Department of Education's (2001) reception year pilot project found that training was important, but level of training alone was no guarantee of a quality service. **It is for reasons such as these that an internationally and locally validated tool such as the ECERS is recommended to gauge the quality of the environments that shape the cognitive and non-cognitive development of Vrygrond's children. How best to use and whom to train in this tool needs investigation.**

3. True North are recognising that a large number of children not attending ECD centres in the Vrygrond community and are trying to pilot ways to assist them. **However, it is unclear to what extent these ideas are being driven by an established evidence base or are planned to be evaluated.** Significant resources are being committed to develop these programmes (such as their parenting programmes). It may be of value for the Learning Trust to investigate the effectiveness of programmes such as these elsewhere (both locally and internationally), and under what conditions behaviour change/parenting programmes have traction, and to provide input at this early state of the organisation's pilots.

4. Much is being learnt about the pros and cons of a **local facilitating organisation such as True North versus a social franchising model**. The Seedlings Trust based in Masiphumelele is urgently looking for some input into how to support the 23 centres operating in its community. The Learning Trust should lead the way in providing an analysis of effective catalytic support models that build institutional capacity within the sector that can be replicated.