An Outcome Evaluation of Living Through Learning's Coronation Reading Adventure Room Programme

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A dissertation submitted in partial fulfilment of the requirements for the award of the Degree of Master of Philosophy (Programme Evaluation)

Faculty of Commerce

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2016

COMPULSORY DECLARATION:

This work has not been previously submitted in whole, or in part, for the award of any degree. It is my own work. Each significant contribution to, and quotation in, this dissertation from the work, or works of other people has been attributed, cited and referenced.

Signature: Signed by candidate Date: 15 December 2016

ACKNOWLEDGEMENTS

I would like to thank:

Prof Joha Louw-Potgieter, for her advice, continuous support and motivation.

Adiilah Boodhoo, for her support and guidance.

Sonja Botha, Salma Adams and the rest of the Living Through Learning team, for their assistance, welcoming nature and allowing me to evaluate their programme.

Alicia Nortje for her statistical analyses guidance.

My mother, Nolwazi Ngubane for her encouragement and support through my studies.

Lastly, my siblings Nqobani and Lwazi for their support.

EXECUTIVE SUMMARY

This dissertation was an outcome evaluation of the Living Through Learning's Coronation Reading Adventure Room Programme. LTL's reading programme objectives include aspects of improving and developing English literacy in disadvantaged schools, teaching learners how to read and write and equipping teachers with the necessary skills to teach effectively. LTL also provides facilitators to offer assistance to the teachers in order to teach effectively in overcrowded classes. The main programme beneficiaries are teachers and grade one learners. This dissertation focuses on 18 schools in disadvantaged communities in Cape Town who received the literacy programme in 2015.

Two evaluation questions were formulated, for the literacy programme. The first evaluation question focused on the learners and assessed whether or not the learners who were part of the CRAR programme were better off regarding literacy performance than they were before the programme. For the teacher characteristics, the evaluation question asked if the teachers' language teaching experience, English language proficiency, teaching self-efficacy, perceptions of usefulness of the LTL materials, and usage of the reading room had any influence on the learner's performance.

Secondary data provided by LTL was utilised to answer the literacy programme evaluation question. The data included test scores of grade 1 learners from 18 different schools. Primary data was used for teacher's characteristics and this was done through a questionnaire sent out to the different teachers. Data analysis methods included descriptive statistics for the learners' assessments and inferential statistics for teacher characteristics.

The results showed that learners who were part of the LTL programme showed improvement in assessment scores. All schools, except one, attained the realistic NGO (60%) standard in their reading assessments. Three schools attained the high standard (85%). Furthermore, all schools attained the 50% Curriculum Assessment Policy Statements standard in the CAPS based-assessments. Therefore, it can be concluded that the LTL programme successfully aided improvement of literacy skills of the learners who were part of the programme. In an analysis of teacher's characteristics, teacher experience in literacy was the only variable that significantly predicted learner performance in literacy.

However, the results must be interpreted with caution; the absence of a comparison group makes it difficult to give all credit to the LTL programme alone. At this point I simply do not know whether it was only the programme that led to the improvement in literacy scores or whether other factors had an influence, or a joint influence in combination with the literacy programme (e.g. learners started reading more in their own time as a result of the programme).

LIST OF ABBREVIATIONS

ANAs = Annual National Assessments

CRAR = Coronation Reading Adventure Room

CAPS = Curriculum Assessment Policy Statements

LTL = Living Through Learning

NITL = National Inquiry into the Teaching of Literacy

NRP = National Reading Panel

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CHAPTER ONE: INTRODUCTION

Education based tests conducted internationally and nationally show that a large number of primary school learners in South Africa cannot read at the average standard required (Spaull, 2013). These tests indicate that these primary school learners are behind where they are supposed to be in terms of the school curriculum. The 2014 Annual National Assessments (ANAs) revealed that the average home-language pass rate was 63% for grade one, 61% for grade two, 56% for grade three and 57% for grade four (Department of Basic Education [DBE], 2014). These results clearly indicate that there is a problem within the South African education system. The national average performance for languages seems to be decreasing instead of increasing from grade one up to grade twelve.

The National School Effective Study (NSES), based on data from grades three to five in 266 schools, showed that the average literacy and numeracy scores in grade three were 19%, in grade four 27% and in grade five 35%. These numbers indicate that all the learners in the study scored below the levels that they are expected to be achieving at their respective levels (Spaull, 2013).

In South Africa, literacy skills of foundation phase learners remain extremely poor. There are various problems faced by the South African government in providing quality education that will improve the literacy rate. These problems range from limited availability of trained teachers, to an excessive number of learners in each classroom, inadequate learning materials and a wide range of home languages (Sailors, Hoffman, Pearson, Beretvas & Matthee, 2010). Non-governmental organizations (NGOs) have played a major role in providing additional literacy interventions in schools. Examples of such interventions are the Shine Centre's Literacy Hour programme (Schkolne, 2014), Wordworks Early Literacy programme (Okeyo, 2015) and the Help2Read programme (Joffe, 2015). Another programme that addresses poor literacy in young children is offered by the non-government organization (NGO), Living Through Learning (LTL). The aim of this dissertation is to provide an evaluation of LTL's Coronation Reading Adventure Room (CRAR).

Programme Description

The following description of the CRAR programme was constructed from the CRAR Report (2015), interviews with programme staff (cited below) and the organization's website (http://livingthroughlearning.org.za/).

The CRAR programme is administered by a non-profit organization called Living through Learning (LTL), which is based in Cape Town, Wynberg. The CRAR programme is founded on a practical and developmental approach to literacy. The programme is facilitated by providing educational support and interventions to teachers and learners around Cape Town from historically disadvantaged communities. It aims at improving and developing literacy levels, building learners' confidence and equipping teachers with effective teaching skills.

The CRAR programme was founded by Sonja Botha, who has over 25 years of experience in producing results within the primary school sector in the Western Cape (CRAR Annual Report, 2015). The founder believes that empowerment of people comes from education (S, Botha, personal communication, February 27, 2016). Thus, the programme addresses social development issues through empowering those who come from disadvantaged communities by means of education. This is done through two initiatives: building teachers' skills to teach literacy and to implementing these skills by means of a child literacy programme.

The following donors provide financial support to the programme: Coronation Fund Managers, Chemical Industries Education and Training Authorities, Airports Company of South Africa, The Ackerman Family Trust, Datatec Educational Trust and Ridge Cape Capital (Living Through Learning, n.d.).

The ultimate goal of the programme is to build a proper educational foundation for primary school learners in South Africa. The programme seeks to achieve such a goal through its objectives. These objectives include aspects such as improving and developing literacy in disadvantaged schools, building confidence of learners in reading and writing and lastly equipping teachers with effective teaching skills to administer the programme successfully in schools (S, Adams, personal communication, March 04, 2016). Further, the programme has its own short and long term outcomes that it seeks to achieve. The short term outcomes with a timeframe of 1-3 years, are to see an improvement in teacher's ability to teach and manage the

class, increased improvement in teacher's ability to teach and manage the classrooms, improvement in foundation phase in English literacy at participating indigent schools and witnessing teachers and schools achieving better results with all their learners. The long term outcomes with a timeframe of 4-6 years, are to see improved performance of all the participating school and witnessing learners being exposed to different academic opportunities. These goals and outcomes are illustrated in the following diagram produced by LTL.

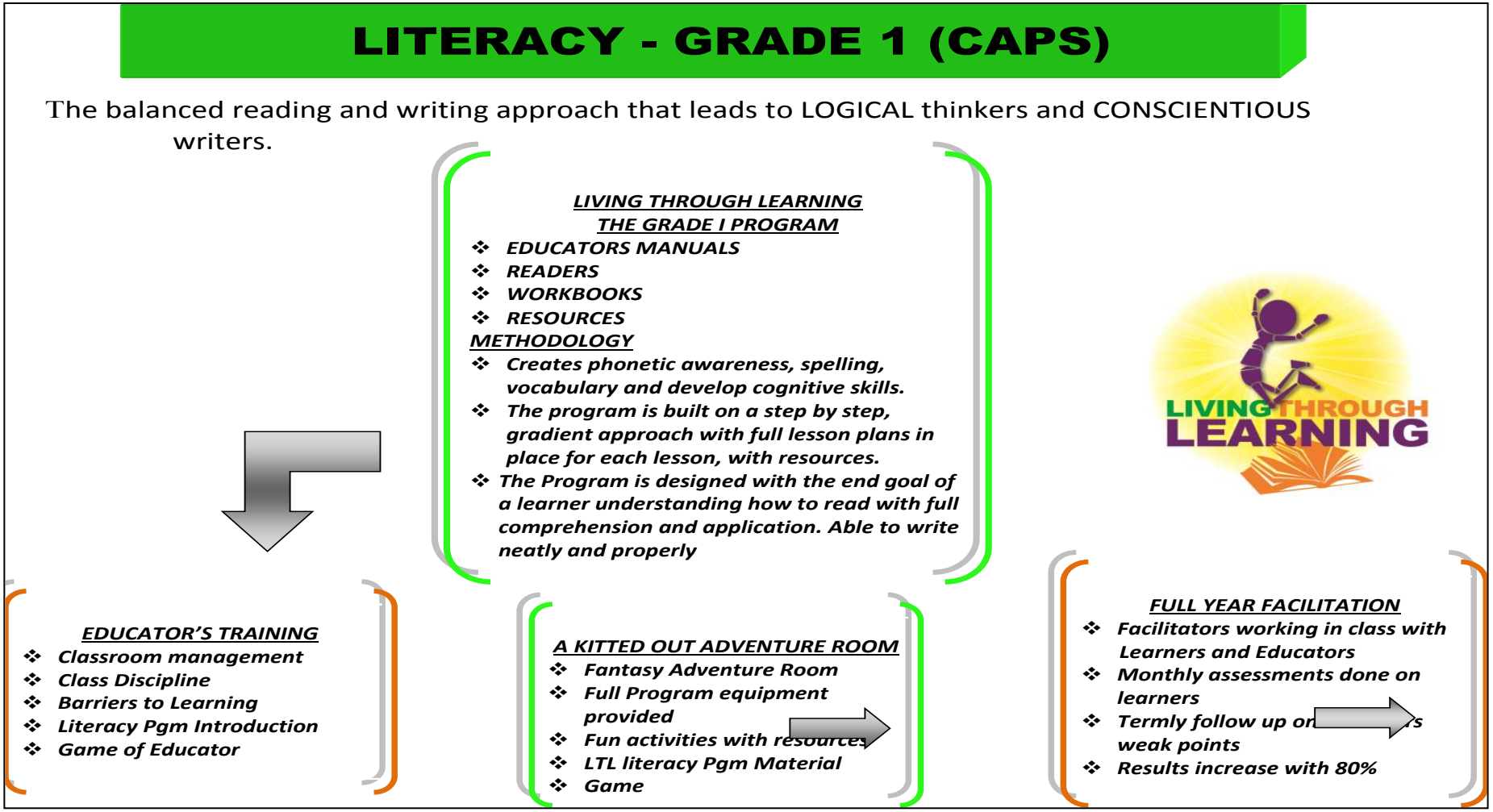

Figure 1. Illustration of goals and outcomes of Living Through Learning

Any disadvantaged primary school within the geographical proximity of LTL is eligible to apply to the programme (S. Adams, personal communication, March 04, 2016). Schools usually contact the organization requesting to be part of the programme. After the request, the organization visits the schools where interviews and assessments are conducted to ensure that the schools have all the requirements needed for the programme.

The teachers attend an all-day workshop for three consecutive Saturdays. The workshop runs from 9:00 am to 15:00 pm (S. Adams, personal communication, March 04, 2016). Teachers receive training in classroom management, class discipline, barriers to learning, the literacy programme and the role of the educator. They also learn how to equip a reading adventure room and to develop learning content for targeted learners. The programme manager with the help of the facilitators administers the training workshops. Moreover, the program manager and facilitators work closely with the schools to set up the programme, which includes setting up CRAR room. Facilitators provide continued support to the teachers throughout the programme's duration. Within the schools, the teachers with the facilitators deliver the programme to Grade 1 learners.

Within a school, a specific classroom is allocated to CRAR and the room is decorated with educational images, for instance colourful alphabets on the walls and paintings of animals. The CRAR classes are only dedicated and utilised for all Grade 1 English lessons purposes. Full resources are provided with the programme including workbooks, a teacher's manual, board games, toys and stationery.

The founder started the programme originally in 2010 and continued the programme from 2012 to date with Living through Learning (S. Botha, personal communication, February 27, 2016). CRAR has two types of beneficiaries. The primary recipients of the programme are teachers of grade 1 classrooms and secondary recipients are grade 1 learners coming from disadvantaged primary schools. The programme operates in communities throughout Cape Town and surroundings involving 19 poor primary schools with approximately 2800 learners. The programme sites that the CRAR programme caters for are; Belhar, Bishop Lavis, Athlone, Stellenbosch, Mitchell's Plain, Delft, Grassy Park, Lotus River, Nyanga, Parow, Strandfontein, Nyanga and Gugulethu indicators (S. Adams, personal communication, March 04, 2016).

The CRAR curriculum aligns with and is integrated into the Curriculum Assessment Policy Statements (CAPS), which is a national curriculum for public schools in South Africa. Teachers are trained in the CRAR methods and its integration with CAPS and receive ongoing mentoring and motivation from CRAR facilitators to ensure full skills transfer and application. The literacy method is taught in an easy, systematic way and is, phonics-based in style. Before learners start the programme, they are to ascertain their basic English proficiency level by means of tasks requiring picture matching, formation of sounds, filling in missing sounds, doing puzzles and following mazes. The main aim of each assessment is to test not only the reading ability but also writing, listening and speaking and spelling skills of each learner and the level at which they are able to do each of these every term. Learners should be able to know certain sounds and write these sounds, read three letter word and write these words correctly; they should be able to read simple sentences and know word that start with certain blends and lastly they should be able to write their own sentences and read more complex sentences and form words with certain blends and word families. (S. Adams, personal communication, March 04, 2016). Teachers follow a CRAR lesson plan each English lesson to ensure learning is active. The CRAR programme activities create phonetic awareness, spelling, vocals and cognitive skills.

In the service utilisation plan shown in Figure 2, the path that a Grade 1 learner follows through the CRAR programme is illustrated. Also illustrated in this plan is the timing of progress assessment.

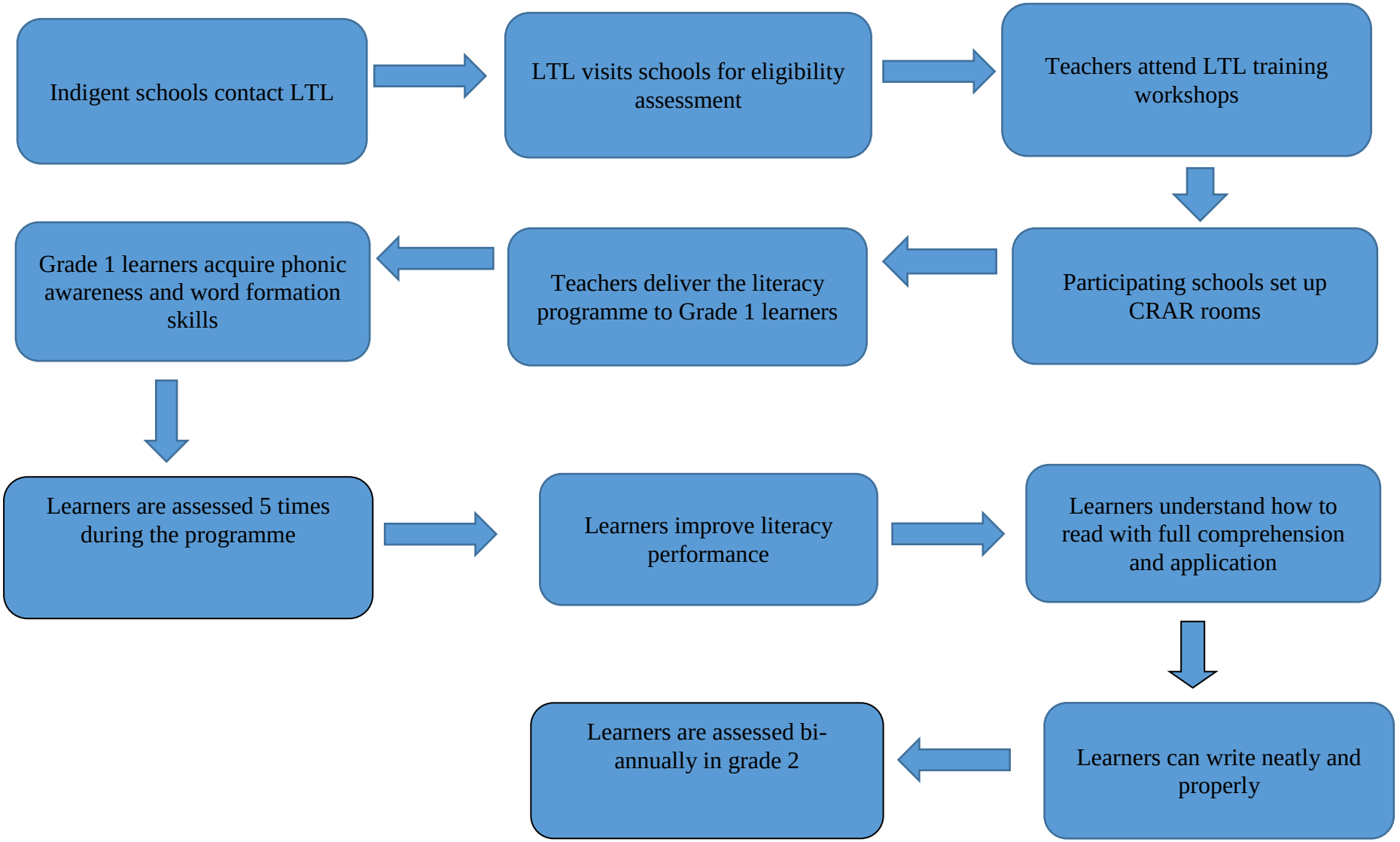

Figure 2. Service utilisation diagram depicting sequence in which teachers and grade 1 learners participate in the CRAR programme

To track progress in the learner's development, LTL receives the following information from the schools: feedback from schools and teachers, an attendance register, a report at the end of each term and weekly teacher assessments (S. Adams, personal communication, March 04, 2016). Furthermore, the programme is monitored through CRAR and CAPS assessments each term, as well as Annual National Assessment (S. Adams, personal communication, March 04, 2016).

It is clear from the programme description that the CRAR programme, like all social programmes, is based on assumptions of change for the better. In the next section, I will present the theory of change that underlies the CRAR programme. This will be presented in a form of a logic model.

Programme Theory

A programme theory is defined as a causal theory; it explains how an intervention is understood to contribute to a chain of activities that brings about causes and social benefits of the programme (Rossi, Lipsey, & Freeman, 2004). Programme theories are depicted in a variety of ways and the logical framework is one such a depiction. A logical framework is a tool used to depict the cause and sequence of a programme (Rossi et al., 2004). Depicted in Table 1 is LTL's Evaluation Plan, presented in a logical framework. This diagram was supplied by LTL.

Programme Elements	Evaluative Questions	Indicators	Target	Measures
Inputs				
- Qualified and experienced trainer - Access to CRAR curriculum - Training materials -Project expenses -Trained facilitators -An effective curriculum - Sustainable skills transfer to educators - Self-motivated educators - Proactive school management - Relevant skills				
Activities				
-Provide training to educators and facilitators -Providing support to educators for 2 years -Effective teaching utilising additional skills provided by programme	-Were all the educators and facilitators trained? -Are educators supported to use and integrate CRAR with CAPS? -Are educators provided with additional literacy support as needed?	-Number of educators and facilitators that completed CRAR core 5-week training. -Number of CRAR individual educator literacy support sessions	-80% complete training successfully	-Completion certificates -Attendance register -Termly report form -Weekly educator assessments

Programme Elements	Evaluative Questions	Indicators	Target	Measures
Outputs				
-Educators and facilitators confident and trained to deliver CRAR curriculum and teach effectively -Learners achieving increased literacy scores -All learners of CRAR trained educators achieving increased marks in all their subjects.	-Were the educators and facilitators trained? -Did literacy scores improve? - Are learner's marks increasing?	-Number of educators and facilitators that completed training - Learners scores on standardised literacy tests	-80% complete training successfully -Improvement of minimum 10% in CAPS results from 1st term to 4th term	-Completion certificates -Attendance register
Immediate Outcomes (1 – 3 years)				
-Improve their teaching skills and ability -Educators achieving better results with all their learners	-Was there any improvement in educators teaching and management skills?	-Learners scores CAPS -	-80% score on educator assessments -Average increase of 5% in all learners CAPS results from 1st term to 4th term	-Weekly educator assessment -CAPS results
Long Term Outcome (4-6 years)				
-Improved performance of schools	Is there an improvement in schools?	Test scores on Systemics	Average increase of 5% per year	Systemics
Desired Impact (7-10 years)				
Learners have more opportunities open to them	Do learners have more opportunities open to them in life?	Number of learners accessing, tertiary education, career paths, entrepreneur opportunities.	70% increase in learners accessing tertiary , career paths and entrepreneur opportunities	World Economic Forum Global Competitiveness Report

Figure 3. Logic Model designed by LTL

From the logic model presented here, it can be concluded that if the necessary programme inputs are present and the activities are delivered with fidelity, competent educators and facilitators will be able to guide learners in the next 3 years to improve their foundation phase English literacy. This improvement in the foundation phase will carry over into the next two educational phases, namely the intermediate phase and the senior phase. In order to simplify the information presented in Figure 3. I created a simple diagram to show what happens in the LTL programme. This is presented below in Figure 4.

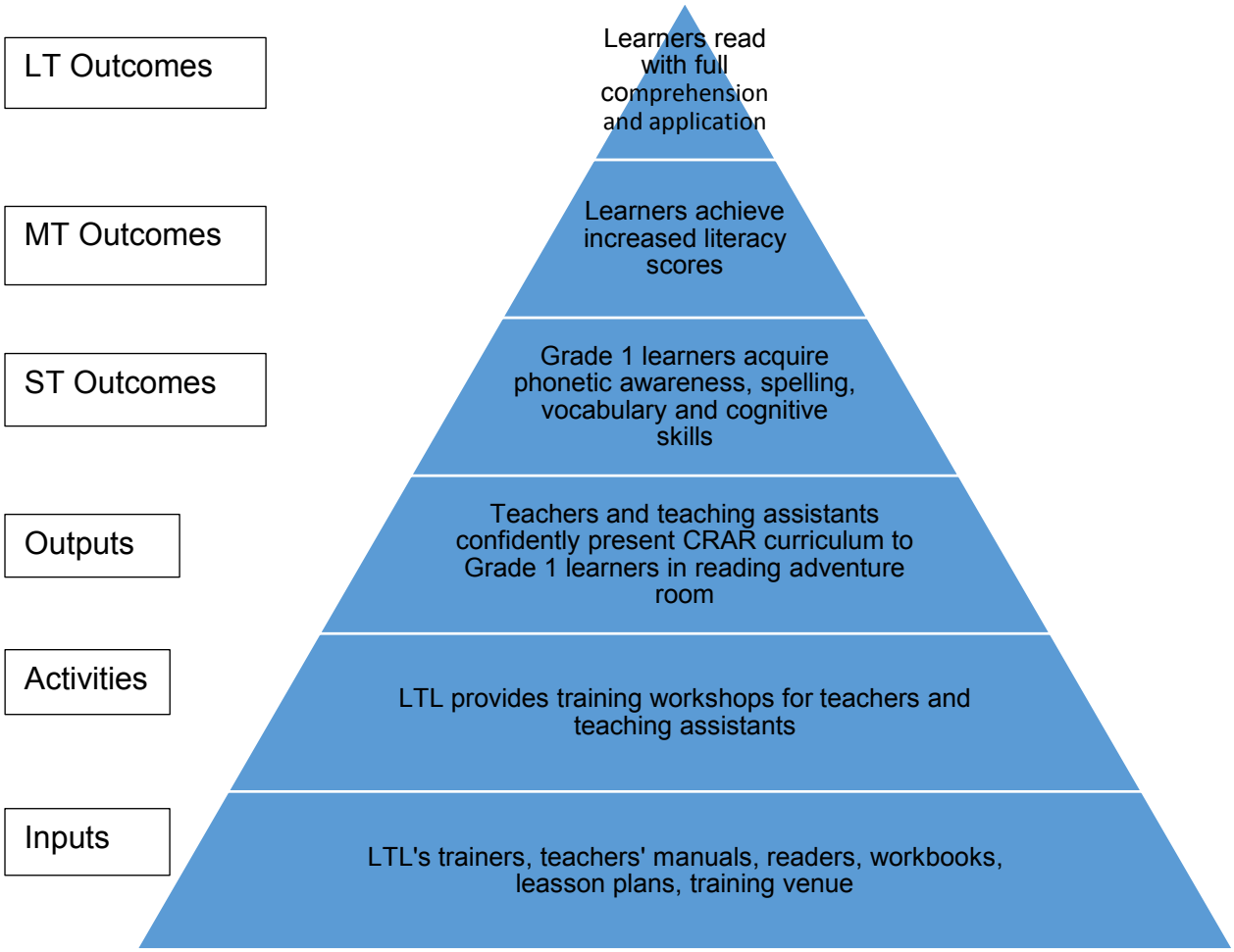

Figure 4. Programme Theory of LTL's CRAR Programme

Plausibility of the Programme Theory

The logic model in the previous section depicts positive links between foundation phase literacy and improved academic performance in the intermediate and senior phases. In this section, I shall examine these links in order to find out whether the following assumptions are valid:

1) Early literacy interventions influence later school performance;
2) The content of the CRAR programme will deliver its outcome of reading with full comprehension and application;
3) The quality of literacy teaching is important for attaining literacy outcomes;
4) Classroom resources can contribute to attaining literacy outcomes.

Each one of these assumptions has been assessed for plausibility by means of a review of relevant social science research literature. The search method and the results of the method are described below.

To access good academic research papers, electronic databases from Google Scholar and EBSCOhost were utilised. The search involved using key words such as, reading, writing, literacy, primary school literacy interventions, literacy interventions, evaluation, tutoring primary school learners and conducive classrooms.

Given various definitions and reviews on the subject of literacy, it is important to state clearly the parameters of the review. For the purpose of this review literacy is used to refer to the ability to read and write with comprehension. This definition provided in this research review is consistent and in line with other definitions in the studies utilised in this paper.

1) Early literacy interventions influence later school performance

According to Nel and Swanepoel (2010) it is critical to target literacy problems early in order for learners to complete school and be able to attain academic success. A strong predictor of achieving academic success is one's ability to read (Van der Berg, 2008). Reading provides building blocks to learning, and it is therefore; pivotal for a child to master reading and gain the necessary skills early in the child's development. Children who fail to master reading are at high risk of early academic problems (Spira, Bracken, & Fischel, 2005).

Torgesen (2000) stated that researchers and educators have put much emphasis on equipping children with abilities to read well so that by the time they reach high school they are well equipped and able to compete at that particular level. It is important for a child to be competent in literacy during the first years of school. This is important because as learners move from one grade to the next, the levels of expectations and academic demands increase considerably. The quantities of work and textbook material that need to be learned increase.

Foundation phase is the best place to start introducing literacy intervention programmes. In this phase, children are provided with fundamental building blocks that will be useful throughout the child's academic life (Slavin, Chambers, Cheung, & Davis, 2009). The transformation that occurs during the first grade is what equips the child with the necessary skills (Slavin et al., 2009). If a child goes through this process successfully and the literacy programme is implemented correctly, end of grade one a child must have the ability to read, recognise the sounds of letters and easily convert the sounds into words. This part of reading development is so powerful because it provides a stepping-stone to the second grade when; children expand their vocabulary, build fluency in English and are able to understand texts (Slavin et al., 2009).

It is clear that primary school is an important stage to foster literacy development in children. It is also clear that those children who do not get sufficient help in reading during early years of school are highly vulnerable to experiencing unfavourable consequences at a later stage (Reynolds, Wheldall, & Madelaine, 2010). These consequences include factors such as low self-esteem, low cognitive capacity, not being able to read well and social exclusion. Slavin et al. (2004) stated that people who struggle with literacy will bear the consequences and such individuals will be at a disadvantage in a society that is demanding competent reading mastery. These skills are required in different places, like the workplace. It is, consequently, important for children to acquire good reading skills.

Thus it can be concluded that it is plausible for LTL to assume that:

2) **The content of the CRAR programme will deliver its outcome of reading with full comprehension and application**

The LTL literacy programme consists of the following activities that take place during the English class: identifying sounds, blending words, identifying letters, writing and comprehension. LTL assumes that providing these activities will lead to important literacy

skills that will result in improvement in fluency, familiarity with words, words, and vocabulary, comprehension and word recognition skills. Additionally, the implementation of these activities in a conducive and friendly classroom is expected to increase enjoyment in reading.

Reynolds, Wheldall, and Madelaine (2010) investigated studies such as the National Reading Panel (NRP) conducted in the United State of America, the Independent Review of the Teaching of Early Reading in Australia, and the National Inquiry into the Teaching of Literacy (NITL) in the United Kingdom. The studies indicate that an effective literacy programme should include these components of literacy: phonological awareness, phonics, fluency, reading, writing, vocabulary and a range of reading material.

Phonological awareness is the individual's awareness of spoken words (Stahl & Murray, 1994). The investigation placed an emphasis on the importance of acquiring phonological awareness early for a child. Phonological awareness is an important aspect to literacy. The activities that accompany phonemics are being able to manipulate sounds, recognizing rhyming words and matching consonants (Stahl & Murray, 1994). In addition, Torgesen (2000) advocated for phonics as an effective component in a literacy programme. His study focused on comprehension, word-recognition, phonological awareness and verbal ability. Torgesen placed a strong argument on phonological awareness. Findings based on the study indicated that interventions that put a strong emphasis on phonological awareness in primary school are more effective in promoting reading and preventing problems than those who did not use this concrete foundation for reading.

Furthermore, another investigation by Reynolds et al. (2010) also suggested that comprehension is an important element that literacy interventions should have. Comprehension is crucial for language development, which is an important skill for reading. The authors suggested that children should be able to make use of what they read and fully comprehend. Reynolds et al. (2010) stated that comprehension is the reason for reading. It is an essential skill to foster early in children.

Reynolds et al. (2010) also pointed out the importance of fluency. Fluency is critical in a child's life because it serves as a connector between comprehension and word recognition. Fluency intervention activities include elements of teaching children how to read text accurately, fast and with expression (Reynolds et al., 2010). By allowing children to go over books many

times, the above-mentioned elements can be improved in order to develop familiarity with words and be able to identify them easily.

Vocabulary skills were also emphasised as another important aspect of an effective literacy intervention (Reynolds et al., 2010). Vocabulary skills can be taught through reading storybooks, conversations in class, listening tasks, word recognition and task restructuring (Reynolds et al., 2010). In addition to vocabulary, a writing component is also important in a literacy intervention programme. Writing and spelling helps children gain confidence in their literacy skills. These two activities are inter-linked so they must be taught in conjunction because they support the development of reading skills.

Thus, in principle, it seems plausible that the combination of the components of the LTL programme could lead to improved foundation phase literacy of learners.

3) The quality of literacy teaching is important for attaining literacy outcomes

LTL uses teachers and facilitators to teach foundation phase learners who have poor literacy skills. Therefore, it is imperative to see if utilising teachers and facilitators in this capacity is an effective means to improve foundation phase learners' literacy skills.

The quality of literacy teaching is an important factor for attaining literacy outcomes. Teachers play a vital role in improving literacy programmes' success. Classrooms with highly motivated teachers tend to have learners who are also highly motivated and willing to engage in the material presented (Pressley et al., 2001). Teachers must have effective teaching skills to administer the literacy programmes in their schools.

Further, effective teaching involves teachers being able to equip children with necessary skills in order to move on to the next academic year and being able to handle the academic requirements of that grade. Consequently, if a teacher fails to do so, children will have difficulties understanding new content presented in the following grade.

This approach to learning is contained in an Instructional Model. The Instructional Model suggests that effective learning can be obtained where there is an interactive combination of skills, strategies, content knowledge and motivation (Pressley et al., 2001). This evidently indicates that there is a possibility of a correlation between highly motivated teachers and

learners who are eager to learn and achieve academic success. Teachers need to be equipped, learners need to be motivated and classrooms should foster a positive learning environment.
In the LTL programme, teachers receive training on how to manage the classroom, deal with barriers to learning and teach effectively. In addition to that, the LTL programme provides facilitators. The facilitators work closely with the teachers to facilitate the literacy programme in classrooms. They provide continued support to the teachers throughout the programme.

Many times programmes use volunteers or teaching assistants to deliver their programmes. Elbaum, Vaughn, Tejero Hughes, and Moody (2000) stated that learners learn better and effectively when a facilitator is teaching them. A meta-analysis concluded that trained volunteers (facilitators) were able to provide effective literacy programme after they went through a rigorous training process (Elbaum et al., 2000). After the training, these facilitators were provided with a curriculum that is structured; they were taught how to use it; they were supervised and tested to determine the extent to which their teaching is effective or not (Ehri, Dryer, Flugman & Gross, 2007). LTL provides a structured training programme for facilitators and teachers, whereby they are taught how to effectively deliver the literacy programme.

The studies show that non-accredited persons can deliver a programme if they receive quality training and support. The success of an intervention is based on what the facilitators teaches in classrooms rather than who teaches it.

LTL uses this method: the organization provides training for the facilitators before they can assist the teachers with literacy programme activities.

4) **Classroom resources can contribute to attaining literacy outcomes.**

A positive classroom atmosphere is an important contributing factor; to attaining literacy outcomes. This atmosphere is characterised as a classroom environment that engages learners in a positive manner and effectively optimises their learning process and helps learners thrive (Conroy, Sutherland, Snyder & AL-Hendawi, 2009).

Evidence shows that quality of a classroom environment is a determinant of children's learning process (Fraser, 1998). The classroom can be referred to as shared perception between the learners and teachers. The classroom fosters many relationships that exist between teacher-leaners and learner-learner. Within the interrelation, the environment needs to be supportive

and friendly in order to be a conducive learning environment (Conroy et al., 2009). Fraser (1998) attributed academic achievement levels of primary school learners to classrooms that are well organised, have greater cohesion, are well-resourced and goal-orientated. The literature suggests a proactive approach to developing a classroom environment that is positive and conducive for learning. This approach states that the classroom should be: welcoming, supportive, provide instructions and be attractive in order to make learning possible (Fraser, 1998). This notion of a language classroom as an environment that fosters language learning is further supported by Krashen (1982) who stated that teaching of language may be enhanced further by the use of visual aids and other materials, furthermore stating that the set-up of a classroom and the availability of resources and competent instructors is a contributing factor to literacy outcomes.

LTL delivers a classroom setting that is appropriate to learning and well-resourced with necessary material. Within a school, a specific classroom is allocated for the literacy programme. This room is decorated with educational images such as colourful alphabets on the walls and painting of animals.

Studies show that the classroom colours can have an effect on how learners behave and perform academically (Kennedy, 2005). Colour has an influence on the learning process of children. Kennedy states that it is advisable for primary schools to keep the walls of classrooms bright and colourful. Functional colours should be considered when painting school classrooms. Children find bright colours and high contrast colours as stimulating. The mental stimulation received from the colour of the room helps with keeping the learners and teachers focused on the task at hand (Kennedy, 2005). Moreover, if the colour of the room is not conducive, it can influence the child's concentration span and cause eye strain. If the room is painted in dark colours, this may cause anxiety in children which in turn may result in irritability and overall lack of ability to concentrate (Kennedy, 2005).

The plausibility assessment outlined above for the four assumptions indicated that the CRAR programme's assumptions are valid. The reviewed literature indicated that it is important for literacy programmes to be administered early in school. If literacy interventions are not delivered early in a child's schooling career, the outcomes can be distressing. Furthermore, the content of the programme matters. It is important for the programme to include comprehension, phonics and vocabulary awareness. Moreover, the programme must be delivered by well-

trained teachers who are highly motivated and in well-resourced classrooms that are conducive to making reading an enjoyable activity.

Evaluation Questions

Rossi, Lipsey and Freeman's (2004) hierarchy of evaluation was used to formulate the evaluation question for the LTL programme. This hierarchy consists of the following five steps: need for the programme; programme theory and design; programme implementation; outcomes and impact; and cost effectiveness and efficiency. In consultation with the programme staff, it was decided to do an outcome evaluation and thus focus on level four of the hierarchy. An outcome evaluation is concerned with the causal effects of the programme which generally involves measuring whether the programme reached it goals and objectives. In order to assess whether the learners in the programme benefitted from it and whether specific teacher characteristics influenced the programme outcome, the following evaluation questions have been formulated:

1. Are the learners who participated in the CRAR programme better off in terms of literacy after their programme than they were before the programme?

2. Did the teacher's language teaching experience, English language proficiency, self-efficacy, perceptions of usefulness of the LTL materials, and usage of the reading room have any influence on the learners' literacy performance?

Long-term outcomes, namely improvement in school performance in the intermediate and senior phases cannot be assessed as the programme for the 2015 cohort is continuing.

The manner in which the evaluation question is answered will be described in the next chapter.

CHAPTER TWO: METHOD

The design for this evaluation is presented in terms of the specified evaluation questions.

1. **Are the learners who participated in the CRAR programme better off in terms of literacy after their programme than they were before the programme?**

To assess the outcomes for the learners in the literacy programme, a single group quasi-experimental design with repeated post-test performance measures was employed. There were four repeated measures, namely four quarterly measures. This design was chosen in an attempt to explore the short-to-intermediate-term changes that have occurred in the participants on the LTL programme. Graphically, the design looks like this:

Table 1

Evaluation Question 1: Design

Group	Intervention	Repeated Measures			
Grade 1 learners	CRAR programme (X)	First quarter assessment (O1)	Second quarter assessment (O2)	Third quarter assessment (O3)	Fourth quarter assessment (O4)

As there was no control group, causality cannot be asserted, only change in relation to the performance standard set by LTL, and I will not know whether the change was because of the programme or because of other factors.

A post-test-only design was considered because it is plausible to assume that Grade 1 learners have no literacy skills before they are taught to read in school. It was deemed to be counter-productive to pre-test them if I expected that they would all get a score of zero. So the assumption was that grade one learners in the LTL programme have no prior literacy skills.

Apart from the repeated measures of the CRAR programme, teachers also design quarterly CAPS assessments for the learners. Performance on these assessments cannot be compared directly to the CRAR assessments, as the assessments are different and measure different outcomes. However, I thought it would be interesting to see whether children who are on the

CRAR programme also improved on their CAPS assessments. A similar design as above was used to examine this.

2. **Did the teacher's language teaching experience, English language proficiency, self-efficacy, perceptions of usefulness of the LTL materials, and usage of the reading room have any influence on the learners' literacy performance?**

Design

To assess the attributes of the teachers, a descriptive design was employed. Descriptive research describes the current state of affairs (Salkind, 2009) and for this evaluation the aim is to describe whether or not specific characteristics of teachers influenced the literacy performance of the learners. The following figure shows the details of this design:

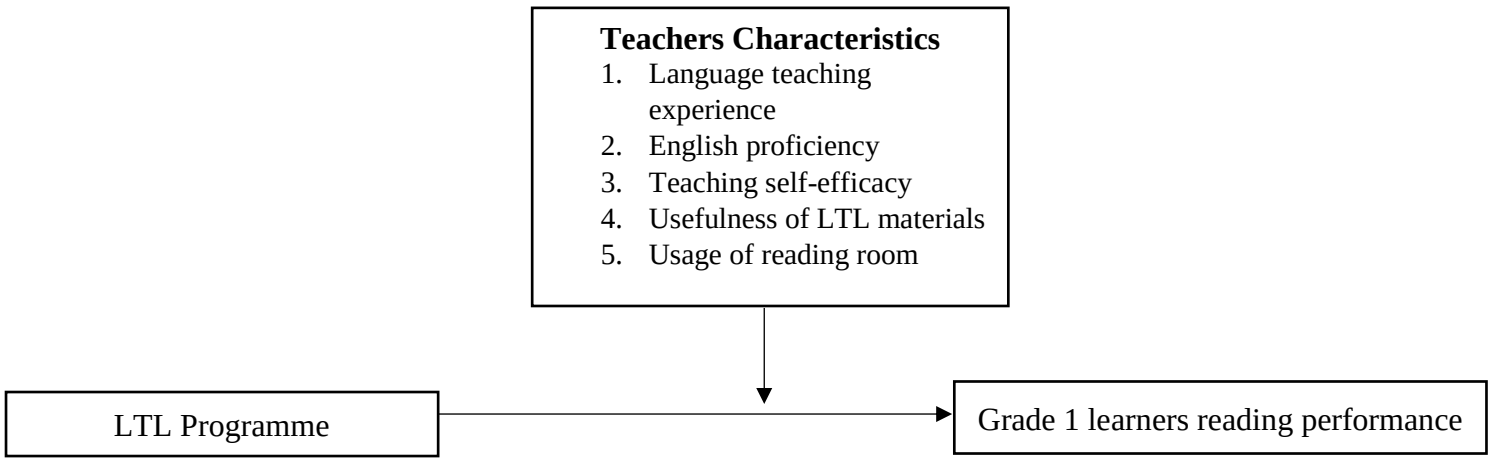

Figure 5. Evaluation question 2: Design

Participants

There were two sets of participants in this evaluation.

The first set consisted of Grade 1 learners of 18 different schools. For ethical considerations, the names of the schools were not disclosed. Schools in this evaluation were referred to as School 1 to School 18. The schools in this evaluation were public schools located in low-

income areas around Cape Town in the Western Cape. Within the selected schools, the unit of analysis was grade one learners who received the literacy programme in 2015.

All children in Grade 1 in a selected school were included in the programme. The baseline assessment was used to see at what level the children's knowledge of English sounds were before the programme. The literacy programme was incorporated into an English class in each school. The lessons took place during normal school hours.

The number of literacy classes in each school differed according to the size of the school. Each school had at least one teacher and one facilitator for the literacy class. In total, there were 54 classes, 1090 grade one learners, 1 teacher and 1 facilitator in each class.

The second set of participants consisted of the 54 teachers in the 18 different schools.
These two sets of participants are shown in detail in Table 2.

Table 2

Participants in the CRAR Evaluation

School	No. of classes	No. of children in each class	No. of teachers in each class	No. of facilitators in each class
1	3	41, 41, 42	1	1
2	5	35,34,37,32,36	1	1
3	2	30,30	1	1
4	2	32,32	1	1
5	3	22,47,27	1	1
6	2	38,38	1	1
7	3	39,41,39	1	1
8	2	43,41	1	1
9	3	39,35,36	1	1
10	2	40,40	1	1
11	3	34,32,32	1	1
12	4	36,38,38,37	1	1
13	3	33,31,35	1	1
14	3	36,38,36	1	1
15	3	41,40,41,41	1	1
16	4	40,40,40	1	1
17	3	45,44,45	1	1
18	3	37,38,38	1	1

Measures and Procedure

LTL signed a contract with each school in order to provide teacher training, facilitator provision and regular assessments of learners. The assessment data remained the intellectual property of LTL. These secondary data were used to answer evaluation question 1.

The grade one learners' performance of literacy scores were assessed through an assessment tool constructed by the LTL staff. The data consisted of four tests to assess different aspects of the learners' literacy performance. These quarterly tests included: (1) finding the picture and stating what it is and matching a letter to the picture (marked out of 20 marks), (2) word search, reading and circling words (marked out of 30 marks), (3) filling in the missing words, spelling, matching words to the picture, writing and comprehension (marked out of 55 marks), (4) matching words to the picture, writing, comprehension, spelling and reading (marked out of 50 marks). The literacy teachers and facilitators administered the measures.

Apart from the CRAR quarterly assessments, learners were also assessed by quarterly CAPS assessments. These assessments were developed by the teachers and were different from the CRAR assessments.

For evaluation question two, regarding the influence of teacher characteristics attributes on learner performance, the following measures were used:

Table 3

Data Providers for Teacher Characteristics

Teacher Characteristic	*Data Providers*	*Data Type*
Experience of teacher	Teachers	Categorical (years)
English proficiency	Teachers	Categorical (English)
Self-efficacy	Teachers	Quantitative, continuous
Perceptions of materials usefulness	Teachers	Quantitative, continuous
Perceptions of room usage	Teachers	Quantitative, continuous

Data for these measures were collected through the use of a questionnaire designed by the evaluator (see Appendix A). There were 11 items in the questionnaire and the first five items, relating to teaching self-efficacy, were taken from a scale developed by Midgley, Feldhauer and Eccles (1989). I have adapted these items to suit the context of this evaluation. Midgley et al. (1989) reported an alpha coefficient of .65 for this brief scale.

Permission to conduct the evaluation on the LTL programme was provided by the Director of Living Through Learning. The letter of permission is attached in Appendix B.

Ethics in Research Committee of the Commerce Faculty, University of Cape Town granted permission to use secondary data and collect primary data.

Data Analysis

The first evaluation question was answered by using the CRAR assessment data. Descriptive statistics (means and standard deviations) were calculated. These statistics were compared to a realistic standard (60%) and a high standard (85%) set by LTL. A separate, similar analysis was done for the CAPS data. In this case the statistics were compared to a standard for English first language (50%) and English additional language (40%). Although all learners in the sample learn to read in English, most of them are not English first language speakers and therefore the English additional language standard was added.

Regression analysis was used to analyse the data for the second evaluation question. As the independent variables consisted of continuous and categorical data (see Table 4), a multiple linear regression was employed. The regression model is depicted below:

Table 4

Regression Model

Predictor variables (Teacher characteristics)*	*Level*	*Criterion measure*
Language teaching experience	*Number of years*	*Learners'** performance
English proficiency	*Yes/No English*	
Teaching self-efficacy	*Average score on 5 Likert-type items*	
Usefulness of LTL materials	*Score on 1 Likert-type item*	
Usage of reading room	*Score on 1 Likert-type item*	
** 54 Teachers*		*1090 Learners*

Multivariate profiling

Where categorical variables had more than two levels, the variable was dummy coded for the linear regression model.

The dummy coding of the English proficiency variable had three levels hence it was converted into a two dichotomous variables. These three levels were: 1= English, 2= Afrikaans, and 3= IsiXhosa. A dichotomous variable was created namely; Language_Afrik and Language_IsiXh. English was the reference category in this case. If Language = 1, then Language_Afrik would be coded with a 0 and Language_IsiXh with a 0. If Language =2, then Language_Afrik would be coded with a 1 and Language_IsiXh would be coded with a 0. If Language =3, then Language_Afrik would be coded with a 0 and Language_IsiXh would be coded with a 1. The dummy coding is represented in the table below.

Table 5

Dummy Coded Variables

	Language	Language_Afrik	Language_IsiXh
English	1	0	0
Afrikaans	2	1	0
IsiXhosa	3	0	1

To make sure that multivariate assumptions were met for the regression, the data were properly examined for outliers, normality, homoscedasticity, linearity and multicollinearity.

Outliers.

Assessments were conducted in all four multiple regression models. To assess the fit of each model across the sample, SPSS was used to determine any extremely influential cases and to ensure that these cases do not deviate the analysis. Cook's distance was used as a technique to identify outliers that influences the analysis. Values that were greater than 1.00 may be cause for concern in the Cook's distance (Field, 2013). The cases (N = 54) cases screened for outliers, none of them had a Cook's D value >1.00.

Normality.

In multiple regression model, errors are assumed to be normally distributed. Histograms and q-q plots were used to assess normality. None of these indicated that the residuals distributions deviate significantly from normality (See Appendix C).

Homoscedasticity.

Heteroscedasticity is an assumption in the regression analysis that assumes that residuals have similar variances (Field, 2013). An inspection of residual scatter plots was conducted to assess homoscedasticity. The scatter plot depicted residuals scatters centred on zero. For this reason, no variable needed to be transformed (See Appendix D).

Linearity and Multicollinearity.

Linearity depends on the assumption that the relationships between independent variable and dependent variables are linear. This is an issue since non-linear relationships may cause results with a Type I or Type II error (Field, 2013). No issues were found when assessing for linearity. Multicollinearity is a situation when variables are very closely related to each other (Tabachnick & Fidell, 2007). An examination of correlations (see Chapter 4) showed that the predictor variables were not highly correlated and tolerance and (VIF) statistics were within accepted limits, revealing that multicollinearity assumption was met (Field, 2013).

The results of the evaluation are reported in the next chapter.

CHAPTER THREE: RESULTS

The following results are presented according to the evaluation questions formulated in Chapter 1.

Evaluation question 1: Are the learners who participated in the CRAR programme better off in terms of literacy performance than they were before the programme?

Assessment measures used in this analysis were the NGO test scores and Curriculum Assessment Policy Statements (CAPS) test scores. Furthermore, it is important to note that these assessments for both NGO and CAPS are independent of each other.

To track possible changes in the term scores, it was decided to observe scores from all four terms. The purpose of this was to compare the average scores for each assessment with the stipulated standard set out by the NGO and CAPS. Since I am evaluating the CRAR programme, the NGO assessments will be presented first followed by the CAPS assessments. The CAPS assessment was included in the analysis since it is reasonable to assume that improvement in the NGO assessment influence improvement in the CAPS assessment. Further, it is important to note that, the CAPS assessment is not 100% aligned with the NGO literacy activities and therefore I cannot treat these assessments as equal or as measuring the same variable. I cannot make any comparisons since these are two independent assessments.

Assessment scores from a sample of schools (N = 18) from the 2015 cohort were analysed to determine if there were any significant improvements in the literacy outcomes. From the 18 schools, there were 53 teachers and 1090 learners which were selected in the beginning of the year. However, as the year progressed, there was a reduction in the number of cases.

With that said it is important to note that missing information may affect the results and therefore it is essential to know how much missing data may have influenced the overall results. The descriptive tables below indicate the missing data.

Table 6

Learner Performance on NGO Assessments

Assessment	Mean	*S*	Minimum	Maximum	*N*
Term1	76.82	16.51	13.0	100.0	1072
Term2	77.17	16.60	6.0	100.0	1069
Term3	66.1	20.87	1.0	100.0	1042
Term4	74.72	18.89	2.0	100.0	1042

Note: values in the second column represent average mean percentages of each assessment.

Table 7

Learner Performance on CAPS Assessment

Assessment	Mean	*S*	Minimum	Maximum	*N*
Term1	63.3	15.96	2.0	100.0	1065
Term2	68.64	15.51	20.0	99.0	1062
Term3	66.9	15.32	18.0	100.0	1062
Term4	68.59	15.58	6.0	100.0	1044

A 5% trimmed mean non-parametric test was utilised to assess the influence of missing values on the results. Pallant (2013) states that "to obtain this value, SPSS removes the top and bottom 5 per cent of your cases and calculates a new mean value" (p. 63). Comparing these two means, you can understand whether the extreme marks are having a significant effect on the mean (Pallant, 2013). If the mean values of the results and the trimmed mean are very different, then those data points need to be investigated further (Pallant, 2013). The 5% trimmed mean revealed the two mean values are quite similar. Given this, and the fact that the values are not too different from the remaining distribution, I decided to retain these cases in the data file.

The bar chart below in Figures 6 and 7, graphically display the average scores of the NGO and CAPS assessments across the 18 schools for each assessment. The relevant standards are also included in the graphs.

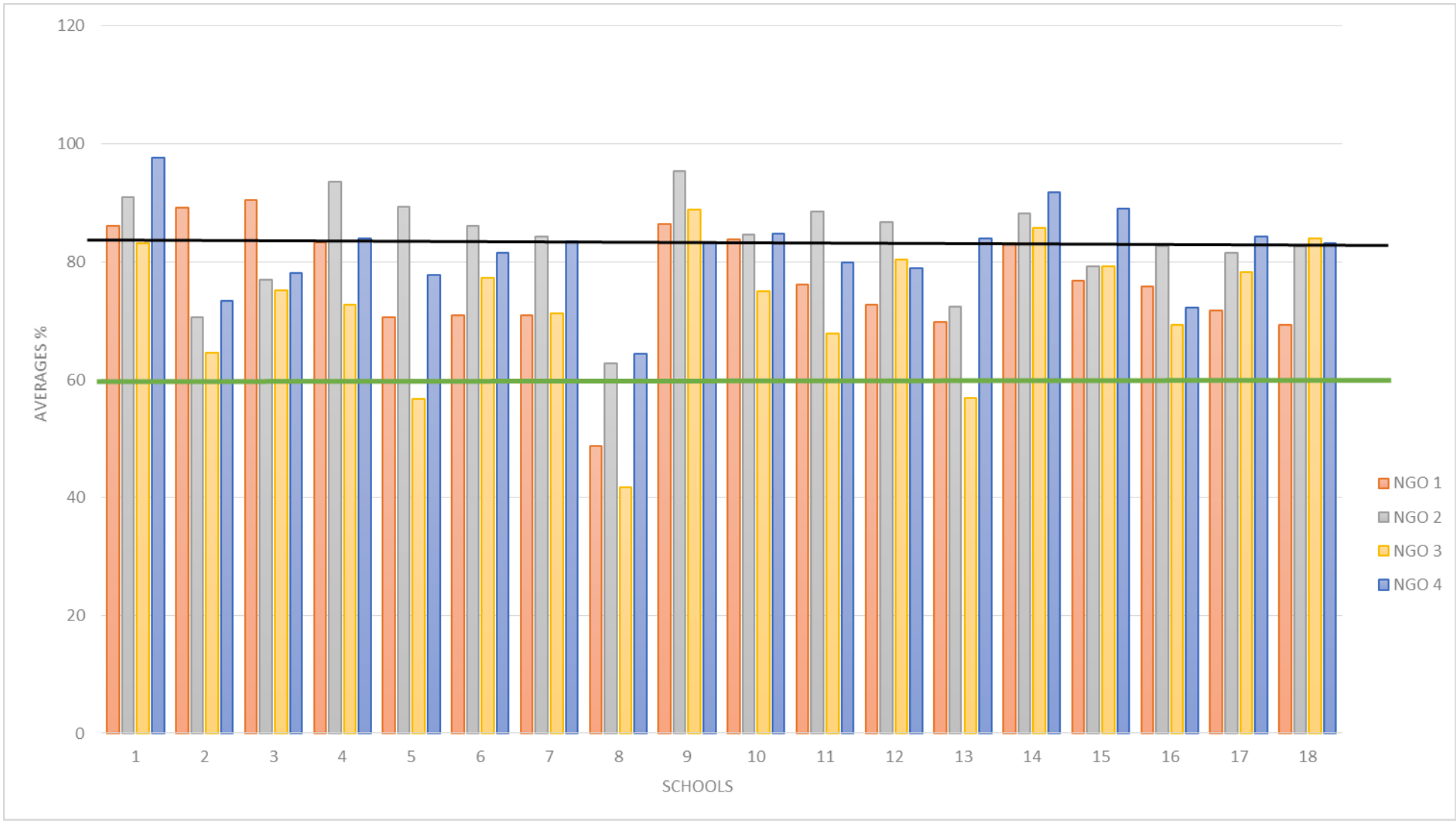

Figure 6. Performance on NGO assessments compared to 60% and 85% standard

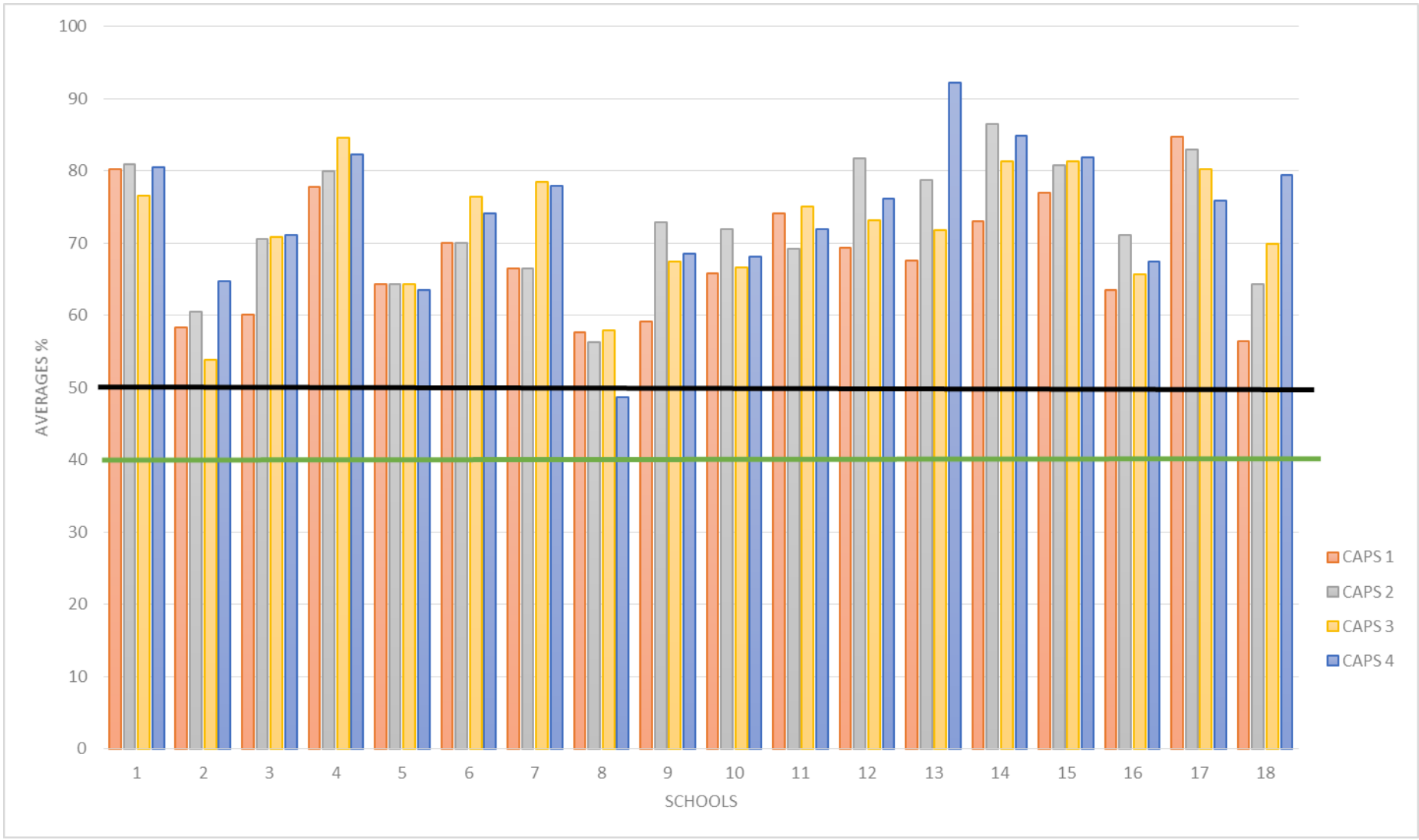

Figure 7. Performance on CAPS assessment compared to 40% and 50% standard.

From Figure 6, it is clear that the schools, reached the 60% standard in all four terms. The exception, however, is school 8, which did not attain this level of performance in terms 1 and 4. If we use the ideal standard of 85%, the graph shows, only schools 1, 9 and 14 reached this standard.

In Figure 7, it is clear that all schools managed to attain the 40% lower standard for English additional language. School number 8 is still underperforming when compared to other schools and school 1, 9 and 14 are the top performing schools. All 18 schools, except for school 8 in term 4, were able to attain the high standard of 50% for English first language in all four assessments.

It is also of interest to see the proportion of learners able to reach the set standards for the assessments. The tables below show the proportion of learners in each school who attained the set standards for the NGO and CAPS assessments respectively. Instances where percentage of learners who attained these standards were below 50% (an arbitrary cut-off), are indicated in blue.

Table 8

Percentage of learners in each school who attained 85% for NGO assessment

School	*N*	NGO1	NGO2	NGO3	NGO4
1	41	65	53	41	48
2	61	73	26	13	33
3	62	75	22	25	32
4	43	48	7	14	41
5	62	18	35	0	10
6	61	26	27	14	33
7	42	16	26	2	28
8	42	0	14	0	14
9	40	22	95	63	47
10	80	55	30	20	53
11	61	38	37	11	36
12	100	19	6	17	25
13	43	23	79	0	16
14	60	51	25	45	57
15	64	26	46	14	45
16	80	18	30	0	15
17	84	16	14	27	46
18	64	17	26	21	32

Table 8 shows that most schools are performing badly in relation to the 85% optimal standard. This was not visible in the bar chart since we were using averages, as averages could have masked the influence of extreme scores. In this table it is clear that most learners did not attain the optimal standard of 85%.

Table 9

Percentage of learners in each school who attained 60% for NGO assessment

School	*N*	NGO1	NGO2	NGO3	NGO4
1	41	87	80	65	49
2	61	100	64	62	72
3	62	91	70	74	77
4	43	86	86	58	62
5	62	62	83	19	59
6	61	69	73	57	75
7	42	47	54	45	57
8	42	37	66	30	52
9	40	90	97	93	85
10	80	91	88	71	82
11	61	78	91	67	85
12	100	74	87	60	68
13	43	60	67	13	69
14	60	90	90	78	93
15	64	79	32	70	85
16	80	85	96	62	78
17	84	75	84	72	80
18	64	65	76	50	65

In Table 9, it is clear that the percentage of learners who attained the realistic NGO standard of 60% increased. This increase even happened in those schools where averages indicated underperformance.

The same proportional analyses were done for the performance on the CAPS assessment (see Tables 10 and 11). The English first language standard (50%) was used in Table 10 and the English additional language was used in Table 11. Again, an arbitrary cut-off of 50% was used to show instances where half the learners did not attain these standards.

Table 10

Percentage of learners in each school who attained 50% for CAPS assessment

School	*N*	CAPS1	CAPS2	CAPS3	CAPS4
1	41	87	95	49	49
2	61	60	72	52	88
3	62	67	82	87	85
4	43	54	58	54	56
5	62	75	64	64	69
6	61	59	75	85	80
7	42	76	90	92	95
8	42	76	69	69	57
9	40	60	90	83	88
10	80	83	93	91	95
11	61	93	92	95	95
12	100	79	95	90	91
13	43	74	88	86	95
14	60	85	95	93	97
15	64	89	65	82	84
16	80	86	88	93	93
17	84	92	95	94	90
18	64	82	84	89	90

Table 11

Percentage of learners in each school who attained 40% for CAPS assessment

School	*N*	CAPS1	CAPS2	CAPS3	CAPS4
1	41	98	98	49	48
2	61	56	53	66	55
3	62	50	55	56	55
4	43	68	88	90	77
5	62	55	54	45	46
6	61	66	54	59	56
7	42	79	77	88	99
8	42	70	66	69	58
9	40	67	90	97	97
10	80	77	77	79	78
11	61	60	58	60	59
12	100	94	96	93	94
13	43	89	97	98	90
14	60	55	59	59	59
15	64	59	61	54	59
16	80	70	78	78	80
17	84	82	81	80	79
18	64	58	58	60	59

From the two tables presented here, it is clear that all schools have a high percentage of learners attaining the English first language standard for CAPS. Furthermore, what is interesting is that

school 8 is doing well in the CAPS assessment but performing poorly in the NGO assessments. The CAPS standard for English additional indicate that all schools are doing well and able to attain the 40%.

In summary, it can be concluded that on average, all schools, except school 8, attained the realistic (60%) NGO standard in their NGO reading assessments. Only three schools (1, 9, and 14) attained the high standard of 85%. Furthermore, all schools (18) attained the 50% CAPS standard in the CAPS assessments and the 40% standard.

Evaluation question 2: Did the teacher's language teaching experience, English language proficiency, teaching self-efficacy, perceptions of usefulness of the LTL materials, and usage of the reading room have any influence on the learner's performance?

Completed data were available for 40 teachers.

To address evaluation question two, I employed a hierarchical multiple regression with performance on the four NGO assessments as the dependent variable. For a hierarchical regression, variables are entered into the variable blocks in SPSS in a predetermined order (Pallant, 2013). In this type of regression, sample size is a consideration. I had a sample of 40 teachers. This sample size was considered sufficient in relation to the five predictors. According to Field (2013), the cases to independent variables (IVs) ratio should ideally be 20:1 in the regression model. My sample size meet this required ration.

In order to perform the regression, a number of assumptions needed to be tested. The reason behind these tests was to confirm that there were no violations of the assumptions of normality, linearity, multicollinearity and homoscedasticity. An examination of correlations showed that the predictor variables were not highly correlated, tolerance and (VIF) statistics were within accepted limits, revealing that the multicollinearity assumption was met (Field, 2013). An examination of Cook's distance scores showed no multivariate outliers. Inspecting histograms, q-q plots (See Appendixes C & D) and residuals indicated that linearity, normality and homoscedasticity were all met (Pallant, 2013).

For the analysis, four independent multiple regressions were performed. Since I evaluated the LTL programme, only the NGO assessments were included in the regression model. The LTL

assessment is focused on what is in the workbook and might give stronger results than the more general CAPS assessment results.

The outcome variables were performance on NGO1, NGO2, NGO3 and NGO4 independent assessments. The five predictor variables were; language teaching experience, English proficiency, teacher self-efficacy, usefulness of LTL materials and usage of reading room.

Hierarchical multiple regression analysis was performed to determine if the independent variables predict the LTL literacy outcomes. In the first block, language teaching experience was entered into the model. In the second block, the remaining predictor variables were entered into the model. Table 12 presents the regression model and indicates their coefficients and their significant p-values.

Table 12

Summary of Hierarchical Regression Analysis for Variables predicting LTL Literacy Outcomes

Variables	NGO 1			NGO 2			NGO 3			NGO 4		
	B	*SE B*	*B*	*B*	*SE B*	*β*	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Model 1												
Constant	72.340	2.791		76.968	2.188		67.856	2.949		77.713	2.082	
Language teaching experience	.373	.179	.338**	-.042	.140	-.051	-.050	.189	-.045	-.120	.133	-.153
Model 2												
Constant	53.033	22.951		45.770	17.064		46.282	23.790		66.207	16.873	
Language teaching experience	.386	.195	.349	-.046	.145	-.056	-.027	.202	-.025	-.126	.143	-.161
Language_Afrik	.152	4.800	.006	-.286	3.569	-.014	4.077	4.976	.151	-.856	3.529	-.044
Language_IsiXh	2.556	7.358	.063	3.951	5.471	.131	-.118	7.627	-.003	-6.491	5.410	-.224
Teacher self-efficacy	5.605	5.066	.205	4.734	3.767	.234	5.884	5.252	.216	1.111	3.725	.057
Usefulness of LTL materials	-1.134	4.020	-.056	2.540	2.989	.169	.142	4.167	.007	2.265	2.955	.156
Usage of reading room	.264	2.421	.020	.004	1.800	.000	-1.160	2.509	-.087	-.661	1.780	-.070

Note. $N = 40$; $p < .005$ *

In Model 1 for NGO1, number of years teaching significantly predicted LTL literacy scores, β = -.34, t (225) = 6.53, p < .001. Number of years teaching also explained a significant proportion of variance in LTL literacy scores, R^2 = .114, F (1, 35) = 4, 37, p < .005.

In Model 2 for NGO 1, with all the predictors included in the regression model the total variance explained by the model was R^2= .152, F (6, 35) = .868, p>.005. When I consider the contribution of each variable individually in model 2, English Proficiency (β = .006; p = .975), Teacher self-efficacy (β = .205; p = .278), Usefulness of LTL materials (β = -.056; p = .780) and Usage of reading room (β = .020; p = .914) none of these were significant.

Therefore, the first model where only one predictor was included, was better at predicting the outcome variable and significantly contributed to the outcome.

Examining the results of NGO2, NGO3 and NGO4 assessments, a different pattern of results emerged. In these three assessments, the contribution of all five predictors was not significant in both models 1 and model 2.

In conclusion, the hierarchical multiple regression revealed that only number of years of teaching predicted improved performance on the NGO1 reading assessment.

CHAPTER FOUR: DISCUSSION

From the results reported in the previous chapter, it can be concluded that the LTL programme was effective in improving literacy skills of the learners who were part of the programme. All schools, except for school 8, attained the realistic (60%) NGO standard in their reading assessments. Three schools attained the high standard of 85%. Furthermore, all schools attained the 50% CAPS standard in the CAPS assessments.

In an analysis of predictor variables, teacher experience in literacy teaching was the only variable that significantly predicted learner performance in literacy during the first term.

These results will be discussed in more detail under the relevant evaluation questions below. Following that, the limitations will be discussed and recommendations will be presented to help improve the LTL programme and the evaluation.

1. Are the learners who participated in the CRAR programme better off in terms of literacy performance than they were before the programme?

Overall, the analysis revealed that the literacy skills of the learners who participated in the LTL programme improved over time. Overall, the learners had improved in both the NGO assessment and the CAPS assessment by attaining the required standards even though the analysis indicated that there was a slight decrease in the mean scores at year end, compared to beginning of the year for the NGO assessment. At year-start, LTL learners achieved an average total test score of 76.82, and by year-end this decreased to 74.72. Although there was a decrease in the NGO mean scores, a closer look revealed that there was not a remarkable change between year-start and year-end since learners, on average, were still performing well. In term three, there was a sharp decline in the mean scores and I suggest a further investigation to assess what led to the observed decline. According to the programme manager, the term three assessment focused on the learners' ability to read simple sentences and know words that start with certain blends (fl, cl, bl, sh, th). In term two, learners' ability to read three-letter words is assessed. At this stage, it is unclear whether the step from reading three-letter words to reading simple sentences is a bit too big. What is interesting here is that there was no decline in performance on assessment four, which measures writing own sentences, a relatively complex operation.

From the analysis, it is clear that most schools were able to reach the 60% expected standard except for school number 8 in term 1 and term 3. Given the current poor performance level of this school compared to others, one can conclude that there is something odd happening in school 8 which is influencing performance. I do not have any data to speculate on these results for school 8 and suggest that a further investigation be conducted there to find out why the learners in this school did not benefit from the programme.

What is impressive is the performance of three schools that were able to attain the NGO high standard of 85%. Again, I do not have any data to explain this result. It may be of interest to the programme manager to investigate these success cases further. Are these schools significantly different from the other schools, or what is happening with the implementation of the programme that has led to these impressive results?

The CAPS analysis showed that the learners' mean scores improved from year start to year end. At year-start, LTL learners achieved an average total test score of 63.3, and by year-end this increased to 68.59. This is a noteworthy improvement in the mean scores. Although this improvement cannot be ascribed directly to the programme, it is interesting to observe that the learners who received NGO support may also do well in the CAPS assessment. What is obvious here is the fact that learners could read according to CAPS standards at the end of their school year. A more nuanced analysis of the overall CAPS results also showed that there was a decrease in term three in performance on the CAPS assessment. I do not possess the data to indicate the reason behind this decline. As such, this warrants a further investigation to find out why, for both NGO and CAPS assessment performance, there was a sharp decline in term three. Is it the inherent difficulty of the reading operation that is assessed at this time, or is it a flaw in the assessment tool? Could it be something that happens in schools at this time of the year? At this stage I simply do not know.

Additionally, a subsequent analysis was conducted to see the proportion of learners in each school who were able to reach the set standards for the assessments. The number of learners attaining the realistic standard for NGO assessments showed an increase for each assessment. Even for the schools which are underperforming, there seems to be a general increase. All schools have a high number of learners attaining the English first language and Additional language standard for CAPS.

From these results, we can conclude that the LTL literacy programme works. It consists of the following activities that take place during the English class writing, identifying sounds, blending words, identifying letters and comprehension. Research indicates that these activities will lead to literacy skills that will result in improvement in fluency, familiarity with words, words, and vocabulary, comprehension and word recognition skills. Reynolds, Wheldall, and Madelaine's (2010) investigated studies such as the National Reading Panel (NRP), the Independent Review of the Teaching of Early Reading, and the National Inquiry into the Teaching of Literacy (NITL). The studies indicated that an effective literacy programme should include the following components of literacy: phonological awareness, phonics, fluency, reading, writing, vocabulary, and a range of reading material. In addition, Torgesen (2000) advocated for phonics as an effective component in a literacy programme. His study focused on comprehension, word-recognition, phonological awareness and verbal ability. Torgesen placed a strong argument on phonological awareness. The study indicated that interventions that put a strong emphasis on phonological awareness in primary school are more effective in promoting reading and preventing problems than those which did not use this concrete foundation for reading. As indicated in Chapter 1, the LTL programme is based on these sound literacy principles and it is no surprise that the programme worked.

The programme is also robust enough to work in difficult circumstances. South African teachers in under-privileged schools have to deal with overcrowded classrooms which are very hard to manage. In the LTL programme, each school on average had about 40 learners per class. This puts a lot of a pressure on the individual teacher who has to manage and teach these classrooms. In such cases, teachers need extra assistance from well-trained teaching assistants. In the LTL programme, teacher assistants (facilitators) receive training on how to manage the classroom, deal with barriers to learning, and teach effectively. The teaching assistant works closely with the teachers to facilitate the literacy programme in classrooms. They provide continued support to the teachers throughout the programme. Elbaum, Vaughn, Hughes, and Moody (2000) stated that learners learn better and more effectively when a facilitator is present. A meta-analysis conducted by Elbaum et al. (2010) concluded that trained volunteers (facilitators) were able to provide effective literacy programme following a rigorous training process. The studies show that non-accredited persons can deliver a programme if they receive quality training and support. The success of an intervention is based on what the facilitators teach in classrooms rather than who teaches it (Elbaum et al., 2000).

Overall, the findings were positive, but they must be interpreted with caution. I cannot claim that the improvement can be attributed to the LTL programme alone. The research design did not allow me to make any inferences regarding causality (i.e. that outcomes measured are a result of the LTL literacy programme). The lack of a control group made it difficult to attribute any changes to the programme only.

2. Did the teacher's language teaching experience, English language proficiency, teaching self-efficacy, perceptions of usefulness of the LTL materials, and usage of the reading room have any influence on the learner's performance?

The quality of literacy teaching is an important factor for attaining literacy outcomes. Teachers play a vital role in improving literacy programmes' success. Classrooms with highly motivated teachers tend to have learners who are also highly motivated and willing to engage in the material presented (Pressley et al., 2001). Teachers must have effective teaching skills to administer the literacy programmes in their schools. Further, effective teaching involves teachers being able to equip children with necessary skills in order to move on to the next academic year and being able to handle the academic requirements of the subsequent grade. Consequently, if a teacher fails to do so, children will have difficulties understanding new content presented in the following grade.

With that being said, the only significant predictor in the analysis was the number of years teaching for NGO1 assessment (but not for NGO2, NGO3 and NGO4 assessments). NGO1 assessment measures the very beginning of literacy, namely the ability to know familiar sounds and write them. It thus seems as if more experienced teachers are better able to instil this fundamental literacy skill in learners than less experienced teachers.

Both anecdotal and research evidence shows that often less experienced (and by implication, younger) teachers are more successful in teaching children to read and write. According to Armstrong (2015), there are multiple explanations for the ability of younger teachers to produce stronger performance from their learners. The younger teachers are able to relate to the learners in class since the age gap is closer compared to the older teachers, younger teachers are able to adapt quickly to technological equipment used in the classrooms, and the change in teacher training may have excluded the older teachers who trained under a different system.

The new system has equipped them to be more effective when teaching and older teachers could be more resistant in adapting to the new ways of teaching such as the LTL programme (Armstrong, 2015). The results of this evaluation did not support the notion that younger teachers are more effective. It could be that more experienced teachers are better at teaching literacy or simply that they are better at managing discipline in class and therefore at creating a conducive atmosphere for learning.

Limitations

For this evaluation, the lack of a control group made it difficult to attribute any changes to the programme only. The learners in the treatment group were also not randomly assigned to the intervention. According to Field (2013), random assignment helps to control for the confound variables, thus ensuring that the changes in the group is due to the intervention. The study consisted of grade one learners and examined their year-long improvement in their literacy scores. Young school learners are subject to maturation effects since they are still growing and learning. Maturation refers to natural developmental changes caused by biological or psychological effects (Field, 2013). This implies that the improvement in their literacy scores cannot be fully attributed to the programme itself. Improvement could be happening simply as a result of the learning that took place in the classroom. Learners will improve regardless of whether they were in a programme or not. Furthermore, given that the LTL programme is supplementary, the improvement of literacy scores is not likely due to the programme only.

Recommendations

It is important to collect data for groups that did not receive the programme but were eligible. These groups can serve as a comparison group to the intervention group, and thus could help strengthen the evaluation. In this case I recommend that a matched comparison technique be conducted to evaluate the effect of the intervention by comparing the group that received the programme with the group that did not receive the programme. Matching is a statistical method that is useful when we cannot conduct random assignment (Field, 2013). The method helps match two groups with observable similar characteristics. In this case, socio-economically poor schools with children who learn to read in a second or a third language instead of their mother tongue. This method will allow us to claim with more confidence that the intervention works while reducing the effect of confounding variables.

It is also important to find out why school 8 is performing poorly when compared to other schools. The problem should be analysed properly to discover the causes and find a remedy. Furthermore, I recommend that LTL also take a closer look at to why the three schools were able to attain the NGO high standard. This is important so that LTL could learn from these schools and utilise whatever they are doing well and apply that to the other schools.

I further recommend an investigation of teacher characteristics, specifically of experience and also of the teachers' perceptions of the quality of training and amount of assistance received by the teaching assistants.

Lastly, I recommend a follow up intervention into Grade two to track the progress of the learners who received the programme.

Conclusion

The findings indicate that LTL's CRAR is a robust programme and that it is achieving its primary goal of helping learners improve their literacy skills. Despite the poor socio-economic background in which the programme operates, it is still able to achieve success. Given the inequalities of our education system, LTL is doing a sterling job in providing an opportunity to good education for the learners who come from underprivileged communities. The programme lives up to it slogan, namely "making a difference, one child at a time" (http://livingthroughlearning.org.za /).

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Appendix A

Questionnaire

Dear Teacher

My name is Mlungisi Zuma and I am a Master's student at the University of Cape Town. As part of my Master's degree I am evaluating Living Through Learning's Coronation Reading Adventure Room programme. My supervisor is Professor Joha Louw-Potgieter. The Ethics in Research Committee in the Commerce Faculty has ensured that this questionnaire conforms to UCT's high ethical standards. This means that there are no known risks or dangers to you associated with this study. Also note that participation in this study is voluntary and that you can withdraw from it at any time.

The purpose of this questionnaire is to find out a bit more about teachers who are teaching young learners how to read and write.

Please note that you do not have to write your name on the questionnaire and that we will treat your answers as anonymous. We are interested in teachers as a group and not in any individual teacher.

The questionnaire consists of 9 questions and it should take you no longer than 10 minutes to complete it.

I thank you sincerely for taking part in my study and for helping me with this part of my Master's degree.

If you have any questions, please do not hesitate to contact me on mlungisizuma.mz@gmail.com

Part 1

Please make a tick or put a ring around the number in the block that best reflects your opinion.

Statement:		Strongly disagree	Disagree	Neither disagree or agree	Agree	Strongly agree
1.	If I try really hard, I can get through to even the most difficult and unmotivated learner	1	2	3	4	5
2.	If some learners in my class are not doing well in reading, I feel that I should change how I teach them	1	2	3	4	5
3.	I use different teaching methods to help a learner to read	1	2	3	4	5
4.	I can motivate learners who show low interest in their school work	1	2	3	4	5
5.	I can provide an alternative explanation or example when learners are confused	1	2	3	4	5

Part 2

Please make a tick or put a ring around the number or the word in the block that best reflects your opinion. For question 9, please fill in the number of years.

Question:		Not at all useful	Not useful	Unsure	Useful	Very useful
6.	How useful did you find the training you received from Living Through Learning for teaching Grade 1 learners to read?	1	2	3	4	5
7.	How useful did you find the workbooks and other resources supplied by Living Through Learning?	1	2	3	4	5
8.	Think back to last year and think of a normal week of teaching. How often did you use the Adventure room during the week?	Not at all	Seldom	Unsure	Often	Every day
9.	Please tell me how long have you been teaching Grade 1 learners to read and write? Please write down the number of years in the block to the right.					
10.	Please write the name of the school where you teach					
11.	Please write the name of the Grade R class (1A, 1B, etc.) you taught in 2015					

Please note that Questions 10 and 11 will be removed from the questionnaire as soon as I have linked your information to the information of the Grade 1 class that you taught in 2015.

Thank you very much for completing this questionnaire.

Appendix B

Permission Letter

UNIVERSITY OF CAPE TOWN

School of Management Studies
University of Cape Town. Private Bag.
Rondebosch 7701
Telephone: +27 21 650-5218
Fax: +27 21 689-7570
8 February 2016

TO WHOM IT MAY CONCERN

Thank you very much for your willingness to enable one of our Master's students to work with a programme from your organization. I appreciate your contribution to the education of our students.

The student will need programme information from you and we request that you or a designated person meet with them regularly to provide access to this information. Your cooperation in this regard will ensure that the student meets deadlines and provides you with a high quality evaluation. In order to keep track of the student's interactions with your organization, we request that you copy the supervisor on all correspondence to the student.

Please note that our students are required to work within the ethical framework of the Faculty of Commerce when collecting information from programme documents or programme recipients. This framework deals with anonymity of data sources, sensitivity when requesting information from people and responsible reporting of results.

We also undertake and ensure you that the student will display professional behaviour at all times while working in your organization or on your programme. At the end of the process, you will receive a useful report which will enable you to make informed decisions regarding your programme.

In order to comply with the rules of the Faculty of Commerce, we request you to sign below to indicate that the student will have access to programme data and records and where applicable, to programme recipients.

Thank you very much.

Yours sincerely

PROF J LOUW-POTGIETER
CONVENER: MPHIL PROGRAMME EVALUATION

AGREEMENT TO ACCESS PROGRAMME RECORDS AND/OR RECIPIENTS:

.....	LTL	24/2/16 .....
AUTHORISED PERSON	ORGANISATION	DATE

Appendix C

Histograms for normality

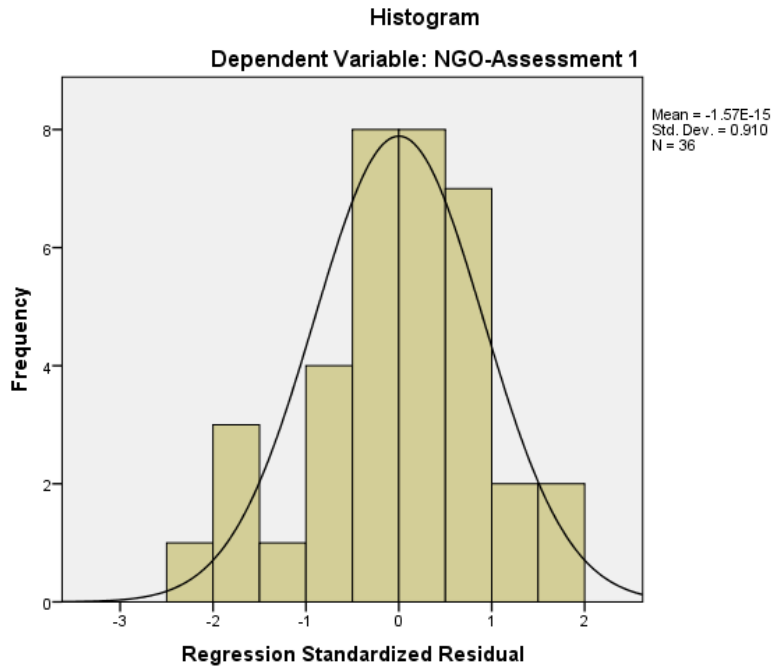

Figure A1. Histogram for NGO 1 assessment.

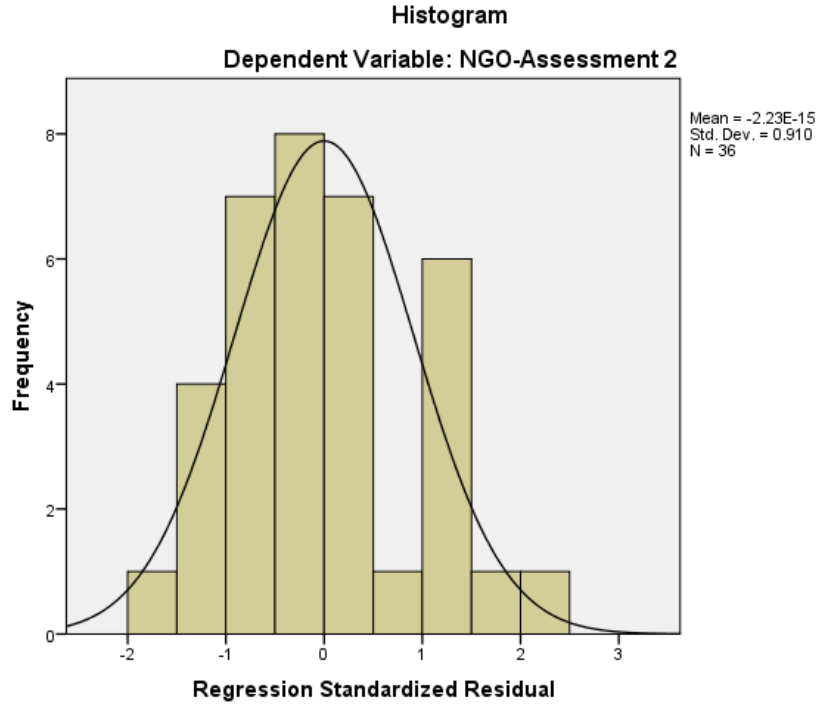

Figure A2. Histogram for NGO 2 assessment.

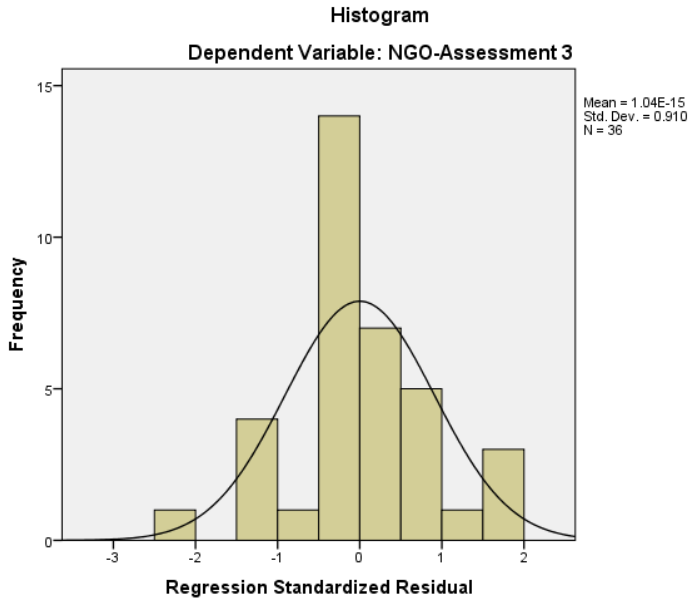

Figure A3. Histogram for NGO 3 assessment.

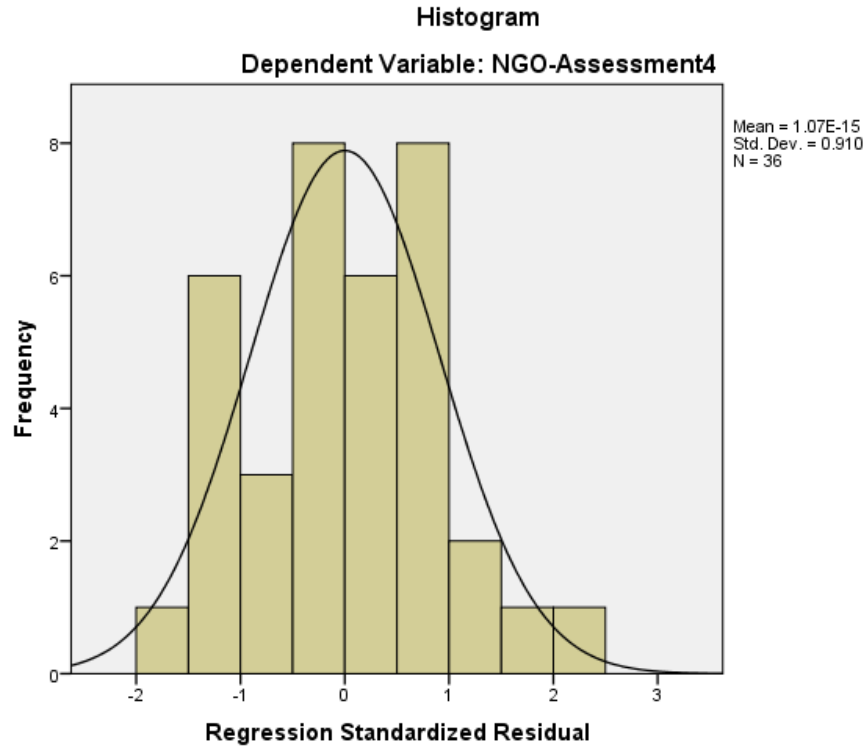

Figure A4. Histogram for NGO 4 assessment.

Appendix D

Normal Probability Plots

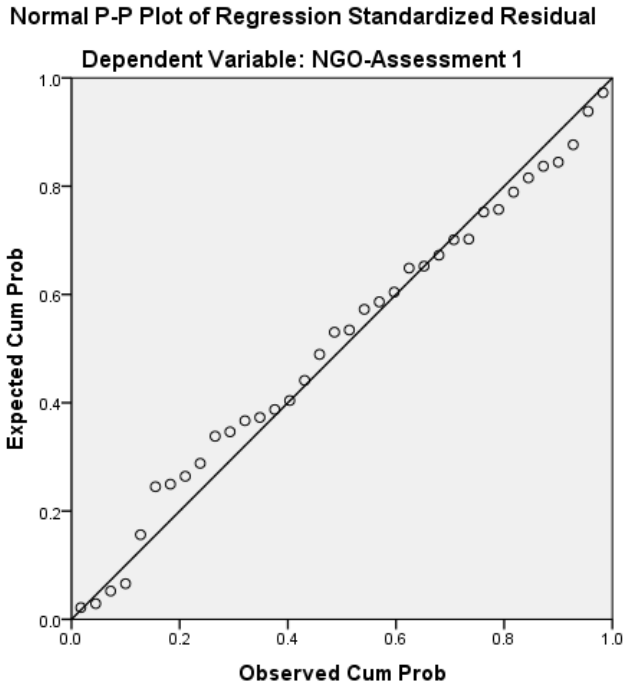

Figure A5. Hierarchical multiple regression analysis: NGO1

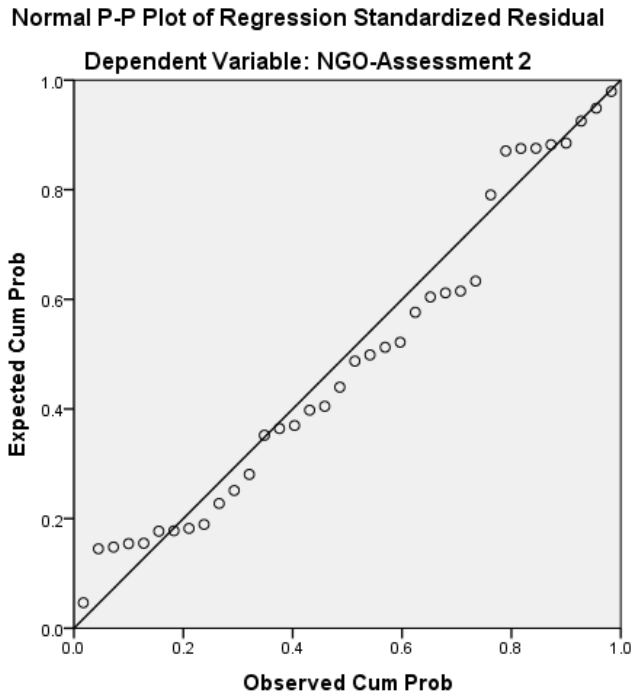

Figure A6. Hierarchical multiple regression analysis: NGO2

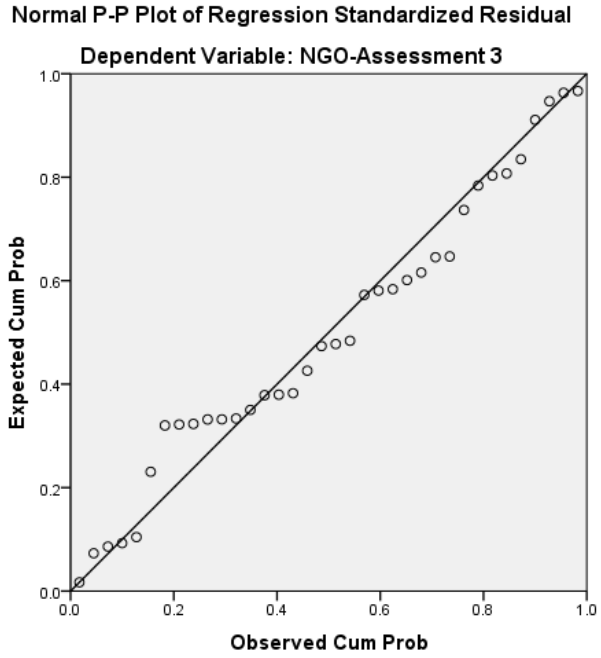

Figure A7. Hierarchical multiple regression analysis: NGO3

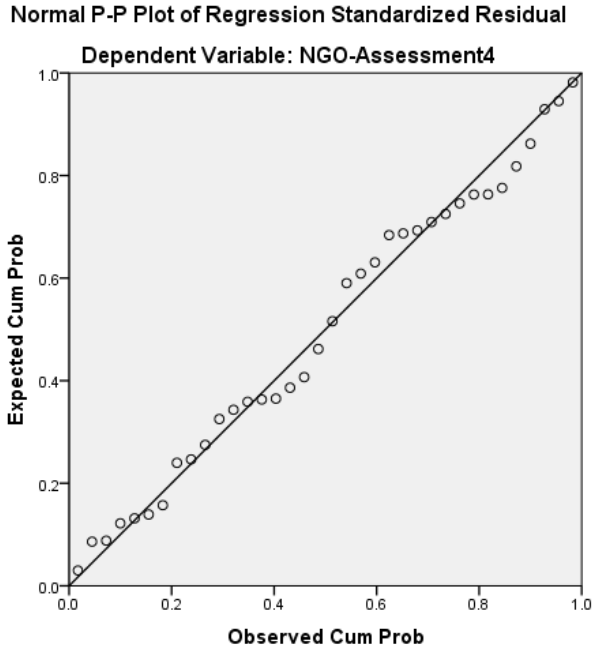

Figure A8. Hierarchical multiple regression analysis: NGO4