

# CTLI Evaluation 2010 Report

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## Executive Summary

This purpose of this report is to evaluate the process, procedures, and impact of the Cape Teaching and Leadership Institute (CTLI), an in-service teacher training centre in the Western Cape. The evaluation ultimately seeks to establish whether CTLI's training courses are making a difference in schools and to identify how CTLI can increase and sustain their impact. More specifically, it investigates whether the right educators are attending training courses, if the courses are of high quality, if training leads to the improvement of subject knowledge, classroom practice, and professional practices, and if it has an effect on learner achievement. Five training courses were selected for the scope of the evaluation. These courses are Foundation Phase (FP) Literacy, FP Numeracy, Intermediate Phase (IP) Language, IP Maths, and Principal as Manager of the Curriculum.

Chapter two established that the selection process failed to target weak schools in the province and bring the "right" educators to CTLI. Two contributing factors were that the districts played a minimal role in the selection and allowed any principal to select his/her educators for training, and that the CTLI circular opened the registration process without specifying any selection criteria.

As a result, enrolment figures for 2010 revealed that 80% of the schools who attended training came from the three most privileged quintiles, particularly Quintile 4. Schools were predominantly from the urban areas and former HOR schools. The majority of schools that attended training performed around the provincial average on the systemic tests. However, in the Intermediate Phase Maths course and School Management courses, it was the strongest schools who disproportionately received training while the poor-performing schools were under-represented. Another finding was that close to one third of the Literacy/Numeracy Intervention schools also received literacy, numeracy, and school management training from CTLI in 2010. Overall, provincial schools with the greatest need for training are largely being missed.

Chapter three investigated the quality of the five training courses. Findings suggest that the IP Maths course and FP Numeracy course were excellent. Course materials were rated highly by a mathematics expert and participants were overwhelmingly positive about their experience of the course. Teacher test scores also improved significantly, showing a 19 percentage point gain in IP Maths and a 7 percentage point gain in FP Numeracy. The quality of the FP Literacy and IP Language course was compromised by CTLI's new training model, which appointed WCED trainers to prepare and deliver the course. Course materials were poorly developed- they were not phase specific, placed too much emphasis on policy and theory, focused on a single Learning Outcome-reading, and in addition were delivered late. The IP course was particularly affected and lost close to a third of its participants between Block 1 and Block 2. CTLI responded by bringing in service providers for Block 2, which improved the material and delivery of both courses. On the whole, FP Literacy and IP Language teachers thought the courses were good and agreed they had improved their content knowledge as well as their teaching practice. The principal's course obtained poor reviews for its course material although participants rated the course very highly. Two possible explanations for the contradictory views are that essential course content was not evaluated (the material submitted consisted of individual, unorganized handouts) or that participants were not bothered by the lack of content depth as they were all fairly new principals. Further investigations are required.

Chapter four examined the curriculum knowledge and language proficiency of FP literacy and IP language teachers. One cohort of teachers in the FP literacy course and one in the IP language course wrote tests in the language they use to teach in their classrooms at the beginning and end of Block 2. Pre-test scores reveal that at the start of the training, teachers' curriculum knowledge was below the minimum level required for FP and IP teachers. However, it should be noted that the scores of Afrikaans, English, and IP isiXhosa teachers fell close to

the 70% target pass rate (ranged from 61%-66%), whereas the score of FP isiXhosa teachers (35%) was far below. Post-test scores reveal that the curriculum knowledge of FP teachers improved for all language groups by an average of 6 percentage points after the training. In contrast, Intermediate Phase teachers made no improvements to their post-test scores with the exception of a small group of IP Afrikaans teachers. In regards to language proficiency, FP and IP teachers failed to meet the minimum standard. Findings suggest that teachers could not read or write at the level of a Grade 7 learner. Once again, Afrikaans and English teachers' scores fell close to the 70% pass rate (68% and 65% respectively) but the performance of isiXhosa teachers (48% in the FP and 58% in the IP) is cause for concern. While the report suggests many areas of improvement for all teachers, FP isiXhosa teachers should be given special attention as their levels of curriculum knowledge and language proficiency are alarmingly low.

Chapter five investigated CTLI's impact on school level practices. Half of the participants in the second principal course (4 principals) and about one third of the participants in each of the four curriculum courses (between 13-18 teachers) were visited three months after completing the training. For the principal's course, fieldworkers conducted an interview with the principal, analyzed school documents, and made brief observations at the school. Although it is very difficult to obtain a valid description of a school's management practices in a single visit, results suggest that management practices varied widely in the four schools and school functionality ranged from excellent to poor. All principals reported that they had begun to implement changes since completing the course. These changes included making curriculum plans, improving communication amongst staff and discussing expectations, revising school policies, building relationships with the community, improving management procedures, as well as stimulating pedagogic discussions at school. At the same time, principals also disclosed that some of the biggest curriculum management issues they face at their schools are unresolved. On the whole, the principal course has sparked a lot of plans that should contribute to the improvement of the quality of education in participating schools. However, it is possible that the planned changes do not address the most problematic and pressing issues facing the school or that principals are not equipped to effect them properly. The follow up visit next year will help to answer this question and will provide a better idea of what has changed at the school.

For the curriculum courses, fieldwork entailed an interview with the participating teacher and the analysis of the books of the best learner in the class of the interviewed teacher. Learner book results show that despite the training, there is too little writing happening in the classrooms. On average, learners write between one and a half times and three times a week whereas they should be writing every day. Of the four courses learners write the most in FP, where they complete 110 pages a year, and write the least in IP language, where they only complete 58 pages a year. The quantity of writing also varies drastically amongst the schools. In FP literacy and numeracy, some learners write three times as many pages as learners in other schools over the course of the year. In IP language, some learners write four times as much and in IP maths they write six times as much as learners in other schools.

Curriculum coverage is also a cause for concern. In literacy and language, the majority of written work covers language structures which includes phonics, grammar, and vocabulary. Learners are given few to no opportunities to do their own extended writing or answer comprehension questions. In the Foundation Phase, more than half of the learners had not written a single paragraph in the entire year and in the Intermediate Phase, more than half of the learners had written 2 paragraphs or less. In addition, the vast majority of books show no evidence of learners engaging in the writing process or working with non-textual items such as tables, graphs, diagrams, or mindmaps. In FP numeracy and IP maths, learners notebooks are filled with exercises covering Learning Outcome 1 (LO1), numbers and number relationships, while the other four LOs are greatly neglected. Even though policy dictates that only 55% of the time in numeracy and 40% of the time in maths should be spent in LO 1, the study

found that 85% of the written exercises in numeracy and 75% in maths covered LO 1. In numeracy, LO 3 (space and shape) and LO 5 (data handling) were particularly neglected while in maths, LO 2 (patterns, functions, and algebra), LO 3, and LO 5 received very little attention. Findings also suggest that learners are passing from grade to grade with significant knowledge gaps, as teachers in all schools tend to ignore the same topics.

Regarding impact on classroom practices, all teachers reported that the CTLI course had helped to improve their content knowledge as well as their teaching practice. Teachers who had attended the FP numeracy course and IP maths course felt more strongly about the course's impact than those who had attended the FP literacy and IP language course. FP literacy and IP language teachers mostly noted having implemented reading methodologies and improved their use of resources as a result of the course, while FP numeracy and IP maths teachers mostly noted implementing a practical approach to teaching and having better explanations/strategies to teach particular topics that may have been neglected in the past. Evidence from the learner books suggests that the quantity of writing increased in IP maths, FP literacy, and slightly in FP numeracy, whereas it remained low and unaffected in IP language. At the same time, the quantity of writing did not decrease during the time that teachers were away at the training. In fact, on average learners wrote more while the substitute managed the class. Thus, aside from a few teachers who planned inadequately for their time away, learners do not seem to be impacted negatively by the teachers' four week absence.

Chapter six explored CTLI's impact on professional practices and found that CTLI training courses were making a significant difference in this area. Educators generally reported leaving the training feeling empowered, confident, motivated, and some have even improved their attitude of the subject they taught. Professional communities have also reportedly sprung up and been promoted. Almost all educators were able to share what they had learnt with other colleagues at their school and claimed they kept in contact with other educators they met at CTLI. In the absence of any follow up support from the district, it is invaluable that educators are staying connected and supporting one another across schools- sharing ideas, resources, advice, and assistance. These links increase the chances that educators will stay motivated as they implement what they learnt in the training and face new challenges in their schools.

Chapter seven studied past trends in learner performance to see if previous CTLI courses had made a difference in learner achievement. Two types of analysis were used, as there were important limitations to the data we had available. The first analysis measured gains made in the WCED's systemic test before and after the training for schools who had received CTLI training in that particular subject for the first time within a specified period. Gains from this "pre" and "post" measure were then compared to gains made by all other schools in the province who had never received CTLI training in that subject. The second analysis compared the overall gains made from 2002 to 2008 in the Foundation Phase and from 2005 to 2009 in the Intermediate Phase for schools who received CTLI training versus schools who hadn't.

Results from both analyses suggest that CTLI courses may have had a positive impact on learner performance, as schools that attended CTLI training courses showed more improvement than schools who hadn't. Moreover, evidence suggests that learner gains may increase when a larger number of teachers attend the same training course. In FP literacy, schools that had sent five or more teachers through the years to the FP literacy course improved their 2002 to 2008 literacy scores by 17.8%. In comparison, schools that had sent one to four teachers improved by 13.0% and those that had sent 0 teachers improved by only 7.8%. In FP numeracy, schools that had sent five or more teachers through the years to the FP numeracy course improved their 2002 to 2008 numeracy scores by 5.0%, whereas schools that had sent one to four teachers improved by 3.4%, and schools that had sent no teachers improved by a mere 0.5%. Similarly, schools that sent five or more teachers to the IP language course

improved their 2005 to 2009 scores by 6.1%, whereas schools that had sent one to four teachers improved by 2.0%, and those that had sent none decreased their scores by 0.6%. Finally, schools that sent five or more teachers to the IP maths course improved their 2005 to 2009 scores by 8.4%, whereas schools who sent one to four teachers improved by 7.8%, and schools that sent none improved by only 3.6%. These changes are all statistically significant. Although it is possible that another factor that is common to schools who sought training at CTLI is responsible for the difference in learner gains, it is likely that the actual training course at the very least contributed to those gains. The large relative gains recorded in numeracy and mathematics for schools that sent to CTLI is particularly significant, given the fact that provincial mean scores have hardly changed since the tests were introduced in 2002.

Chapter eight brings together all findings for each of the five courses and concludes that CTLI is making a difference at the classroom level. Furthermore, it summarizes recommendations made throughout the report. Recommendations for CTLI courses include having a strong focus on content knowledge, a secondary focus on the classroom context, and a brief look at related policy; delivering content knowledge in the teachers' LOLT; increasing reflection time for participants; and compiling course materials into a handbook. In regards to CTLI processes, the report recommends that the selection process become an integral part of the districts' strategy to address poor performance by systematically targeting weak schools circuit by circuit. It further suggests that district officials be more closely involved in CTLI courses, that course evaluations be administered by CTLI; and suggests slight modifications to the CTLI database, course reports, course evaluations, and course tenders. Finally, the study recommends that certain aspects of the evaluation increase in scope and be revised to more accurately measure the impact of CTLI.



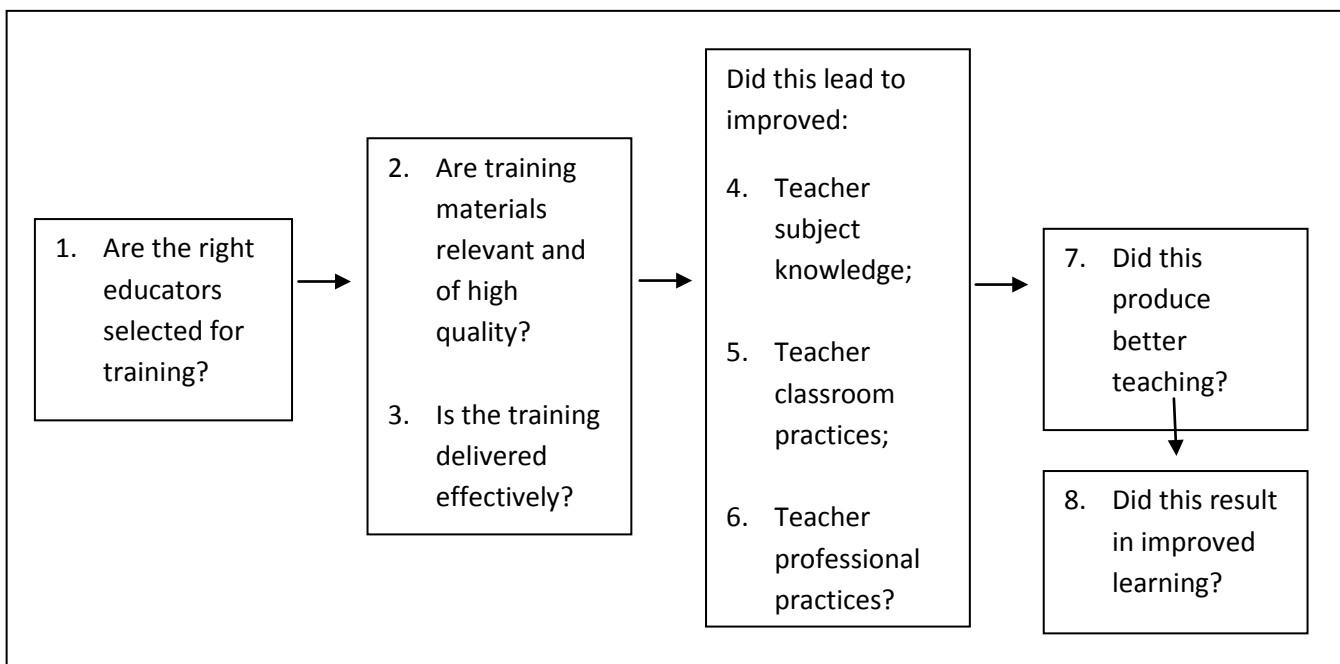
# 1 Introduction

The Cape Teaching and Leadership Institute (CTLI) was established in 2002 as an in-service training centre for educators by the Western Cape Education Department (WCED). Its mission is to improve the quality of teaching and learning in the Western Cape through effective teacher development. Past external evaluations have shown CTLI to be a cost-effective teacher training and development centre that is unique in South Africa. Nevertheless, it is widely acknowledged that CTLI can play an even more central role in this process. By 2009, it was agreed that there would be an incremental expansion of CTLI’s programme as well as other important changes to its training model and structure. During this critical time of transition, JET Education Services was appointed to evaluate the processes, procedures, and impact of CTLI.

## 1.1 The evaluation

The evaluation is focused on eight questions measuring how well the programme was designed, is being implemented, and the effect it is having on teachers and learner performance. The logic of the theory of change is as follows: If the right educators are selected for training and the training makes use of high quality materials and is delivered effectively, then this will lead to improved teacher subject knowledge, improved classroom practices, and improved professional practices. This in turn will produce better teaching, which will ultimately result in improved learner performance. The figure below illustrates this relationship.

Figure 1: Evaluation’s research questions



The scope of the evaluation is limited to four curriculum courses and one school management course. These courses are Foundation Phase Literacy, Foundation Phase Numeracy, Intermediate Phase Language, Intermediate Phase Maths, and Principal as Manager of the Curriculum.

This report summarizes all findings for year 1 of the CTLI evaluation up to December 2010. It was preceded by a detailed report on teacher selection and five technical reports reviewing the course materials for the five courses; the interested reader is referred to these reports. Chapter two in this report examines teacher selection for CTLI

training courses and investigates whether the right educators are sent to CTLI. Chapter three looks at the five courses and considers the quality of the course materials as well as the delivery of the training. Chapter four focuses on CTLI's impact on teacher subject knowledge and presents the results of the teacher tests. Chapter five and six consider CTLI's impact on teacher practices and teacher professionalism respectively by reviewing the results of the fieldwork. Chapter seven presents evidence of learner performance gains for schools who were trained through CTLI. Finally, Chapter eight discusses all findings and presents a list of recommendations for CTLI courses, processes, and future evaluations.

## 2 Teacher Selection

To eradicate poor performance in the province, it is essential that the right educators be identified and sent to CTLI for training. To benefit from CTLI courses, educators should display a weakness in the area they seek training. They should come to CTLI with the desire to learn and a willingness to improve, not to escape from school. To assess whether the right educators were selected for training, five questions are asked in this chapter:

1. Who does CTLI target for training?
2. What is CTLI's role in the selection process?
3. How was the selection made in 2010?
4. Who attended training in 2010?
5. Who should attend training at CTLI?

### 2.1 Methodology

To answer the first two questions, interviews were conducted with key staff at CTLI. Andre Lamprecht was formally interviewed on August 16<sup>th</sup>, 2010. The interview consisted of a mix of semi-structured and open-ended questions, which mirrored the questions asked to district coordinators. More informal conversations were also held with Eddie Kirsten, Director of Human Capital, and Nobantu Pasiya, Head of CTLI, especially in regards to who is targeted for training.

To understand how the selection process was made, six district coordinators were randomly selected and interviewed. The interviews were held between the 9-14<sup>th</sup> of June 2010 and included three urban and three rural districts. The names of the officials are listed in the table below.

Table 1: District officials interviewed

District	Name of Coordinator
Cape Winelands	Mr. Malefo Makena
West Coast	Mr. R. Gildenhuis
Overberg	Mr. Edgar Johannes
Metro South	Ms. Curriema Daniels
Metro North	Mr. G. Foster
Metro Central	Ms. A. Naidoo

Finally, the CTLI database was analyzed alongside the WCED systemic test results. The CTLI database, which records the names and schools of participants who register to attend a course, was up to date as of August 23<sup>rd</sup>, 2010. The database was manipulated to use the school as the unit of analysis. It was then merged with the WCED's systemic test results for 2008 and 2009, which were obtained from Dr. Chris Van Wyk at the University of Stellenbosch.

### 2.2 Who CTLI targets for training

CTLI's priority is to train educators from the weakest performing schools in the system. When the institute first opened its doors in 2003, CTLI received a clear mandate to train only the schools that performed the poorest in the provincial systemic tests. These schools were classified as 3A and 3B schools and were found mostly in the

lower quintiles. However, as time went on, CTLI welcomed a more diverse group of educators. This group included educators from the more privileged quintiles, including those from former white schools. While CTLI remains committed to serve and uplift the weakest schools in the province, it also recognizes the benefits diversity brings. The interaction between weak and strong educators, it is argued, adds great value to the course experience and can even be a valuable means for transformation. Rather than just filling courses with demoralized educators from the most dysfunctional schools, there are now also educators from higher achieving schools that can share best practices and assure educators about what methods can work when brought back to the classroom.

In essence, CTLI seeks to target the weakest schools in the province. But since they want to expose these educators to enriching experiences that are very different from their own, they want to maintain a mix of poor and better performing schools.

### **2.3 CTLI's role in the selection process**

Each of the eight education districts in the Western Cape is given an equal opportunity to train their educators. As space is limited, each district is asked to send seven educators per course. To coordinate the selection process at the district level, CTLI coordinators are appointed in every district. These officials tend to be GET coordinators or Curriculum Advisors that take on the added responsibility of liaising with CTLI.

CTLI recognizes that districts have different dynamics and is not prescriptive about how the selection of educators should happen. In 2009, CTLI visited all 49 circuits to promote the institute and encouraged circuits to send their weakest performing schools for training. At the end of September, a circular was sent to share the training course programme for 2010 and open up the registration process. This circular reached all WCED staff including head office, district directors, circuit team managers, IMG managers, curriculum advisors, and all principals, and did not specify any criteria about who should attend the training. It states that "persons interested in attending these courses are advised to register, via their education district offices" (Western Cape Education Department, 2009). After the circular goes out, CTLI fields questions from interested participants and waits for the nominations to come in around the end of November.

CTLI assumes that districts know which schools need the training the most. They imagine that both Curriculum Advisors and IMG managers would have recommendations to make as to who should attend what course, given that they spend most of their time in schools and would be aware of their needs. However, this is not what actually happens.

### **2.4 The selection process for 2010**

Six of the eight CTLI coordinators were interviewed in April 2010 to find out how the selection was made in their district. These districts were selected at random and included three urban and 3 rural districts. All coordinators understood the purpose of CTLI and their particular role as district coordinator.

It appears that district coordinators and officials were minimally involved in the selection process. All districts reported that nominations were predominantly made by schools and the names of educators forwarded straight to the district coordinator. According to their estimates, teachers primarily nominated themselves in Metropole Central and Overberg, and principals primarily nominated their teachers in Metropole South, North, and West Coast. Very few nominations were made at the circuit level, which only took place in two districts. However, it should also be mentioned that Metropole North did provide some guidance to schools on who should be nominated to attend training and Metropole South did verify the list of names that was sent in by the schools.

Selection criteria was only used in the three urban districts. Metropole South and North somewhat used the Literacy and Numeracy systemic test results whereas Metropole Central focused more on educators' individual needs as defined by IQMS. Surprisingly, only two of the six districts were aware that they were supposed to send seven participants to each course. The two considerations that guided that final selection were that not too many educators should come from one school at a time and if there were too many nominations priority was given to those who hadn't previously attended training at CTLI.

Table 2: Selection process followed in the districts in 2010

District	Action taken after circular	How nominations were made	Criteria used in the selection	Aware of quota-7 per course	Percentage of educators nominated through		
					Self	Princ.	Dist.
Metropole South	Reminder given to CTMs and CAs to forward names	Schools made the nomination. Circuits verified whether it reflected the true needs of the school.	Lit/num results	No	10%	80%	10%
Metropole North	Highlighted info to principals and CAs	Schools sent nominations to coordinator. CAs gave guidance. Lit/Num focus schools given preference.	Lit/num results	Yes	0%	100%	0%
Metropole Central	Highlighted info to principals and circuits	School's SMTs made nominations according to guidelines.	First time educators and those struggling given preference	No	90%	10%	0%
Cape Winelands	Highlighted information to CTMs and schools.	Schools sent nominations to coordinator.	None	No	*	*	0%
West Coast	None	Schools made most of the nominations. Few were made by some circuits.	None	No	25%	70%	5%
Overberg	Highlighted information to schools	Schools sent nominations to coordinator.	None	Yes	100%	0%	0%

KEY: Princ. = Principal; Dist. = District; CTM= Circuit Team Managers; CA= Curriculum Advisors.

NOTE: The district official was unsure of the breakdown between educators who had selected themselves for training or those that had been selected by the principal, but was certain that the district had not played a role in the selection.

District coordinators were open about the weaknesses they saw in the selection process. All coordinators recognized that the current methods of selection were not optimally suited to identify educators that needed the training the most. It is clear that if schools are the ones who ultimately decide who attends training there can be no targeting of poor performing schools. Four districts requested that CTLI give explicit criteria to guide the selection of teachers. However, the initial selection should not be at the school level if the criteria of Lit/Num results is used. Overberg recommended that CTLI have quotas for target groups to strengthen the process and together with West Coast, Metropole South, and Metropole North suggested that circuit officials be more involved in identifying educators belonging to these targeted groups. Both Metropole North and Central added that information on the content of the courses would also help district officials determine who needed to attend which course.

## 2.5 Who attended training in 2010

Given that principals and teachers were left to make the nominations and CTLI registered all educators that had not already attended a CTLI course that year, it is important to ask who came to CTLI for training and were these the right educators. CTLI's enrolment spreadsheet for 2010 which was last updated on August 23, 2010, was used to carry out the analysis. It was merged with data from the WCED's Ordinal List of Schools 2009 to acquire additional information as well as systemic test data for 2008 and 2009. The unit of analysis used was the school even though schools did not send the same number of participants to CTLI courses in 2010. This was done to facilitate the comparison between schools who sent educators to CTLI (from now on referred to as CTLI schools) and the rest of the districts and is a minor limitation of the analysis.

In this section the profile of CTLI schools is discussed by examining the districts, quintiles, ex-departments, and learner performance levels. Furthermore, the list of CTLI schools is checked against the list of Lit/Num schools to determine whether schools are receiving double the training from two separate projects.

### 2.5.1 The profile of CTLI schools

Enrolment figures for CTLI courses in 2010 revealed that 80% of the schools who attended training came from the three most privileged quintiles, particularly Quintile 4. Schools were predominantly from the urban districts, where schools tend to be more privileged than in the rural areas. With the exception of three Quintile 1 schools and eighteen Quintile 2 schools, there are no Quintile 1 or 2 schools in the urban parts of the province. The majority of Quintile 1 and 2 schools lie in Cape Winelands and Eden and Central Karoo, which are very much under-represented at CTLI. CTLI is receiving mostly former coloured schools (HOR), as their numbers are greatest in the province, and few former white schools. This finding would seem to support CTLI's mission to target the weaker schools. However, three quarters of the HOR schools that attend training at CTLI are from Quintile 4 and 5. The reason is that the HOR schools coming from the urban districts are the more privileged ones. For further information and discussion on the breakdown of district, quintile, and ex-departments, see pages 8-10 of the CTLI Teacher Selection Report prepared in September 2010.

The profile of schools that attend training at CTLI does not seem to correspond with CTLI's target group of weak schools. To reverse this trend it will be important to understand why the urban schools show greater interest in attending courses at CTLI and what may keep rural schools from applying. Although we can only speculate, possible reasons are discussed below. Staff at CTLI have mentioned that one of the biggest challenges for educators is to find a suitable substitute to replace them, which is especially problematic in the rural areas. If this is truly the case, the WCED may have to consider ways of ensuring suitable substitute teachers exist for the schools that need to attend training. Another contributing factor may be the distance between the rural schools and the institute, which could be remedied by decentralizing key courses to rural areas in need of training.

Reflecting back on the responses given by the district coordinators, it seems likely that urban districts may have been more involved in the selection process, which would have resulted in a greater number of schools coming from these areas. Metropole South also mentioned that a greater awareness of Lit Num results in their schools has contributed to a greater number of teachers being willing to enrol in training courses. Whether there is less of a focus on Lit Num results in rural districts would have to be investigated. Overberg did offer a reason why so few educators applied from this district. Apparently district staff have a difficult time advocating for CTLI as they know little about its impact and many teachers have negative perceptions about other WCED experiences. Rather than waiting for word of mouth to spread the message among teachers about the value of attending courses at CTLI, the WCED may want to consider mounting a proactive advocacy strategy.

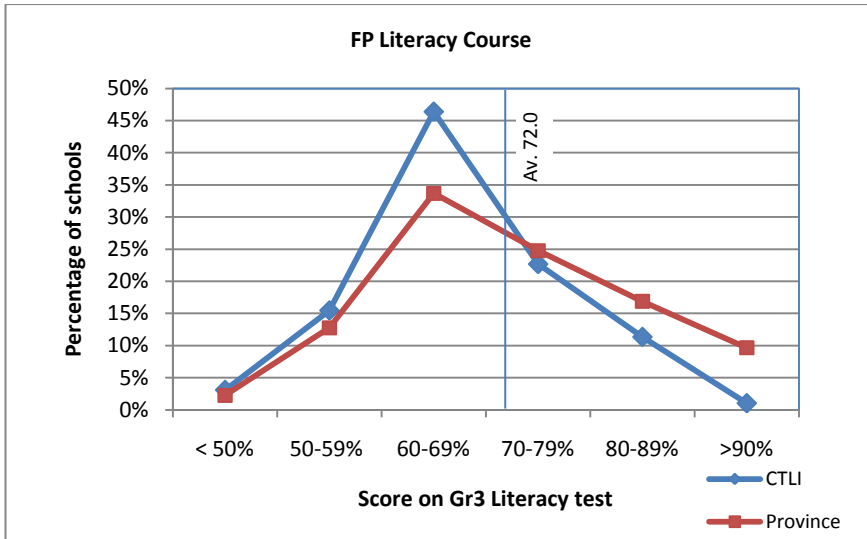
Finally, if one considers that principals are the ones making the nominations, it would make sense that the greatest number of schools at CTLI would end up being those that have principals that take initiative in order to improve the quality of teaching and learning in their schools. In other words, this would be the Quintile 4 schools who we know are located mostly in Metropole South, East, Central, and North. Quintile 1 and 2 schools tend to be more dysfunctional, face many problems in addition to poor teacher subject knowledge, and have less access to email, which is how the CTLI circular is distributed. For all of these reasons, one cannot expect principals from Quintile 1 and 2 schools to put forth as many nominations as more organized schools. Without a mechanism to target the weak schools, this situation will continue to repeat itself.

### **2.5.2 Breakdown by performance**

This next section investigates whether educators from the weakest schools are attending the right courses at CTLI. To carry out this analysis, data from the WCED's biennial systemic test was used. In the Foundation Phase, we examined the 2008 Grade 3 Literacy results for schools that had educators that attended the 2010 Literacy course and the Grade 3 Numeracy results for those who had educators that attended the 2010 Numeracy course. Similarly, in the Intermediate Phase, we examined the 2009 Grade 6 language results for those schools who sent teachers to the 2010 Language course and the Grade 6 maths results for those who attended the 2010 Maths course. To ascertain whether the right schools were attending the 2010 school management courses offered, we examined a combined average of the Grade 3 and Grade 6 test results as there is no test on school management. The overall performance of the school is thus used as a proxy for schools who would need to receive support in the area of school management. For the analysis, schools were grouped together according to their scores and the performance of CTLI schools was compared to the performance of the province as a whole.

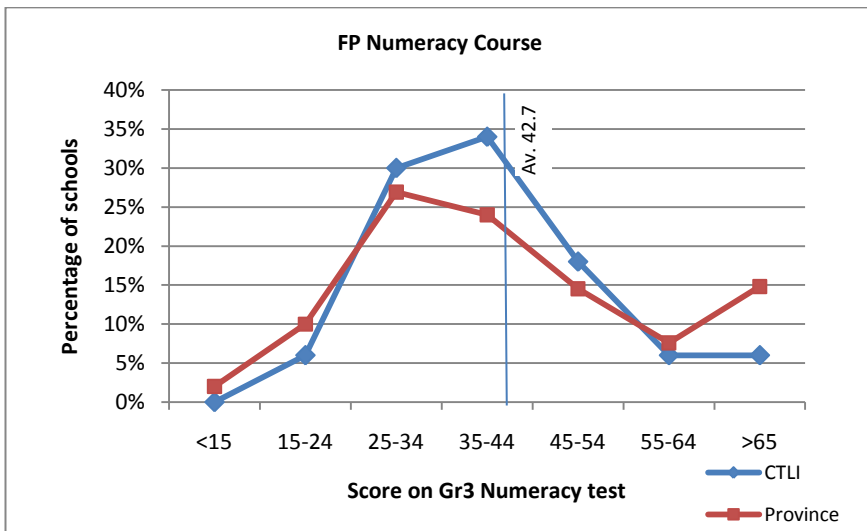
The graphs that follow show the percentage of CTLI schools that achieved certain marks versus the percentage of schools in the province who achieved the same marks. If the schools that attended training at CTLI had been chosen at random from the province, one would expect an equal percentage of weak, average, and above average schools to have come to CTLI. In other words, the trend lines for performance of CTLI schools and the province would have been the same. Given CTLI's policy to favour the weaker schools, one would expect to see a greater percentage of weaker schools in CTLI in comparison to their numbers in the province. In other words, the score distribution for CTLI schools should be shifted to the left, if the schools that most needed training were being targeted.

**FP Literacy:** The majority of schools in the province score between 60-69% on the test, which is just below the provincial average score of 72%. The greatest percentage of schools attending CTLI's FP Literacy course (46%) come from this group. There is a slightly greater percentage of weaker schools at CTLI when compared to the province, 1% more that score below 50% and 2% more that score between 50-59%. There is also proportionally fewer strong schools at CTLI than in the province, which decreases with higher performance. There are 2% fewer schools that score between 70-79%, 6% fewer that score between 80-89%, and 9% fewer that score above 90%. Although most of the schools performed around the average, overall a slightly greater percentage of weak schools enrolled in the course and a smaller percentage of strong schools attended.



\*CTLI n= 97, Province n= 1066

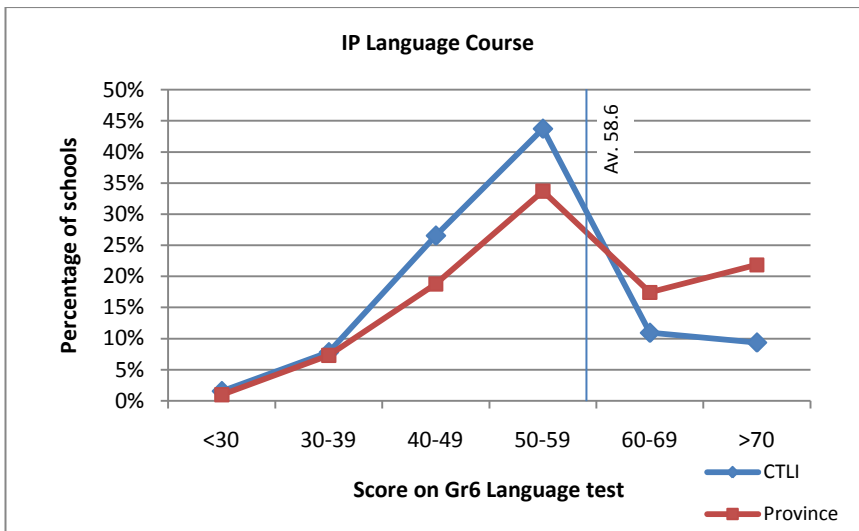
**FP Numeracy:** The majority of schools in the province (27%) score between 25-34% on the test, which is well below the provincial average score of 42.7%. However, the greatest percentage of schools attending the Numeracy course (34%) performed much better, scoring between 35-44%. CTLI also received more schools that performed a little below and above average relative to their numbers in the population. There are 3% more schools that scored between 25-35% as well as 3% more schools that scored between 45-54%. A smaller percentage of the weakest two tiers of schools and the strongest two tiers attended training at CTLI. All in all, the weaker performing schools were not favoured at the training.



\*CTLI n= 100, Province n= 1066

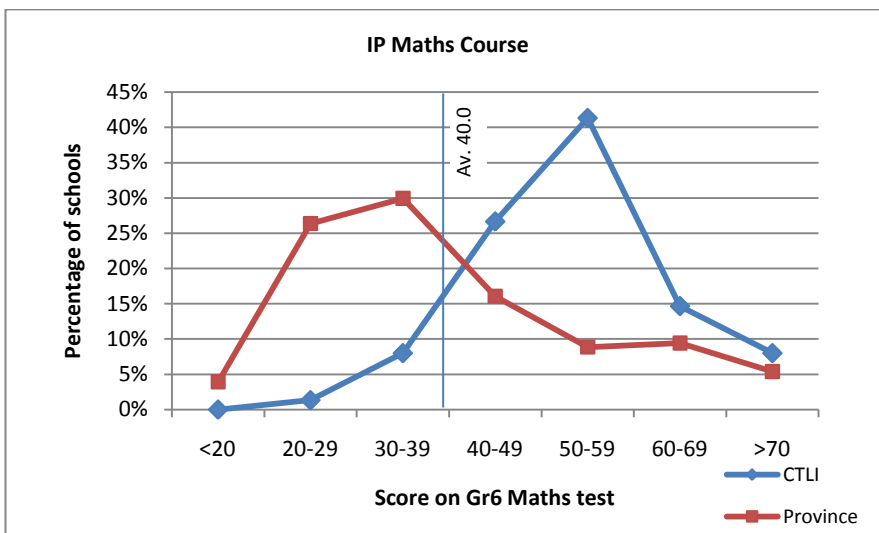
**IP Language:** The majority of schools at CTLI (44%) and in the province (34%) score around the provincial average on the test of 58.6%. However, the proportion that attend training at CTLI is greater than the proportion that exists in the province by 10%. Similarly, there is a greater percentage of schools that perform just below average at CTLI (27%) than in the province (19%), meaning that the slightly weaker schools were also favoured. There were disproportionately less schools that performed above average, between 60-69%, and well above the average, above 70%. Thus, while the largest group of schools that attended Language training at CTLI scored around the average, the slightly weaker schools were favoured and the stronger schools were disfavoured.





\*CTLI n= 64, Province n= 1039

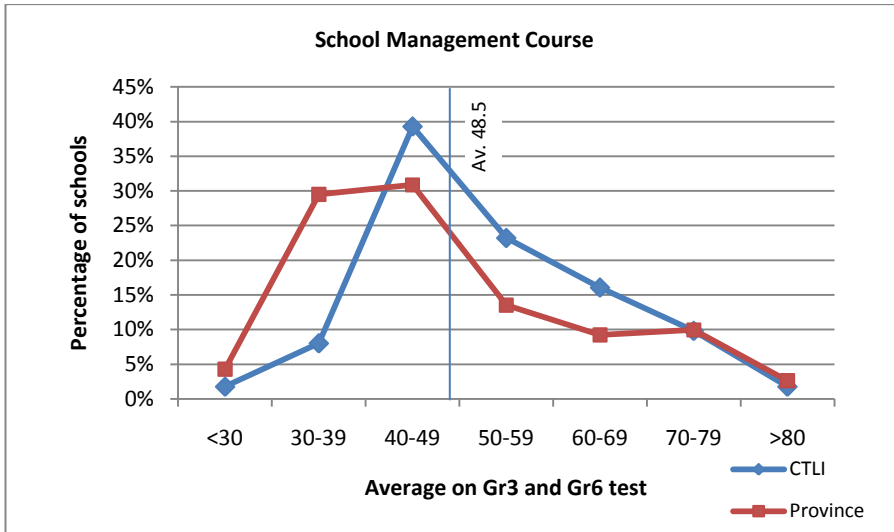
**IP Maths:** This graph is very different from the others examined above, and it is strongly skewed towards the stronger schools. More than half of the schools in the province are scoring below average, 30% score between 30-39% on the test, 26% score between 20-29%, and 4% score below 20%. However, hardly any of these poor performing schools attended the CTLI IP Maths course. Only 1% of the schools came from the two weakest groups and 8% came from those scoring just below average. The majority of schools that attended training at CTLI (41%) scored between 50-59%, or 10 to 19% points higher than the average. These are clearly the ones not in most need of training, and they correspond to a small minority (9%) of the overall provincial population. The crucial part of the population, which is really struggling with Mathematics, is being missed.



\*CTLI n= 75, Province n= 1039

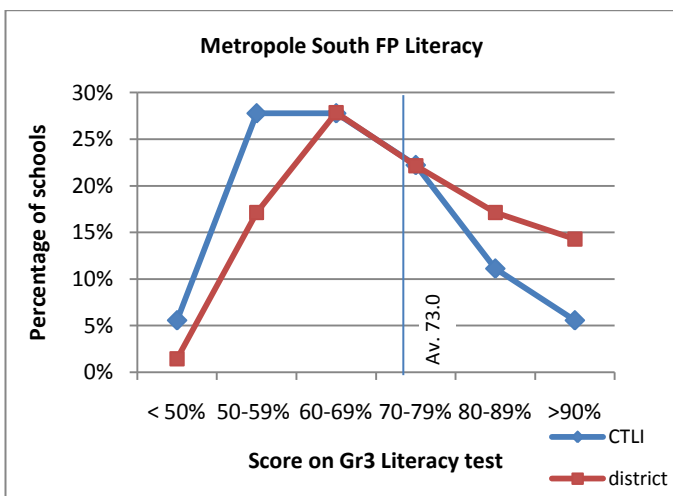
**School Management:** The majority of schools attending school management courses at CTLI (39%) have a combined score on the Grade 3 and Grade 6 test that falls around the average of the province. Moreover, they are disproportionately represented in CTLI relative to their numbers in the population. Schools that score above average are also being disproportionately favoured. There are 9% more schools that scored between 50-59% and 6% more schools that scored between 60-69% at CTLI. All in all, close to half of the schools (51%) at the training represent the stronger schools in the province. In comparison, even though 29% of the schools score significantly below the provincial average (between 30-39% on the two tests), these weak schools only make up 8% of the

schools that attend training at CTLI. Once again, the average-performing and high-performing schools are being disproportionately favoured.

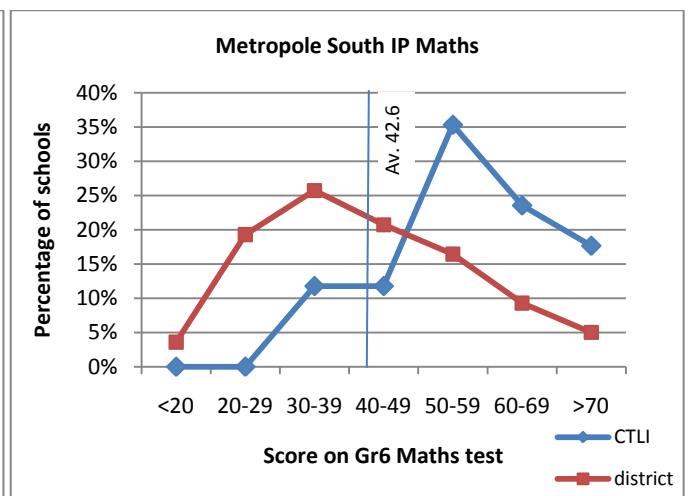


\*CTLI n= 112, Province n= 1095

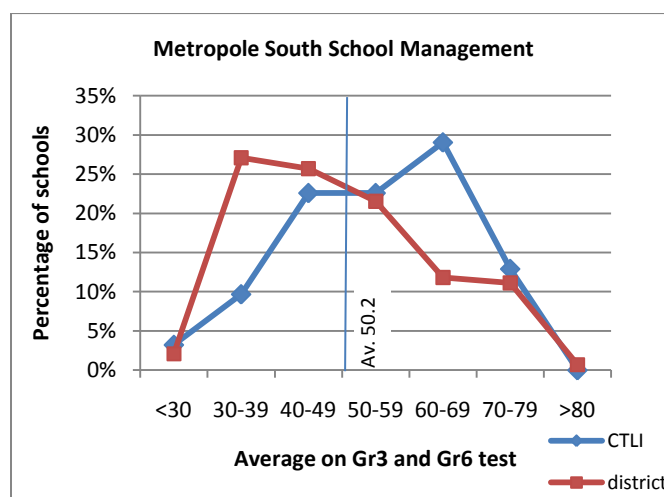
In summary, the current selection process is mainly attracting the schools that are performing on or above average and is largely missing the weakest performing schools. In the case of the IP Maths course and to a smaller extent the School Management courses, it is actually the strongest schools who are being favoured and are receiving training. When we disaggregate the data and look at what is happening at the level of the district, we find that a few districts do favour the weakest schools some of the time, but it is not consistently done by any district. For example, based on the interview data, Metropole South could have been expected to disproportionately send the weakest schools to CTLI. Although it was still the principals who made the nominations, the district coordinator claimed that the circuit teams verified these nominations to reflect the true needs of the schools and support schools with low Lit/Num results. While the schools that were sent to the FP Literacy course were disproportionately the weakest schools and most closely resemble what CTLI would like to see for all of its courses, the schools sent to the IP Maths course and School Management courses were disproportionately the strongest ones.



\*CTLI n= 18, district n= 140



\*CTLI n= 17, district n= 140



\*CTLI n= 31, district n= 144

### 2.5.3 Overlap with Literacy/Numeracy Intervention schools

Another training strategy being implemented by the WCED to raise the Literacy and Numeracy results in the province is known as the Literacy/Numeracy Intervention. Two hundred and fifty schools are currently participating in the programme. Every education district chose about 31 functional schools, which consisted of weak, average, and a few strong schools. The training model consists of intensive training and year-long in-school support for 1 teacher per grade per learning area (literacy and numeracy) per school. The intention is for the lead teacher that attends the training and receives the support to pass on the knowledge to the rest of the teachers in his/her grade. In 2009, half of the Lit/Num schools received training in Numeracy/Maths while the other half received training in Literacy/Language. In 2010 the schools switched. Those that had received Numeracy/Maths training the previous year received Literacy/Language and vice versa.

Given the amount of support these schools are receiving, it is important to ascertain how many are also sending teachers to Literacy/Language and Numeracy/Maths courses at CTLI. Doubling up on training can be problematic if the two training programmes do not necessarily align with one another and can lead to training overload. An analysis of the data shows that 75 Lit/Num schools, or close to one third (30%), also attended training at CTLI in 2010. This overlap occurred in all the districts, but was especially pronounced in Metropole East, North, and South. Thirteen schools received literacy/language training from CTLI and the Lit/Num intervention in the same year, and 27 schools received CTLI training one year after they had received it from Lit/Num. Similarly, 9 schools received Numeracy/Maths training from CTLI and Lit/Num the same year, and 20 schools received CTLI training the year after. Also, 36 schools or close to half (48%) attended a School Management course, as part of the Lit/Num Intervention. Considering the investment the department makes through its Lit/Num and CTLI training, it is essential to examine further whether these two training programmes detract or re-enforce one another. If they do re-enforce one another, it should be considered whether the added value of attending the other training programme is worth the cost.

## 2.6 Who should attend CTLI training?

CTLI is already aware that they are not necessarily receiving the weakest schools at their training courses and would like to re-think which schools need to be targeted and how this process can be carried out.

### 2.6.1 Should enrolment be limited to the poorest quintiles?

One of the ideas put forth is to only allow Quintile 1-3 schools at CTLI, since they tend to be poorest performers in the system. Table 6 below, which depicts performance according to quintile, shows that the systemic test results for the three lowest quintiles are indeed significantly below the provincial average (see the figures highlighted in red).

Table 3: Performance on the 2008 and 2009 Systemic Test according to Quintile

Quintile	Grade 3 2008			Grade 6 2009		
	No of schools	Literacy	Numeracy	No of schools	Language	Maths
1	230	66.8	31.9	216	50.7	31.5
2	105	67.3	35.6	99	51.9	32.3
3	176	66.3	34.6	173	50.9	29.6
4	251	68.8	40.8	246	56.6	37.4
5	304	83.6	59.5	299	73.1	57.2
<b>Total</b>	<b>1066</b>	<b>72.0</b>	<b>42.7</b>	<b>1039</b>	<b>58.6</b>	<b>40.0</b>

However, if the data is disaggregated by education district, one will find that in five of the eight districts, some Quintile 4 schools perform just as poorly and sometimes even worse than their Quintile 1, 2, and 3 counterparts. If we take the example of Eden and Central Karoo (Table 7), one can see that Quintile 4 schools fare worse than Quintile 3 schools in Literacy, and marginally better than Quintile 3 schools in Numeracy, Language, and Maths (but still, very far from the Quintile 5 schools). The situation looks quite similar in the West Coast, where Quintile 4 schools fare worse than Quintile 2 schools in Literacy, marginally better in Numeracy and Language, and are actually the poorest performers out of all the quintiles in Maths. If CTLI chooses to go this route, certain weak performing Quintile 4 schools will undoubtedly be missed, especially in the rural districts.

Table 4: Poor Quintile 4 performance in two districts

District	Quintile	Gr3 Literacy	Gr3 Numeracy	No. of schools	Gr6 language	Gr 6 Maths	No. of schools
Eden and Central Karoo	1	67.5	32.0	71	51.6	32.0	66
	2	64.3	33.4	28	48.1	26.3	28
	3	71.4	35.9	23	56.6	31.0	23
	4	68.8	39.1	21	58.3	34.2	21
	5	88.5	69.0	24	77.0	64.7	24
	District Avg.	<b>70.7</b>	<b>39.0</b>	<b>167</b>	<b>56.3</b>	<b>36.0</b>	<b>162</b>
West Coast	1	68.8	37.0	51	54.3	36.7	48
	2	72.9	41.2	15	56.8	38.1	14
	3	71.3	34.4	7	56.8	36.6	6
	4	71.9	42.3	23	57.0	34.2	23
	5	87.4	71.1	20	75.2	64.1	19
	District Avg.	<b>73.3</b>	<b>44.3</b>	<b>116</b>	<b>58.9</b>	<b>41.1</b>	<b>110</b>
<b>Provincial Avg.</b>		<b>72.0</b>	<b>42.7</b>	<b>1066</b>	<b>58.6</b>	<b>40.0</b>	<b>1034</b>

### 2.6.2 A systematic approach to teacher selection

Rather than using Quintiles to identify and target weak performing schools, a more systematic approach should be used for the selection process. We recommend that CTLI first concentrate on the weakest performing districts and target the weak schools circuit by circuit. Together with the department, CTLI must decide how it will define “weak” schools- whether it will refer to those schools who score below the provincial average, those who fall into the “not achieved” or “partially achieved” national categories (below 50% on the systemic test), or those who score below 40%.

All targeted weak schools should be personally encouraged to attend the relevant courses and individually followed up on. Principals should not be asked to nominate just the weakest teachers in the school. It is very important that the HOD also accompany them to the course, as weak teachers will have trouble returning to their schools and addressing their seniors to say that things must be done differently (as they have pointed out in their course evaluation forms). The Curriculum Advisors and IMG Managers responsible for those targeted schools in a given circuit also need to attend at least some of the training, to be on the same page with schools that are trying to transform their practice and be able to support them once the training is complete. Even though district officials are always welcomed to attend courses at CTLI, without targeting them specifically, only 3 district officials came in 2010. Furthermore, we know that it can be problematic for schools to be receiving different and even contradictory information from the district and CTLI about how they should be doing things. If CTLI is going to make a lasting impact, this potential source of conflict needs to be eliminated. It is also suggested that the weakest schools send several teachers and school leaders at a time so that the culture of the school can be addressed. If these targeted schools do not accept to attend training, reasons should be followed up on but no school should be forced to come to CTLI. Training is likely to have little value to those that are there against their will and may negatively impact other participants attending the course.

As we also see the value of mixing schools from different socio-economic and geographical backgrounds, CTLI can offer a limited number of places to high performing schools within targeted circuits and can mix three or four geographically distinct districts together for the training.

The advantages of using this method are multi-fold and include:

1. A systematic approach to selection will ensure that all struggling schools in all parts of the province are covered;
2. Ensures weakest schools are targeted while leaving room for better performing schools to attend;
3. Will strengthen and empower the circuit teams to know who are the weakest schools and support them;
4. Allows teachers to interact with other teachers in nearby schools and build constructive relationships. Teachers from the same circuit are likely to face similar contextual challenges and can share specific solutions about what has worked and what hasn't. They also form part of the same cluster and can further support each other in the transformation of each others' school.
5. Allows teachers to interact with other teachers from different geographical and socio-economical backgrounds. The diverse experiences can help teachers realize what is actually possible to do in schools.
6. There is greater potential for enduring change when a group of individuals are brought together under the same goal and can motivate each other. In this case, the group consists of circuit officials, school leaders, lead teachers as well as weak teachers all from the same circuit.

Implementing this new selection process will require much greater coordination between CTLI, the districts, and its circuit teams. While it will be difficult to set in motion, it is essential that CTLI work closely with the

department to maximize the impact they can make in the province. At the moment there is little alignment between the two groups and the potential of CTLI is not being realized. To bring the district on board, a mandate from the top will have to be issued. The relevant circuit officials will need to liaise with the identified weak schools to encourage them to enrol in CTLI, follow up on their enrolment, attend the course with them, and provide support after the training. It is best that CTLI take responsibility for developing a 3-year plan specifying which circuits and schools they intend to target that can then be operationalized by the districts.

One very important question that needs to be asked is what type of schools are best suited to attend and benefit from the training at CTLI? Currently, CTLI receives schools that perform around the average on the Literacy and Numeracy systemic tests. Is the impact of the training course greatest for teachers coming from average schools? Will it have an impact on the weakest schools in the system, or do these schools first need a different kind of support altogether? An impact analysis is essential to answer these questions, which will have significant ramifications on the direction CTLI chooses to take.

### 2.6.3 More Numeracy, Maths, and Intermediate Phase educators

Table 8 below shows the number of schools that failed, or scored below 50%, on the Grade 3 Literacy, Grade 3 Numeracy, Grade 6 Language, and Grade 6 Maths test. It is apparent that the greatest number of schools struggle with Numeracy and Maths. There are 769 schools (72%) that score below 50% in Numeracy and 793 schools (77%) in Maths. These struggling schools can be found in all districts, although there is a smaller percentage in Metropole Central (58% in Numeracy and 66% in Maths) and a greater one in Cape Winelands and Eden and Central Karoo (81% and 78% in Numeracy and 83% and 84% in Maths respectively). In comparison, only 24 schools (2%) in the whole province fail the Grade 3 Literacy test and 281 (27%) fail the Grade 6 Language test. Another interesting finding is that learners in the Intermediate Phase fare worse in Language and Maths when compared to the Foundation Phase. However, at the moment CTLI offers 3 courses for each learning area in the Foundation Phase, and only 2 in the Intermediate Phase. Based on these numbers, CTLI should consider whether it is possible to increase the number of courses in Numeracy, Maths, and the Intermediate Phase, since it is where most of the improvement needs to be made.

Table 5: Number of schools who score below 50% in the Systemic Tests

District	No. of schools	Schools that failed 2008 Grade 3 test		No. of schools	Schools that failed 2009 Grade 6 test	
		Literacy	Numeracy		Language	Maths
Cape Winelands	213	8	172	198	72	164
Eden and Central Karoo	167	7	130	162	54	136
Metropole Central	147	0	85	146	20	96
Metropole East	87	2	63	89	31	68
Metropole North	133	2	87	127	37	93
Metropole South	140	2	102	140	35	97
Overberg	63	0	50	62	7	51
West Coast	116	3	80	110	20	83
<b>Total</b>	<b>1066</b>	<b>24</b>	<b>769</b>	<b>1034</b>	<b>281</b>	<b>793</b>

\*5 schools in the province were excluded from the Grade 6 results as information was not available.

## 2.7 Summary of results

The current selection process is not bringing the “right” educators to CTLI. As it stands, districts are not taking charge of identifying their weak schools and principals are being given the choice to nominate their teachers for

training. The CTLI circular is also misleading and may be contributing to the problem. It reaches all school principals via email as well as district and provincial staff, opens registration to all who are interested, and does not specify any quota or criteria that need to be followed. Based on this process, one can expect that principals in more or less functional schools, who take initiative and have reliable access to internet, would be the ones sending the majority of educators to CTLI.

An analysis of the enrolment figures for 2010 reveals that it was in fact schools from the most privileged quintiles that made up the majority at CTLI. They came predominantly from the urban districts and scored around the provincial average on the systemic tests (with the exception of educators in the IP Maths course). Weak and very weak schools are being missed and will continue to be under-represented at CTLI until an effective mechanism exists to target them directly for training.

The following recommendations are made:

- Systematic process for targeting weak schools circuit by circuit, which is led by CTLI and the Provincial office;
- Increase the number of Numeracy and Maths courses offered, as well as the number of Intermediate Phase courses;
- To facilitate analysis, it is recommended that participants write the EMIS numbers in their registration forms and capture it on the CTLI database.

### 3 Quality of the training courses

In 2010, CTLI offered 38 courses to teachers and school leaders throughout the Western Cape province. Eight of these courses covered Numeracy, Literacy, or Life Skills in the Foundation Phase (FP); six covered Maths, Language, Natural Sciences, or Environmental Education in the Intermediate Phase (IP); four covered Reading, Maths, or Technology in the Senior Phase (SP); and twenty covered school management topics including the roles of the principal, deputy principal, and HOD, aspiring school leaders, induction courses, School Management Team training, and a course focused on women. In addition to these training courses, CTLI also hosted a number of education conferences attended by up to 1,000 educators.

Given the span of course offerings, the scope in this study was limited to four curriculum courses and 1 school management course considered key in improving learner performance. These courses are:

- FP Literacy;
- FP Numeracy;
- IP Language;
- IP Maths; and
- Principal as Manager of the Curriculum.

The study made two assumptions about training elements that would improve teaching and investigated them for each course. The questions it sought to answer were:

1. Did the training course make use of relevant, high quality materials?
2. Was the training delivered effectively?

#### 3.1 Methodology

To investigate the first question, experts were commissioned to review the course materials. To evaluate the effectiveness of delivery, facilitators' reflections, participant feedback, and informal training observations were used.

##### 3.1.1 Review of the course materials

Three experts in the areas of Maths, Language, and School Management were chosen to review the training materials (refer to the appendix for background information on the reviewers). They each received the tender document specifying the course requirements, the facilitators guide for the course, and the material given to participants. The reviewers followed a framework which looked at the content of the training materials, their instructional design, time allocations, approach to teaching and learning, as well as the editing. A technical report was produced for each course and a summary table can be found in the appendix.

The material review was problematic for various reasons. Some of the material was not ready in July to be given to the course reviewers including the course programmes, facilitator's guide, and Block 2 material. Moreover, because the material is not compiled into a single handbook, there were numerous complications in obtaining all of the material in the order that participants received it. It appears that many of the service providers do not provide CTLI with an additional copy of the material that can be used for the evaluation. Consequently, CTLI staff had to photocopy and collate hundreds of pages introducing yet another element of error into the review.



Reviewers analysed and drew conclusions based on the materials they were given. However, we cannot ascertain the extent to which the contents reviewed actually represent the content covered in the course.

The table below details what was reviewed for each of the courses and highlights any particular problems experienced.

Table 6: Materials reviewed for CTLI training courses

Course	Material reviewed	Comments
FP Lit	Block 1	Course programmes for Block 1 and 2, as well as all the material for Block 2 were not available at the time of the review.
FP Num	Block 1, Block 2, course programme Block 2	Course programmes for Block 1 as well as the facilitator guide were not made available.
IP Lang	Block 1	The course programme for Block 1 and 2, as well as all the material for Block 2 were not available at the time of the review.
IP Maths	Block 1, Block 2, course programme Block 1	Course programme for Block 2 was not made available. We didn't have all the content for Block 2 at first, but managed to get it in time after some effort.
Principal	Handouts, facilitator's guide, course programme, overhead transparencies	Material arrived as loose pages and was organized by JET according to the course programme and facilitator guide. We noticed that some of the items were dated 2008 and could not ascertain whether we had the correct, updated versions. Furthermore, some of the material listed in the course programme could not be found among the content we received and participants' comments later revealed that more information was covered in the course than was referenced in the course documents.

Another question that surfaced during the brief, informal observations of the training was the use of the materials in the actual course. It is not clear how the materials were used in the Numeracy or Maths course.

### 3.1.2 Delivery of the training

To assess how well the training was delivered, data was obtained from the course provider's course report, from the participants' course evaluations, from interviews with a small sample of participants held three months after the course, and brief observations of the training. All course providers submitted reports after the completion of each course. Although quality varied significantly, course reports generally recounted details of the training, challenges, highlights, and recommendations on how to improve the course.

Course evaluations were also obtained from CTLI on the final day of training. However, not all questionnaires were delivered to CTLI in the first place. As it is the service providers' responsibility to administer the questionnaire to the participants, it is possible that some forms containing negative remarks were discarded. In the future we recommend that CTLI staff administer all course evaluations to ensure they receive all reviews. All questionnaires received for this study were captured into Excel and incorporated into the analysis.

Interviews were conducted with about a third of the participants in one cohort of each course. School visits took place at the end of October and beginning of November, three months after completion of the training. For more information on the fieldwork and participating educators, please refer to Chapter 5, pages 63-65.

Finally, brief observations of the training took place for the FP Literacy, FP Numeracy, IP Language, and IP Maths courses. Observations were made on the afternoon of the first day of Block 2 and lasted about 30 minutes. As most of the courses split up into two parallel sections, both facilitators were observed teaching. There was no formal process or structure used to make the observations. Experienced fieldworkers recorded what they saw.

## 3.2 Results

### 3.2.1 Foundation Phase Literacy

The FP Literacy Course is a 4 week course which is broken up into two training blocks. Block 1 is held early in the year and Block 2 is held towards the middle of the year allowing participants to return to the classroom in between. In accordance with CTLI's new training model, WCED trainers were appointed to develop and present the material for the course. However, only one set of materials was developed for FP literacy and IP language teachers. As a result of the feedback from Block 1, CTLI decided to enlist service providers to assist in the delivery of Block 2 and supplement materials to make the course more practical.

Four Modules were covered in Block 1:

- The importance of literacy;
- Policies, principles, programmes, people for effective literacy and language development;
- Foundations for learning and the balanced language programme; and
- Methodologies of a balanced language programme.

In Block 2, six Modules were covered:

- Literacy across the curriculum;
- Phonemic awareness;
- Strategies to enhance language instructions - how to evaluate LTSM;
- Inclusive classroom practice;
- Recognising reading problems - learning styles;
- Planning for assessment in the Foundation Phase.

#### **Training materials**

Only Block 1 course material was evaluated for this report, as material for Block 2 was not yet available. Overall, the materials received a rating of 3.0 out of 5.0, meaning it was satisfactory for FP literacy teachers.

The main strength of the material is that it identified one important area -how to put into practice a balanced literacy programme, and used good materials that dealt with the topic in sufficient depth and detail to have an impact on practice. At the same time, the material largely derives from READ Education Trust and it is possible that many teachers would find this training redundant as they are already implementing these reading methodologies effectively in their schools. Nevertheless, the material has been generally well-designed and well-edited. The training manual is logically sequenced and the materials are all-inclusive. Active learning is promoted through the materials, although some activities are not well-conceptualized.

The course material also exhibits a number of weaknesses. Too much time is spent introducing the balanced language approach and relating it to policy (Module 1-3), and too little time is spent learning about the actual approach (Module 4). Moreover, the tone tends to be directive, didactic and bureaucratic. Instead of engaging and involving teachers it has the potential effect of disengaging and distancing them. It is also offers limited

opportunities for reflection and contains no assignments or assessments. For more information on the material review, please refer to the appendix or the course’s technical report.

**Facilitators’ feedback**

Several course reports were written for the FP Literacy course. The table below summarizes facilitators’ comments on the elements of the training that worked well and those that were challenging. It should be noted that a few elements that worked poorly in Block 1 were amended for Block 2.

Table 7: Training elements that worked and were challenging according to the FP Literacy facilitators

	<b>Elements that worked well</b>	<b>Elements that were challenging</b>
<b>Block 1</b>	<ul style="list-style-type: none"> <li>• Participants appreciated training on work schedules and lesson plans from department officials.</li> <li>• Demonstration lesson with learners.</li> <li>• Good participation and interaction.</li> <li>• Teaching the Balanced Language Approach methodologies.</li> </ul>	<ul style="list-style-type: none"> <li>• Facilitators and CTLI received the course material late Friday afternoon prior to the start of class.</li> <li>• Participants never received the daily course programmes.</li> <li>• Participants were not given the READ handbooks detailing the methodologies of the Balanced Language Approach.</li> <li>• Training was too theoretical, not practical.</li> <li>• Some participants were from READ schools and already familiar with methodologies.</li> <li>• Different facilitation styles and activities done in the two parallel groups, disadvantaging one.</li> <li>• Different language groups not accommodated.</li> <li>• Focus was too narrow- only covered reading.</li> <li>• Using the same manual as the IP (some examples and case studies not relevant for the FP).</li> </ul>
<b>Block 2</b>	<ul style="list-style-type: none"> <li>• Participant groups exposed to both facilitators.</li> <li>• With the exception of concepts not part of course materials, teachers expectations were met.</li> <li>• More practical work than in Block 1.</li> <li>• High participation.</li> <li>• Phonics content.</li> </ul>	<ul style="list-style-type: none"> <li>• Issues with JET testing- translation and administration</li> <li>• Different languages still not accommodated.</li> </ul>

NOTE: Block 1 reports submitted by N. Mgobozi, M. Benn, B. Goetham, and N. Nyamza. Block 2 report submitted by N. Mgobozi.

**Participants’ feedback**

Participants’ response to the training was obtained through the course evaluations as well as interviews conducted three months after completing the course. It should be noted that according to CTLI staff, 14 course evaluations were missing. Overall, participants were overwhelmingly positive about the course. It is interesting to note that while ratings do not indicate that language was an issue in the course, in the open comment section of the evaluation 12 participants (26%) requested the training/materials be in Afrikaans or isiXhosa.

Table 8: Quality of the FP Literacy Block 2 training session according to course evaluations

	Strongly agree	Agree	Disagree	n
Presenters well prepared and delivery was effective	59%	41%	0%	46
Facilitators and presenters were professional in all they did	62%	38%	0%	45
Adequate information was disseminated on each topic	52%	48%	0%	44
Adequate time was spent on all topics	51%	47%	2%	45
Materials and handouts were adequate	57%	43%	0%	46
Group and plenary sessions were well-managed	52%	48%	0%	46
Presenters and facilitators accommodated all language groups	49%	49%	2%	45
Expectations of workshop were met	47%	53%	0%	45
My understanding of the curriculum has improved	44%	56%	0%	45

The top three highlights, future training needs, and aspects of the course that require improvement are presented in the table below.

Table 9: Top three highlights, future training needs, and aspects that require improvement in the FP Literacy course

Highlight of the course	Future training needs	Needs improvement
<ul style="list-style-type: none"> <li>• Learning barriers (20)</li> <li>• Assessment (14)</li> <li>• Phonics and spelling (12)</li> </ul>	<ul style="list-style-type: none"> <li>• Xhosa training/phonics (6)</li> <li>• CAPS/English FAL (5)</li> <li>• Numeracy/life skills (4)</li> </ul>	<ul style="list-style-type: none"> <li>• End day earlier (6)</li> <li>• Language (6)</li> <li>• Demo lessons (4)</li> </ul>

Note: Number of teachers who made the comment appears in parenthesis

Three months after the training, fifteen FP teachers were interviewed about the course. Seven rated the FP Literacy Course as “excellent”, 6 as “good”, and 2 as “average”. They also felt more strongly about the courses’ effect on their teaching practice (11 strongly agreed) as opposed to their content knowledge (8 strongly agreed), which is in line with the courses’ focus on reading methodologies. More than half of the teachers also mentioned topics for which they would like to receive more support. Phonics was mentioned by almost all of the teachers followed by the teaching of reading and writing. When asked to rate the quality of the course materials, 4 rated them “very good”, 10 rated them “good”, and 1 rated it “average”. All have referred back to their materials since their return to the classroom and almost all teachers (12) find them to be very useful.

### **Training observations**

A little over half an hour was spent observing the two FP literacy groups on the first afternoon of Block 2. Despite the brief amount of time spent in the training, it was evident that language issues were a problem in the course. The pace of the class was moving quickly and it became clear that a table with isiXhosa speakers was struggling to keep up. As a whole, they participated less in the class discussion and did not call for the facilitator’s attention when topics the sped through topics they did not understand. The content of the course was also not always pertinent to this group (e.g.: English phonics). At one point in time, an isiXhosa teacher became exasperated by this and spoke out about it to the class. Besides these difficulties, the overall learning environment was positive, vibrant, and participants were enjoying the opportunity to interact with one another.

## **Conclusions**

Despite the logistical difficulties and limitations of the materials, participants responded very favourably to the course. CTLI was able to react quickly after the first block to improve the quality of the second training session by making the training more practical and useful for educators. It appears that service providers are particularly strong in some literacy content areas whereas WCED trainers are best suited to present policy issues of the department. Until department officials acquire the requisite knowledge to present certain literacy topics with skill and confidence, a mix of facilitators should be retained and each should teach according to their strengths. The biggest issue that surfaced was language and it is strongly recommended that the sessions be split up according to the teachers' Language of Learning and Teaching (LOLT), especially for the presentation of phonics. Lastly, the scope of the materials was largely limited to reading, which is only one of the six learning outcomes. It is essential that the course cover the other learning outcomes with content that is specific to the Foundation Phase.

### **3.2.2 Foundation Phase Numeracy**

The FP Numeracy Course is a four week training course which was held three times in 2010. Similarly to the literacy course, it was broken up into two training sessions allowing participants to return to the classroom in between. The training materials and course delivery were handled by the Mathematics Education Primary Programme (MEPP) and covered all five Learning Outcomes. Learning Outcomes were weighted according to specifications in the National Curriculum Statements (NCS) as well as the perceived needs of the teachers. Within each Learning Outcome, assessment standards were unpacked and problem solving was discussed. The course also addressed planning, assessment, use of resources, managing a classroom, and learning barriers in numeracy.

#### **Training materials**

The training materials for both Block 1 and 2 were found to be of a very high quality and were given a rating of 4.1 out of 5. The greatest strength of the material is the thorough coverage of the NCS, which is very relevant and useful for all teachers. The instructional design of the material is also strong. Course materials are logically sequenced, coherent, and for the best part all-inclusive. Provision is made for the extension of learning and departmental documents are referenced in such a way that they further enhance lesson planning and classroom practice. The pacing of the mathematical content in the course materials is appropriate and pays careful attention to progression and development of concepts. Active learning is promoted and reflection is encouraged as a way to deepen and consolidate learning. The materials are well edited and make good use of supporting text and graphics, although a few typos need correction.

Few weaknesses were identified that would improve on an already excellent set of materials. Minor suggestions were made in the technical report to improve the clarity and accuracy of certain topics. For more information on the ratings obtained by these materials, please refer to the table in the appendix or the technical report.

#### **Facilitators' feedback**

A 124 page report was written for Course 3 of the FP Numeracy Course. The table below summarizes elements of the training that worked well and those that were found to be challenging according to the facilitators who wrote the report.

Table 10: Training elements that worked and were challenging according to the FP Numeracy facilitators

Elements that worked well	Elements that were challenging
<ul style="list-style-type: none"> <li>• Number work (LO1).</li> <li>• The class work books (developed 48 learner activities).</li> <li>• Demo lessons.</li> <li>• Measurement work stations.</li> <li>• Patterns in natural and cultural artefacts.</li> <li>• Hands on teaching of LO3.</li> <li>• Great interaction among participants.</li> <li>• 20 minutes of journal writing to reflect on class content.</li> </ul>	<ul style="list-style-type: none"> <li>• Learning Support Teachers, who have different needs, often dominated the conversation.</li> <li>• Barriers to learning in LO1 (done poorly through an external expert).</li> <li>• Assignments could be improved.</li> <li>• Proofread teacher tests and shorten in length.</li> <li>• Teachers exposed to a lot of resources that they cannot afford/do not have access to.</li> </ul>

Course reports also included information on the teacher testing conducted by MEPP. On average, teachers gained 7 percentage points on the curriculum test they wrote, scoring 76% on the post-test. Most of the gains were made in LO3 Space and Shape. In the post-test, teachers struggled most with LO5 and obtained 65% on the section.

### **Participants' feedback**

The table below presents the participants' responses captured in the course evaluations. Participants were overwhelmingly positive about the training, especially about the facilitators. It is interesting to note that participants felt least strongly about their expectations being met or having improved their understanding of the curriculum. Two participants even disagreed that their content knowledge had improved as a result of the course. It is not clear why participants gave such ratings. The table that follows shows that a large number of teachers thought that the content in Block 2 (LO2, LO3, and LO4) was the highlight of the course. In addition, only two teachers thought there was any aspect of the numeracy course that could be improved (LO4).

Table 11: Quality of the FP Numeracy Block 2 training session according to course evaluations

	Strongly agree	Agree	Disagree	n
Presenters well prepared and delivery was effective	76%	24%	0%	37
Facilitators and presenters were professional in all they did	81%	19%	0%	37
Adequate information was disseminated on each topic	60%	40%	0%	35
Adequate time was spent on all topics	61%	39%	0%	36
Materials and handouts were adequate	67%	33%	0%	36
Group and plenary sessions were well-managed	59%	41%	0%	37
Presenters and facilitators accommodated all language groups	57%	38%	5%	35
Expectations of workshop were met	39%	61%	0%	36
My understanding of the curriculum has improved	41%	54%	5%	35

Table 12: Top three highlights, future training needs, and aspects that require improvement in the FP Numeracy course

Highlight of the course	Future training needs	Needs improvement
<ul style="list-style-type: none"> <li>• LO4 Measurement (19)</li> <li>• LO3 Space and shape (18)</li> <li>• LO2 Patterns (8)</li> </ul>	<ul style="list-style-type: none"> <li>• Life-skills/Literacy training (15)</li> <li>• Learning barriers (3)</li> <li>• Assessment (2)</li> <li>• LO4 (2)</li> </ul>	<ul style="list-style-type: none"> <li>• HODs should attend course (3)</li> <li>• Food (3)</li> <li>• LO4 (2)</li> </ul>

Note: Number of teachers who made the comment is in parenthesis

Thirteen FP teachers were visited at their schools three months after the course. Eleven of the teachers rated the course as “excellent” and two rated it as “good”. All but one teacher strongly agreed that the course had improved their content knowledge, and 10 strongly agreed it had improved their classroom practice. Three teachers said they wanted to receive more support in LO3 and three others mentioned they wanted more support in LO4. All of the teachers mentioned referring back to their course materials. The majority of teachers (8) rated them “very good” and almost all agreed they were very useful.

### **Training observations**

Towards the end of the first day of Block 2, both numeracy groups were observed for about 35 minutes each. The atmosphere in both classrooms was very different. One facilitator struggled to keep his class focused. Although he knew his content well and was presenting something useful, explanations were not clear or concise and dragged the pace of the lesson. A few teachers lost interest and conversations easily broke out derailing them off the topic. In contrast, the other facilitator expertly managed her class. Teachers were very focused as some seemed to be learning the concept of fractions themselves. One teacher asked how they could write the names of fractions in isiXhosa and some time had to be spent debating the correct names without the guidance of the facilitator.

### **Conclusions**

The FP Numeracy course made use of an excellent set of training materials to cover all the Learning Outcomes in the NCS. The course was practical and enlightening for teachers who deeply appreciated being part of the training. Facilitators were very knowledgeable, although one was not as adept in communicating and managing the class and the other could not help isiXhosa teachers establish number names in their language. Test results revealed that teachers improved their understanding of the curriculum, especially in LO 3 space and shape. Another strength of the course was the daily use of journals for reflection on course content. All curriculum courses at CTLI should consider implementing their use.

### **3.2.3 Intermediate Phase Language**

IP Language is a four week training course which was held twice in 2010. Delivery was split up in to 2 two-week sessions held at the beginning and middle of the year. In accordance with CTLI’s new training model, WCED trainers were appointed to develop and present the material for the course. However, WCED trainers developed only one set of materials for both FP literacy and IP language teachers. The material was found to be unsuitable for the Intermediate Phase by course participants as well as the reviewer. Consequently, CTLI enlisted a service provider to deliver Block 2 of the course and prepare a new, more relevant set of materials.

In Block 1, the following content was covered:

- The importance of literacy;

- Policies, principles, programmes, people for effective literacy and language development;
- Foundations for learning and the balanced language programme; and
- Methodologies of a balanced language programme.

In Block 2, the following content was covered by the service provider without making use of the training manual:

- Theories for teaching reading and elements of a reading lesson;
- Characteristics of different types of texts;
- Intervention;
- Reading across the curriculum;
- Inclusive education;
- Selection of LTSM;
- Assessment; and
- Writing.

### **Training materials**

Only Block 1 materials were evaluated for this report, as course material for Block 2 was not yet available. Overall, the materials received a rating of 2.7 out of 5 and were judged to be below expectations for the Intermediate Phase. The material is centred on the balance language approach and it is not entirely appropriate, as the knowledge of IP teachers needs to extend well beyond teaching the basics of literacy. Relevant topics for IP teachers include teaching literacy across the curriculum, information literacy (locating information in books, making sense of it, evaluating it, synthesising it), reading more sophisticated literature, using higher order comprehension skills, and writing a greater range of more complex texts, which were not addressed in the materials.

### **Feedback from the facilitators**

Several course reports were written for Block 1, which were quite critical of the course. Only one report was submitted for Block 2, and this included less information about what worked and what didn't work in the training. The table below summarizes these elements. It should be noted that there appears to have been a significant improvement from one training session to the other.



Table 13: Training elements that worked and were challenging according to the IP Language facilitators

	Elements that worked well	Elements that were challenging
<b>Block 1</b>	<ul style="list-style-type: none"> <li>• Mediation of work schedules and lesson plans by the department</li> <li>• Activities captured and copied onto a CD for teachers to take back to school</li> <li>• A district official attended the course</li> <li>• Interaction amongst participants</li> </ul>	<ul style="list-style-type: none"> <li>• Training material received late</li> <li>• Only one Learning Outcome was addressed</li> <li>• Material largely irrelevant for the IP</li> <li>• Too much focus on policy and a lack of classroom based activities</li> <li>• Facilitators finished covering material with 2 days left</li> <li>• Language issues</li> <li>• Methodologies taught already in practice in many schools</li> <li>• Activities focused on lower-order thinking skills and were not stimulating</li> <li>• No assignments or pre/post tests</li> <li>• Participants did not receive a course programme</li> </ul>
<b>Block 2</b>	<ul style="list-style-type: none"> <li>• Content on teaching a reading lesson</li> <li>• Covering different text genres</li> <li>• Time spent on writing</li> <li>• Presentation on assessment</li> <li>• More practical work</li> </ul>	<ul style="list-style-type: none"> <li>• Could not make use of the training manual</li> </ul>

NOTE: Reports submitted by J. Kurgan, M. Benn, N. Ngondo, and Block 2 presenters

### Participants' feedback

The tables below shows participants' responses from the course evaluations. Overall, teachers thought the course was satisfactory and that it contained a mix of both good and bad elements. While opinions remain largely positive, the ratings shown in the table below are more tempered than for any other course. The highlight for participants was learning about a reading lesson and how to do pre-reading, reading, and post-reading. Many commented that these presentations were excellent. The second week was disappointing for some teachers. Many complained about the Inclusive Education presentation, particularly how the facilitator simply read from the textbook and could not address their questions. Other teachers mentioned that the second week was too disorganized with too many presenters, big groups, and not enough time to discuss and grapple with the topic.

Table 14: Quality of the IP Language Block 2 training session according to course evaluations

	Strongly agree	Agree	Disagree	n
Presenters well prepared and delivery was effective	37%	63%	0%	35
Facilitators and presenters were professional in all they did	60%	34%	6%	35
Adequate information was disseminated on each topic	47%	47%	6%	32
Adequate time was spent on all topics	31%	63%	6%	35
Materials and handouts were adequate	32%	62%	6%	34
Group and plenary sessions were well-managed	40%	57%	3%	35
Presenters and facilitators accommodated all language groups	34%	63%	3%	35
Expectations of workshop were met	12%	85%	3%	34
My understanding of the curriculum has improved	30%	70%	0%	33

Table 15: Top three highlights, future training needs, and aspects that require improvement in the IP Language course

Highlight of the course	Future training needs	Needs improvement
<ul style="list-style-type: none"> <li>• 3 phases of reading (25)</li> <li>• Intervention (4)</li> <li>• Creative writing (2)</li> </ul>	<ul style="list-style-type: none"> <li>• Curriculum advisor and management involved (4)</li> <li>• Learning barriers/interventions (3)</li> <li>• Assessment tasks (3)</li> </ul>	<ul style="list-style-type: none"> <li>• Inclusive education presentation (8)</li> <li>• Groups were too big (4)</li> <li>• More resources for schools (2)</li> </ul>

Note: Number of teachers who made the comment is in parenthesis

Seventeen participants were interviewed three months after completing the course. When asked to rate the course the majority of the teachers (9) responded that it was “good”, seven thought it was “excellent”, and one thought it was “average”. Teachers also believed that the course had helped to improve their content knowledge and teaching practice, although they felt that the course had made a bigger impact on their content knowledge. Teachers were also asked about topics for which they would like to receive more support. Four teachers mentioned writing, four mentioned reading interventions for slow learners, and two mentioned grammar. More than half of the teachers (10) rated the course materials as “good”, the others were split between “excellent” and “average”. All but two teachers refer back to the course materials and most (10) find them to be very useful.

### **Training observations**

About 20 minutes were spent observing the first afternoon of Block 2 of the course. The whole group of teachers was together in one room and were engaged in a small group discussion about how to do pre-reading. As each of the groups presented, the rest of the class listened attentively and the facilitator expertly jumped in to highlight, summarize, and correct any misconceptions that could arise. The class was lively, supportive of one another, and was enjoying being part of the course.

### **Conclusions**

The IP Language course suffered from a poorly developed course manual that was delivered days before the start of the course. The training material it contained was not suited to the needs of the Intermediate Phase. There was too much attention on policy, only 1 Learning Outcome was addressed, and the balanced language approach methodologies were neither new to some teachers nor considered appropriate. Moreover, the content was not sufficient and was completed in 8 days. The overall response to Block 1 was negative and one third of the teachers did not return for Block 2. Service providers were appointed for Block 2 leading to a big improvement in the training, although the last minute decision left little time to prepare the course and its materials properly. In Block 2, teachers were excited about certain presentations and slightly disappointed by others, but on the whole were thankful for the course and thought it was good. The evaluation strongly recommends that proper time be devoted to reworking the content for the course, which should include all Learning Outcomes, be specific to the Intermediate Phase, and feature practical applications for the classroom.

### **3.2.4 Intermediate Phase Maths**

IP Maths is a 4 week training course which was held twice in 2010. Course delivery was broken up into 2 training sessions; the first block was held early in the year and the second block was held towards the middle of the year to allow teachers to return to the classroom in between. The Mathematical Education Primary Programme (MEPP) was appointed to prepare the course material and deliver the course.

In Block 1, the following content was covered:

- LO1- whole numbers, fractions;
- LO4- measurement;
- Mental maths.

In Block 2, the following content was covered:

- LO1- decimal fractions, percentages;
- LO2- patterns and pre-algebra;
- LO3- shape and space;
- LO5- data handling and probability;
- Barriers to learning mathematics;
- Preparing learners for external testing;
- Using notebooks and textbooks in mathematics;
- Planning- aligning work schedules and lesson plans.

### **Training materials**

The training materials were found to be of very high quality and received a rating of 4.2 out of 5. Similar strengths were found to the FP numeracy course. The coverage of specific topics and of the material as a whole is excellent, matching well the tender specifications and being highly relevant for teachers. The material is well-presented, has a strong logic guiding its organization, and is coherent. The support material is virtually all-inclusive since in most cases all of the information that makes up the training is included in the material and given to teachers to take home. Really useful and well-written summaries of the content are given as well as further reading and complementary resources to extend learning. The materials promote active-learning by teaching it and modelling it effectively. Activities, assignments, and assessments are varied, clear, and relevant.

There are very minor weaknesses in relation to the overall quality of the materials. A small number of topics could be more clearly and accurately conveyed and in some instances, the South African context needs to be considered. A few reflection activities could be improved upon and feedback after activities would enhance the learning. The pace at which the material is covered is adequate, however, the bulk of materials (consisting of over 712 pages) may be a bit overwhelming. For more information on the material review, please refer to the summary table in the appendix or to the technical report for IP Maths.

### **Facilitators' feedback**

An excellent and thorough course report was written for the IP Maths Course where facilitators reflected on each of the sessions and the teachers' response to what they were learning. Elements that worked particularly well in the training and those that were challenging are highlighted in the table below.

Table 16: Training elements that worked and were challenging according to the IP Maths facilitators

Elements that worked well	Elements that were challenging
<ul style="list-style-type: none"> <li>• The development of number concept, progression, and place value.</li> <li>• Mental maths.</li> <li>• Division.</li> <li>• How to teach fractions.</li> <li>• Teaching maths in multilingual contexts.</li> <li>• Practical measurement.</li> <li>• Discussion over the use of textbooks.</li> <li>• Space and shape.</li> <li>• Learner book discussion.</li> <li>• Probability.</li> <li>• Preparing learners for external tests.</li> <li>• Geometric patterns.</li> <li>• LO5 data handling.</li> <li>• Work schedules and lesson plans.</li> </ul>	<ul style="list-style-type: none"> <li>• Session on problem solving- air conditioning was out and teachers were tired.</li> <li>• Library visit and task (difficulty acquiring library cards for participants, over-booking of the library).</li> <li>• Computer session (varying skills of participants, slow internet).</li> <li>• Teaching measurement before space and shape (volume).</li> <li>• Not enough time to cover barriers to learning.</li> </ul>

Course reports also included information about the teacher testing conducted by MEPP. Teacher knowledge improved significantly as a result of the course. On average, teachers raised their scores by 19 percentage points, obtaining 79% on the post-test. Teachers made the greatest gains in LO2 patterns and functions and LO3 space and shape, where they increased their scores by 32 percentage points. Other significant areas of gain were place value (21 percentage points), whole number operations (18 percentage points), and data and probability (17 percentage points). Teachers made the least gains in fractions (5 percentage points) and measurement (6 percentage point), however teachers' scores in these areas was already relatively high in the pre-test. In the post-test, teachers scored between 75% and 82% in all the test topics.

### **Feedback from the participants**

The course evaluations reveal a strong and overwhelmingly positive response to the course. Almost all participants strongly agreed that the presenters were well prepared and the delivery of the course was effective. Participants also felt particularly strongly about the amount of information given on each topic and the quality of the materials they received. The only concern that emerges is the issue of language. A fifth of the teachers did not feel that all language groups had been accommodated.

Table 17: Quality of the IP Maths Block 2 training session according to course evaluations

	Strongly agree	Agree	Disagree	n
Presenters well prepared and delivery was effective	91%	9%	0%	34
Facilitators and presenters were professional in all they did	88%	12%	0%	33
Adequate information was disseminated on each topic	79%	21%	0%	34
Adequate time was spent on all topics	62%	35%	3%	34
Materials and handouts were adequate	76%	24%	0%	34
Group and plenary sessions were well-managed	62%	38%	0%	34
Presenters and facilitators accommodated all language groups	38%	44%	19%	32
Expectations of workshop were met	52%	48%	0%	33
My understanding of the curriculum has improved	69%	31%	0%	32

When asked to name the highlights of the course, the most common answers given were “everything that was covered” and “LO3 space and shape”. Many teachers also expressed that presentations on LO5 and LO1 had been very helpful to them. Future training needs and improvement areas include learning barriers - an area that facilitators also pointed out required more training time.

Table 18: Top three highlights, future training needs, and aspects that require improvement in the IP Maths course

Highlight of the course	Future training needs	Needs improvement
<ul style="list-style-type: none"> <li>• Everything (7)</li> <li>• LO3 (7)</li> <li>• LO5 (5), LO1 (5)</li> </ul>	<ul style="list-style-type: none"> <li>• Learning barriers (6)</li> <li>• LO1 and problem solving (6)</li> <li>• Other subject training (3)</li> </ul>	<ul style="list-style-type: none"> <li>• More time for learning barriers (3)</li> <li>• Language (3)</li> <li>• Food (2)</li> </ul>

Note: Number of teachers who made the comment is in parenthesis

Three months after the course, 17 teachers were interviewed about the course. Practically all teachers (15) rated the course as “excellent”. They also felt quite strongly that the course had improved their content knowledge and classroom practice. Almost all teachers (14) also expressed the need for additional support on various topics. The most common requests were for more help on LO3, LO4, fractions, and division. An overwhelming majority (15) also rated the materials “excellent”, and all reported referring back to them as they were a very useful resource.

### **Training observations**

Only 25 minutes was spent observing the first afternoon of the Block 2 training session. The teaching talent and rapport created by one of the facilitators was remarkable. While participants busily solved a problem with their group, the facilitator skilfully picked up the teachers’ misconceptions, intervened, and called for the attention of the whole class. Teachers were fired up about the lesson and so engrossed with the discussion that they even skipped over tea time entirely. Upon noticing, the facilitator called for a break yet a large number of teachers continued to work and approached her to test their understanding. It was an impressive class to watch. The other group of teachers also benefitted from a knowledgeable and skilful facilitator.

### **Conclusions**

The IP Maths course was an excellent, intensive, and extremely successful course. Participants benefitted immensely from the course’s focus on content knowledge as well as the attention paid to the classroom context. Facilitators were outstanding and teachers’ knowledge improved significantly, as shown by the 19% gain from the pre to the post-test score. Teachers rated the course very highly but seem to need continued support in a variety of topics covered by the course. The only aspect of the training that caused a minor problem for some participants was that different language groups were not accommodated.

### **3.2.5 Principal as Manager of the Curriculum**

The Principal as Manager of the Curriculum course is presented over a period of 10 days and was offered twice in 2010. The course concentrates on the support and management of the National Curriculum Statements (NCS) for the GET and FET Phases. The course material was prepared and delivered by Inhlansi Consultants and covered the following topics:

- NCS and OBE;
- Managing change;
- Managing learning;

- Assessment;
- Managing the learning environment;
- Managing resources;
- Managing professional development; and
- Management support.

**Training materials**

The materials reviewed for this course were particularly problematic as evidence strongly suggests that not all handouts covered in class were submitted for the evaluation. The content submitted was rated poorly by the school management expert and received a score of 2.7 out of 5.

The course’s main weakness is that it is too broad and therefore too superficial to support the course objectives in a meaningful way. This is a limitation in the course design and specifications, which attempted to do too much in too short a time. While participants probably gained some insight from the input and benefited from an introduction to concepts that might have been new to them, the overall benefits of the course are likely to be limited and short term. The lack of logical flow and poor sequencing of key leadership and management concepts further impede clarity on the cursory coverage of topics. The benefit of the course may well be of an informal nature and lie in the fact that the participants will have interacted with others in and out of the course sessions. They will have shared experiences which they might not otherwise have done, but on a personal level rather than in an interrogative and reflective way through the course materials and coverage of content.

The course would have benefitted from a fully compiled handbook given to each of the participants in which key concepts/research were highlighted and additional readings/references supplied. Finally, it is also suggested that the course should be completely re-worked in terms of scope and required outcomes. For more information on the material review, please refer to the table in the appendix or the technical report for the course.

**Facilitator’s feedback**

A very brief report was prepared for the Principals’ Course containing little information about what happened at the actual training. The table below draws upon these limited comments to summarize elements that worked well in the course and elements that were found to be challenging.

Table 19: Training elements that worked and were challenging according to the facilitators of the Principal’s course

Elements that worked well	Elements that were challenging
<ul style="list-style-type: none"> <li>• Teacher participation amongst a small group of 8.</li> <li>• Relevance and practicality of content.</li> </ul>	<ul style="list-style-type: none"> <li>• Respecting prescribed break times.</li> <li>• Principals walking in and out of the class.</li> <li>• Key documents not available in other languages.</li> </ul>

Principals were given a pre and post test based on the NCS to measure gains in curriculum knowledge. On average, principals gained 9% over the 10 days course and scored 63% on the post-test. Facilitators recommended that five of the eight principals receive a certificate for the course as a result of poor attendance and or missing assignments.

### Participants' feedback

Principals were very positive about the quality of the course. All strongly agreed that their expectations of the workshop were met and that their understanding of the curriculum had improved. They also tended to think highly of the facilitators, content, materials, and overall delivery of the course.

Table 20: Quality of the IP Maths Block 2 training session according to course evaluations

	<b>Strongly agree</b>	<b>Agree</b>	<b>Disagree</b>	<b>n</b>
Presenters well prepared and delivery was effective	88%	13%	0%	8
Facilitators and presenters were professional in all they did	88%	13%	0%	8
Adequate information was disseminated on each topic	88%	13%	0%	8
Adequate time was spent on all topics	75%	25%	0%	8
Materials and handouts were adequate	86%	14%	0%	7
Group and plenary sessions were well-managed	88%	13%	0%	8
Presenters and facilitators accommodated all language groups	88%	13%	0%	8
Expectations of workshop were met	100%	0%	0%	6
My understanding of the curriculum has improved	100%	0%	0%	7

The table which follows lists some of the highlights, future training needs, and areas recommended for improvement.

Table 21: Highlights, future training needs, and aspects that require improvement in the Principals course

<b>Highlight of the course</b>	<b>Future training needs</b>	<b>Needs improvement</b>
<ul style="list-style-type: none"> <li>• Curriculum changes for 2011</li> <li>• The facilitators</li> <li>• Professional development</li> <li>• Assessment</li> <li>• Accountability</li> </ul>	<ul style="list-style-type: none"> <li>• Official curriculum changes</li> <li>• Discipline</li> <li>• Financial management</li> <li>• Principal as visionary leader</li> <li>• Moderation</li> </ul>	<ul style="list-style-type: none"> <li>• Professional development</li> <li>• Catering and toilets</li> </ul>

Four of the eight principals were interviewed three months after the training. When asked to rate the course, most of the principals (3) rated it as “good” and the other as “excellent”. The majority was also in strong agreement that the course had helped to improve their knowledge of their role as curriculum leader, the curriculum itself, as well as planning, implementation, and monitoring of the curriculum. Regarding the materials, most of the participants rated them as “good” and one rated them as “excellent”. All principals refer back to the materials and the majority find them very useful. Principals added that the course was very relevant but perhaps too short. Nevertheless, they felt empowered and one said he now felt he could face any situation at school.

### Conclusions

Despite the materials' poor review, course participants felt they benefitted greatly from the course and rated it highly. Two possible explanations for the opposing views are that there was essential content missing from the set of materials evaluated or the participants were not bothered by the lack of content depth as they were all fairly new principals. It would be helpful to meet with the service provider and determine if any content was missing from the evaluation. Either way, the study recommends that the course material be compiled into a handbook and if necessary, that the course content be reworked to provide greater depth of coverage.

### 3.3 Summary of results

The aim of this chapter was to investigate the quality of five of CTLI’s training courses. More specifically, it commissioned subject experts to evaluate the training materials and examined feedback to determine if course delivery was effective. While the quality of materials varied significantly among the five courses, all courses received positive feedback from the participants. Teachers felt that the courses had improved their content knowledge as well as their teaching practice. Similarly, principals agreed they had improved their knowledge of their role as curriculum managers, the curriculum, and how to plan, implement, and monitor the curriculum in their schools. The table below summarizes findings for the five training courses.

Table 22: Summary of ratings for the course material and training sessions

Course	Rating for course materials (1 = very poor and 5= outstanding)	Percentage of participants who rated the course as			
		Excellent	Good	Average	n
FP Lit	Average- 3.0	47%	40%	13%	15
FP Num	High standard- 4.1	85%	15%	0%	13
IP Lang	Below standard- 2.7	41%	53%	6%	17
IP Maths	High standard- 4.2	88%	12%	0%	17
Principal	Below standard- 2.7	25%	75%	0%	4

The IP Maths course was the most successful course followed closely by FP Numeracy. The FP Literacy and IP Language come next in the rankings and appear to have been affected by the change in CTLI’s training model, which will be discussed below. In last place is the principals’ course, which received a poor rating of its materials and had the greatest percentage of participants who thought the course was simply good as opposed to excellent.

CTLI’s new training model, which appointed WCED trainers to prepare and deliver the FP Literacy course and the IP Language course, was not a success. Not only were course materials delivered exceptionally late, they were also not specific for each phase, were too theoretical and placed a large focus on policy, and covered only one of the six Learning Outcomes in Literacy/Language. This was particularly problematic in the IP, which had no training manual on the first day of Block 2. In addition, some of the department officials who delivered the courses received criticism from other facilitators or participants. In the wake of these problems, CTLI was nevertheless able to react quickly and appointed new facilitators which improved the material and delivery of Block 2.

#### 3.3.1 Recommendations

Below is a list of recommendations that have emerged from this chapter. They are divided into three sections- those corresponding to the training courses, to CTLI processes, and to future evaluations of courses.

##### Recommendations for CTLI courses

- **Course content:** All curriculum courses should have a strong focus on content knowledge, address the classroom context, and touch upon policy. Training should primarily cover the content in all Learning Outcomes and examine when and how it should be taught. Secondly, training should address the context in which most of the teachers teach, specifically issues of learning barriers, slow learners, big classes, and multilingualism. The purpose of these sessions should be to equip teachers with tools and strategies to effectively deal with these realities in their classrooms. All courses should also all discuss the use of learner notebooks and the use of LTSM in class. Finally, a day or two towards the end of the training should be reserved to deal with policy. WCED officials should present these sessions and cover topics such as work-schedules, lesson plans, planning, assessment, and other relevant policies for that subject.



- **Reflection time:** Participants in all courses should start each day by spending 15 minutes to recall and reflect on course content in their journals. This would provide a valuable opportunity for participants to consolidate what they have learnt. On the final day of Block 1 or 2, participants should start the day by writing what they would implement in their classroom. Currently, this question is posed at the end of the course evaluation and obtains two-word answers from participants. Participants would benefit significantly by being given more time to think through the question in greater detail. During the post-test, facilitators would even have the time to write comments, giving participants the added benefit of receiving advice, ideas, and feedback on their specific plans to apply what they have learnt at their schools.
- **Demo lessons:** Where they were used, participants and facilitators have made it clear that demo lessons were one of the most valuable components of the course. However, it is often not convenient or possible to gather a class full of learners for different grades in English, Afrikaans, and isiXhosa. CTLI should thus consider video-taping the lessons and copying them onto DVDs, so that not only would there be a wider range of contexts available for discussion in the training, but teachers could take the DVDs back to their schools and share them with their colleagues.
- **Language:** The biggest complaint participants' had was that all languages were not accommodated in the course. Ideally, content knowledge should be delivered in the teachers' LOLT. This is particularly crucial in Literacy, as English language structures and phonics do not remotely apply to isiXhosa, but is also important in other courses as this would enable teachers to pick up the correct terminology in their own languages. Teachers would still benefit from interaction with the larger group by attending all other sessions together in English, as is currently done. In the event this suggestion proves too logistically difficult or expensive to carry out, CTLI should consider giving participants supplementary material featuring key terminology/topics in their LOLT.
- **Delivery:** Service providers should be retained in CTLI courses until departmental officials with the requisite content knowledge and facilitation skills can be found. Co-teaching with the department is also an option to further develop officials' knowledge and skills.
- **Daily schedule:** Many requests were made to end the day one hour early. There was also a lot of feedback to say that the 45 minute lunch period was not sufficient time to get lunch. One suggestion is to lengthen the lunch period by 15 minutes, remove afternoon tea altogether, and end the day at 15h30.
- **Training materials:** Training materials should be compiled into a course handbook that is given to participants at the start of the course. This practice has the following advantages: it would save precious training time by eliminating the need to distribute handouts on a daily basis, allow participants to look ahead and prepare for the following day's lesson, and ensure that participants who miss a session, CTLI, as well as the evaluator receive all content for the course.

### **Recommendations for CTLI processes**

- **Course evaluations:** Course evaluations are a valuable means for CTLI to obtain immediate feedback on the quality of their training courses. It is strongly recommended that CTLI staff administer the evaluations.

This will ensure that no course evaluation is discarded, and will also enable participants to give honest responses by removing the facilitator from their immediate presence.

In addition, the following changes are suggested for the questionnaires:

- Move question 4.4 (Which aspects would you like to see improved in the course?) and place it underneath the further comments for section 1 (logistical arrangements) as well as section 2 (presentation of parallel sessions). This will allow participants to comment individually on these aspects of the course.
  - Add the following open-ended questions: Which course topics would you like to spend more time on? Which topics would you like to spend less time on? Are there any topics that you would remove from the course? Where there any topics not covered that you would like to see added to the course?
  - Remove question 4.3 (List three aspects from the question that you will implement in your school) and treat it as a small written assignment as mentioned above.
- **Course reports:** Course reports can provide a wealth of information on classroom practices as well as the quality and suitability of the course. Although the tender document requires each course provider to submit a comprehensive report and specifies its content, some course providers did not abide by it and produced reports that revealed little about the participants or course. In our review, we found the IP Maths report to be the most useful particularly because it discussed the training procedures in great detail and highlighted the teachers' response to the content presented. To illustrate this point, a passage from the IP Maths course report has been included in the appendix. While we do not believe course reports need to be 225 pages long, we think CTLI would benefit from reconsidering what it wants to learn from these reports, communicating it to their course providers, and holding them accountable for it.

#### **Recommendations for future evaluations**

- **Reports:** Future evaluations should review the CTLI coordinator's report to obtain more objective feedback on the course.
- **Training observations:** Observations of the training should be incorporated as they reveal a lot about the quality of the facilitators and the course.

## 4 Teacher knowledge

The state of teachers' subject knowledge has been a growing concern in South Africa. In this study, the content knowledge and language proficiency of Literacy and Language teachers was investigated. Tests were administered to teachers to answer three questions:

1. How well do teachers know the national curriculum for Literacy/Language?
2. Did the CTLI course help teachers improve their content knowledge of the curriculum?
3. Are teachers proficient in the language they are teaching?

Foundation Phase Numeracy and Intermediate Phase Maths teachers were tested by MEPP, the course service provider. It was not possible for JET to obtain the teachers' individual results for analysis as MEPP held that it would breach their agreement with the teachers. In the future, it is strongly advised that ethics regarding the use of the results be established prior to the testing and shared with all parties, and that the service provider be legally bound to release the results to the evaluator once the testing is complete. If an agreement cannot be reached with the service provider, the evaluator will need to administer the tests separately.

### 4.1 Methodology

One cohort of teachers in the FP Literacy course and one cohort in the IP Language course participated in the testing. All testing was administered in Block 2 of the course between the 16<sup>th</sup> and 27<sup>th</sup> of August.

Teachers wrote two different kinds of tests, a curriculum test and a proficiency test. The curriculum test is phase specific and the same test was administered twice as a pre and post measure. The pre-test was administered the first day of Block 2 prior to the start of the training, and the post-test was administered on the final day after the completion of training. Teachers received ten full days of training in between the pre and post-test.

Unfortunately, it was not possible to administer the pre-test at the beginning of Block 1 in February, as the evaluation had not yet gotten underway. However, it is highly recommended that in future years pre and post-tests be given on the first day of Block 1 and the last day of Block 2 respectively.

The proficiency test was given to both Foundation Phase and Intermediate Phase teachers. It was only administered once as it is unlikely that language proficiency levels would have been significantly affected by the training. Teachers wrote the proficiency test alongside the curriculum post-test on the final training day. All tests were written in the Language of Learning and Teaching (LOLT) used by the teacher at the school.

#### 4.1.1 Test instruments

Three different kinds of instruments were used for the testing:

- The Foundation Phase Curriculum Test;
- The Intermediate Phase Curriculum Test; and
- The Proficiency Test.

There are three versions of each test- one in English, Afrikaans, and isiXhosa. Tests were developed by curriculum specialists in English and versioned into Afrikaans and isiXhosa through the use of translators, Afrikaans and isiXhosa curriculum experts, as well as back translators. With the exception of a few test questions, items have remained largely the same across the three languages. Due to their recent development, tests were being piloted

at the same time they were used at CTLI. Through item stats, a few test items were not found to be suitable and were excluded from the analysis. The contents included in the analysis for each of the tests are described below.

### **Foundation Phase Curriculum Test**

The Foundation Phase curriculum test is based on the NCS assessment standards for Foundation Phase Literacy at home language level. Thus, the test covers Literacy topics that teachers are expected to teach in this phase. Its main purpose is to determine whether teachers understand the terminology and concepts in the NCS and if they would be able to teach them in the classroom. The test is made up of 30 items and includes questions on phonics, grammar, writing, thinking and reasoning, organizing information, and knowledge of texts. Test items consist of open-ended questions, multiple-choice questions, or fill-in-the blank questions. The test frameworks are given in the table below.

Table 23: Foundation Phase Curriculum Test Frameworks

<b>Area</b>	<b>Item number</b>	<b>Type of question</b>	<b>Topics covered</b>	<b>Total marks</b>	<b>% of total score</b>
Phonics	4a,4b,4c,4d, 5, 7,8, 15a,15b, 15c, 15d, 15e	OEQ	CVC words, word families, syllables, rhyme, homonyms, onset and rhyme, high frequency word, phonic patterns- vowel sounds, blends, digraphs, diphthongs	19	33%
Grammar	3,10a,10c, 11,12	OEQ	Punctuation marks, tense, subject-verb agreement, conjunctions, synonyms	10	17%
Writing	2,13	OEQ, RRQ	Formulate a question, steps in the writing process	9	16%
Thinking and reasoning	1,9, 16, 20	MCQ, OEQ	Cause and effect, sequences, logic, drawing conclusions, classification, parts from whole, compare and contrast	8	14%
Organizing information	17, 18	OEQ	Table, mind map	6	10%
Texts	6,14, 19, 21,22	MCQ, OEQ	Types of texts, elicits personal-response to text, identifies socio-cultural values in text, description of a text	6	10%
<b>TOTAL</b>				<b>58*</b>	<b>100%</b>

KEY: MCQ= multiple choice question, OEQ= open-ended question, RRQ= restricted response question, CVC= consonant-vowel-consonant

\* Question 4a was deleted from the isiXhosa test due to a test error. The isiXhosa test was thus out of 56 points instead of 58.

### **Intermediate Phase Curriculum Test**

The Intermediate Phase curriculum test is based on the NCS assessment standards for Intermediate Phase Language at home language level. Thus, the test covers Language topics that teachers are expected to teach in this phase. Like the Foundation Phase test, the main purpose of the IP curriculum test is to determine whether teachers understand the terminology and concepts in the NCS and if they would be able to teach them in the classroom. The test is made up of 28 items and includes questions on grammar, writing, organizing information, figures of speech, and texts. Test items consist of open-ended questions, multiple-choice questions, or fill-in-the blank questions. The test frameworks are given in the table below.

Table 24: Intermediate Phase Curriculum Test Frameworks

Topic area	Item number	Type of question	Topics covered	Total marks	% of total score
Grammar	4,9,10,11,12,13,14,15,16,17,18	MCQ	Synonyms, comparative and superlative form, tenses and complex tenses, subject verb agreement, conjunctions, plurals, negative pronouns, contractions, prepositions	11	25%
Writing	8	RRQ	Steps in the writing process	7	16%
Organizing information	24, 25	OEQ	Bar graphs	8	18%
Figures of Speech	19,20,21,22,23	OEQ, MCQ	Onomatopoeia, alliteration, metaphor, simile, personification	5	11%
Texts	1,2, 3, 5,6, 7, 26, 27, 28,	MCQ, OEQ	Literal comprehension, responds to text, reading strategies, types of texts, purpose and audience, social values, captions/titles	13	30%
<b>TOTAL</b>				44	100%

KEY: MCQ= multiple choice question, OEQ= open-ended question, RRQ= restricted response question,

### Proficiency Test

The Proficiency test seeks to determine if the teacher can read and write the language that he or she uses to teach in the classroom. The test is primarily based on the NCS home language level assessment standards for Grade 7, meaning it tests whether the teacher can read and write at the Grade 7 level. The rationale used is that teachers, at the absolute minimum, need to show a proficiency in a language that is two years beyond that of their learners. The test is made up of 47 items and covers a range of topics. Topic areas include comprehension, text structures, words, grammar, and writing. Test items consist of open-ended questions or multiple-choice questions. The test frameworks are given in the table below.

Table 25: Proficiency Test Frameworks

Area	Item number	Type of question	Topics covered	Total marks	% of total score
Comprehension	1,2,4,9,12,13,25,26,27,28,33,34,35	MCQ	Literal and inferential comprehension	13	20%
Text Structures	3,8,18,19,20,21,22,32,37	MCQ,OEQ	Features of non-fiction texts: interviews, autobiographies, dictionaries, and advertisements	9	14%
Words	5e,10,11,24,30	MCQ, OEQ	Homonyms, vocabulary, synonyms/antonyms, word roots	5	8%
Grammar	5a,5b,5c,5d,6a,6b,15a,15b,15c,16a,16b,16c,16d,23,29,36	OEQ	Interrogative words, tenses, apostrophe, word order, adjectives, verbs, subject, subject-verb agreement, adverbs, inverted commas, phrase/clause, punctuation	19	30%
Writing	7,17,31,38	OEQ	Expresses and supports an opinion, writes a description, writes comparative statements	18	28%

<b>TOTAL</b>				64	100%
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KEY: MCQ= multiple choice question, OEQ= open-ended question

### **Performance scales**

The level of these tests is quite low, as they are trying to establish absolute minimum standards for teachers. The pass rate has thus been set at 70% for all three tests. The following scale can be applied:

- 70% and above- satisfied requirements
- 50%-69%- cause for some concern
- Below 50%- cause for serious concern

### **4.1.2 Test administration**

Two test administrators from JET were used to conduct the tests, one for the Foundation Phase and the other for the Intermediate Phase. Tests were administered anonymously through the use of number codes and upon handing them out to the teachers, test administrators verified that the test language matched the teacher’s LOLT. Teachers were given an hour and a half to complete each test. On average, teachers took 45 minutes to complete the curriculum test and 75 minutes to complete the proficiency test. No teacher required the full amount of time to finish any of the tests.

In the Foundation Phase, 46 teachers wrote the curriculum pre-test and 47 teachers wrote the curriculum post-test and proficiency test. In the Intermediate Phase, 38 teachers wrote the curriculum pre-test and 35 teachers wrote the curriculum post-test and proficiency test. However, due to absenteeism, only 46 Foundation Phase teachers and 33 Intermediate Phase teachers wrote both the pre and post-test. The table below shows the breakdown according to test language.

Table 26: Number of teachers who wrote the pre-test, post-test, and proficiency test

Test Language	Foundation Phase		Intermediate Phase	
	Pre-test	Post-test/Prof. test	Pre-test	Post-test/Prof. test
Afrikaans	21	22	10	10
English	9	8	18	18
isiXhosa	16	17	10	7
<b>TOTAL</b>	<b>46</b>	<b>47</b>	<b>38</b>	<b>35</b>

Responses given in the short background questionnaire that preceded the pre-test were used to verify the test language for the post and proficiency test. Teachers that reported doing most of their teaching in a different language wrote the post and proficiency test in this other language. In the Foundation Phase, three teachers had to switch test languages and in the Intermediate Phase, only one teacher was affected. All teachers accepted the change in test language and administration continued smoothly.

Both test administrators remarked the difficulty experienced by isiXhosa speaking teachers. Many of these teachers were hesitant to write the test in either English or isiXhosa and wished they could have used both versions. It was evident that teachers who wrote the test in isiXhosa struggled to understand the standardized form of the language that was used in the test. Some teachers complained that the Xhosa in the test was not the Xhosa they used in the classroom; others tried to consult their neighbours to obtain English translations of the test questions. Overall, teachers who wrote the test in isiXhosa took the longest to complete it and were the only group of people who expressed finding the test difficult.

### 4.1.3 Scoring and analysis

Curriculum experts in English, Afrikaans, and isiXhosa were used to score the tests. Given the amount of open-ended questions, scores were moderated across all languages to ensure consistency and reliability. The two extended writing questions in the proficiency test were independently scored by two individuals. Wherever marks differed, scores were discussed and agreed upon. Scoring and moderating the isiXhosa tests was quite challenging. To resolve this matter, the isiXhosa scorer was teamed up with the JET Project Officer and together marked every single question on all the isiXhosa tests. Scores were then re-checked by the JET Project Manager to assure reliability.

The data was captured in Excel and one third of the database was checked by a second person for capturing errors. Finally, frequencies were to further assure the accuracy of the data.

## 4.2 Results

The table below shows the mean scores on the curriculum pre-test, post-test, and proficiency test for Foundation Phase and Intermediate Phase teachers. Results are disaggregated by language since teachers wrote the tests in their specific LOLTs. Test scores suggest that a significant number of teachers have inadequate levels of curriculum knowledge and language proficiency to effectively teach Literacy in the Foundation Phase or Language in the Intermediate Phase. These results will be further examined by test in the sections below.

Table 27: Overview of scores in the curriculum pre-test, post-test, and proficiency test

Language	Foundation Phase					Intermediate Phase				
	Pre test	Post test	Prof test	n pre	n post	Pre test	Post test	Prof test	n pre	n post
Afrikaans	62%	71%	68%	21	22	61%	67%	69%	10	10
English	66%	73%	65%	9	8	66%	65%	65%	18	18
isiXhosa	35%	40%	48%	16	17	62%	59%	58%	10	7
<b>TOTAL</b>	<b>54%</b>	<b>60%</b>	<b>60%</b>	<b>46</b>	<b>47</b>	<b>64%</b>	<b>64%</b>	<b>65%</b>	<b>38</b>	<b>35</b>

KEY: Prof test=Proficiency test; n pre= number of teachers who wrote the pre-test; n post= number of teachers who wrote the post-test and proficiency test

### 4.2.1 Foundation Phase Curriculum Test

On the whole, Afrikaans and English teachers performed significantly better than isiXhosa teachers in the pre and post-test. Whereas Afrikaans teachers scored 62% in the pre-test and English teachers 66%, isiXhosa teachers obtained a mere 35%. The considerable difference in performance remained even after the training. Results in the post test were 71% for Afrikaans teachers, 73% for English teachers, and 40% for isiXhosa teachers. Given a pass rate of 70%, these results suggest that the majority of Afrikaans and English teachers possessed the minimum expected level of curriculum knowledge upon completion of the CTLI course (two thirds obtained scores of 70% and above). In contrast, the extremely poor understanding of the curriculum displayed by all isiXhosa teachers is a major concern. It is also quite worrying that an isiXhosa teacher scored a mere 18% after the training.

Over the training period, teachers' scores did improve by an average of 7 percentage points. Unfortunately, due to the short time in between testing, it is not possible to attribute test gains to the CTLI Literacy Course alone. Scores may have improved as a result of a testing effect whereby teachers remembered the test questions and consulted their peers. Regardless of the cause, teacher knowledge seems to have benefitted from the experience of the course. However, considering how little isiXhosa teachers improved relative to their initial low scores, it would appear that CTLI's Literacy course is failing the teachers that need it the most.

Table 28: Foundation Phase curriculum pre and post-test results

Language	Pre-test					Post-test					Gains
	Mean score	St. dev	Max	Min	n	Mean score	St. dev	Max	Min	n	
Afrikaans	62%	14%	88%	28%	21	71%	12%	90%	48%	22	9%
English	66%	10%	76%	45%	9	73%	6%	81%	62%	8	7%
isiXhosa	35%	12%	57%	16%	16	40%	14%	63%	18%	17	6%
<b>TOTAL</b>	<b>54%</b>	<b>19%</b>	<b>88%</b>	<b>16%</b>	<b>46</b>	<b>60%</b>	<b>20%</b>	<b>90%</b>	<b>18%</b>	<b>47</b>	<b>7%</b>

Note: Gains calculated only among participants that took both pre and post test in the same language (n=43)

### By Test Component

The Foundation Phase Curriculum Test can be broken down into several components. Items test the knowledge of phonics, grammar, writing, thinking and reasoning, organizing information, and text structures. In the pre-test, teachers performed best in the writing (64%) and thinking tasks (63%) and worst in the phonics (47%) and information tasks (44%). Likewise, in the post-test teachers continued to perform best in writing (68%) and thinking tasks (65%) and worst in phonics (53%) and knowledge of texts (55%).

Different language groups improved in different areas, as shown by the red font in the table below. All teachers improved in grammar tasks. However, only Afrikaans and English teachers improved in phonics and writing and only English and isiXhosa teachers improved in information tasks. It is interesting to note that isiXhosa teachers improved only in their weakest areas, which is somewhat true of Afrikaans teachers but not at all of English teachers. The topic areas least affected by the training were thinking and reasoning and knowledge of texts.

Table 29: Foundation Phase curriculum pre-test results by test component

Language	Phonics		Grammar		Writing		Thinking		Info		Texts		Total	
	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Afrikaans	55%	64%	68%	80%	73%	81%	67%	70%	55%	78%	63%	59%	62%	71%
English	65%	82%	64%	71%	75%	83%	74%	72%	59%	54%	59%	56%	66%	73%
isiXhosa	31%	29%	19%	38%	47%	45%	52%	54%	22%	37%	48%	50%	35%	40%
<b>TOTAL</b>	<b>49%</b>	<b>54%</b>	<b>50%</b>	<b>63%</b>	<b>64%</b>	<b>68%</b>	<b>63%</b>	<b>65%</b>	<b>44%</b>	<b>59%</b>	<b>57%</b>	<b>55%</b>	<b>54%</b>	<b>60%</b>

Pre test n: Afrikaans 21, English 9, isiXhosa 16, total 46. Post test n: Afrikaans. Post test n: Afrikaans 22, English 8, isiXhosa 17, total 47.

Each of the test components is further discussed below. For additional information on teacher performance, refer to the item stats tables in the Appendix of the report.

- **Phonics:**

A third of the test items were related to phonics, making it the biggest literacy component tested. Post-test results show a very good performance by English teachers (82%), a slightly poor performance by Afrikaans teachers (64%), and an extremely poor performance by isiXhosa teachers. Moreover, from the pre-test to the post-test, English teachers showed a significant improvement (increase of 17 percentage points), Afrikaans teachers showed a moderate improvement (increase of 9 percentage points), while isiXhosa teachers showed no improvement at all. These results are not surprising when one considers that the CTLI course covers English phonics only and that the phonemic structure of English and Afrikaans is quite similar to each other when compared to the phonetic structure of isiXhosa. It is particularly unfortunate that the CTLI course does not address isiXhosa phonics given the phonetic nature of the language, which should it considerably easier to learn to read than English or Afrikaans. We strongly recommend that future CTLI courses split the phonics session so that all teachers receive phonics support in their LOLT.



Regarding the specific phonics questions, the majority of teachers struggled most with the concept of consonant digraphs and word families. In the case of digraphs, English and Afrikaans teachers tended to confuse the concept with consonant blends while isiXhosa teachers tended to confuse it with trigraphs. In the case of word families, many teachers either left it blank or guessed. It should also be noted that more than three quarters of isiXhosa teachers cannot answer very basic questions on syllables and rhymes correctly. It is imperative for the CTLI Literacy course to address this.

- **Grammar:**

On the whole, Afrikaans and English teachers did well on the five grammar items in the post-test (scored 80% and 71% respectively) while isiXhosa teachers performed quite poorly (38%). The item most problematic for all teachers was identifying six punctuation marks in a text (only 6 teachers got full points). Some teachers did not know the names of the punctuation marks or confused them with other grammatical structures. Other teachers lost points for not following the instructions. Teachers also missed basic questions on subject-verb agreement and simple verb tenses (about a third of Afrikaans and English teachers and three fourths of isiXhosa teachers got these incorrect). Lastly, almost all isiXhosa teachers did not know what was meant by a synonym.

- **Writing:**

The main question in this section asked teachers to chronologically order five steps of the writing process, which was answered correctly by only a third of the teachers. Whereas the majority of English and Afrikaans teachers committed minor faults that still showed basic understanding of the process, the responses of isiXhosa teachers were often illogical (work is revised and published before the first draft is written) and revealed little to no understanding of the process. For teachers to be able to put into practice this essential component of the curriculum, they must first understand what it entails. The CTLI course must cover this.

- **Thinking and reasoning**

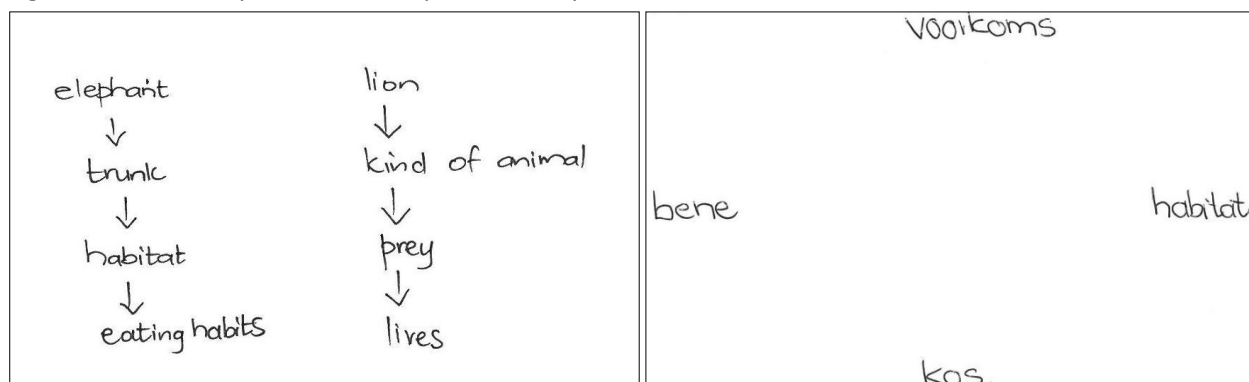
Overall, teachers struggled less in this area than others. Afrikaans teachers obtained an average of 70%, English teachers 72% and isiXhosa teachers 54%. However, the difficulty teachers experienced in two items reveals that many teachers are not clear on the terminology associated with thinking and reasoning. Some of these terms include compare and contrast, affective identification, logic, drawing conclusions, classification, conceptual language and parts from the whole. Teachers will undoubtedly run into these terms in their teaching and it is important that they know their specific meanings as well as they are applied in the classroom.

- **Information**

The two information items in the test asked teachers to work with a table and organize facts into a mind map. While Afrikaans teachers tended to perform well on this component (78% on the post-test), English and isiXhosa teachers found them quite difficult (54% and 37% respectively). The first question asked teachers to complete headings for a table that would compare two animals based on a very simple text. The mistakes made were varied and included forgetting to capitalize the headings and writing full sentences with explanations as headings. A few teachers wrote something completely irrelevant or left the question blank, showing the extent to which they do not understand tables. In the second question, teachers had to organize facts from the same simple text into a mind map. Responses show that many

teachers do not know the essential features of a mind map and 15% do not know what it even is. It is also important to point out that many teachers did not read the question carefully. Rather than drawing a single mind map about an elephant as required, some of the teachers drew two mind maps and confused the question with the previous one. Two examples of incorrect mind maps have been included below.

Figure 2: Two examples of mindmaps created by teachers



- **Texts**

Performance on text items was relatively poor and did not improve over the course of the training. Afrikaans teachers obtained 59% in this section of the post-test, English teachers 56%, and isiXhosa teachers 50%. Two questions that teachers found particularly difficult involved the learners' response to a text. Teachers had to identify a question that would help learners establish socio-cultural values and one that would help learners give a personal response. Responses suggest teachers are unfamiliar with these types of questions and what they mean.

#### 4.2.2 Intermediate Phase Curriculum Test

The overall performance of Intermediate Phase teachers is relatively similar and was affected little by the training. In the pre-test, Afrikaans teachers scored 61%, English teachers 66%, and isiXhosa teachers 62% (which is much better than their FP counterparts). In the post-test, Afrikaans teachers' scores increased to 67%, and English and isiXhosa teachers' scores dropped by a few points to 65% and 59% respectively. Short of the 70% pass rate, test results suggest that the majority of Intermediate Phase teachers left the CTLI training course with an inadequate level of curriculum knowledge. Minimum post-test scores, which range from 36% to 43% for Afrikaans, English, and isiXhosa teachers, are a huge concern.

Table 30: Intermediate Phase curriculum pre and post-test results

Language	Pre-test					Post-test					Gains
	Mean score	St. Dev	n	Max	Min	Mean score	St. dev	n	Max	Min	
Afrikaans	61%	13%	10	80%	34%	67%	11%	10	80%	43%	6%
English	66%	14%	18	93%	45%	65%	14%	18	86%	39%	1%
isiXhosa	62%	6%	10	68%	52%	59%	14%	7	77%	36%	-2%
<b>TOTAL</b>	64%	12%	38	93%	34%	64%	0.13	35	86%	36%	2%

Note: Gains calculated only among participants that took both pre and post test in the same language (n=32)

#### **By Test Component**

The Intermediate Phase Curriculum Test can be broken down into several components. Items test the knowledge of grammar, the writing process, bar graphs, figurative speech, and texts. In the pre-test, teachers performed best in grammar (74%) and bar graphs (69%) and worst in writing (45%) and figurative speech (54%). Teacher performance on the different test components was comparable across language groups with the exception of grammar, where English teachers outperformed their peers with a high score of 88%. In the post-test, teachers continued to perform best in grammar (76%) and texts (67%) and worst in writing (48%) and figurative speech (58%). There was also greater variation in performance after the training. The post-test scores of Afrikaans teachers consistently increased in almost all test components, while scores of English and isiXhosa teachers stayed at similar levels but significantly decreased for graph related tasks. Since the course was delivered in English, it is difficult to understand the relatively large gains of Afrikaans teachers on some test components. Overall, the CTLI course had little impact on the curriculum knowledge of Intermediate Phase teachers.

Table 31: Intermediate Phase curriculum pre-test results by test component

Language	Grammar		Writing		Graphs		Fig. speech		Texts		Total	
	pre	post	pre	post	pre	post	pre	post	pre	post	pre	post
Afrikaans	56%	68%	43%	40%	73%	78%	56%	64%	69%	74%	61%	67%
English	88%	83%	47%	54%	67%	59%	56%	58%	62%	63%	66%	65%
isiXhosa	69%	70%	46%	43%	69%	52%	50%	51%	65%	67%	62%	59%
<b>TOTAL</b>	<b>75%</b>	<b>76%</b>	<b>45%</b>	<b>48%</b>	<b>69%</b>	<b>63%</b>	<b>54%</b>	<b>58%</b>	<b>65%</b>	<b>67%</b>	<b>64%</b>	<b>64%</b>

\* Pre test n: Afrikaans 10, English 18, isiXhosa 10, total 38. Post test n: Afrikaans 10, English 18, isiXhosa 7, total 35.

Each of the test components is further discussed below. For additional information on teacher performance, an item stats table for the pre-test and post-test has been included in the Appendix.

- **Grammar**

Grammar items made up a one fourth of the test and consisted entirely of multiple choice questions. Teachers found this section to be the easiest and obtained post-test scores close to or above 70%. The only question that gave teachers difficulty dealt with the past perfect. Only 59% of English teachers and 38% of isiXhosa teachers got it correct, whereas no Afrikaans teacher got it correct. The easiest items dealt with simple tenses, prepositions, conjunctions, superlatives, and synonyms.

- **Writing**

Knowledge of the writing process is very poor among Intermediate Phase teachers, as reflected by their low scores in this component. The test asked teachers to order seven steps of the writing process chronologically. In the post-test, only 4 out of 37 teachers answered the question correctly and 3 other teachers made minimal mistakes. The rest of the teachers showed limited understanding and often gave illogical responses. The teachers' unfamiliarity with the writing process is alarming, as Intermediate Phase learners are required to produce extended pieces of writing. It is essential that teachers are able to assist learners in developing good writing through the steps in the writing process.

- **Graphs**

This test component was made up of two items: drawing a simple bar graph and writing two questions about the bar graph. Teachers performed particularly poorly on the drawing and only 6 out of 37 teachers got the question right. Common mistakes included leaving out titles for the vertical and horizontal axes, incorrect use of a scale, and not using bars to mark the values. IsiXhosa teachers in particular least understood the notion of a bar graph and its various elements. Teachers also struggled writing questions

that could be asked to a Grade 6 learner based on the graph. In this case, it was the English teachers who lost the most points. Many questions were poorly formulated showing that teachers found it difficult to talk about the graph and used incorrect grammar. Two examples of graphs and questions have been added below.

Figure 3: Two examples of bar graphs created by teachers

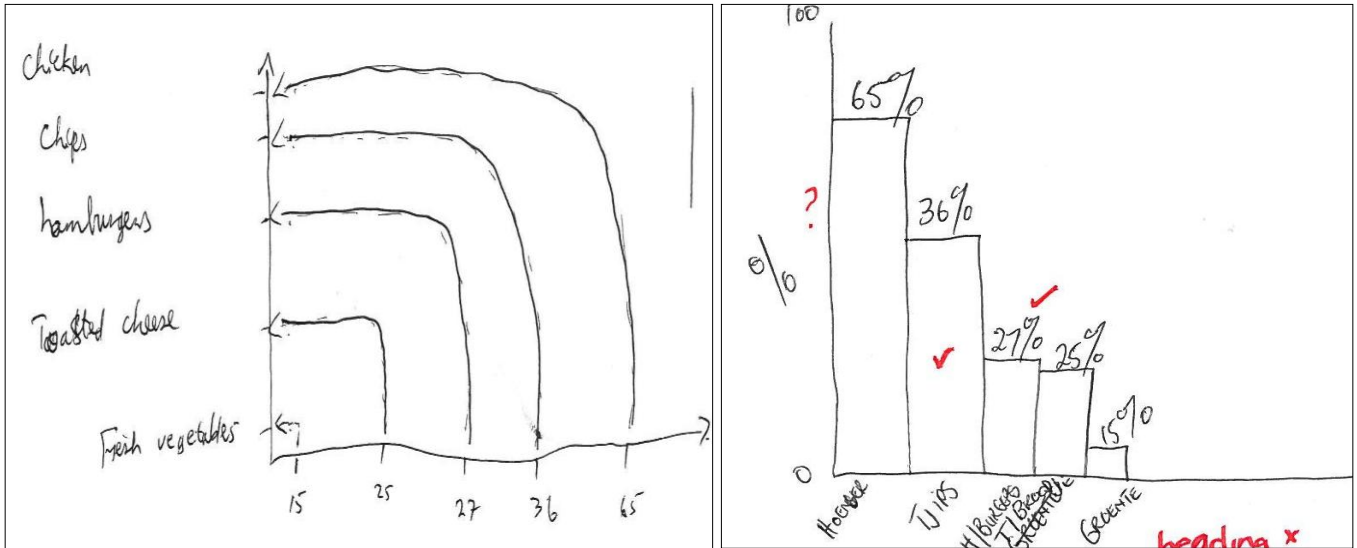


Figure 4: Two teacher responses to questions about bar graphs

<p>25. List two questions that you could you ask Grade 6 learners based on the graph.</p> <p>1. Which food is the favourite to learners?</p> <p>2. Give the least food and name it.</p>	<p>25. List two questions that you could you ask Grade 6 learners based on the graph.</p> <p>* Why you eat so much unhealthy food? and eat no little healthy food.</p>
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- **Figurative speech**

Teachers performed relatively poorly in this small section of the test component. Post-test scores of 64%, 58%, and 51% for Afrikaans, English, and isiXhosa teachers respectively show poor understanding of figurative speech. Teachers had the greatest difficulty identifying what was being compared in a metaphor. About half of the Afrikaans teachers got this question right, while almost no English or isiXhosa teachers succeeded. It is recommended that the CTLI Language course clarify the differences between a metaphor, personification, simile, and alliteration, and show teachers ways of teaching them in the classroom.

- **Texts**

Questions related to texts comprised almost a third of the test, making it the biggest component. Afrikaans teachers were the only group to perform satisfactorily on the post-test and scored above 70%. IsiXhosa teachers were close with a score of 67%. English teachers scored a bit lower, obtaining 63%. The item that gave teachers the most trouble, particularly English teachers, asked teachers to compose a question that would bring out the socio-cultural values conveyed by a text. Many teachers did not know what is meant by socio-cultural values and either wrote an irrelevant question (ex: what is your favourite

sport?), made a statement related to these values (ex: let us love and respect other people), or left the question blank. Other teachers also lost points for incorrect grammar. Responses in this section also show that teachers do not know what a caption is, and that they are not familiar with reading strategies.

### 4.2.3 Proficiency Test

Alongside knowledge of the curriculum, proficiency in the language of instruction is a pre-requisite for effective teaching. For this reason, teachers' language proficiency was tested once in this study. The test used was the same for Foundation Phase and Intermediate Phase teachers and is more or less set at the proficiency level of a Grade 7 learner.

Results show that Foundation Phase and Intermediate Phase Afrikaans teachers have similar levels of language proficiency in Afrikaans as do Foundation Phase and Intermediate Phase English teachers in English. However, in the case of isiXhosa, Foundation Phase teachers displayed a considerably lower level of proficiency in isiXhosa than their Intermediate Phase peers. Additionally, while scores of Afrikaans and English teachers fell close to the 70% pass rate, scores of isiXhosa teachers fell far below (48% in the Foundation Phase and 58% in the Intermediate Phase). It is troublesome to think that on average, teachers exhibited a lower proficiency than what is expected of a Grade 7 learner.

Table 32: Results for the Proficiency Test

Language	Foundation Phase					Intermediate Phase				
	Mean score	St. dev	n	Max	Min	Mean score	St. dev	n	Max	Min
Afrikaans	68%	9%	22	84%	50%	69%	9%	10	83%	52%
English	65%	8%	8	75%	55%	65%	14%	18	84%	44%
IsiXhosa	48%	10%	17	66%	30%	58%	11%	7	72%	45%
<b>TOTAL</b>	<b>60%</b>	<b>13%</b>	<b>47</b>	<b>84%</b>	<b>30%</b>	<b>65%</b>	<b>12%</b>	<b>35</b>	<b>84%</b>	<b>44%</b>

Teachers were tested for proficiency in their LOLT, which is not always the same as their home language<sup>1</sup>. Because teachers that wrote the test in their home language can be expected to perform better than those who wrote the test in their second language, scores have been further broken down by the home language of the teacher. The table below shows that teachers teaching in Afrikaans speak English or Afrikaans as their home language, but there is only a marginal difference in their scores. The difference is greater in the case of English teachers. In the Foundation Phase, English home language speakers outperformed Afrikaans speakers by 7 percentage points. In the Intermediate Phase, both groups of teachers performed extremely well on the test but the Afrikaans home language speaker unexpectedly outperformed the English home language speakers by 6 percentage points. The majority of English teachers in the Intermediate Phase, however, speak isiXhosa as their home language and displayed a low level of proficiency in English. Interestingly enough, isiXhosa home language speakers display an equally poor level of proficiency in English (57%) as they do in isiXhosa (58%). The similarity in proficiency for isiXhosa home language speakers must lie in the fact that they are poorly proficient in academic literacy, no matter which language they speak at school.

Looking back at the Intermediate Phase curriculum test results, we find a similar trend. Whereas English teachers that are English/Afrikaans home language speakers scored 78% on the post-test, isiXhosa home language speakers scored 58%. The same 20 point percentage gap exists between these two groups whether it applies to

<sup>1</sup> Home language is defined by the language in which the teacher speaks most often at home.

curriculum knowledge or language proficiency in English. Moreover, the curriculum scores of English isiXhosa home language speakers teaching in English (58%) is practically identical to the scores of isiXhosa teachers teaching in isiXhosa (59%). These results imply that the weakest teachers in the system, both in terms of language proficiency and curriculum knowledge, may be isiXhosa home-language speakers, regardless of whether they are teaching in English or isiXhosa.

Table 33: Results by test language (LOLT) and home language of teachers

Language	Foundation Phase Teachers						Intermediate Phase Teachers					
	HL Afrikaans		HL English		HL Xhosa		HL Afrikaans		HL English		HL Xhosa	
	score	n	score	n	score	n	score	n	score	n	score	n
Afrikaans	68%	19	65%	3			67%	10				
English	61%	4	68%	4			83%	1	77%	5	57%	10
IsiXhosa					49%	16					58%	7

Note: If teacher responded spoke both English and Afrikaans at home was counted as a language match. One isiXhosa teacher who mistakenly wrote the test in English has been excluded from the table.

One of the reasons isiXhosa teachers may have struggled so much with the curriculum and proficiency test is due to the standardized version of Xhosa used in the tests. During testing, a few isiXhosa teachers complained that they were not familiar with the form of language that had been used and disclosed that they used a different dialect in their classrooms. It is quite worrying to think that some isiXhosa learners are being taught in a dialect that is not supported by South African institutions, including the education system. Given that isiXhosa textbooks must use the standardized form of the language, one can assume that if teachers had a difficult time understanding this version of isiXhosa in the test, learners will have a difficult time understanding it in their books. We have no way of knowing if isiXhosa teachers would have performed better in these tests had they been tested in the dialect they used. Nevertheless, isiXhosa teachers should be required to know and teach in the standardized version of isiXhosa, as using a dialect can lead to grave consequences.

### By test component

Items in the proficiency test can be grouped into 5 areas: comprehension, texts, vocabulary, grammar, and writing. Results show that both Foundation and Intermediate Phase teachers are strongest in comprehension and knowledge of texts and are weakest in writing and vocabulary. It is interesting to note the performance patterns displayed by the different language groups across test components, as it mirrors between the two phases. Afrikaans teachers tended to perform equally well on all test components with the exception of writing, which they found to be more difficult. English teachers tended to do really well on comprehension and knowledge of texts, scoring well above 70%, but experienced great difficulty with vocabulary, grammar, and writing in particular. IsiXhosa teachers performed best in comprehension and found vocabulary to be the most challenging. It is interesting to note that Intermediate Phase teachers had significantly better grammar than Foundation Phase teachers but Foundation Phase teachers demonstrated better writing abilities than Intermediate Phase teachers.

Table 34: Results for the Foundation Phase Proficiency Test by test component

Language	Comp	Texts	Vocabulary	Grammar	Writing	Total	n
Afrikaans	74%	69%	68%	68%	62%	68%	22
English	74%	76%	60%	64%	55%	65%	8
IsiXhosa	62%	48%	28%	46%	47%	48%	17
<b>TOTAL</b>	<b>70%</b>	<b>63%</b>	<b>52%</b>	<b>59%</b>	<b>55%</b>	<b>60%</b>	<b>47</b>

Key: Comp=Comprehension

Table 35: Results for the Intermediate Phase Proficiency Test by test component

Language	Comp	Texts	Vocabulary	Grammar	Writing	Total	n
Afrikaans	72%	69%	70%	71%	54%	69%	10
English	77%	82%	59%	61%	43%	65%	18
IsiXhosa	68%	60%	43%	69%	34%	58%	7
<b>TOTAL</b>	<b>74%</b>	<b>74%</b>	<b>59%</b>	<b>65%</b>	<b>44%</b>	<b>65%</b>	<b>35</b>

Key: Comp=Comprehension

Each of the test components is further discussed below. For additional information on teacher performance, an item stats table for Foundation Phase and Intermediate Phase teachers has been included in the Appendix .

- **Comprehension**

Literal and inferential comprehension items made up a fourth of the test and took the form of multiple choice questions. Teachers performed particularly well in this area and with the exception of isiXhosa teachers, scored above 70%. Two questions in particular gave difficulty to both Foundation Phase and Intermediate Phase teachers. The first question asked teachers to identify the main idea of a paragraph and the second question pertained to another paragraph of the text. In both questions, teachers had a choice between the correct answer and other true statements that were found in the text. What this means is that teachers either read the question carelessly and chose something they remembered from the text, or that they struggle to comprehend an idea that is developed and conveyed over several statements.

- **Texts**

Questions related to text structures made up a minor component of the test. These items focused on features of non-fiction texts, more specifically of interviews, autobiographies, dictionaries, and advertisements. Overall, teachers performed better in this section. Afrikaans teachers performed just below the 70% mark, English teachers performed well above, and isiXhosa teachers, particularly in the Foundation Phase, struggled more with these questions. Teachers had the most difficulty with items related to dictionaries. Few teachers knew that in a dictionary definition, the letters found in between the back slashes represent the pronunciation of the word. Many IsiXhosa teachers were also unfamiliar with other components of a definition, namely the part of speech and the different meanings of a word. They even struggled to answer how words in a dictionary are arranged. Another question which gave Afrikaans and isiXhosa teachers great trouble shows that many teachers do not read questions carefully. Rather than explaining why the phrase “terms and condition” was written in such a small font in an advertisement, they gave the purpose of such a phrase.

- **Vocabulary**

Items dealing with words and vocabulary made up the smallest component of the test. Nevertheless, teachers found this section to be one of the most difficult. In both phases, Afrikaans teachers scored close to 70%, English teachers close to 60%, and isiXhosa teachers between 28%-43%. The hardest question, which was missed by three quarters of all teachers, asked for the opposite of the word ‘roughly’ which had been used in context. Rather than identifying the antonym, the majority of the teachers chose a synonym for the word. Not surprisingly, many teachers also missed another item asking for the synonym of a word. Another concept that proved to be difficult for English and isiXhosa teachers in particular were finding the root of a word.

- **Grammar**

Grammar items made up close to a third of the test and consisted of open-ended questions. Afrikaans teachers and Intermediate Phase isiXhosa teachers performed better than their peers, scoring around 70%. All other teachers, particularly Foundation Phase isiXhosa teachers, performed below expectations. The items teachers found most challenging asked them to correct a sentence that contained a grammatical mistake. About two thirds of teachers missed these items. Many teachers could not identify the mistake and instead changed other parts of the sentence sometimes incorrectly. Other teachers that succeeded in identifying the mistake did not know how to correct it. Results suggest that teachers either have a weak understanding of grammatical rules or have a difficult time applying them to writing. Either way, the results imply that teachers have a limited ability to correct learners' writing. Another item that was missed by the majority of Foundation Phase teachers was a question about adverbs. Many teachers did not know how to use the word 'automatic' as an adverb. Lastly, a few items in the test dealt with parts of speech. Both Foundation Phase and Intermediate Phase isiXhosa teachers struggled to answer these questions correctly, showing a poor understanding of what they are.

- **Writing**

The writing component comprised two short answer questions and two extended writing tasks of 4 to 6 sentences. Teachers' scores for this section were the lowest of the test and suggest unacceptably poor writing levels. Foundation Phase teachers averaged 55% and Intermediate Phase teachers averaged 44%. In each of the phases, Afrikaans teachers performed best, followed by English teachers, and lastly isiXhosa teachers.

One of the extended writing items required teachers to explain and justify one thing that should be done to fight crime. Teachers struggled to express and support their opinion and obtained an average score of 3.1 out of 6. First, many teachers failed to explain and justify their answer either because they did not read the directions carefully or because they do not know how to do this. Second, teachers' poor control of grammar compromised the clarity of what they wanted to say. Two sample responses have been included below, one who scored a 2 and the other a 5. The first one is almost unintelligible, and is characteristic of about 40% of the responses. The second one is more successful at elaborating a coherent response, although it is still far from good writing, and is characteristic of about 18% of the responses. As illustrated below, typical mistakes include fragments, run-ons, punctuation, poor sentence structure, vocabulary, and tenses.



Figure 5: Sample response for Item 7, score of 2

7. Write a short paragraph (3-4 sentences) about one thing you think should be done to fight crime in this country. Explain and justify what you say.

Police should wear private no use of uniform even their van should be private the only thing they have in hand is their badges. Because the criminals ~~was~~ once they see the police van/police in uniform they ~~run~~ away especially during dark hours ~~they~~ police van have that blue light, which make things easy for criminals.

Figure 6: Sample response for Item 7, score of 5

Firstly, we need to think why do people do crime? I think the answer is if they are bored they have nothing to do. If government can create more jobs and give people skills then the crime rate will be reduced. Some people resort to crime because they say they are poor (hungry), although that is unjustifiable. I think if more people can be employed, crime rate will be reduced. Even <sup>when</sup> they are prisoned they need to be taught skills, so that when they come out they don't go back to crime, but instead can do something to earn a living. ] *repet.*

The second extended writing item asked teachers to write a descriptive paragraph about a family member, detailing what the person looks like, enjoys doing, and makes him/her special. Teachers received an average score of 3.3 out of 6. Once more, teachers had a problem following directions and did not write down all the details required, especially what they looked like. The result was that many paragraphs failed to paint a picture of the person they were describing and made little use of descriptive words. Responses also contained many grammatical mistakes, showing poor control of the language, and displayed weak sentence structure. An example of a response with a score of 3 and a score of 2 is included below.

Figure 7: Sample response to Item 17, Score of 3

17. Write a description of your parent or another family member. Use 4-6 sentences. You should say who the person is and include details such as what they look like, what they like doing and what makes them special to you.

My youngest son,  
His name is Alexander Patrick Riley. He  
was born on the 26th of April, 1994,  
and is now 16 years old. He attends  
Spineroad High and is currently in  
grade 10. He has a quiet personality  
and yet very disciplined and well organised.  
He is a sound engineer, video editor,  
as well as a drummer. He does everything  
with great enthusiasm.

Figure 8: Sample response to Item 17, score of 2

I'm describing my mother's sister. She  
is everything to me, because my mother was  
was not working. She was responsible for  
everything. She is a busy person. She always  
buy clothes and food for the whole  
family. What makes her so special to me is  
She take me to school on her own pocket.  
Now I'm a teacher because of her. I  
love her so much.

### 4.3 Variables linked to teacher knowledge

In this section, the relation between various variables and teacher performance is examined through the use of descriptive analysis and correlations.

- **Language**

As we have seen in the analysis above, the teachers' LOLT and home language appears to be linked to teacher performance. In the majority of cases, teachers who teach in Afrikaans outperform those who teach in English, who perform better than those who teach in isiXhosa. The home language of teachers

also seems to play a role. Teachers who speak Afrikaans and English as a home language perform significantly better than those who speak isiXhosa as a home language.

- **Quintile**

There appears to be little to no relation between the performance of Foundation Phase teachers and quintile for Quintile 1-4 schools (see graphs and table below). There is a similar spread of scores across these quintiles which includes both excellent and extremely poor performance. Nevertheless, overall performance does tend to be lower for Quintile 3 schools. In the case of Quintile 5, teachers do perform significantly better than their peers and the range of scores is considerably smaller.

The trend is somewhat similar for Intermediate Phase teachers. There is little to no relation between the teachers' curriculum knowledge and the schools' quintile for Quintile 1-4. However, the teachers' language proficiency does seem to improve between Quintile 1 and 2, and Quintile 3 and 4. As expected, Quintile 5 teachers outperform their peers in the curriculum and proficiency test.

This finding suggests that teachers should not be selected to attend CTLI courses based on the school's quintile, as poor curriculum knowledge and language proficiency are prevalent in all quintiles, particularly Quintile 1-4.

Figure 9: Foundation Phase Pre-test results by quintile

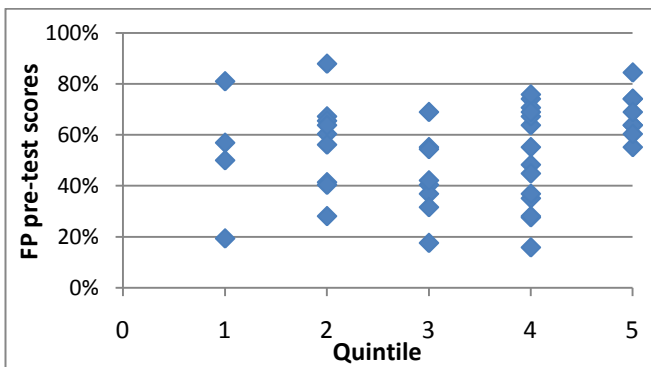


Figure 10: Foundation Phase Proficiency results by quintile

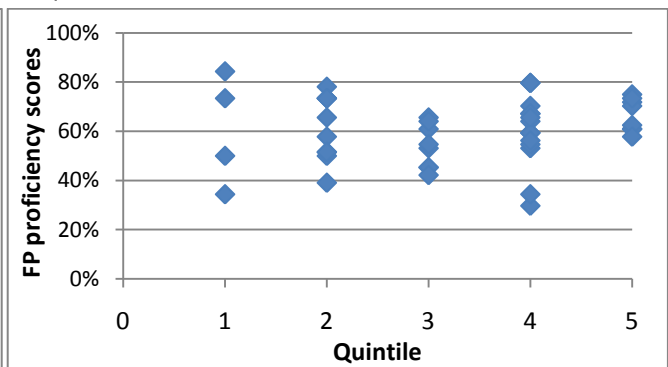


Figure 11: Intermediate Phase Pre-test results by quintile

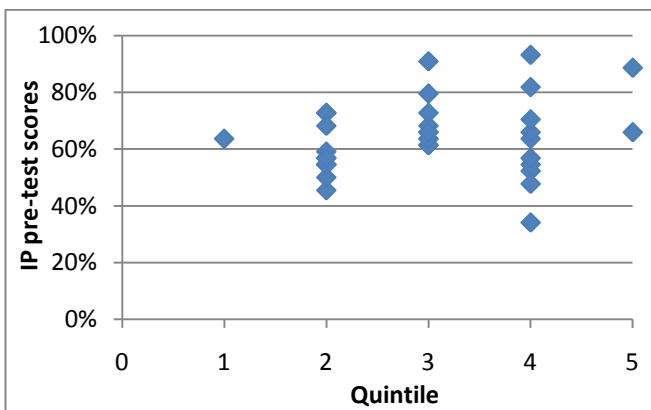


Figure 12: Intermediate Phase Proficiency results by quintile

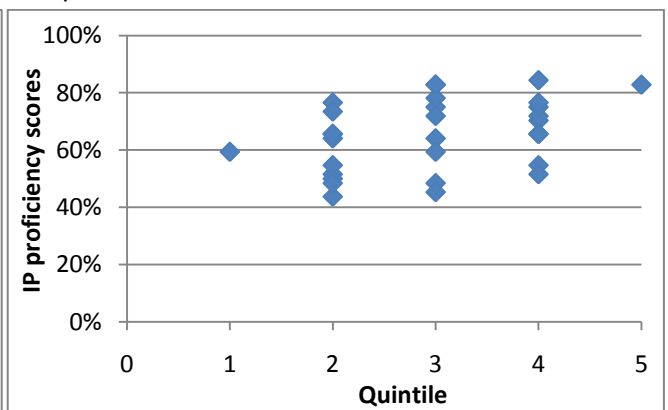


Table 36: Teacher performance by quintile

Quintile	Foundation Phase						Intermediate Phase					
	Pre-test	St. dev	n	Profic	St. dev	n	Pre-test	St. dev	n	Profic	St. dev	n
1	52%	26%	4	61%	23%	4	64%	n/a	1	59%	n/a	1
2	57%	18%	9	61%	13%	10	59%	9%	11	59%	11%	10
3	43%	16%	8	54%	9%	8	69%	9%	10	68%	14%	9
4	51%	20%	14	60%	14%	14	62%	17%	10	68%	10%	9
5	68%	9%	8	67%	7%	8	77%	16%	2	83%	n/a	1
TOTAL	54%	19%	43	60%	13%	44	64%	13%	34	65%	12%	30

Key: St. dev= Standard deviation; Profic=Proficiency

- **Ex-department**

The school's ex-department seems to be linked to teacher performance. Teachers from former black schools (DET) and recently established schools (WCE) tend to perform worse than those who teach in former coloured schools (HOR) or former white schools (CED). This is particularly true for the Foundation Phase curriculum and proficiency test. It should nevertheless be noted that there is a wide spread of pre-test scores amongst teachers in former HOR schools and some HOR teachers perform just as poorly as their DET and WCE counterparts.

Figure 13: Foundation Phase pre-test results by ex-dept

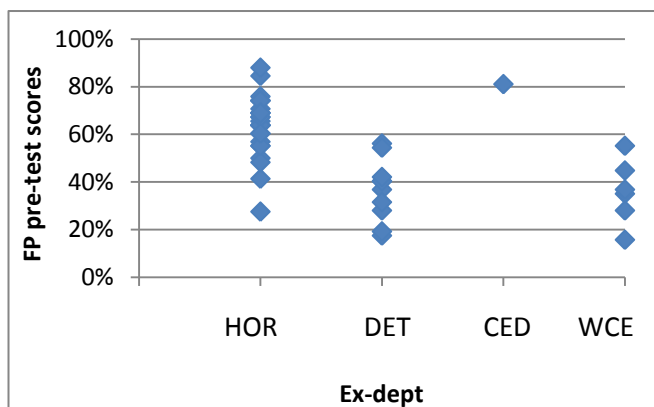


Figure 14: Foundation Phase proficiency results by ex-dept

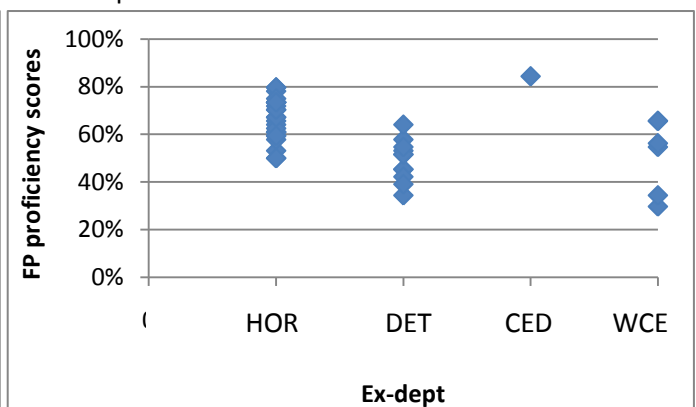


Figure 15: Intermediate Phase pre-test scores by ex-dept

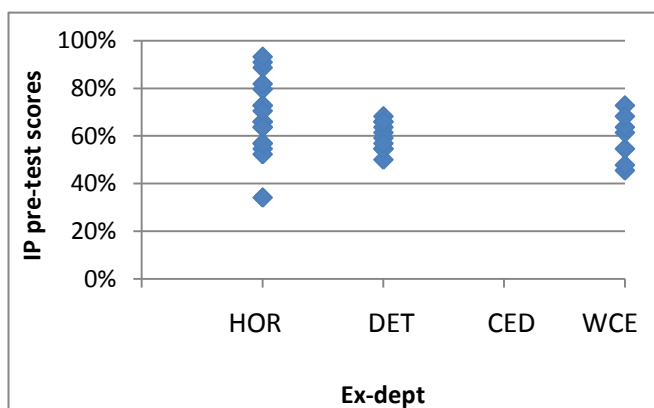


Figure 16: Intermediate Phase proficiency results by ex-dept

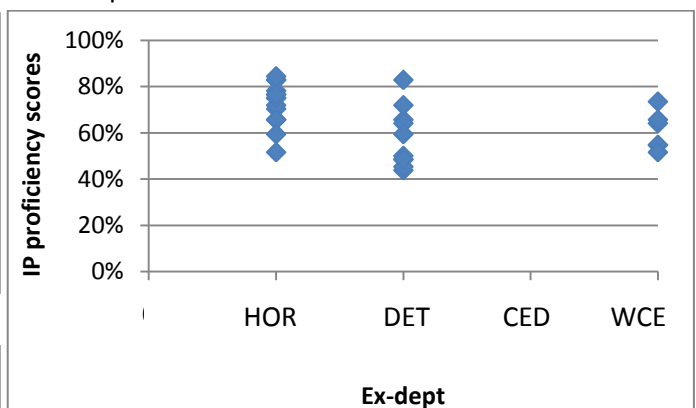


Table 37: Teacher performance by ex-dept

Ex-dept	Foundation Phase						Intermediate Phase					
	Pre-test	St. dev	n	Profic	St. dev	n	Pre-test	St. dev	n	Profic	St. dev	n
CED	81%	n/a	1	84%	n/a	1						
DET	36%	13%	10	49%	9%	11	60%	6%	10	58%	13%	10
HOR	64%	13%	26	67%	9%	26	68%	15%	17	73%	9%	14
WCE	36%	14%	6	51%	15%	6	59%	10%	7	61%	8%	6
TOTAL	54%	19%	43	60%	13%	44	64%	13%	34	65%	12%	30

Key: St. dev= Standard deviation; Profic=Proficiency

- **School's systemic results**

The connection between teacher performance and schools' systemic results in Literacy and Language is hard to derive from our data. For one, our sample of teachers includes other grades besides Grade 3 and 6. Nevertheless, there appears to be a relationship between the teachers' pre-test scores and proficiency scores and learner performance in that school. The average pre-test and proficiency score of teachers increases with the performance of learners, as illustrated by the tables below. The correlation coefficients for the Foundation Phase pre-test and proficiency test (.53 and .43 respectively) as well as for the Intermediate Phase pre-test and proficiency test (.48 and .51 respectively) suggest a moderate relationship between these two variables.

Table 38: Foundation Phase teacher performance by learner results in literacy (Grade 3)

Gr 3 2008 school results	Pre-test		Proficiency	
	Score	n	Score	n
40-49%			39.0%	1
50-59%	37.9%	3	56.8%	3
60-69%	45.7%	23	57.2%	23
70-79%	67.2%	14	66.6%	14
80% and up	69.5%	3	67.7%	3

Table 39: Intermediate Phase teacher performance by learner results in language (Grade 6)

Gr 6 2009 School results	Pre-test		Proficiency	
	Score	n	Score	n
30-39%	54.0%	4	55.5%	4
40-49%	60.9%	9	59.2%	8
50-59%	65.9%	16	70.1%	13
60% and up	74.4%	4	73.4%	4

#### 4.4 Summary of results

This chapter set out to answer 3 questions: What is the state of teachers' curriculum knowledge, did the CTLI Literacy/Language course help teachers improve this knowledge, and are teachers proficient in the language they teach? At the start of the training session, teachers' curriculum knowledge was below minimum standards for both Foundation Phase and Intermediate Phase teachers. In the case of Foundation Phase isiXhosa teachers, results suggest that their understanding of the curriculum is alarmingly poor. Post-test scores reveal that

curriculum knowledge improved for Foundation Phase teachers, but not for Intermediate Phase teachers. In regards to language proficiency, teachers exhibited on average a lower level of proficiency than what is expected of a Grade 7 learner. Whereas the scores for Afrikaans and English teachers fell close to the pass rate, the scores for isiXhosa teachers, particularly those teaching in the Foundation Phase, fell far below.

In spite of this overall picture of poor performance, it should be noted that there was a wide spread of test scores that ranged from excellent to very poor. There was a greater degree of variance in the results of the curriculum tests than in the proficiency tests. This is particularly true for the scores of the post-test, implying that the performance of some teachers improved significantly over the 2 week course whereas some teachers remained unmoved. Moreover, teachers from quintile 5 schools, former HOR and CED schools, or who speak English or Afrikaans as their home language were more likely to meet the required minimum standard for curriculum knowledge and language proficiency than their peers.

Foundation Phase teachers displayed many weaknesses in terms of curriculum knowledge, particularly isiXhosa teachers. Overall, teachers missed simple grammatical questions on verb tense and subject agreement, struggled to work with tables and create a mind map, and were not clear on thinking and reasoning terminology derived from the NCS or what is meant by socio-cultural values. In addition, isiXhosa teachers lack understanding of very basic phonics concepts such as syllable and rhyme, and have almost no knowledge of the writing process. It should be noted that the phonics scores of English teachers improved significantly (by 17 percentage points) from the pre to the post-test despite a relatively high pre-test score. Given that English phonics alone were covered by the CTLI course, this finding suggests that training in this area can really make a difference.

In the Intermediate Phase, many areas also posed a challenge to teachers. Most importantly, results suggest that the teaching of writing is greatly compromised in this phase. Teachers had trouble setting an expressive or informational task for learners and very few were familiar with the writing process. Also, the majority of teachers could not construct a proper bar graph and experienced difficulty talking about the topic. They displayed poor knowledge of figurative speech and had difficulty applying the concept of socio-cultural values as well. Intermediate Phase teachers found the grammar component to be the easiest in the test. However, it should be noted that this section consisted entirely of multiple choice questions, unlike the other sections, which may have made the task simpler.

Results from the proficiency test were also very revealing. There was a lot of evidence that teachers read carelessly and many times do not follow directions. Moreover, the comprehension items show that while teachers can answer straightforward questions correctly, they have trouble integrating information that is conveyed over a small paragraph and extracting the main idea. Extended writing tasks depict unacceptably poor writing levels. Writing is not only replete with grammatical errors but teachers do not manage to express their ideas successfully. Teachers struggled to explain and justify an opinion as well as formulate a descriptive paragraph. In terms of grammar, teachers have great difficulty applying correct grammar to writing. They also struggled with the perfect tense and isiXhosa teachers with parts of speech. Lastly, it was surprising to find that so many teachers, particularly those who teach in isiXhosa, were so unfamiliar with the use of a dictionary.

Test scores suggest that a majority of teachers that attended the CTLI Literacy and Language course have poor content knowledge and language proficiency. Thus, it is imperative that CTLI courses address these gaps and not assume that teachers already come bearing this knowledge. While it can be challenging for service providers to address these gaps without belittling what teachers already do know, it would be a huge disservice not to do so. Until teachers learn how to read carefully and with great clarity and express themselves effectively through writing, we cannot expect them to be able to teach this to their learners.

## 5 Teacher practice

A small sample of participants received school visits to examine CTLI's impact on actual practice. Teachers who attended the Numeracy, Literacy, Language, or Maths course were interviewed and submitted a learner book for analysis. Principals who attended the Principal as Manager of the Curriculum course were also interviewed, submitted school documents for analysis, and had their schools observed for functionality. This section of the report briefly discusses the methodology surrounding the fieldwork and presents the findings on school management and teaching practices. It's main purpose is to answer two questions:

1. What is the state of school management practices and classroom practices amongst those who received training from CTLI?
2. Is there evidence that school management practices and classroom practices improved after the training?

### 5.1 Methodology

#### 5.1.1 The sample

Teachers and principals were hand-picked to participate in this study in order to maximise the number of participants that could be visited with the allocated budget. For this reason, schools that had sent more than one teacher to CTLI were favoured to participate. At the same time, a diverse sample that was representative of all education districts, quintiles, and levels of learner performance was desired. A sampling list was thus reached by carefully balancing these two factors.

Not all teachers that were chosen to participate took part in the study. The sample unknowingly included ELSEN teachers who were excluded from the study. This decision was made due to the fact that ELSEN teachers do not have their own class and it would have been difficult to determine classroom impact. Teacher absenteeism and unavailability also resulted in missed appointments. In a few of these instances, learner books were collected and analyzed, but no interview was held.

The table below shows the number and percentage of participants that were visited per course. Fieldworkers visited a total of 4 principals and 62 teachers in thirty-eight schools. Thus one half of the participants in the principal's course and about one third of the teachers in each curriculum course received a visit.

Table 40: Number and percentage of educators who participated in the study

	<b>Principal Course 2</b>	<b>FP Literacy Course 3</b>	<b>FP Numeracy Course 3</b>	<b>IP Language Course 2</b>	<b>IP Maths Course 2</b>
Number of participants	4	15	13	18	16
Percentage of course	50%	28%	30%	35%	38%

Note: Percentage of course has been calculated using CTLI's registers. Due to the number of teachers who register and do not attend the course (usually around 10%), this figure should actually be slightly bigger.

Characteristics of the sample are shown by the figures below. With the exception of Metro Central, all education districts were included in the study. The majority of participants came from Metropole East, North, and South, followed by Eden and Central Karoo, West Coast, Cape Winelands, and lastly by Overberg. All quintiles were also represented. Quintile 2 and 4 schools had the biggest percentage of educators in the study, followed by Quintile 3 and 5, and lastly by Quintile 1. The sample also included schools who achieved at various levels in the systemic

test, with the greatest percentage of educators coming from schools who scored around 45-65%. Regarding the language of learning and teaching, a little more than one third of the educators used English, about one third used Afrikaans, and one fifth used isiXhosa.

Figure 17: Sample distribution according to Education District

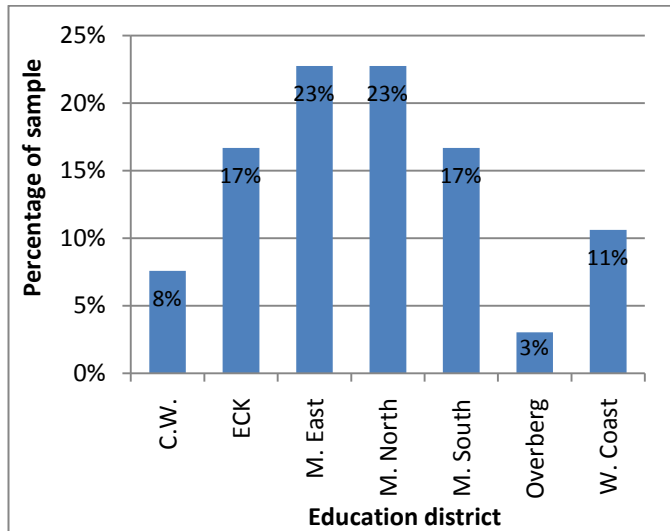


Figure 18: Sample distribution according to school quintile

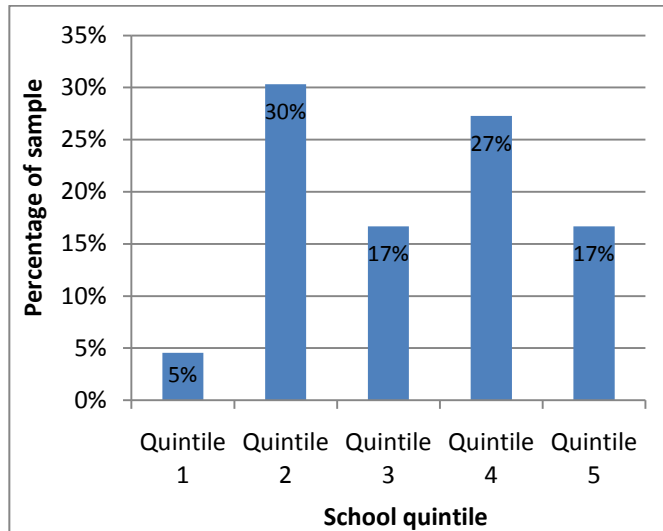


Figure 19: Sample distribution according to performance on the systemic test

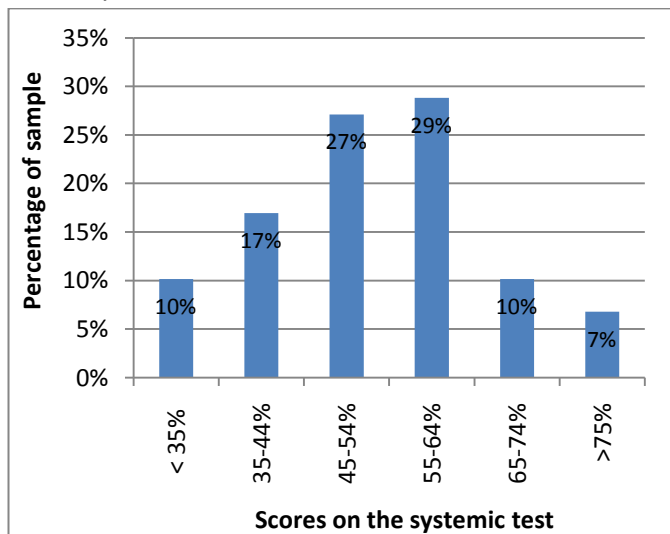
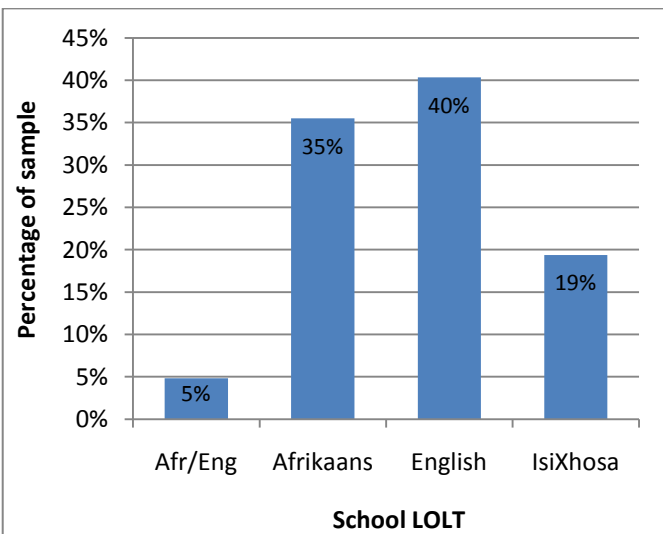


Figure 20: Sample distribution according to school LOLT



Educators in the sample tended to be experienced teachers and had been teaching for an average of 16 years. Only 4 out of 62 educators were relatively new to the field and reported teaching for less than 5 years, while a few of the teachers were very close to retiring. As many as 20% of the teachers also disclosed that they were not qualified to teach the subject for which they had sought training. In regards to principals, all four were relatively new principals and reported having less than 3 years of experience managing schools. For more detail on the participants as well as the fieldwork, please refer to the tables in the appendix.

### 5.1.2 Fieldwork

Four fieldworkers were appointed to carry out the fieldwork and received a full day of training. In addition to fieldwork logistics, the training discussed each of the questions in the instruments. This was done to assure



fieldworkers understood the question and its purpose as well as any special instructions. Moreover, fieldworkers had a chance to analyze real learner books using the learner book instrument to assure correct use.

School visits took place between October 26 and November 5, 2010. Principals who attended the CTLI course were interviewed, had their school documents examined, and a quick walk-about was done to determine school functionality. Teachers who attended the CTLI course were also interviewed and they were asked to submit one learner book for analysis. All interviews lasted approximately 35 minutes and used semi-structured instruments.

The learner book was used to determine the quantity of writing as well as the level of curriculum coverage in the class. Fieldworkers requested to see all the books and classroom work of the best learner with the best attendance, excluding assessments. They then counted the number of lessons learners had written throughout the year and estimated their length, rounding up whenever possible. A lesson was defined as the work a learner completed in one day and made no distinction between class work and homework. The number of lessons was then divided by the total number of school days to estimate how often learners wrote. The figure used to calculate the total number of school days assumed that school began on January 13<sup>th</sup>, 2010, and took into account school holidays, 19 days of teacher strike, as well as the day of the field visit. For curriculum coverage, fieldworkers also recorded the assessment standards that were covered in each lesson.

CTLI's impact on classroom practice was assessed through the interview as well as the learner book. In the interview, teachers were asked if they had been able to apply what they learnt in the classroom and to describe what they had done. The study also sought to determine if learners had suffered from the teachers' absence in the classroom. It asked teachers what they had prepared for their learners to do while they attended training and if the work got done. Finally, evidence was sought in the learners' books. The quantity of writing was measured in five key periods of the year: pre-CTLI training, during Block 1, post-Block 1 training, during Block 2, and post-Block 2 training to find out if the amount of writing increased after the training and if it significantly decreased while the substitute managed the class.

## 5.2 Results

This section presents the fieldwork results for each of the five training courses. Results for the principal course are discussed below. For curriculum courses, the discussion addresses three points: how much are learners writing in the classroom, what topics are they writing about, and what is the impact of the training course on classroom practice.

### 5.2.1 Principal as Manager of the Curriculum

The two week principal course held on July 26<sup>th</sup> to August 6<sup>th</sup> 2010 was attended by 8 principals. Four principals received a visit three months after the training to investigate curriculum management practices as well as the effects of the course.

#### **Curriculum management practices**

Curriculum management refers to the school-level management processes which facilitate delivery of the curriculum. This function is directed and coordinated by the principal and was the focus of the CTLI course. Various measures were used to assess the curriculum management practices at the school including teaching time, learning environment, school culture, and learner performance.

Research suggests that time is not used optimally in a majority of South African schools. However, a striking feature in highly successful underprivileged schools is that time is seen as a precious commodity (Malcolm et al.,

2000; Christie et al., 2007). Not only is punctuality respected during the day and teaching time protected, but additional time is created outside of school hours to extend learning time. Ensuring that the school is set up to use its time effectively and that it operates accordingly are essentially management’s responsibilities. Poor use of time can occur on multiple levels. Planning should ensure there is enough time to cover the curriculum, time should be properly allocated in the time-table, teachers and learners must be in class, on time, actively covering the curriculum, and class time should not be disrupted.

Fieldworkers asked principals for the number of teaching weeks their schools used to cover the curriculum, assuming that unless they knew they would not be able to plan for it. If holidays and the examinations held in June and November are taken into account, then 36-40 weeks are available for teaching. Only the principals in School A and B were able to respond accordingly. Principals in School C and D did not know. Policy also dictates the minimum amount of time that should be spent on specific subjects. Fieldworkers were thus asked to check the school’s time table and record the number of hours dedicated to Literacy/Language and Numeracy/Maths a week. The table below shows the schools’ results in comparison to the required time stipulated in the National Curriculum Statements (NCS). Assuming the time-table was recorded correctly by the school and interpreted correctly by the fieldworker, only two schools met the minimum requirements set for the two subjects. Learners in School A and C receive about an hour less of instruction a week in each of the subjects.

Table 41: Teaching time in Literacy/Language and Numeracy/Maths per week

School	FP Literacy	FP Numeracy	IP Language	IP Maths	FET Lang	FET Maths
A	8 hrs	7 hrs 50min	4 hrs 15min	5 hrs	n/a	n/a
B	n/a	n/a	n/a	n/a	5hrs 25min	5hrs 25min
C	9 hrs 25min	7 hrs 30min	6hrs 45min	4 hrs 30min	n/a	n/a
D	10 hrs 50min	9 hrs 10min	9 hrs 10min	4 hrs 40min	n/a	n/a
<b>NCS</b>	<b>10 hrs</b>	<b>8 hrs 45min</b>	<b>7 hrs 30min</b>	<b>5 hrs</b>	<b>4hrs 30 min</b>	<b>4 hrs</b>

Fieldworkers walked around the school looking into classrooms to determine how many classrooms were actively involved in teaching and learning activities. They found only one school where learning was taking place in all of the classrooms. School A and B had a few teachers absent from the classroom and learners were left unsupervised. However, in School D, the majority of the classrooms observed did not have a teacher in them. Fieldworkers also checked the teachers register in each of the schools they visited. They collected teacher absenteeism data by recording the number of teachers that were absent on the day of the visit, three days before the visit, two weeks before the visit, and one month before the visit. They found that teacher absenteeism was a big problem in School B and perhaps a minor problem in School A or D. While the fieldworkers were at the schools they also noted whether classes began and ended on time. This was not a problem at any of the schools. Lastly, fieldworkers asked principals whether teaching time is frequently lost at their schools and only School B replied that it was.

Table 42: Other practices relating to teaching time in the school

School	Number of classrooms with teachers teaching	Number of classrooms without a teacher	Total number of classrooms observed	Avg. number of teachers absent per day	Classes were on time	Teaching time is frequently lost
A	5	2	7	1.5	Yes	No
B	5	1	6	4.7	Yes	Yes
C	8	0	8	0	Yes	No
D	4	5	9	1	*	No

\* Could not be determined from the fieldworkers' visit.

Principals are ultimately responsible for creating and maintaining an environment that is conducive to learning in their schools. In their visit, fieldworkers recorded the number of learners roaming during class time, learner behaviour, noise levels, the care given to LTSM, classroom furniture, and school grounds, and based on all the information collected from their visit rated the functionality of the school. Results are shown in the table below.

Table 43: Learning environment and functionality

School	Learners roaming	Learner behaviour	Noise level	Care for books and LTSM	Care for classroom furniture	Care for grounds and buildings	Functionality rating
A	> 10	adequate	reasonable	mixed	mixed	adequate	good
B	> 10	adequate	reasonable	adequate	adequate	mixed	good
C	0	excellent	reasonable	adequate	adequate	adequate	very good
D	< 10	poor	unreasonable	*	poor	poor	poor

\* Could not be determined from the fieldworkers' visit.

With the exception of School C, it was common to see learners roaming the school grounds during class time. This was particularly a problem in School A and B where more than 10 learners were found outside of class. Learner behaviour was adequate in School A and B, excellent in School C, and poor in School D. Noise levels were only unreasonable in School D, where learners roam the school, behaviour is poor, and many teachers are absent from the classroom. Care for the physical resources of the school also varied. They were best in School C and poorest in School D.

Overall, the functionality of the schools can be summarized by the fieldworkers' ratings. School C was given the highest rating of very good functionality. The fieldworker further adds that the principal is new, dynamic, committed, and is pushing the school forward. School A and B were given the rating of good. The fieldworker noted that in School A there was a distinct difference between the Foundation Phase and Intermediate and Senior Phase. Whereas Foundation Phase classrooms were very neat and print rich, Intermediate and Senior Phase classrooms had little to no displays and furniture was poorly taken care of. In School B, the fieldworker noted that a few teachers stood around outside after the start of class for a long time. School D received the poorest rating for functionality. Troubles noted by the fieldworkers also derived from the Intermediate Phase, as there were very few teachers in classrooms. The 40 minute principal interview was also interrupted 8 times suggesting that school operations were not running smoothly.

One aspect of the learning environment that is beyond the school's immediate control is safety. Schools must be a place where both staff and learners feel safe so that they can properly devote themselves to the central task of teaching and learning. To determine if safety and security was a problem in the school, we asked school principals to recall the number of times the school experienced vandalism, theft, or assault this year. Every school reported

several incidents, but the problem is greatest in two schools. In the high school there were 15 accounts of vandalism, 4 accounts of theft, and way over 1,000 accounts of assault in 2010.

Table 44: Number of safety and security incidents in 2010

School	Vandalism	Theft	Assault
A	1	1	3
B	15	4	1600*
C	> 10	0	5
D	3	3	0

\* More than 4 a day

Research tells us that the culture of the school and the relationships between the various stakeholders is very important. Schools should have a caring culture that supports hard work, has high expectations of teachers and learners, promotes collaboration, and acknowledges success. The focus at the school should be around teaching and learning and it is the management's responsibility to foster and nurture this kind of environment. With the exception of Principal B, principals tended to be quite positive about the culture in their schools. They believed their schools had a shared sense of purpose, valued hard work and discipline, and that their staff trusted, collaborated, and felt supported by one another. In addition, all principals felt there was agreement between staff and management over how to improve learner results. The positive atmosphere depicted by the principals should also make it easier to introduce change and receive support for it. Lastly, it should be noted that schools struggled the most with creating effective partnerships to support learner achievement.

Table 45: School culture

School	Shared sense of purpose	Hard work and discipline are important	Culture of trust and collaboration	Teachers work together and help each other	Staff and management agree about improving learner results	Staff feels valued and supported	Effective partnerships exist to support learner achievement
A	Yes	Yes*	Yes*	Yes*	Yes	Yes*	Yes
B	No	Yes	No	No	Yes *	Yes	No*
C	Yes	Yes	Yes	Yes	Yes	Yes*	No
D	Yes	Yes*	Yes*	Yes*	Yes*	Yes*	Yes*

\* Principal strongly agreed or disagreed to the statement

Successful schools focus on raising achievement levels and excellence in any context. For this reason principals were asked about learner performance in their schools and whether it had improved, remained the same, or declined in the past three years. In order to formulate a strategic plan to improve learner achievement and gather support, principals would need to be aware of the systemic test and matric results. Since most of the principals were new to the post, principals did not really know how results had changed over the years. It would have been better to ask principals if they knew the systemic results for their schools, how they compared to the district or provincial average, and if they had a plan to describe how they intended to improve learner results. Results from the 2010 systemic test as well as the matric results should be obtained to determine if any improvement took place. The table shows the relevant school data we have collected so far. In the majority of cases, schools have performed below the provincial mean.

Table 46: Learner performance

School	District	Quintile	Ex-dept	Grade 3 2008		Grade 6 2009	
				Lit	Num	Lang	Maths
A	M. East	5	HOR	69%	35%	44%	53%
B*	W. Coast	3	HOR				
C	M. South	4	HOR	55%	26%	39%	51%
D	M. South	2	DET	56%	26%	28%	36%
<b>Provincial average</b>				<b>72%</b>	<b>43%</b>	<b>59%</b>	<b>40%</b>

\* School B is a secondary school

In summary, curriculum management practices vary widely in the four schools. Nevertheless, findings suggest that there are still improvements to be made in all of the schools. Most importantly, principals need to put systems in place to assure that teachers and learners are in class, on time, and that time is used effectively to cover the whole curriculum with the appropriate depth.

### **Impact on curriculum management practices**

According to the four principals, the CTLI Principal course had a significant impact on their understanding of curriculum management. Three of the four principals strongly agreed that the CTLI course improved their knowledge of their role as manager of the curriculum, the curriculum itself, and curriculum planning, while all principals strongly agreed that it improved their knowledge of curriculum implementation, monitoring, and evaluation. In addition, principals added that they obtained a better understanding of obstacles facing Western Cape schools, changes made to the curriculum, and were able to improve their time management skills as a result of the course.

Upon their return to schools, all principals were able to share what they had learnt with their colleagues. Most principals held a formal meeting with their School Management Team and briefed the whole staff at a staff meeting. Principals have also begun to implement the three changes they wrote about in a course assignment in addition to others. These changes include making curriculum plans, improving communication and collaboration amongst staff, re-visiting school policy, building relationships with the community, discussing what is expected of educators, school management procedures, as well as stimulating discussion on pedagogic issues. Their individual responses are shown in the table below.

Table 47: Changes implemented at the school

School	Change	Description
A	1	<b>Curriculum planning</b> for the whole year, including an assessment programme to inform parents. This has been implemented 70%. It will be in the 2011 year plan.
	2	<b>Community relationships</b> , especially parents, social service departments, sports, and religious structures. Has attended meetings and engaged with SAPS social workers and an NGO.
	3	<b>Motivating teachers</b> . Had discussions about attitude, work ethics, resolution 6 & 7 of the Schools Act, job descriptions, and corporal punishment. Teachers are more aware about these issues- now it must be captured in school policies and discussed with Labour relations.
	Other	<ul style="list-style-type: none"> <li>• <b>Revisiting policy:</b> vision and mission statements, school safety, and admissions.</li> <li>• <b>Principal's accountability.</b></li> <li>• <b>Engage with SGB</b> on an informed basis.</li> </ul>
B	1	<b>Budgeting</b> . It's not optimal yet, but there has been a great improvement. The whole staff has bought in.
	2	<b>Analysis of results</b> . Teachers in each subject had to formulate action plans for the remainder of 2010. This is in progress but success can only be measured at the end of 2010. Big improvement in Gr.12 already.
	3	<b>Workshop on learning styles</b> . It hasn't started yet but will be addressed in the last week of 2010 or early 2011.
	Other	Teachers to be deployed across both phases to <b>distribute workload</b> more evenly.
C	1	<b>Meetings</b> to take place in smaller groups in grades, subjects, and phases. The process has begun in the subjects so far.
	2	<b>Using staff knowledge and creativity</b> as a resource in the curriculum. Process has begun and is very fruitful.
	3	Changing <b>learning styles</b> . Will begin next year.
	Other	Addressed HODs in the Intermediate Phase about <b>better leadership and accountability</b> .
D	1	<b>Curriculum</b> . English to be formal from Grade 1. This will be implemented next year.
	2	<b>Cooperative learning</b> . Teachers are working on this.
	3	<b>Involvement of the community</b> . Have interacted and reported to parents.
	Other	Control of <b>teachers' register and absenteeism</b> .

The principal at School C is the only one that did not encounter any difficulties implementing changes in the school. Two principals mentioned encountering resistance and reluctance by a minority of teachers. The other principal reported having to delay his implementation plans due to the public servant strike. Finally, fieldworkers asked principals what was the biggest problem they faced in their school. Principals mentioned teacher absenteeism, poor relations amongst some teachers, lack of parental involvement, and gangs. These responses are interesting because three of these principals reported problems that other principals had addressed after their course, but they themselves believed there was nothing they could do about it. For example, the principal in School A reported that teacher absenteeism was his biggest problem, yet he did not have any intention of addressing it after the course. On the other hand, the principal in School D mentioned taking control of the teacher's register and absenteeism as a result of the course.

In summary, the CTLI principals course has made a significant impact on its participants. Principals have learned a lot from the course and are bringing about change to improve the quality of teaching and learning at their

schools. At the same time, findings suggest that principals may not be changing the aspects of school that are most problematic and require it the most. It is unfortunate that the majority of principals have not learnt ways to address their biggest challenges whereas other course participants have tackled these same problems as a result of the course. It indicates that course participants are not learning everything they could from the training. The course can improve by helping principal's reflect upon and address their biggest challenges at school. It is also recommended that principals share with each other what they intend to change and how they plan to do it, that they may obtain support from others facing similar problems and further learn from one another.

## 5.2.2 Foundation Phase Literacy

### How much are they writing in the classroom?

On average, learners had written 92 lessons by the beginning of November, meaning they had written about once every other day. Only one learner book out of 16 showed evidence that learners were writing every single day as expected. Almost two thirds of the lessons examined were a page in length; the remaining lessons were either half a page or more than a full page. Results suggest that on average, there is more writing in the third grade classroom. However, some Grade 1 learners wrote considerably more at an earlier age.

Table 48: Frequency of writing per year in Foundation Phase Literacy

Grade	Teacher	Total number of lessons	Percentage of lessons that were				Total number of pages
			¼ pg	½ pg	1 pg	1 ½ pg	
1	A	47	0%	100%	0%	0%	
	B	79	1%	33%	66%	0%	72
	C	80	0%	11%	81%	8%	
	D	65	5%	5%	60%	31%	101
	E	76	3%	12%	62%	24%	101
	F	80	6%	19%	58%	18%	103
	G	106	4%	6%	61%	29%	153
	H	178	2%	16%	63%	18%	192
2	I	58	0%	0%	90%	10%	61
	J	85	1%	45%	45%	9%	65
	K	75	0%	0%	85%	15%	82
	L	101	0%	27%	48%	26%	101
	M	113	0%	0%	94%	6%	113
3	N	61	0%	2%	16%	82%	120
	O	88	1%	13%	48%	39%	133
	P	123	0%	0%	73%	27%	146
<b>AVG</b>		<b>92.0</b>	<b>1%</b>	<b>18%</b>	<b>59%</b>	<b>21%</b>	110.2

Note: Figures in italics have not been used to calculate the average. These learner books were not dated from January, thus it represents an incomplete picture of the learner's work.

### What literacy topics are Foundation Phase learners writing about?

In the learner books, fieldworkers were asked to distinguish between exercises covering different assessment standards. Every lesson that contained at least one instance of an assessment task received one mark. For thinking and reasoning skills, fieldworkers looked for examples of sequencing and sorting of pictures. For language structures, fieldworkers looked for phonics, words (spelling, vocabulary, sight words), and grammar exercises. For writing, fieldworkers recorded when lesson contained a drawing, handwriting practice, writing

that was copied by the child (transcription), sentences or paragraphs that were composed by the child, as well as when there was evidence of the writing process (pre-writing, writing, revision). Fieldworkers recorded written comprehension exercises separately, and differentiated between one-word responses, full-sentence responses, and responses that were elaborated in a paragraph. Finally, they recorded instances when learners worked with tables, graphs and mind maps. If a lesson contained an exercise that featured several assessment tasks, each was recorded separately.

Results show that the majority of written work in the Foundation Phase classroom focuses on language structure and use (Learning Outcome 6). Grade 1 learners work predominantly on phonics, Grade 2 learners on spelling, vocabulary, and sight words, and Grade 3 learners on grammar. Grade 1 learners work on phonics about once a week, which is twice as much as Grade 2 and 3 learners. Grade 2 learners are the only group working on word related topics close to once a week, although it is important for all grades. Grammar exercises tend to be quite rare in Grade 1 and 2 (only 6 instances found throughout the year), but increase significantly to once a week in Grade 3.

Learners have very few opportunities to do their own real writing. On average, learners wrote their own sentences only 10 to 13 times a year and considerably less their own paragraph. More than half of the learner books examined did not contain a single paragraph written by the learner. Equally rare are written comprehension exercises, with the exception of a few schools. When these two figures are combined, we see that Grade 1 learners express themselves through writing less than once every two weeks, Grade 2 learners slightly more than once every two weeks, and Grade 3 learners only once a week. Handwriting practice is the most common form of writing, although it still only happens once every 6 school days. Transcription is also quite prevalent in some schools.

It is a concern that children seldom write in a meaningful and purposeful way. It is critical that they learn to express their thoughts and develop them through writing, but they are getting very little practice at school. Children are spending most of their time learning the structures of the language, which is of little value if children cannot apply it to their own writing. Results from the teacher tests showed a similar weakness in Foundation Phase teachers. While they were better prepared to complete a grammatical exercise correctly, few teachers could write a sentence that did not contain a grammatical mistake. The CTLI Literacy course should show teachers how to use journals in their classroom and encourage their daily use. This way, children can dramatically increase their practice of this essential skill.

Lastly, learner books showed little evidence that children were working with simple graphical forms such as charts, timelines, graphs, tables, and mind-maps. This finding is not surprising since many teachers also struggled to complete a table and create a mind-map in the curriculum test. Until teachers understand how to organize and interpret information, we cannot expect them to teach this to their learners.



Table 49: Number of lessons per year covering assessment standards in thinking and reasoning, language structures, and writing

Grade	Teacher	Thinking and reasoning and language structures					Writing						
		Sequences/ sorts pictures	Phonics	Words	Grammar	Total	Drawing	Handwriting	Transcription	Writes own Sentence	Writes own paragraph	Writing process	Total
1	A	0	13	6	0	19	0	17	12	0	0	0	29
	B	3	35	35	14	87	15	2	30	5	14	0	66
	C	9	24	14	0	47	7	25	0	0	0	0	32
	D	12	31	10	0	53	5	14	16	14	0	0	49
	E	10	19	15	0	44	4	22	6	9	0	0	41
	F	1	55	9	7	72	9	50	3	12	0	0	74
	G	4	39	35	5	83	32	35	12	29	5	0	113
	H	9	51	35	22	117	11	30	5	12	0	0	58
2	I	0	12	17	5	34	1	8	9	9	4	0	31
	J	1	18	39	4	62	0	5	11	12	0	0	28
	K	0	15	24	3	42	0	0	3	14	1	0	18
	L	0	29	47	8	84	0	69	10	3	0	0	82
	M	2	20	22	12	56	1	11	0	22	7	4	45
3	N	0	15	13	48	76	0	26	11	14	3	0	54
	O	0	9	10	32	51	3	25	4	15	17	0	64
	P	6	28	21	18	73	1	24	4	12	0	0	41
AVG	Gr. 1	6.0	33.4	19.9	6.0	65.3	10.4	24.4	10.5	10.1	2.4	0.0	57.8
	Gr. 2	0.6	18.8	29.8	6.4	55.6	0.4	18.6	6.6	12.0	2.4	0.8	40.8
	Gr. 3	2.0	17.3	14.7	32.7	66.7	1.3	25.0	6.3	13.7	6.7	0.0	53.0

Table 50: Number of lessons per year covering assessment standards in comprehension and non-text

Grade	Teacher	Written comprehension				Non-text		
		Words	Sentence	Paragraph	Total	Tables/ graphs	Mind- maps	Total
1	A	0	0	0	0	0	0	0
	B	0	0	0	0	0	0	0
	C	0	0	0	0	0	0	0
	D	0	0	0	0	0	0	0
	E	0	0	0	0	0	0	0
	F	2	4	0	6	0	2	2
	G	8	1	0	9	0	0	0
	H	0	0	0	0	0	0	0
2	I	2	0	0	2	0	0	0
	J	7	6	0	13	0	0	0
	K	1	4	0	5	0	0	0
	L	0	0	0	0	0	0	0
	M	0	13	0	13	0	4	4
3	N	8	3	4	15	1	2	3
	O	7	15	3	25	0	3	3
	P	8	4	3	15	0	1	1
Avg.	Gr. 1	1.3	0.4	0.0	1.3	0.0	0.3	0.3
	Gr. 2	2.0	4.6	0.0	6.6	0.0	0.8	0.8
	Gr. 3	7.7	7.3	3.3	18.3	0.3	2.0	2.3

### **Impact on classroom practice**

According to the teachers, the CTLI Literacy course improved teachers' content knowledge and pedagogy, although it had a bigger impact on the latter. Whereas two thirds of the teachers strongly agreed that CTLI had helped to improve their pedagogy, only half strongly agreed that the course had helped to improve their content knowledge. All fifteen teachers responded that they had been able to apply what they learnt in class. The most common response, given by half of the teachers, was that they had applied the reading methodologies systematically in their classroom. These methodologies include shared, guided, group, and independent reading. Close to half of the teachers also mentioned applying methods that develop learners' cognitive skills. A few had implemented the use of mind maps to plan writing, a few others had learnt to set tasks or ask questions that required more than one-word answers. This is especially valuable, as the development of higher order skills is a major problem for most South African classrooms. Finally, a few teachers commented having been able to make and improve on their classroom resources as a result of the CTLI course.

All teachers also prepared work for their learners to do while they attended training. However, a third of the responses given showed that teachers had not prepared adequately and left learners too little to do in the span of two weeks. Aside from the strike that took place during Block 2, all teachers reported that the work they had assigned was completed while they were away.

Regarding the learner books, half of them showed evidence that the quantity of writing had increased after the training, while the other half either decreased or remained somewhat constant. Thus, it is not clear whether the course had an impact on how much learners write. What is certain is that the amount of writing did not decrease while the teachers attended the training. There was only one case where the teacher had mentioned that the substitute had been unsuitable and in fact very little work was completed during that time.

Overall, the CTLI course seems to have made a positive impact on classroom practice. Teachers have implemented the reading methodologies learnt at the training as well as other methods that promote learners' thinking. Although there is inconclusive evidence that the training increased the quantity of learner writing, findings suggest that at least the quantity did not decrease while the teachers attended the training. All teachers had worked prepared for their learners, who wrote an average of three fourths of a page per day while the substitute was there.

### 5.2.3 Foundation Phase Numeracy

#### How much are they writing in the classroom?

On average, learners had written 74.5 lessons by the beginning of November, meaning they had written a little more than twice a week. No learner book even came close to showing evidence that learners were writing every single day. In Grade 1, the majority of lessons examined were a full page (84%), whereas in Grade 2 and 3, half of the lessons were a full page and a little more than a third were a page and a half. Thus, on average, the amount of writing happening daily increased from Grade 1 to Grades 2 and 3. Looking at the total number of pages completed, it is worrying to find that some learners are writing half as much as other learners in other schools. This lack of writing will deprive learners of much needed practice that is required in mathematics.

Table 51: Frequency of writing per year in Foundation Phase Numeracy

Grade	Teacher	Total number of lessons	Percentage of lessons that were				Total number of pages
			¼ pg	½ pg	1 pg	1 ½ pg	
1	A	50	2%	12%	80%	6%	50
	B	44	0%	25%	73%	2%	61
	C	58	0%	10%	90%	0%	71
	D	82	0%	26%	73%	1%	72
	E	70	0%	16%	81%	3%	73
	F	106	0%	9%	91%	0%	102
	G	103	0%	0%	100%	0%	103
2	H	90	0%	13%	52%	34%	132
3	I	70	0%	39%	46%	16%	66
	J	61	0%	0%	51%	49%	70
	K	70	0%	10%	44%	46%	99
	L	73	0%	3%	73%	25%	101
	M	91	2%	13%	42%	43%	153
<b>AVG</b>		<b>74.5</b>	<b>0%</b>	<b>14%</b>	<b>69%</b>	<b>17%</b>	<b>88.7</b>

#### What numeracy topics are Foundation Phase learners writing about?

Fieldworkers examined the numeracy books for content and marked the different assessment standards covered in each lesson. To simplify data collection and interpretation, assessment standards were grouped together and when they appeared in a lesson received one mark. For addition and subtraction, only the highest item was placed (1 digit, 2 digit, or 3 digit). In the case of word problems, both the operation and the fact that it was a word problem received a mark.

Results show that about 85% of the work done by Foundation Phase learners is based on Learning Outcome (LO)1- numbers, operations, and relationships. According to the NCS, LO 1 is only supposed to account for 55% of their time yet learners are spending almost all of their class time on it. Grade 1 work is dominated by counting, naming numbers, addition and subtraction. Few books show that learners are building up and breaking down

numbers, doubling and halving, or using number lines, which would help learners solidify the concept and characteristics of numbers. With the exception of one school, word problems are also a rarity. At the same time, some Grade 1 learners are tackling more advanced assessment standards such as fractions, multiplication, and division. Given the little amount of work they complete in a year, it is unlikely that these learners would have developed a strong numerical foundation required to grasp these topics. Their early introduction might be very detrimental, as learners are likely to become confused and discouraged.

The Grade 2 learner book resembles those from Grade 1. The only differences are that learners do more building and breaking down of numbers, more two digit sums, and more work with fractions, multiplication, and division, which is expected at this grade. Word problems are still alarmingly low (1 instance in the whole year) and place value is hardly touched upon. Grade 3 learners, on the other hand, do a little bit of everything in LO 1. Similar to Grade 1, the amount of work covered by different learners in different schools is radically different. The learner in Teacher L or M's class got about three times more practice on every assessment standard in LO 1 than the best learner in Teacher I or J's class and will be better prepared to advance in mathematics.

Table 52: Number of lessons per year covering assessment standards in LO 1

Grade	Teacher	Count and name numbers	Order and compare numbers	Order and compares fractions	Build/break numbers	Place value	Rounding	Number line	Add subtract (1 digit)	Add subtract (2 digit)	Add subtract (3 digit)	Multiplication	Division	Word problems	Total LO1
1	A	29	1	1	0	0	0	0	15	0	0	1	1	1	49
	B	13	7	1	0	0	0	0	1	7	0	2	1	1	33
	C	26	4	2	2	0	0	2	18	21	0	3	3	1	82
	D	13	6	0	5	0	0	0	26	26	0	6	5	16	103
	E	36	0	0	2	0	0	0	19	15	0	0	3	2	77
	F	36	16	0	7	0	0	0	7	5	0	0	0	2	73
	G	22	8	0	8	0	0	10	18	13	0	0	0	5	84
2	H	27	9	8	19	1	0	2	11	45	5	14	9	1	151
3	I	6	1	0	8	12	0	8	1	16	11	8	3	5	79
	J	17	1	7	12	1	1	6	2	3	1	3	1	13	68
	K	19	2	8	7	15	5	1	0	16	12	16	7	10	118
	L	14	5	14	13	11	7	1	0	4	18	28	28	46	189
	M	39	22	7	22	23	12	2	0	8	19	35	40	17	246
AVG	Gr.1	25.0	6.0	0.6	3.4	0.0	0.0	1.7	14.9	12.4	0.0	1.7	1.9	4.0	71.6
	Gr. 2	27.0	9.0	8.0	19.0	1.0	0.0	2.0	11.0	45.0	5.0	14.0	9.0	1.0	151.0
	Gr. 3	19.0	6.2	7.2	12.4	12.4	5.0	3.6	0.6	9.4	12.2	18.0	15.8	18.2	140.0

The NCS states that forty-five percent of the time should be spent working on LO 2-patterns, functions, and algebra, LO 3- space and shape, LO 4- measurement, and LO 5-data handling. Nevertheless, with few exceptions, these topics are rarely touched upon in the Foundation Phase. In particular, Grade 1 learners seldom do any work on space and shape, measurement, and data handling; Grade 2 learners on patterns, space and shape, and measurement; and Grade 3 learners on patterns, space and shape, and data handling. Overall, Foundation Phase learners are receiving least exposure to geometric concepts. Having built no base in LO 3, learners are likely to struggle with this area in the future.

Table 53: Number of lessons per year covering assessment standards in LO2, LO 3, LO 4, and LO 5

Grade	Teacher	Figure patterns	Number patterns	Total LO2	Names of shapes	Symmetry	2D vs 3D	Maps	Total LO3	Time	Standard measures	Word problems with measurement	Total LO4	Collects /organizes data	Makes graphs	Interprets data	Total LO5
1	A	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0
	B	0	0	0	3	0	0	0	3	0	0	0	0	0	0	0	0
	C	2	0	2	1	0	0	0	1	0	1	1	2	0	2	3	5
	D	0	9	9	0	0	0	0	0	2	3	0	5	0	3	1	4
	E	0	8	8	3	2	0	0	5	0	1	1	2	0	0	0	0
	F	10	2	12	0	0	0	0	0	1	1	0	2	0	4	0	4
	G	7	13	20	4	1	1	0	6	0	0	0	0	0	0	0	0
2	H	1	0	1	4	1	0	0	5	2	4	3	9	3	2	4	9
3	I	0	6	6	4	1	0	0	5	4	0	0	4	0	1	0	1
	J	0	0	0	1	0	0	0	1	6	1	0	7	1	0	0	1
	K	0	12	12	2	3	3	0	8	4	6	6	16	1	1	3	5
	L	1	5	6	1	1	0	0	2	6	8	18	32	1	2	2	5
	M	5	9	14	0	1	0	0	1	6	5	14	25	1	1	1	3
AVG	Gr.1	2.7	4.6	7.3	1.7	0.4	0.1	0.0	2.3	0.4	0.9	0.3	1.6	0.0	1.3	0.6	1.9
	Gr. 2	1.0	0.0	1.0	4.0	1.0	0.0	0.0	5.0	2.0	4.0	3.0	9.0	3.0	2.0	4.0	9.0
	Gr. 3	1.2	6.4	7.6	1.6	1.2	0.6	0.0	3.4	5.2	4.0	7.6	16.8	0.8	1.0	1.2	3.0

### Impact on classroom practice

According to the teachers, the CTLI Numeracy course had a significant and positive impact on teachers' content knowledge and pedagogy. Practically all teachers strongly agreed that CTLI had helped to improve their content knowledge as well as their teaching practice. All teachers also said they had been able to apply what they learnt in class, including new methods, strategies, and activities for teaching particular topics. Common responses were doing more counting in the classrooms to support learners' understanding and doing measurement practically. A few teachers also mentioned being better able to teach and explain LO3, LO2, and LO5. It is interesting to note, however, that these comments are not reflected in the learners' books. Few instances of work, if any, were found in books where the teacher had specifically mentioned changing their practice around LO 2, 3, 4, and 5. This could mean that the teacher is assigning little to no written work for these topics, or had it not been for CTLI these topics would not have been covered at all.

All teachers responded that they had prepared work for their learners to do while they attended training. However, close to a fourth of the teachers specified that the substitute teacher had to prepare all or part of the work. It is clearly not acceptable to pass this responsibility on to the substitutes who are less likely to know what learners should do, at what pace they should be working, and may not even bother doing it all. Nevertheless, the majority of teachers commented that the work they had assigned was completed. The teachers that responded that work was only partly completed mentioned that it was a result of the strike, not the substitute.

Regarding the learner books, the quantity of writing increased in five books, decreased in six books, and remained constant in one book. Results are thus inconclusive. What is certain is that the amount of writing did not tend to decrease while the teachers attended the training. There was only one case out of 12 where no written work was completed during the training. Overall, the CTLI course seems to have made a positive impact on classroom

practice even though it is not necessarily reflected in the learners' books. Furthermore, there is evidence that the training is not impacting the learners' negatively by removing the teacher from the classroom for 4 weeks.

### 5.2.4 Intermediate Phase Language

#### How much do IP Language learners write in the classroom?

Writing in the Intermediate Phase language classroom happens seldomly and dramatically decreases from the Foundation Phase. On average, learners had written 51.4 lessons by the beginning of November, meaning they had written one and a half times every week. Only one book showed evidence that learners had written once every other day, whereas learners are expected to be writing every single day. Grade 6 lessons tend to be longer than those in Grade 4 or 5. Lessons in Grade 6 tended to be a full page in length whereas lessons in Grade 4 and 5 tended to be either half a page or a full page. There were also 4 teachers in the sample (22%) whose learners wrote a few quarter page lessons, which is worrying given how infrequently they write in the first place. Even though much more is required of learners in the Intermediate Phase, by the end of the year Intermediate Phase learners had written an average of 58 pages in comparison to 110 pages in the Foundation Phase. A further cause for concern is that some learners are writing significantly less than their peers in other schools. In Grade 4, 5, and 6, there are learners who are writing up to four times less and as little as 20 or 25 pages a year.

Table 54: Frequency of writing per year in Intermediate Phase Language

Grade	Teacher	Total number of lessons	Percentage of lessons that were				Total number of pages
			¼ pg	½ pg	1 pg	1 ½ pg	
4	A	45	0%	69%	27%	4%	35
	B	48	2%	19%	56%	23%	48
	C	70	10%	40%	39%	11%	51
	D	34	3%	35%	41%	21%	63
	E	69	7%	67%	25%	1%	68
	F	67	1%	24%	61%	13%	83
5	G	33	0%	94%	6%	0%	20
	H	58	7%	64%	24%	5%	48
	I	66	0%	17%	82%	2%	66
6	J	32	16%	44%	41%	0%	25
	K	30	0%	27%	53%	20%	35
	L	43	0%	26%	49%	26%	49
	M	42	5%	19%	19%	57%	58
	N	58	0%	17%	47%	36%	76
	O	87	0%	25%	64%	10%	82
	P	31	0%	29%	39%	32%	87
Q	78	0%	21%	55%	24%	92	
7	R	35	0%	20%	49%	31%	58
<b>AVG</b>		<b>51.4</b>	<b>3%</b>	<b>36%</b>	<b>43%</b>	<b>18%</b>	<b>58</b>

#### What language topics are Intermediate Phase learners writing about?

Similar to the Foundation Phase, the majority of written work in the Intermediate Phase is concentrated around language structures and grammar. This is especially true for Grade 4 and 5, where learners work on language structures three times more often than they work on writing or comprehension. Whereas Grade 4 and 5 learners had completed an average of 37 exercises on language structures, they had completed only 5 written tasks (mostly writing their own sentence) and 9 comprehension tasks. Writing and comprehension tasks increase in

Grade 6, but remain below expectations. Throughout the year, there were five occasions where learners wrote their own sentence, 4 occasions where they wrote their own paragraph, and 3.5 occasions where they wrote a page or more. On average 12 comprehension exercises were found in the Grade 6 books. These figures suggest that Grade 6 learners work on written tasks or comprehension less than once every two weeks. Moreover, only 5 books in the whole sample (30%) showed evidence that learners had engaged in the writing process. Yet even in these books, learners had only engaged in the writing process an average of two times throughout the year.

Intermediate Phase learners are also getting very little practice working with non-text items. A little more than a third had a couple examples of mind maps and even fewer had a single example of a table or a graph. This finding is not surprising given the difficulty teachers experienced working with graphs in the curriculum test. If teachers do not understand how to create and talk about graphical information, it is unlikely their learners will know either.

Overall, Intermediate Phase learners are doing very little writing, but the little they are doing is focused on vocabulary and grammar and not on how to apply these to their own writing. The number of written tasks must increase in this phase to enable learners to reflect and express themselves through writing, which should be scaffolded via the writing process. Lastly, it is important for learners to receive a little more exposure to non-text items.

Table 55: Number of lessons per year covering assessment standards in language structures and writing

Grade	Teacher	Language Structures			Writing						
		Words	Grammar	Total	Handwriting	Transcription	Writes own Sentence	Writes own paragraph	Writes own page or more	Writing process	Total
4	A	9	19	28	0	1	0	2	0	1	4
	B	1	35	36	0	4	2	1	1	1	9
	C	10	39	49	1	4	7	1	0	0	22
	D	8	23	31	1	2	1	0	0	0	4
	E	25	17	42	0	0	3	0	0	0	3
	F	15	31	46	0	3	8	6	2	0	19
5	G	5	29	34	0	0	0	1	0	0	1
	H	8	21	29	1	1	4	1	3	2	12
	I	18	19	37	3	3	2	7	0	4	19
6	J	8	11	19	0	0	3	2	0	0	5
	K	4	9	13	0	0	5	2	3	0	10
	L	7	13	20	0	0	4	3	4	0	11
	M	11	19	30	0	4	1	1	1	0	7
	N	9	31	40	0	4	1	10	15	0	30
	O	17	17	34	0	6	18	5	0	2	31
	P	5	15	20	0	7	0	0	0	0	7
Q	22	19	41	0	2	11	9	5	0	27	
7	R	8	12	20	0	0	2	2	0	0	4
AVG	Gr. 4	11	27	39	0.3	2.3	3.5	1.7	0.5	0.3	10
	Gr. 5	10	23	33	1.3	1.3	2	3	1	2	11
	Gr. 6	10	17	27	0	2.9	5.4	4	3.5	0.3	16
	Gr. 7	8	12	20	0	0	2	2	0	0	4

Table 56: Number of lessons per year covering assessment standards in written comprehension and non-text

Grade	Teacher	Written comprehension				Non-text			
		Words	Sentence	Paragraph	Total	Tables/ graphs	Mind- maps	Drawing/ Collage	Total
4	A	5	2	0	7	1	0	0	1
	B	4	8	2	14	0	4	1	5
	C	5	11	0	19	0	3	1	4
	D	0	2	0	2	0	0	0	0
	E	11	5	1	17	1	0	0	1
	F	7	5	0	12	1	1	8	10
5	G	0	2	0	2	0	0	0	0
	H	4	2	0	6	0	0	0	0
	I	2	7	0	9	0	2	2	4
6	J	2	1	0	3	0	0	1	1
	K	3	3	1	7	0	1	0	1
	L	5	8	0	13	0	0	1	1
	M	0	8	0	8	0	0	0	0
	N	0	6	0	6	0	1	1	2
	O	18	9	0	27	0	3	1	4
	P	0	5	0	5	0	0	0	0
7	Q	6	19	0	25	0	0	3	3
7	R	3	10	0	13	0	0	0	0
AVG	Gr. 4	5.3	5.5	0.5	11.8	1	1.3	1.7	3.5
	Gr. 5	2	3.7	0	5.7	0	0.67	0.7	1.3
	Gr. 6	4.3	7.4	0.1	11.8	0	0.62	0.9	1.5
	Gr. 7	3	10	0	13	0	0	0	0

### **Impact on classroom practice**

All teachers agreed that the CTLI Language course had helped to improve their content knowledge and pedagogy, although teachers felt less strongly than Foundation Phase teachers had felt about their courses. With only one exception, all teachers had also applied what they learnt in class. The CTLI Language course made the biggest impact on reading methodologies. Almost two thirds of the teachers (61%) mentioned having implemented pre-reading, reading, and post-reading strategies or having tried the balance language approach to reading. A little over a fourth of the teachers (28%) had also applied writing methodologies learnt at the course. Teachers mentioned using mind maps to teach the writing process and using writing frames for different genres. Lastly, a few teachers improved their use of resources as a result of the course.

All teachers responded that they had prepared work for their learners to do while they attended training. However, a little more than a fourth of the teachers had prepared too little work or had just given the work schedules to the substitutes for them to prepare. Upon their return to the classroom, teachers generally found that the work they had assigned was completed aside from the teacher strike that took place in Block 2.

Overall, learner books showed no indication of impact on classroom practice. Writing was scarce prior to the start of the training, during the training, as well as after the training. On average learners wrote 1 page every 4 days, which neither decreased with the substitute teacher nor increased after any of the trainings. On the whole, the CTLI Language course seems to have improved reading practices in the classroom. However, results suggests that it has failed to impact on learners' written work which is exceptionally poor and needs the most improvement.



Given that writing levels are so low and remain low while the substitute is present in the class, there is no evidence that removing the teachers from the classroom is impacting the learners negatively.

### 5.2.5 Intermediate Phase Maths

#### How much do IP Maths learners write in the classroom?

On average, learners had written 80.6 lessons by the beginning of November, meaning they had written in their books close to every other day. Only one learner out of 15 came close to having written every single school day as expected. Half of the lessons examined were a full page in length, a little more than a third were half a page, and the remaining few were mostly a page and a half. In total, learners wrote an average of 98 pages throughout the year but there were significant differences among schools. A few learners wrote as little as 44 pages in comparison to their peers who had written as many as 278 pages. These figures suggest that some learners are getting as much as 6 times the practice as other learners, giving them a significant advantage in mathematics.

Table 57: Frequency of writing per year in Intermediate Phase Maths

Grade	Teacher	Total number of lessons	Percentage of lessons that were				Total number of pages
			¼ pg	½ pg	1 pg	1 ½ pg	
4	A	74	0%	46%	50%	4%	65
	B	81	0%	70%	28%	1%	76
	C	120	8%	40%	45%	8%	100
	D	96	0%	44%	39%	18%	104
	E	88	0%	38%	43%	19%	110
	F	107	0%	13%	79%	7%	278
5	G	37	8%	14%	68%	11%	44
	H	76	1%	64%	30%	4%	68
6	I	64	3%	52%	39%	6%	47
	J	52	0%	33%	52%	15%	47
	K	51	16%	29%	45%	10%	54
	L	53	4%	4%	36%	57%	101
	M	82	1%	30%	46%	22%	122
	N	150	0%	25%	56%	19%	186
7	O	78	0%	38%	54%	8%	68
<b>AVG</b>		<b>80.6</b>	<b>3%</b>	<b>36%</b>	<b>47%</b>	<b>14%</b>	<b>98</b>

#### What maths topics are Intermediate Phase learners writing about?

According to the NCS, Intermediate Phase learners should be spending 40% of their time in LO 1- numbers, operations, and relationships, 15% in LO 2- patterns, functions, and algebra, 30% in LO 3- space and shape and LO 4- measurement, and 15% on LO 5- data handling. However, results show that learners spent three quarters of their time in LO 1 and hardly worked on LO 2 and LO 5. Some assessment standards in LO 3 and LO 4 were covered, but insufficient time is dedicated to these topics as well, particularly LO 3.

In LO 1, learners did most of their work on number properties and the four operations. Grade 4 and 5 learners did slightly more work on addition and subtraction than multiplication or division, while Grade 6 and 7 learners worked equally on addition and subtraction (mostly of large numbers) and multiplication. Exercises involving more than one operation (order of operation) were seldom completed in the lower grades but tended to increase with the years. Addition and subtraction of fractions was quite rare although it is required from Grade 4, and only

three learners had attempted it. Also disconcerting was that a few learners had not worked on any word problems the whole year long.

In regards to the other learning outcomes, little evidence of work could be found for LO 2, both in the area of patterns and equations. In LO 3, the little work that learners had done concentrated on naming and describing shapes as well as 2 dimensional vs. 3 dimensional shapes. Few learners had worked on symmetry and hardly any had any practice with transformations or grids. More work was completed on LO 4, particularly in the area of standard measures. Nevertheless, only half of the learners had worked on word problems dealing with measurement, allowing them to apply what they learnt to real world scenarios. Learners do very little in LO 5 and almost nobody addressed probability.

In summary, the learner book analysis suggests that learners are getting the most practice with simple calculations and number properties, which are familiar topics from the Foundation Phase. In contrast, learners are getting the least practice with topics introduced in the Intermediate Phase, such as fractions, equations, transformations, grids, and probability. Without the exposure and practice to these topics, it will be difficult for learners to build a foundation in these areas leaving knowledge gaps that may be hard to overcome in the Senior Phase.

Table 58: Number of lessons per year covering assessment standards in LO 1

Grade	Teacher	Works with fractions, decimals, percent	Equivalent forms of numbers	Build break numbers	Place value	Rounding	Add subtract (less than 4 digits)	Add subtract (more than 4 digits)	Add subtract fractions	Multiplication	Division	Order of operation	Word problems	Total LO1
4	A	4	1	6	4	1	2	9	0	9	3	0	5	44
	B	16	2	0	5	5	9	11	0	5	6	1	8	68
	C	16	9	7	14	12	22	7	0	37	30	0	26	180
	D	10	7	6	7	8	10	5	0	17	13	8	15	106
	E	9	4	5	3	4	17	5	0	9	2	2	4	64
	F	8	3	7	4	0	2	10	0	7	1	0	3	45
5	G	3	0	0	7	5	2	0	0	11	4	4	0	36
	H	3	1	7	4	6	3	18	0	4	0	1	1	48
6	I	14	5	1	14	3	8	8	0	14	9	10	0	86
	J	14	9	0	7	4	2	0	0	7	1	2	0	46
	K	9	1	0	5	1	1	1	0	3	1	1	7	30
	L	17	8	4	1	8	16	8	1	17	7	3	11	101
	M	8	9	0	0	1	0	25	5	5	3	3	9	68
	N	8	16	6	5	3	0	6	4	13	13	5	4	83
7	O	26	6	0	6	2	8	1	0	8	5	11	4	77
AVG	Gr. 4	11	4.3	5.2	6.2	5	10	7.8	0	14	9.2	1.8	10	85
	Gr. 5	3	0.5	3.5	5.5	5.5	2.5	9	0	7.5	2	2.5	0.5	42
	Gr. 6	12	8	1.8	5.3	3.3	4.5	8	1.7	9.8	5.7	4	5.2	69
	Gr. 7	26	6	0	6	2	8	1	0	8	5	11	4	77

Table 59: Number of lessons per year covering assessment standards in LO 2, LO 3, LO 4, and LO 5

Grade	Teacher	Patterns	Equations	Total LO2	Names shapes	Symmetry	2D vs. 3D	Rotations, translations, etc	Grids	Total LO3	Time	Standard measures	Word prob- measurement	Total LO4	Collects/ organizes data	Graphs data	Analyses/ interprets data	Probability	Total LO5
4	A	0	0	0	3	0	3	1	0	7	5	6	0	11	4	2	0	0	6
	B	1	0	1	7	0	0	0	0	7	3	11	0	14	0	0	0	0	0
	C	13	1	14	1	4	7	0	0	12	1	24	9	34	3	3	3	0	9
	D	3	1	4	3	3	6	0	0	12	0	6	7	13	2	2	0	0	4
	E	0	0	0	5	0	4	0	0	9	3	6	0	9	8	0	0	0	8
	F	2	0	2	7	0	3	0	1	11	15	21	1	37	9	4	1	0	14
5	G	0	0	0	0	1	0	0	3	4	0	1	0	1	2	2	1	0	5
	H	0	0	0	6	2	1	1	0	10	1	4	3	8	2	2	3	0	7
6	I	1	1	2	0	1	0	0	0	1	0	1	4	5	1	0	1	0	2
	J	0	0	0	5	0	0	0	1	6	2	3	0	5	0	0	2	0	2
	K	1	0	1	4	1	1	0	0	6	0	3	1	4	0	0	2	1	3
	L	4	0	4	14	1	3	4	0	22	2	11	9	22	0	1	0	1	2
	M	1	1	2	14	0	5	0	0	19	2	1	1	4	2	3	1	0	6
	N	0	0	0	7	0	3	0	0	10	8	2	0	10	2	0	0	1	3
7	O	3	0	3	6	0	0	0	0	6	0	2	0	2	0	1	1	0	2
AVG	Gr. 4	3.2	0.3	3.5	4.3	1.2	3.8	0.2	0.2	9.7	4.5	12.3	2.8	20	4.3	1.8	1	0	7
	Gr. 5	0	0	0	3	1.5	0.5	0.5	1.5	7	0.5	2.5	1.5	4.5	2	2	2	0	6
	Gr. 6	1.2	0.3	1.5	7.3	0.5	2	0.7	0.2	11	2.3	3.5	2.5	8.3	0.8	0.7	1	0.5	3
	Gr. 7	3	0	3	6	0	0	0	0	6	0	2	0	2	0	1	1	0	2

### **Impact on classroom practice**

All teachers agreed that the CTLI Maths course had helped to improve their content knowledge and classroom practice, although teachers felt more strongly about it improving the former. All teachers also reported that they had applied what they learnt in the classroom. The majority mentioned having learnt and implemented better strategies for teaching specific topics such as fractions, multiplication, 3 dimensional shapes, and other neglected topics. Almost half of the teachers admitted to practicing mental maths for the first time although the Foundations for Learning Campaign made it a requirement a few years back. Another group added that they were teaching mathematical concepts more practically now and consequently their learners were understanding the material better. A third of the teachers mentioned making better use of teaching aids and resources, as some teachers did not know how to use the maths kit or select items from textbooks. A few also said it had improved their planning and taught them how to use the WCED work schedule.

All teachers responded that they had prepared work for their learners to do while they attended training. However, one teacher qualified that she had only left planning documents for the substitute teacher, meaning she hadn't really prepared any work. Aside from the disruption caused by the teacher strike in Block 2, all work assigned was completed upon the teachers' return. Thus, according to the teachers, it appears that the learning programme was not jeopardized by the teachers' absence during the training.

Learner books also showed evidence of impact on classroom practice as the amount of writing increased after the training. On average, learners wrote in their books almost twice as much after the training than prior to its start. Whereas learners were completing .29 of a page per day at the beginning of the school year, they were completing .49 of a page after Block 1, and .45 of a page after Block 2. There were only 3 cases (21%) where the rate of writing either decreased or remained constant. Although it is not possible to ascertain whether this favourable change is due to CTLI or another factor, it is likely that the CTLI Maths course contributed to the outcome.

### **5.2.6 Variables linked to classroom writing**

Through the use of descriptive analysis, the study briefly investigated which variables may be related to the quantity of writing in learner books. The variables most strongly related to writing were subject and phase, level at which the class was offered, the school's ex-department, and the school's culture. The greatest amount of writing is happening in the Foundation Phase Literacy classrooms (completed 111 pages in a year), followed by the IP maths and FP numeracy classrooms (completed 98 and 89 pages respectively), and lastly the IP Language classroom (completed 58 pages). Classes being offered at home language level tend to write more than classes offered at first additional language level. On average, home language level classrooms completed 100 pages in a year in comparison to 59 pages in FAL classrooms. In regards to ex-department, learners in the former CED schools completed the greatest number of pages as expected (125 pages in a year) and learners in recently established schools (WCE) completed the least number of pages (64 in a year). The school's culture may also play a factor. Teachers who were very positive about the culture in their school had about 28 more pages of work in their learners' books than teachers who were negative about the environment in which they worked.

In respect to districts, Overberg, Metropole South, and West Coast had the greatest amount of writing books. The number of pages completed in a year ranged from 101 to 127 in comparison to the other districts which ranged from 70 to 84 pages. The school's quintile did not seem to impact on the amount of writing. The three Quintile 1 schools in the study actually had the greatest amount of work in the learner books, followed by Quintile 4 schools, Quintile 5, Quintile 2, and lastly Quintile 3. The teachers' experience and qualifications, systemic test results, and teacher test scores also did not appear to relate to the amount of writing found in the learner books.

## **5.3 Summary of results**

A small sample of participants received school visits to examine school practices and determine if the CTLI course had an impact on them. Results suggest that the Principal as Manager of the Curriculum course had a significant positive impact on principal's knowledge of curriculum management as well as actual practice. At the time of the visit, all principals reported that they had begun to implement a variety of changes that they had reflected upon during the course to improve the quality of teaching and learning at their schools. These changes include making curriculum plans, improving communication and collaboration amongst staff, re-visiting school policy, building relationships with the community, discussing what is expected of educators, school management procedures, as well as stimulating discussion on pedagogic issues. However, responses also suggest that many principals have not been able to use the course to address the biggest curriculum management problems they face at school. The evaluation recommends that course time be used to discuss these issues, that it be incorporated into the course assignment, and implementation plans be shared with all participants.

The school visits also revealed that curriculum management practices varied widely. Schools received functionality ratings ranging from very good to poor, but improvements could be made at all of the schools. One of the biggest problems observed is that time is not used optimally. Two schools had time-tables that did not

respect the minimum time allocations for Literacy/Language and Numeracy/Maths stipulated in the NCS. A few of the schools had classrooms with no teachers during class time and one had teachers that stayed outside and were in no hurry to start the class. Teacher absenteeism seems to be a problem in some of the schools and was as high as 4.7 teachers a day. Only 2 principals knew how many weeks were used in a year to cover the curriculum in their schools. Without this knowledge, it is difficult to ensure that curriculum planning is being done properly at the school. The environment was particularly problematic in one of the schools, as it was not conducive to learning, and the high school struggled to establish a positive school culture amongst its staff and learners.

While we cannot expect struggling schools to turn themselves around in a period of 3 months, the important question that remains is did the CTLI course help principals realize the most important aspects of curriculum management that need to change in their schools and did it arm them with the knowledge and tools to do it. The follow up visit next year will help to answer this question as well as an analysis of learner performance in the coming years.

### **Curriculum courses**

About one third of the teachers that participated in the Foundation Phase Literacy, Foundation Phase Numeracy, Intermediate Phase Language, and Intermediate Phase Maths courses were visited for the study. The purpose of the visit was to learn about classroom practices through the use of a learner book and determine if the CTLI course had made an impact in the classroom.

Learner book results show that there is too little writing happening in the classrooms. The problem is particularly pronounced in Intermediate Phase Language classrooms, where learners are writing half as much as their Foundation Phase counterparts. The quantity of written work also varies drastically for each of the subjects. In the Foundation Phase, some learners are writing three times as much as learners in other schools. The figure becomes worst for the Intermediate Phase. In Language some learners are writing 4 times as much and in Maths they are writing 6 times as much, giving these learners considerably more practice and a greater chance to succeed. Given the low number of pages being written by learners in an entire year, it is not surprising to find out that learners are not writing every day. Learners in Foundation Phase literacy and Intermediate Phase maths do the most amount of writing, yet they are only writing 2.75 and 2.5 times a week respectively.

An analysis of curriculum coverage also reveals that there are problems with what learners are writing about. In literacy and language, the majority of writing deals with language structures and fewer written work comprises of learners' own writing and comprehension exercises. In addition, learners rarely ever engage in the writing process or work with non-text items such as tables, graphs, diagrams, and mind maps. In numeracy and maths, learner books are filled with exercises covering Learning Outcome 1 (although word problems and fractions tend to be neglected). The other learning outcomes, particularly LO 3 (Space and shape) and LO 5 (Data handling), are hardly covered. Findings suggest that learners are passing from grade to grade with significant knowledge gaps, as teachers in all schools and grades tend to ignore the same topics. These knowledge gaps which have been pointed out in the report should be addressed at CTLI.

Table 60: Summary of quantity, frequency, and topics covered in the written work

Course	Quantity of written work			Frequency of written work		Topics covered and number of lessons that covered it
	Total number of pages	Max pages	Min pages	Total number of lessons	Estimated times learners wrote per week	
FP Lit	110	192	61	92	2.75	<ul style="list-style-type: none"> <li>• Language structures (63)</li> <li>• Drawing/handwriting/transcription (37)</li> <li>• Own writing (15)</li> <li>• Comprehension (6)</li> <li>• Non-text (1)</li> </ul>
FP Num	89	153	50	74	2.25	<ul style="list-style-type: none"> <li>• LO 1 (104)</li> <li>• LO 2 (7)</li> <li>• LO 3 (3)</li> <li>• LO 4 (8)</li> <li>• LO 5 (3)</li> </ul>
IP Lang	58	92	20	51	1.5	<ul style="list-style-type: none"> <li>• Language structures (32)</li> <li>• Handwriting/transcription (3)</li> <li>• Own writing (9)</li> <li>• Comprehension (11)</li> <li>• Non-text (2)</li> </ul>
IP Maths	98	278	44	81	2.5	<ul style="list-style-type: none"> <li>• LO 1 (72)</li> <li>• LO 2 (2)</li> <li>• LO 3 (9)</li> <li>• LO 4 (12)</li> <li>• LO 5 (5)</li> </ul>

Regarding impact, all teachers reported that the CTLI course had helped to improve their content knowledge as well as their practice. Teachers who had attended the FP numeracy course felt most strongly about the courses' impact, followed by those who had attended the IP maths course, FP literacy course, and lastly the IP language course. Interestingly enough, the quantity of writing in learners books increased in IP maths, FP literacy, and slightly in FP numeracy. It remained low and did not change in the IP language books. Teachers also talked about what they had implemented in their classrooms as a result of the training. For literacy and language, common responses included reading methodologies and an improved use of resources. For numeracy and maths, common responses included a practical approach to teaching and better explanations/strategies for teaching particular topics that often times had been neglected in the past.

Table 61: Summary of course impact

Course	Percentage who strongly agreed the course improved their		What they implemented in their classrooms	Rate of writing (pages per day)		
	Content knowledge	Classroom practice		Pre training	Post Block 1	Post Block 2
FP Lit	53%	73%	<ol style="list-style-type: none"> <li>1. Reading methodologies</li> <li>2. Methods to develop learners' cognitive skills</li> <li>3. Improved use of resources</li> </ol>	.55	.52	.71
FP Num	92%	77%	<ol style="list-style-type: none"> <li>1. More counting</li> <li>2. Practical approach to measurement</li> <li>3. Better explanations for LO 3, LO 2, and LO 5</li> </ol>	.47	.47	.51
IP Lang	50%	33%	<ol style="list-style-type: none"> <li>1. Reading methodologies</li> <li>2. Writing methodologies</li> <li>3. Improved use of resources</li> </ol>	.28	.28	.27
IP Maths	77%	62%	<ol style="list-style-type: none"> <li>1. Strategies to teach specific topics</li> <li>2. Mental maths</li> <li>3. Practical approach including use of resources</li> </ol>	.29	.49	.45

The study also investigated the effects of taking the teacher out of the classroom for four weeks and did not find any evidence that it was impacting learners negatively. Practically all teachers were able to find suitable substitutes and aside from the teacher strike, all work assigned was completed upon their return. Evidence to support this can also be found in the learner books. Learners actually wrote more pages per day in Block 1 than when their teachers had been teaching in class. However, the study also found that many teachers are not planning adequately and are either leaving insufficient work or expecting the substitute to do the planning for them. To avoid this, CTLI is recommended to provide participants with brief guidelines as to what is acceptable preparation.

Table 62: Summary of effects from the teachers' absence

Course	Found suitable substitute	Work prepared for learners			Rate of writing (pages per day)	
		Adequate	Inadequate	Don't know	Block 1	Block 2
FP Lit	93%	53%	33%	13%	.75	.38
FP Num	92%	61%	23%	15%	.60	.39
IP Lang	89%	67%	28%	6%	.37	.20
IP Maths	95%	81%	6%	1%	.42	.25

Overall, curriculum courses offered by CTLI should address the quantity and frequency of learner writing as well as any knowledge gaps in the curriculum that receive little attention in learner books. Course facilitators should emphasize that learners need to write every day as well as the amount of class work and homework that is appropriate for their grade level. To facilitate this practice, CTLI courses should also allow teachers to discuss why learners are not writing every day and come up with strategies to overcome any challenges. For example, facilitators could explain that not everything written by a learner needs to be marked and discuss how a teacher

would manage this. Facilitators should also address what is an appropriate pace to cover material in a day, as learner books suggests that the pace of learning is too slow in the classrooms. In their discussion, facilitators should brainstorm strategies to deal with multi-grade classrooms and learners with disabilities, in order to keep up the pace. In regards to literacy and language, CTLI courses should also demonstrate and encourage the use of writing journals in the classroom.

Curriculum courses might also find it beneficial to include an assignment where teachers reflect on what they have learnt, what they will implement in their classroom, and how they will do this. The assignment should be about 2 pages in length, to allow for sufficient detail. This can be finished on the final day and discussed with participants. Facilitators would then be asked to provide comments- such as advice, ideas, or things teachers had not thought about, and fax the document back to the teachers. This assignment would ensure teachers think about what they have gotten out of the course, how they will use what they have learned, and give them the opportunity to receive specific feedback on their practice by one of the facilitators. It would also provide valuable data for future evaluations of the course, as evaluators would be able to check if the teacher had implemented those changes.



## 6 Teacher professionalism

Teacher training courses have the potential to improve teachers' professional practices in addition to improving their subject knowledge and pedagogical methods, and it is an explicit aim of the CTLI programme. They can impact on teachers' ethical compartment, can instil the importance of subject knowledge as the foundation for teaching, promote a cooperative style of working both within the school and across institutions, and influence teachers' attitudes and motivation. Not all of these elements were investigated in this study. The evaluation sought to answer two questions:

1. Did CTLI courses improve the attitude and motivation of its participants?
2. Were professional networks promoted and developed as a result of CTLI courses?

### 6.1 Methodology

Following the training, fieldworkers visited schools and conducted interviews with educators who had participated in the CTLI Principal as Manager of the Curriculum course as well as four curriculum courses (see pages 56-58 for more information on the sample and fieldwork logistics).

Data was further supplemented by the CTLI course evaluations for the following courses: Foundation Phase Literacy Course 3, Foundation Phase Numeracy Course 3, Intermediate Phase Language Course 2, Intermediate Phase Maths Course 2, and Principal as Manager of the Curriculum Course 2. Upon completion of the courses, questionnaires were obtained from CTLI and captured into an Excel spreadsheet for analysis.

### 6.2 Results

#### 6.2.1 Impact on attitudes and motivation

Educators were asked whether they agreed with the statement that the CTLI course helped to improve their attitudes and to indicate how strongly they felt about this. With the exception of one teacher, all educators responded positively. Sixty-seven percent strongly agreed that their attitudes had improved as a result of the course and 34% simply agreed. Educators who participated in the Intermediate Phase Maths course and Principal as Manager of the Curriculum course were the most positive about the courses' effect.

Table 63: Number and percentage of educators whose attitudes improved as a result of training

Course	Strongly agree	Agree	Disagree	n
FP Lit	6	8	1	15
FP Num	9	4	0	13
IP Lang	11	6	0	17
IP Maths	14	3	0	17
Principal	3	1	0	4
<b>Percent</b>	<b>67%</b>	<b>34%</b>	<b>2%</b>	66

In their course evaluations, educators also disclosed the professional benefits they had gained from attending the training. With the exception of one educator in the Foundation Phase Numeracy course, all educators reported that the training had impacted on their personal growth. Once again, educators who participated in the IP Maths course and the Principals' course felt the most strongly about the courses' positive effect. Educators who attended the IP Language course felt least strongly.

Table 64: Percentage of educators who experienced personal growth from the course

Course	Strongly agree	Agree	Disagree	n
FP Lit	56%	44%	0%	45
FP Num	49%	49%	3%	37
IP Lang	39%	61%	0%	33
IP Maths	58%	42%	0%	33
Principal	100%	0%	0%	7
<b>Total</b>	<b>60%</b>	<b>39%</b>	<b>1%</b>	155

A few educators wrote in the open comment section of the course evaluations and expressed their gratitude for the course. Educators mentioned feeling empowered and pointed out their newfound confidence and excitement for their jobs. For example, one Foundation Phase Numeracy course participant said “I have grown so much. I am passionate about my career again,” and another added “I have gained a lot and this workshop made me love numeracy more and more.” These comments were echoed at the fieldworkers’ visit. Teachers gained a lot of content knowledge especially in maths and numeracy that corrected their misconceptions and made them enthusiastic to go back to their classrooms. This knowledge contributed to their confidence, made them feel inspired, and even changed their attitudes and perceptions of the subjects they taught. The course also motivated many teachers because of the extensive support they received from course facilitators who recognized their strengths and encouraged them. Principals also reported that the principals’ course helped them obtain a better understanding of their roles as school leaders. Overall, the majority of educators felt uplifted upon completion of the courses.

### 6.2.2 Impact on professional communities and collaboration

CTLI courses are supporting the professional communities of schools and are establishing active networks across schools and other districts.

Educators reported that they would be able to share and apply what they learnt at CTLI, which was later confirmed through the field visits. The majority of educators interviewed reported that they had discussed and shared materials with other staff members who had not attended the CTLI courses. Between 100% and 92% of educators who participated in the FP Literacy, FP Numeracy, and IP Maths courses had done so, as well as three quarters (76%) of the educators who participated in IP Language.

Upon their return to school, many participants were given a formal opportunity to report back to their colleagues. Sharing took place amongst same grade educators, same phase educators, and or with the whole staff. It is interesting to note that teachers who attended the same course had different things to share with their colleagues. Most shared the resources and materials they had received but focused on a few specific topics. It would be interesting to find out how teachers decide what content to share amongst each other; do they pick topics that are most relevant to their schools and context, topics that are easiest to explain, or topics they learnt the most about? Given the wide variance in practices discovered, it is possible that not all course providers address how educators should give their schools feedback and what they should share. However, since practically all of the educators are spending a significant time back at school presenting what they learnt or running workshops, the opportunity should be seized. A little more direction from course providers would help to make the most out of teachers’ feedback sessions to their schools. Additionally, some teachers mentioned receiving CDs or DVDs that they then watched with a large number of their colleagues. These multi-media resources may prove to be a great investment and CTLI should consider including lesson demonstrations in them.

A small minority of teachers did not share their experiences at CTLI with their colleagues. Reasons for not sharing included lack of time due to the use of the WCED work schedule (blue books) and need to catch up missed work and do assessments. Only one teacher mentioned that the other staff members in her school were not interested.

Table 65: Percentage of educators who would share and apply what they learnt

Course	Strongly agree	Agree	Disagree	n
FP Lit	49%	51%	0%	45
FP Num	43%	57%	0%	37
IP Lang	32%	68%	0%	34
IP Maths	58%	42%	0%	33
Principal	71%	29%	0%	7
<b>Total</b>	<b>51%</b>	<b>49%</b>	<b>0%</b>	<b>156</b>

Teachers are coming together to support and encourage one another not only within their own schools but across institutions. Out of the 63 teachers visited, 83% reported keeping in touch with other teachers they had met at CTLI. Similarly, three out of the four principals have developed a support network for principals as a result of the course. These high numbers are not surprising given the amount of interaction and collaboration that take place in all CTLI courses. This is significant since only 7 teachers out of the entire group interviewed (11%) had engaged with a district official for post-training support.

When asked about the purpose of their contact with one another, more than half (56%) mentioned it was for professional support and assistance including the clarification of concepts and methods. CTLI trained teachers are now phoning and emailing one another when they encounter problems in their classrooms, need advice, or do not understand or remember something they learnt. Another common response to the question was to exchange ideas and materials with one another, which was mentioned by around a third of the teachers (38% and 31% respectively). Teachers are sharing lesson plans, assignments, tests, new materials they discover, CDs, and more. Nine teachers (17%) also said that they contact each other to remind themselves of what they learnt at CTLI and follow up on the implementation. This is yet another practice that will help sustain teachers' motivation long after their last day of training and increase the chance that new, more effective practices are taken up in the classroom.

Principals have developed a similar support network. The principals interviewed are sharing moderation tools and timetabling practices, as well as discussing similar problems they faced in school.

Table 66: Purpose for contacting other teachers at CTLI

Purpose of contact	n	Percent	Sample response
Personal reasons	8	15%	<ul style="list-style-type: none"> <li>• “Mostly friendly contact with teachers from other schools”</li> <li>• “Professional, we discuss the work we did at CTLI and we are also friends.”</li> </ul>
Exchange ideas	20	38%	<ul style="list-style-type: none"> <li>• “To exchange ideas and materials with several colleagues in neighbouring towns. The group who sat at the same table became very fond of each other.”</li> <li>• “Excellent contact with teachers from near and far; regular exchange of ideas and materials with three other teachers including an LSEN teacher and one in another district.”</li> </ul>
Share materials	16	31%	<ul style="list-style-type: none"> <li>• “For professional networking; shared materials with Vredendal teachers on assessment tasks.”</li> <li>• “When a problem is encountered I phone other teachers for help, or if they find new working material they email it.”</li> </ul>
Professional support/clarify concepts and methods	29	56%	<ul style="list-style-type: none"> <li>• “If there is something I do not understand I call them up and we assist each other.”</li> <li>• “For professional reasons. We exchange ideas and clarify concepts not clear to each of us.”</li> </ul>
Discuss what they learnt/implementation challenges	9	17%	<ul style="list-style-type: none"> <li>• “To discuss what we learnt in our class, applying it, and the difficulties.”</li> <li>• “We phone each other to remind each other about what we did at CTLI. Sometimes we meet each other.”</li> </ul>

### 6.3 Summary of results

The evidence for improved teacher professionalism is derived entirely from self report data, and as such suffers from the usual limitations of such data. However, the kinds of examples quoted in the previous table give substance and credibility to the data. It appears that CTLI courses have made a significant impact on teacher professional practices. Educators have left the training feeling empowered, confident, motivated, and some have even acquired a positive attitude towards the subject they teach. Ninety-eight percent of the participants interviewed reported that their attitude had improved as a result of the course and 99% of the participants who filled out the course questionnaires agreed that the courses had contributed to their personal growth.

Professional communities have also been indirectly established and promoted as a result of CTLI. Eighty-nine percent of the teachers interviewed said they had been able to share what they learnt with their colleagues in their schools. Formal and informal feedback sessions were organized where knowledge was transmitted, resources were shared, and support and encouragement was given.

Professional networks have also sprung up across schools thanks to the collaborative nature of CTLI courses, which prizes interaction amongst participants. Eighty-three percent of the teachers interviewed plus three of the four principals mentioned keeping in contact with other educators they met at CTLI. These teachers are now sharing ideas and materials and using each other as a resource when they do not understand something, need advice, or assistance. Through their contact, they are also reminded of the courses’ content and many discuss their experience implementing what they learnt. Overall, educators are staying connected and supporting one another. Their contact not only helps to prolong and sustain the positive impacts of the training, but it increases the chances that new methods and practices will be successfully applied in the classroom to the learners’ benefit.

## 7 Learner performance

Through its in-service training and development of educators, CTLI aims to improve the quality of teaching and ultimately raise learner performance levels in the province. This study investigates CTLI's impact on learner performance in two parts. It first looks at the past for evidence of impact amongst participating schools. It compares the performance of schools that sent educators to CTLI to those in the province that didn't over the period 2002-2009. Its main purpose is to answer two questions:

1. If CTLI schools improved following the training, did they improve more than schools that had not received training from CTLI?
2. Did the CTLI schools that sent more educators to training improve more than those that sent fewer educators?

Second, this study examines the impact on participants who attended courses in 2010. However, this component of the evaluation will only begin once the WCED's 2010 systemic test results are made available. Assuming the department can furnish us with this data by February 2011, this section of the report will be completed by the end of April 2011.

### 7.1 Methodology

Two data sources were used to investigate CTLI's impact on past learner performance. The CTLI database was used to determine how many educators attended the FP Literacy, FP Numeracy, IP Language, and IP Maths course per school for each year between 2002 and 2009. This data was merged to a spreadsheet that featured the systemic test results for all Western Cape schools that had been established prior to 2002. The spreadsheet, which was created by Dr. Chris Van Wyk at the University of Stellenbosch, contained the Grade 3 Literacy and Numeracy scores from 2002 to 2008 as well as the Grade 6 Language and Maths scores from 2005 to 2009 for a total of 791 schools.

Correlating learner performance to teacher training at CTLI turned out to be problematic for several reasons:

- It is not possible to link learner performance to the specific teacher who attended training.
  - Systemic results were captured at the school level, not the teacher level. Consequently, it is not possible to assure that the sample of learners tested in a particular school belonged to the teacher who attended a CTLI course;
  - Furthermore, the CTLI database does not specify the teacher's grade. Because learner performance is only assessed in Grades 3 and 6, improvement at any other grade level may not be reflected in the school's scores and will underestimate the real impact of CTLI.
- The CTLI database includes all registered participants and this differs from the number of teachers who actually attend and complete the course.
  - According to CTLI officials, about 10% to 15% of teachers who register for a course do not complete it. Inclusion of these teachers into the analysis will also underestimate the strength of CTLI's impact, as one would not expect learner performance to vary in these schools beyond that which is observed at the provincial level. Unfortunately, removing these teachers from the

database turned out to be too time-consuming and expensive. Given the other limitations of the analysis this task was not pursued.

- Research suggests that teacher training effects are not immediate and can take up to 3 years to reflect in learner achievement. However, due to high rates of teacher mobility both within a school and across schools, training benefits cannot be tracked appropriately.

In light of the limitations present in the data, two things were investigated. In each of the four curriculum courses, we identified schools that were sending teachers to a particular CTLI course for the first time. We then compared the school's systemic results in that subject area before the training and after the training, and measured those gains against all other schools in the province that were not trained through CTLI. Independent sample t-tests were used to determine if the difference in gains was statistically significant. In the Foundation Phase, we compared the 2002 and 2004 results for schools that attended training in 2003 and 2004, the 2004 and 2006 results for schools that attended training in 2005-2006 for the first time, and the 2006 and 2008 results for schools that attended training in 2007-2008 for the first time against schools that had not received training from CTLI in that subject at that time. Similarly, in the Intermediate Phase we compared the 2005 and 2007 results for schools that attended training in 2006-2007 for the first time, and the 2007 and 2009 results for schools that attended training in 2008-2009 for the first time against schools that had not received training from CTLI in that subject at that time. While the analysis succeeds in creating a pre and post measure for CTLI schools, only a limited number of schools who were trained at CTLI is considered. Many schools consistently sent teachers to CTLI for training in a particular subject area, year after year, and had to be excluded. This limitation is particularly pronounced for the last and most recent years of training.

In the second analysis, the results of all CTLI schools were compared to the results of all schools in the province that never received training from CTLI in that particular subject. In the Foundation Phase, the 2002 results were compared to the 2008 results and in the Intermediate Phase the 2005 results were compared to the 2009. Results were further broken down into schools that had sent fewer than five teachers to CTLI for training and those who had sent more, testing the hypothesis that schools who had sent more teachers to CTLI would improve more. Statistical significance was tested through an independent sample t-test.

However, given the limitations of the analysis we will not be able to conclude whether any observed gains are a direct result of CTLI. Other factors common to schools that sought training at CTLI may be responsible for the gains, such as the school's initiative to send teachers for training in the first place or additional training and support schools may have received through another party. Nevertheless, if a difference in gains exists between CTLI and non-CTLI schools and that difference is statistically significant, then it is highly probable that CTLI contributed to those gains. The 2010 analysis of learner performance should be able to determine CTLI's impact with a greater degree of certainty.

## **7.2 Results**

### **7.2.1 Foundation Phase Literacy**

Even though the whole province has significantly improved their literacy scores in the past 8 years, schools that received literacy training from CTLI improved even more. In 2003-2004, 333 schools attended the CTLI Literacy course. Following the training, these schools improved by .8 percentage points whereas schools that were not trained decreased their scores by .3 points. The difference in gains is bigger for the next two periods. Schools that attended the Literacy course for the first time in 2005-2006 saw an increase of 10.8 percentage points in their

scores in comparison to only 7.0 points in schools that had not received any training. The difference of 3.9 percentage points is statistically significant and similar for schools that attended training in 2007-2008. Schools that attended training gained 4.8 percentage points in comparison to schools that had not attended and only increased their scores by 1.1 percentage points.

Table 67: Comparison of gain scores in Literacy for CTLI schools that attended training for the first time and non CTLI schools

School	Trained 2003 -2004				Trained 2005-2006				Trained 2007-2008			
	2004 results	2002 results	Gain	n	2006 results	2004 results	Gain	n	2008 results	2006 results	Gain	n
CTLI	55.8	54.9	0.8	333	67.3	56.4	10.8	86	71.3	66.5	4.8	25
Non CTLI	66.8	67.1	-0.3	458	76.2	69.2	7.0	372	78.0	77.0	1.1	348
<b>Difference</b>			<b>1.1</b>				<b>3.9*</b>				<b>3.7*</b>	

\* Statistically significant (p<.05)

In the 2002-2008 period, schools that were trained by CTLI improved significantly more in Literacy than those that had not received training. As expected, the difference in gains is more significant for schools that sent more teachers to the CTLI Literacy course than those that sent less. Schools that sent five or more teachers improved their scores by an average of 17.8 percentage points in comparison to those that sent between one and four teachers and improved by 13.0 points, and those that sent none and improved by 7.8 points.

Table 68: Comparison of Literacy gains according to the number of teachers trained at CTLI from 2003-2008

Number of teachers trained	2008 results	2002 results	Gains	Difference in gains when no training took place	n
5 or more	70.0	49.1	17.8	10.0*	28
4 or less	69.0	55.9	13.0	5.2*	415
0	78.0	70.1	7.8		348

\* Statistically significant (p<.05)

## 7.2.2 Foundation Phase Numeracy

Over the six year period examined, provincial scores for Numeracy did not increase as much as those for Literacy. In 2004, all schools experienced small gains in learner achievement. However, those schools that had been trained by CTLI for the first time increased their scores by .8 percentage points more than those that hadn't. In 2006, scores dropped by 2.8 percentage points for all schools that had not been trained by CTLI whereas they increased by .5 percentage points for those that had just received training. This difference in gains of 3.3 percentage points is statistically significant (p=.002). In 2008, CTLI and non-CTLI schools achieved similar gains in their scores which varied by only .3 percentage points. Findings suggest that the CTLI course had a significant impact on learner performance, but only for those schools that first attended training in 2005-2006.

Table 69: Comparison of gain scores in Numeracy for CTLI schools that attended training for the first time and non CTLI schools

School	Trained 2003 -2004				Trained 2005-2006				Trained 2007-2008			
	2004 results	2002 results	Gain	n	2006 results	2004 results	Gain	n	2008 results	2006 results	Gain	n
CTLI	38.3	35.7	2.5	320	35.8	35.3	.5	94	42.9	41.5	1.4	26
Non CTLI	48.7	47.0	1.7	447	49.5	52.3	-2.8	353	51.8	50.1	1.7	327
<b>Difference</b>			<b>0.8</b>				<b>3.3*</b>				<b>-0.3</b>	

\* Statistically significant (p<.05)

The second analysis shows a higher degree of impact of the CTLI Numeracy course on learner performance. The 326 schools that received no Numeracy training from CTLI made minimal gains (.5 percentage points) from 2002 to 2008. In contrast, schools that sent four teachers or fewer to CTLI raised their scores by 3.4 percentage points and those that sent five or more teachers raised them by 5.0 percentage points.

Table 70: Comparison of Numeracy gains according to the number of teachers trained at CTLI from 2003-2008

Number of teachers trained	2008 results	2002 results	Gains	Difference in gains when no training took place	n
5 or more	36.0	31.0	5.0	4.4*	35
4 or less	39.2	35.8	3.4	2.9*	430
0	51.8	51.3	0.5		326

\* Statistically significant (p<.05)

### 7.2.3 Intermediate Phase Language

A significant difference in gains also exists for schools that attended the CTLI Language course. Whereas scores significantly decreased for non-CTLI schools from 2005 to 2007 by 5.1 percentage points, scores only decreased by 1.7 percentage points for schools that attended the training for the first time in 2006-2007. The difference of 3.4 percentage points is statistically significant (p=.015). Overall, Language scores improved from 2007 to 2009. However, CTLI schools improved their scores by 6.9 percentage points in comparison to 4.6 percentage points. Although the difference is not statistically significant given the low number of schools that first received training in 2008, the difference of 2.3 percentage points remains important.

Table 71: Comparison of gain scores in Language for CTLI schools that attended training for the first time and non CTLI schools

School	Trained 2006-2007				Trained 2008-2009			
	2007 results	2005 results	Gain	n	2009 results	2007 results	Gain	n
CTLI	49.7	51.4	-1.7	41	57.2	50.3	6.9	18
Non-CTLI	58.5	63.7	-5.1	496	63.4	58.8	4.6	478
<b>Difference</b>			<b>3.4*</b>				<b>2.3</b>	

\* Statistically significant (p<.05)

The number of teachers in a school that attended CTLI's Language course also makes a significant difference to score gains. On average, the scores of the 478 schools that did not send any teachers to CTLI decreased from 2005 to 2009 by .6 percentage points. In comparison, schools that sent up to four teachers for training experienced a gain of 2.0 percentage points in their scores and those that sent five teachers or more experienced a gain of 6.1



percentage points. Findings strongly suggest that the CTLI Language course had a significant impact on learner performance.

Table 72: Comparison of Language gains according to the number of teachers trained at CTLI from 2003-2009

Number of teachers trained	2009 results	2005 results	Gains	Difference in gains when no training took place	n
5 or more	50.8	44.7	6.1	6.8*	35
4 or less	54.7	52.7	2.0	2.7*	278
0	63.4	64.0	-0.6		478

\* Statistically significant ( $p < .05$ )

#### 7.2.4 Intermediate Phase Maths

Learner performance results also suggest a positive impact of CTLI's Intermediate Phase Maths course. Eighty-eight schools sent teachers to the CTLI Maths course for the first time in 2006-2007. Following the training, the schools' maths results improved by 3.5 percentage points. In comparison, schools that did not send any teachers to CTLI only improved by .4 percentage points. In the next period, schools that sent teachers to CTLI improved their 2007 maths results by 4.7 percentage points in comparison to an improvement of 3.6 percentage points by schools that hadn't. While the difference in gains is only significant for teachers who were trained in 2006-2007 ( $p = .000$ ), both figures suggest that the course could have made a difference.

Table 73: Comparison of gain scores in Maths for CTLI schools that attended training for the first time and non CTLI schools

School	Trained 2006-2007				Trained 2008-2009			
	2007 results	2005 results	Gain	n	2009 results	2007 results	Gain	n
CTLI	30.4	26.9	3.5	88	39.3	34.6	4.7	36
Non-CTLI	43.1	42.7	0.4	409	47.5	43.9	3.6	373
	Difference		<b>3.1*</b>				<b>1.1</b>	

\* Statistically significant ( $p < .05$ )

The number of teachers who attended the training also seems to have an impact on learner gains. However, whether the number of teachers was greater or fewer than four does not make that much of a difference, as long as at least one teacher was trained. Schools that did not receive any Maths training from CTLI improved their 2005 scores by 3.6 percentage points in 2009. In comparison, schools in which four or less teachers were trained improved by 7.8 points and schools in which five or more teachers were trained improved by 8.4 points. It is possible that the small difference in gains between schools that trained more than four teachers and those that trained fewer than four could be due to the smaller number of IP Maths teachers that one would typically find in a school. Training four teachers over a six year period might mean that every IP Maths teacher received the training. As indicated by the table below, very few schools (19) trained more than four teachers from 2003-2009.

Table 74: Comparison of Maths gains according to the number of teachers trained at CTLI from 2003-2009

Number of teachers trained	2009 results	2005 results	Gains	Difference in gains when no training took place	n
5 or more	33.3	24.9	8.4	4.8*	19
4 or less	35.4	27.6	7.8	4.2*	399
0	47.5	43.9	3.6		373

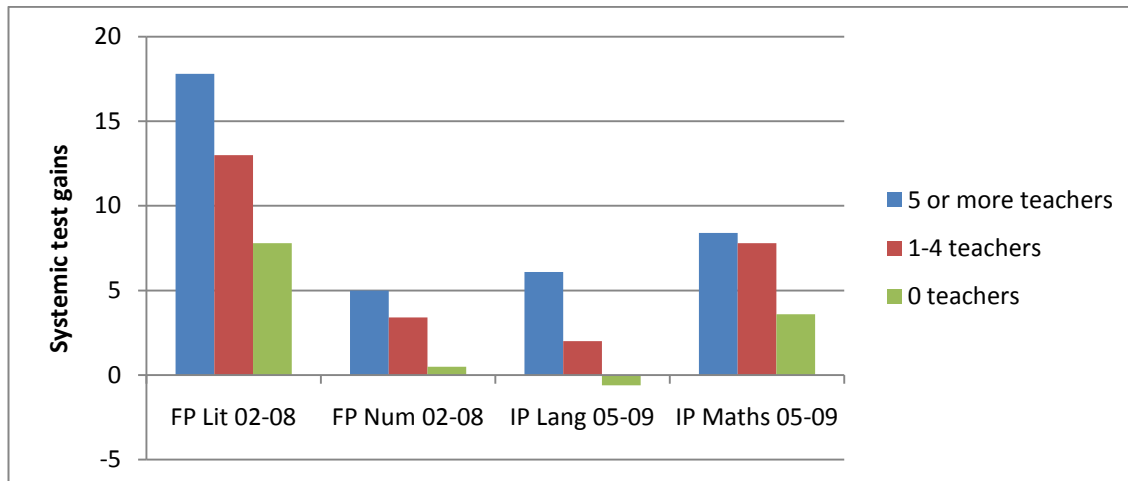
\* Statistically significant ( $p < .05$ )

### 7.3 Summary of results

CTLI's past impact on learner performance was measured by comparing the systemic test gains of schools that had attended CTLI training courses against those that hadn't. Although there are many limitations to our analysis, evidence suggests that all four curriculum courses had a significant impact on learner performance. Impact was greatest for the Foundation Phase Literacy course, followed by the Intermediate Phase Language course, and lastly the Foundation Phase Numeracy and Intermediate Phase Maths course. All schools that sent teachers to CTLI experienced more improvement on their systemic test results than schools that had not received training.

Lastly, the number of teachers trained at a school also seems to make a difference, especially in Foundation Phase and Intermediate Phase language. The figure below summarizes these results for all four curriculum courses in the period between 2002 and 2009. In Foundation Phase literacy, scores improved by 10 percentage points more in schools where five or more teachers had attended the course at some point since 2003. In Intermediate Phase language, scores decreased for schools that did not participate in the training, but they increased by 6.7 percentage points for schools where five or more teachers were trained. In Foundation Phase Numeracy and Intermediate Phase Maths, scores improved by 4.5 and 4.8 percentage points more respectively when five or more teachers were trained, in comparison to schools that had not received any training.

Figure 21: Comparison of gains according to the number of teachers trained at CTLI between 2002-2009



## 8 Conclusion

### 8.1 Discussion of findings

This report set out to answer a series of questions to assess the process, procedures, and impact of CTLI. First, it determined that the educators most in need of development were not selected for training in 2010. Even though CTLI encouraged districts to nominate their poor-performing schools for training courses, districts played a minimal role in the selection process. Upon the receipt of CTLI's registration circular, some principals and teachers took the initiative to nominate themselves for courses and others didn't. As a result, 80% of the schools who attended training came from the three most privileged quintiles, particularly Quintile 4, and performed around the provincial average on the WCED's systemic tests. On the whole, weak schools were not targeted and very few were trained by CTLI.

The next section of the report examined the quality of five training courses, because one cannot expect educators to improve their school management practices or teaching if they are exposed to a poorly designed and poorly delivered course. The study found that the IP Maths and FP Numeracy course were generally excellent. The quality of the FP Literacy and IP Language course was compromised by CTLI's new training model, which appointed WCED trainers to prepare and deliver the course. Course materials were poorly developed and following negative feedback from Block 1, CTLI brought service providers to assist with the materials and delivery of Block 2. Nevertheless, participants were very positive about the course and what they had gained. The Principal as Manager of the Curriculum course received poor reviews for its materials and the design of the course, although participating principals rated the course highly. It is not clear why there is a difference in views and this question will require further exploration.

The quality of the four curriculum courses is reflected by the teacher's gains in subject knowledge. The highest rated course was IP Maths, where teachers gained a remarkable 19 percentage point from their pre to post test scores. The second highest rated course was FP Numeracy, where teachers improved their scores by 7 percentage points. Teachers who took part in the FP Literacy course improved their scores by 6 percentage points. Lastly, teachers who participated in the IP Language course which was the most problematic and focused least on subject knowledge, showed no improvements at all. Overall, post-test scores revealed that teachers scored above 70% in FP Numeracy and IP Maths, and below 70% in FP Literacy and IP Language. Results suggest that FP Literacy and IP Language teachers do not have the minimum curriculum knowledge required to teach effectively in their phase, which is cause for some concern.

The study also found that Foundation Phase teachers who teach in isiXhosa have unacceptably low levels of curriculum knowledge and language proficiency and this situation requires serious attention. At present, the FP Literacy course is poorly designed to meet their needs and it is highly recommended that training sessions break out into different language groups to deliver some of the course content. Moreover, course reports for FP Numeracy and IP Maths as well as teacher tests in FP Literacy and IP Language confirmed that teachers have important knowledge gaps when it comes to the subjects they teach. It should also be remembered that teachers who attended the training sessions and wrote the tests came from the more privileged schools in the province that perform around the average on systemic test. It is likely that the subject knowledge of teachers who come from poorly-performing schools who should be targeted for training is much lower. Thus, it is essential that CTLI curriculum courses retain a strong focus on subject knowledge and cover all of the Learning Outcomes required in the NCS.

It is altogether possible for educators to attend an excellent course, improve their knowledge, learn new methods, but change nothing once they return to school. For this reason, the next question posed by the evaluation investigated whether educators had implemented what they learnt at CTLI three months after the completion of the course and if school management/teaching practices had improved. Principals who had attended the Principal as Manager of the Curriculum course reported that they had begun to implement many changes. These changes included making curriculum plans, improving communication amongst staff and discussing expectations, revising school policies and management procedures, building relationships with the community, as well as stimulating pedagogic discussions at the school. However, improvement will come if principals learn how to implement these changes effectively and if the changes made were appropriate for the schools in the first place. Despite the principals' excitement over the course, the evaluation was not able to determine if the course properly equipped principals to carry out these changes and questions whether principals are able to address the biggest curriculum management issues they face at school. More investigations will need to be done in the year to come.

Participants' responses suggest that the CTLI curriculum courses have impacted teachers' classroom practice. Teachers who attended the FP Literacy and IP Language have implemented the reading methodologies they learnt at the course, have improved their use of resources, and are applying methods to develop learners' cognitive skills among other things. Teachers who attended the FP Numeracy and IP Maths course mentioned that they are teaching topics more practically, and are using explanations, methods, and strategies to teach specific topics more effectively to their learners. The evaluation sought evidence for these accounts in the learner's written work. Results suggest that the quantity of learner writing increased in IP Maths and FP Literacy, increased slightly in FP Numeracy, and remained unaffected in IP Language following the training.

Learner book analysis also showed that despite the training, there is too little writing happening in the classrooms. On average, learners write in their books between one and a half times and three times a week when they should be writing every day. Of the four courses, learners write the most number of pages in FP literacy (110 pages) and the least number of pages in IP Language (58 pages) per year, a figure which is alarmingly low. The quantity of writing also varies drastically amongst schools. Some learners write three times, four times, and up to six times as many pages over the course of the year as learners in other schools. This radically increases the learners' opportunity to integrate, consolidate, and practice what they have learned, resulting in a significant advantage. All courses should address the frequency, quantity, and quality learner writing in class. It is interesting to note that the IP Maths course mentioned raising this issue in the training, and the learner book analysis revealed that there is a large difference in the amount of writing learners were doing before and after the training. However, evaluation methods should be further refined to maximise the use of learner books.

Curriculum coverage in learner books is also a cause for concern. In literacy and language, most of the learners' written work covers language structures and learners are given few to no opportunities to do their own writing. It is interesting to note that teacher test results suggest that teachers are also much better at answering grammatical questions but struggle to express themselves clearly and accurately through writing. In numeracy and maths, learners work predominantly in LO 1 (numbers and number relationships) and neglect the four other LOs, particularly LO 3 (space and shape) and LO 5 (data handling). These are areas in which teachers have also shown some weakness. Once again, a strong focus on content knowledge is of paramount importance for CTLI courses, as there is some evidence that teachers are not covering material that they do not understand well themselves.

CTLI courses have also made a significant impact on educators' professional practices. Educators generally left the training feeling empowered, confident, and motivated. They shared what they had learnt with their colleagues upon their return to school but more importantly, 83% reported having kept in contact with other CTLI educators and have formed active professional communities. In the absence of district support following completion of the training, it is invaluable that educators stay connected and support one another. These professional links increase the chances that educators' motivation will stay high for a longer period of time, that they will reflect on their practice, and will implement what they have learnt at CTLI.

The final question posed by the report is are CTLI courses impacting learner achievement in the province. At this time, the report was only able to examine the impact of previous CTLI courses on learner performance. Nevertheless, results suggest that schools who attended CTLI courses improved more in the WCED's systemic tests than schools who had not received this training. The number of teachers in a school who received training in a particular subject also plays a role in learner gains.

In conclusion, the evidence from this evaluation strongly indicates that the CTLI training model is effective at improving teacher knowledge, classroom practices, and professional attitudes. Furthermore, it is clear that the structure and management culture at CTLI enables the institution to respond quickly to problems identified in the training model. What follows are recommendations aimed at further increasing the impact of the work of the institution.

## 8.2 Recommendations

### 8.2.1 For provincial policy

- To further align CTLI training with the line functions of the WCED, district officials should be more closely integrated to the training programme. Benefits include better teacher selection for training and in school support post-training.

### 8.2.2 For CTLI courses

- **Course content:** All curriculum courses should have a strong focus on content knowledge and methods for teaching it in the classroom, address the classroom context including the use of learner books, and touch upon policy.
- **Course materials:** Course materials should be compiled into a course handbooks that is given to participants at the start of the course.
- **Course delivery:** Retain the use of service providers until WCED trainers with excellent content knowledge and facilitations skills are identified.
- **Reflection time:** Reflection time should be incorporated into the daily schedule of all courses. On the last day of training, educators should be given more time to reflect on what they have learnt and what they plan to implement when they return to school.
- **Language:** CTLI should consider delivering the subject knowledge portion of a course in the teachers' LOLT. This is particularly important to cover topics in Foundation Phase Literacy. If this suggestion is not possible, CTLI should consider preparing supplementary materials for participants featuring key terminology/topics in their LOLT.

- **Demo lessons:** CTLI should consider video-taping lesson demonstrations and distributing these to participating teachers. Demo lessons should feature a full class of learners as well as typical challenges faced by teachers, in the LOLT of the teacher.
- **Daily schedule:** Extend lunch by 15 minutes and eliminate the final tea break to end the day at 15h30.

### 8.2.3 CTLI processes

- **Selection process:** A systematic approach should be used to select teachers, targeting weak schools circuit by circuit. A critical mass of teachers in each school should also be trained while minimizing disruptions to schools. Moreover, ways should be found to involve curriculum advisors as well as IMG managers in the training so that their own knowledge is improved and they are better equipped to support participants upon completion of the course.
- **CTLI database:** CTLI should consider entering the EMIS number for schools, grade levels for teachers, and identify participants who have received credit for completing the course.
- **Course evaluations:** CTLI should administer the course evaluations at the end of every course and modify some of the questions as suggested.
- **Course reports:** CTLI should re-think the purpose of these reports, clearly communicate to course providers a report structure and what they hope to learn from them, and hold course providers accountable for writing all sections.
- **Tenders for CTLI courses:** These should include mention of the evaluation to facilitate cooperation between course providers and the evaluation.

### 8.2.4 For future evaluations

- **Teacher tests:** Conduct teacher testing in all course cohorts, administering a pre-test in Block 1 and a post-test in Block 2. For literacy and language teachers, continue to administer a language proficiency test. Course providers who have their own sound tests to assess teacher knowledge should be asked to share their test results. If a course provider does not agree to share the teachers' individual test results for a test they administer in one of the CTLI courses being evaluation, then the evaluation should conduct the test instead.
- **Fieldwork:** Increase the number of teachers who get interviewed and submit learner books for analysis. The current sample size is too small to draw any sound conclusions. Interviews should be tweaked to probe key questions with greater depth and the analysis of the learner book should be refined, to maximise what can be learnt from it.
- **Observations:** Include more formal and lengthier observations of CTLI training sessions.
- **Reports:** Future evaluations should review the CTLI coordinator's course report.

- **CTLI conferences:** Investigate the impact of CTLI's educational conferences. Not only have these conferences been very successful and drawn large number of educators in the previous years, it appears that CTLI may choose to invest more in them.

## 9 Appendix

### 9.1 Background information on the course reviewers

#### Foundation Phase numeracy and Intermediate Phase maths course

- **Ingrid Sapire** has been involved in mathematics teacher education for 17 years. Prior to that she worked as an actuarial clerk and then a mathematics teacher in Johannesburg. She worked as a full-time lecturer for eight years at the Johannesburg College of Education (JCE) which is now part of the Education Faculty at the University of the Witwatersrand. She has been involved in the development and presentation of materials for mathematics teacher education courses and training programmes, has written and edited primary and high school mathematics text books, and has developed and reviewed on-line interactive mathematics material. She worked as a consultant after leaving JCE, but resumed full-time work at RADMASTE (the Centre for Research and Development in Maths, Science and Technology Education) at the University of Witwatersrand in 2005. She is currently employed part time as a project co-ordinator and researcher in the DIPIP project.

#### Foundation Phase literacy and Intermediate Phase language course

- **Sarah Murray** is a Senior Lecturer in the Education Department at Rhodes University. She teaches language and literacy to Foundation Phase PGCE and BEd students. She also teaches at Honours and Masters level and has supervised a number of theses dealing with Foundation and Intermediate Phase literacy. She has extensive experience of writing and evaluating educational materials. Sarah was a member of the Task Team that wrote the NCS; she was co-ordinator of the Languages Working Group. She was a member of the PIRLS Steering Committee, and has recently been a Team Leader of a group of researchers evaluating the Foundation Phase English curricula in South Africa, British Columbia, Singapore and Kenya, for Umalusi.

#### Principal as Manager of the Curriculum course

- The report was prepared by **JET Education Services** together with **Caroline Faulkner**, a lecturer in educational leadership at the Witwatersrand University in Johannesburg. Caroline Faulkner was the leader of the DoE Educational Management Task Team (2004-2006) which was responsible for the development of the Policy for Educational Management and the South African Standard for Principalship (SASP). She is a member of the DoE strategic review group for the development and piloting of the ACE School Leadership programme for principals and aspiring principals (2007 to date), and of the revision (2009) of the national DoE materials for this proposed mandatory pre - qualification (from 2014) for appointment to Principalship. JET Education Services greatly appreciates Caroline Faulkners' assistance and retains all responsibility for the content in the report.

### 9.2 Summary of ratings given to course materials

The tables below summarize the findings for the material review for each of the five courses. Experts rated various aspects of the material using the following scale:

- **5= Outstanding.** No further improvement is possible
- **4= Good quality.** Above average. High standards and quality.
- **3= Acceptable.** Meets expectations.
- **2= Needs Improvement.** Below average.
- **1= Very poor.** Well below average. Unacceptably low standard and quality.



Table 75: Ratings for the 2010 FP literacy and IP language course materials

		<b>Rating</b>	<b>Brief justification</b>
Content	Actual content meets tender specifications	<b>FP: 3 IP: 2</b>	The content goes some way to meet the FP tender specifications but does not meet the IP tender specifications
	Usefulness/relevance of content	<b>FP:3 IP:2</b>	Modules 1 to 3 of the manual are not relevant to either FP or IP teachers' needs. Module 4, and in particular the handbooks, are useful for FP teachers but somewhat less useful for IP teachers.
	Clarity and accuracy of content	<b>4</b>	The clarity and accuracy of the manual is reasonable. The clarity and accuracy of the handbooks is excellent.
	Level of content is appropriate	<b>FP: 3 IP: 2</b>	For FP teachers, the level of content in both the manual and the handbooks is appropriate. For IP teachers, the level of neither the manual nor the handbooks is appropriate.
	Content is gender sensitive and uses contextually relevant examples.	<b>FP: 5 IP: 3</b>	There are plenty of relevant examples for FP teachers; less so for IP teachers. There are no photographs of male teachers in the handbooks.
Instructional Design	Content is logically sequenced	<b>4.5</b>	The sequencing of the manual is good; the sequencing of the handbooks is excellent.
	Content is coherent	<b>3</b>	The coherence of the manual is acceptable. The coherence of the handbooks is excellent, but it is undermined by the fact that the introductory handbook is not used.
	Support material is all-inclusive	<b>4</b>	The support material is all inclusive, though it would be enriched by the addition of practical resources and 'Reading in the Early Grades' (South Africa 2008).
	Provides for extension of learning	<b>3</b>	There is a list of references and further reading in the Introductory handbook, which is not referred to in the manual. The handbooks are a rich resource for learning.
Time allocations	Appropriate allocation of time amongst different topics	<b>1</b>	Too much time is allocated to the content in Modules 1 to 3, and not enough to the content in Module 4.
	Pace is appropriate	<b>2</b>	It is difficult to evaluate this since there is no explicit reference to time in the manual.
	Use of time is maximized	<b>2</b>	Because of the poor allocation of time, the use of time is not maximised.
Approach to Teaching and Learning	Appropriate learning approach	<b>2</b>	Although the approach in the handbooks is excellent, good use is not made of them. The approach of the manual is not appropriate for FP and IP teachers.
	Promotes active-learning	<b>3</b>	Active learning is promoted to some extent.
	Provides opportunities for reflection	<b>2</b>	There are very few opportunities for reflection.
	The use of activities	<b>3</b>	There are a lot of activities but they are not always purposeful and well articulated.
	The use of assignments/assessments	<b>1</b>	There are no assignments or assessments.
Editing and lay-out	Material is well-edited	<b>4.5</b>	The manual has been well edited; there are a few occasions where the language is not clear. The quality of editing in the handbooks is excellent.

	The use of supporting text and graphics	<b>4</b>	Adequate for the manual; excellent for the handbooks. The handbooks have the appearance of commercial publications.
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Table 76: Ratings for the 2010 FP numeracy course materials

		<b>Rating</b>	<b>Brief justification</b>
Content	Actual content meets tender specifications	<b>4</b>	There is a good match between tender specifications, course outcomes and course materials. Some implementation outcomes not evidenced in course materials.
	Usefulness/relevance of content	<b>4</b>	Thorough coverage of all mathematics topics, implementation and pedagogical coverage relates directly to the teaching of the mathematical topics presented. Content covered would be useful to teachers in SA schools.
	Clarity and accuracy of content	<b>4</b>	Content clearly and accurately presented. Arguably very little room for improvement.
	Level of content is appropriate	<b>4</b>	Material presented predominantly from a teaching perspective but room for higher level thinking on behalf of teachers in certain places.
	Content is gender sensitive and uses contextually relevant examples.	<b>5</b>	This has been considered throughout.
Instructional Design	Content is logically sequenced	<b>4</b>	Excellent development of content material. Content pages need improvement – some of them distract the learner through poor layout and choice of wording.
	Content is coherent	<b>4</b>	Flow of text and use of activities very good. Coherence provided for by course outline. Summaries could be useful.
	Support material is all-inclusive	<b>3</b>	Excellent presentation of content and activities. Feedback on activities could be useful (seldom given).
	Provides for extension of learning	<b>5</b>	Reference to departmental documents and some other texts throughout. Sufficient for a course of this nature or teachers could be overwhelmed by information overload.
Time allocations	Appropriate allocation of time amongst different topics	<b>n/a</b>	Time allocations not given in materials.
	Pace is appropriate	<b>4</b>	Allocation to LO guides basically in accordance with percentage specifications in tender document. Material presented with careful attention to progression and development of concepts.
	Use of time is maximized	<b>n/a</b>	No time allocations given in materials. (Programme time allocations to LO topics seem appropriate to content offering based on Block 2 programme.)
Approach to Teaching and Learning	Appropriate learning approach	<b>5</b>	Materials teach and model a hands-on approach involving learners in practical activities where ever possible to develop conceptual understanding. Teacher guidance recommended (guided discovery).
	Promotes active-learning	<b>5</b>	Many activities for teachers and their learners provided

			in the materials with explanations about how to use the activities and what can be learnt through doing them.
	Provides opportunities for reflection	3	There are reflection activities but they are not always adequately structured to consolidate learning. Feedback on reflection activities not always given – it would be useful.
	The use of activities	4	Good use of activities for the teaching of content. This is step one. Analytical reflection on the effectiveness of activities (as required by teachers) is not sufficiently provided for, although it is evident in places.
	The use of assignments/assessments	4	Activities clear and relevant throughout. They contribute to the achievement of the course outcomes. The range of skills assessed is mostly at a “how to” level – could be extended to higher level thinking.
Editing and lay-out	Material is well-edited	4	Excellent language throughout and not too many typos, though there is room for further final editing.
	The use of supporting text and graphics	4	Contents pages need improvement (LO1, LO2 and LO3). Some layout and style inconsistencies which do distract from the clarity of presentation.

Table 77: Ratings for the 2010 IP maths course materials

		Rating	Brief justification
Content	Actual content meets tender specifications	5	Excellent match between tender specifications, course outcomes and course materials.
	Usefulness/relevance of content	4	Content covered is both useful and relevant to the teachers of mathematics. Implementation input highlights current SA curriculum requirements with regard to mathematical context.
	Clarity and accuracy of content	4	Content clearly and accurately presented. Very little room for improvement.
	Level of content is appropriate	4	Content presented with a view to teaching in the Intermediate Phase. The level is appropriate for teachers of this phase.
	Content is gender sensitive and uses contextually relevant examples.	5	This has been considered throughout.
Instructional Design	Content is logically sequenced	4	Excellent development of mathematical content. Well integrated with implementation ideas and supplemented with other relevant information for teachers.
	Content is coherent	4	Course outline concise and clear and provides a good structure for the course materials. General flow of text and use of activities very good. Excellent summaries in several though not all guides.
	Support material is all-inclusive	4	Excellent presentation of content and activities. Very few areas where the self-containment of the materials can be queried.
	Provides for extension of learning	5	Carefully selected readings at the end of each guide. Reference to departmental documents throughout. Links to text books provide a regular reflection activity.

Time allocations	Appropriate allocation of time amongst different topics	n/a	Time allocations not given in materials.
	Pace is appropriate	3	Allocation to teachers' manuals not entirely in accordance with percentage specifications in tender document. Material presented with careful attention to progression and development of concepts.
	Use of time is maximized	n/a	No time allocations given in materials. Programme time allocations to LO topics seem appropriate to content offering in relation to percentage specifications in tender document.
Approach to Teaching and Learning	Appropriate learning approach	5	Materials teach and model a hands-on approach involving learners in practical activities where ever possible to develop conceptual understanding. Problem solving is presented in the context of most mathematical topics. Mental maths is presented as important.
	Promotes active-learning	4	Definitely – Many activities for teachers and their learners provided in the materials with explanations about how to use the activities and what can be learnt through doing them.
	Provides opportunities for reflection	4	Several outstanding reflection activities which allow for consolidation of learning but not consistent across all guides.
	The use of activities	4	Activities chosen for their potential to clarify and teach concepts through participation by learners. These do contribute towards the effective achievement of the course objectives.
	The use of assignments/assessments	5	The assignments are varied and allow a range of opportunities for learners to demonstrate their understanding of both the mathematical content and the way in which it should be taught.
Editing and lay-out	Material is well-edited	4	Very good use of language throughout. Because selections from several sources have been compiled to produce certain sections of some guides there is not one consistent presentation style. Not many typos but room for further final editing.
	The use of supporting text and graphics	4	Very few issues with format of text and illustrations. A single consistent style for general contents pages and levels of headings would unify the course materials which are considerable in volume.

Table 78: Ratings for the 2010 principal as manager of the curriculum course materials

		Rating	Brief justification
Content	Actual content meets tender specifications	3	It complies with the specifications in the designated areas.
	Usefulness/relevance of content	2	The topics are of relevance, but the content is superficial and too generalized due to the large number of topics and subtopics. Moreover, key topics such as processes of curriculum management have been given insufficient attention.

	Clarity and accuracy of content	<b>2</b>	For the most part, content is clearly presented. Some content is no longer accurate as a result of curriculum changes.
	Level of content is appropriate	<b>2</b>	The level is too low and content crowded into a short space of time. The level of superficiality leaves no room for higher level thinking or critical engagement.
	Content is gender sensitive and uses contextually relevant examples.	<b>3</b>	Gender neutrality and relevant examples appears to be observed throughout the materials.
Instructional Design	Content is logically sequenced	<b>2</b>	The content is poorly sequenced and much improvement could be made for clearer and more logical progression through topics.
	Content is coherent	<b>2</b>	Few examples of coherent format and information exist. Daily presentations tend to lack user-friendly introductions, theoretical backgrounds, summarizing passages, and are not linked together.
	Support material is all-inclusive	<b>2</b>	Rather than being a collection of handouts, the material would have benefitted tremendously from being compiled into a handbook containing all relevant information.
	Provides for extension of learning	<b>2</b>	Overall, additional resources were not referenced in the materials.
Time allocations	Appropriate allocation of time amongst different topics	<b>2.5</b>	Time is inadequate for full coverage and discussion of the numerous topics. Too much emphasis on what the curriculum is, and none on the processes by which it is carried out.
	Pace is appropriate	<b>2</b>	The pace is too fast, as there are too many topics to cover in a short period of time (11 topics and 44 subtopics). As a result, the pace limits opportunities for higher order thinking and critical engagement with topics.
	Use of time is maximized	<b>n/a</b>	It is not clear whether prescribed times are set in all activities and if so how well this is used. The session timings vary between 1 and a half and two hours. This limits time for activities where input from facilitators is required.
Approach to Teaching and Learning	Appropriate learning approach	<b>2.5</b>	There is a mix of approaches and techniques which are appropriate for the content. However, the approach offers limited opportunity for challenging input, critical engagement, or debate due to time constraints.
	Promotes active-learning	<b>2.5</b>	There appears to be opportunities for active learning but it is not clear how participants interact or learn from one another apart from 'gallery walks' and newsprint showings after very time-constrained activities.
	Provides opportunities for reflection	<b>2</b>	This is a weakness, given pace and overload of content at a superficial level. The lack of time dedicated to reflection will limit professional development opportunities during and post course.
	The use of activities	<b>3</b>	Some activities are more relevant than others, but it is questionable whether they provide opportunity for

			critical engagement given the time constraints.
	The use of assignments/assessments	<b>2.5</b>	Assignments are practical but could be improved to help participants apply their knowledge. The baseline assessment is limited in scope but the daily reviews seem to be helpful.
Editing and lay-out	Material is well-edited	<b>3</b>	There are a few typos but generally the material is clear and well-formatted.
	The use of supporting text and graphics	<b>3</b>	This seems acceptable.

### 9.3 Passage from the 2010 IP Maths course report (pg.10)

At this point in the discussion it was necessary to lay the foundation for why number concept development was necessary in the intermediate phase. The progression of number sizes from grade R to grade 6 was discussed. *It was evident that most of the teachers were unaware of this progression. They also needed the leading of the facilitator to find the necessary information from the NCS. The teachers were stunned at the large number ranges for grade 6 and the jump between grade 3 and grade 4.* Next, the importance of learners knowing their numbers up to 100 and 1000 was discussed as well as the influence that this number knowledge has on the operations. At this point in the discussion it was evident, through teacher responses, that the teachers understood that the *large number ranges involved with the four main operations are problematic when learners do not even know their small numbers. "No wonder they cannot multiply or divide!" one teacher commented. This discussion caused several a-ha moments amongst teachers as they gained a better understanding of why their learners were struggling with the four basic operations. The majority of the teachers agreed that they have never really tested their learners' knowledge of numbers up to 100/1000. They also said that they are sure that most of their learners do not know their numbers up to 100. The teachers furthermore agreed that when learners do not have a number concept up till at least 100, they cannot cope with the intermediate phase curriculum.* This was a very key discussion and, I believe, opened the teachers' eyes to the importance of developing children's number concept.

## 9.4 Teacher test item stats

Table 79: Foundation Phase curriculum pre-test item stats

Item number and description	Test Comp	Total		Afrikaans		English		IsiXhosa	
		% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty
4.1 Identify two CVC words	Phonics	7%	very hard	0%	very hard	22%	hard		
3. List all punctuation marks	Grammar	9%	very hard	19%	very hard	0%	very hard	0%	very hard
6. Identify type of text	Texts	9%	very hard	5%	very hard	33%	hard	0%	very hard
13. Order steps for writing process	Writing	11%	very hard	33%	hard	44%	medium	6%	very hard
20. Compare and contrast info	Thinking	15%	very hard	14%	very hard	22%	hard	13%	very hard
15.4 Identify consonant digraphs	Phonics	20%	hard	5%	very hard	22%	hard	38%	hard
17. Write 3 table headings	Info	26%	hard	29%	hard	44%	medium	13%	very hard
4.2 Identify words in same word family	Phonics	33%	hard	57%	medium	33%	hard	0%	very hard
10.1 Identify grammatical error	Grammar	33%	hard	38%	hard	33%	hard	25%	hard
16. Identify thinking and reasoning skills	Thinking	33%	hard	57%	medium	0%	very hard	19%	very hard
18. Draw a mind map	Info	33%	hard	52%	medium	44%	medium	0%	very hard
7. Identify the high frequency word	Phonics	39%	hard	43%	medium	89%	very easy	6%	very hard
10.3 Identify grammatical error	Grammar	39%	hard	57%	medium	44%	medium	13%	very hard
15.3 Identify consonant blends	Phonics	39%	hard	19%	very hard	78%	easy	44%	medium
15.1 Identify phonics pattern	Phonics	41%	medium	52%	medium	89%	very easy	0%	very hard
21. Question about a text	Texts	41%	medium	52%	medium	33%	hard	31%	hard
15.1 Identify phonics pattern	Phonics	43%	medium	62%	easy	56%	medium	13%	very hard
2. Write two questions about a text	Writing	50%	medium	52%	medium	56%	medium	44%	medium
15.5 Identify a vowel diphthong /plural word with long sound (Xho)	Phonics	50%	medium	43%	medium	33%	hard	69%	easy
4.4 Identify two rhyming words	Phonics	52%	medium	81%	very easy	67%	easy	6%	very hard
11. Correct use of conjunctions	Grammar	52%	medium	86%	very easy	67%	easy	0%	very hard
15.2 Identify phonics pattern	Phonics	54%	medium	48%	medium	78%	easy	50%	medium
4.3 Identify two words with three syllables	Phonics	57%	medium	71%	easy	78%	easy	25%	hard
19. Questions about a text	Texts	59%	medium	76%	easy	44%	medium	44%	medium
1. Cause and effect	Thinking	61%	easy	52%	medium	78%	easy	69%	easy
12. Identify a synonym	Grammar	72%	easy	100%	very easy	100%	very easy	19%	very hard
22. Identify a better caption	Texts	72%	easy	86%	very easy	56%	medium	63%	easy
14. Identify type of text	Texts	83%	very easy	81%	very easy	100%	very easy	75%	easy
9. List words that show sequence	Thinking	85%	very easy	86%	very easy	100%	very easy	75%	easy
5. Identify onset of word	Phonics	89%	very easy	95%	very easy	67%	easy	94%	very easy

Key: Test comp= Test component; % corr= % of teachers who obtained the item correct; very hard= 0%-19% obtained the item correct; hard= 20%-39% obtained the item correct; medium= 40%-59% obtained the item correct; easy= 60%-79% obtained the item correct; very easy= 80%-100% obtained the item correct.

Table 80: Foundation Phase curriculum post-test item stats

Item number and description	Test comp	Total		Afrikaans		English		isiXhosa	
		% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty
6. Identify type of text	Texts	6%	very hard	0%	very hard	33%	hard	0%	very hard
20. Compare and contrast info	Thinking	9%	very hard	10%	very hard	22%	hard	0%	very hard
3. List all punctuation marks	Grammar	13%	very hard	29%	hard	0%	very hard	0%	very hard
15.4 Identify consonant digraphs	Phonics	21%	hard	24%	hard	22%	hard	18%	very hard
4.2 Identify words in same word family	Phonics	28%	hard	52%	medium	22%	hard	0%	very hard
17. Write 3 table headings	Info	32%	hard	62%	easy	11%	very hard	6%	very hard
13. Order steps for writing process	Writing	34%	hard	52%	medium	44%	medium	6%	very hard
16. Identify thinking and reasoning skills	Thinking	38%	hard	43%	medium	33%	hard	35%	hard
4.3 Identify two words with three syllables	Phonics	38%	hard	90%	very easy	89%	very easy	24%	hard
18. Draw a mindmap	Info	40%	medium	67%	easy	44%	medium	6%	very hard
8. Identify phonics pattern	Phonics	40%	medium	52%	medium	89%	very easy	0%	very hard
21. Question about a text	Texts	45%	medium	48%	medium	33%	hard	47%	medium
10.3 Identify grammatical error	Grammar	47%	medium	57%	medium	67%	easy	24%	hard
15. 3 Identify consonant blends	Phonics	49%	medium	48%	medium	78%	easy	35%	hard
7. Identify the high frequency word	Phonics	49%	medium	57%	medium	78%	easy	24%	hard
10.1 Identify grammatical error	Grammar	51%	medium	67%	easy	56%	medium	29%	hard
15.1 Identify phonics pattern	Phonics	53%	medium	76%	easy	78%	easy	12%	very hard
15.2 Identify phonics pattern	Phonics	53%	medium	48%	medium	78%	easy	47%	medium
2. Write two questions about a text	Writing	55%	medium	71%	easy	67%	easy	29%	hard
11. Identify correct use of conjunctions	Grammar	55%	medium	86%	very easy	67%	easy	12%	very hard
5. Identify the onset of a word	Phonics	55%	medium	67%	easy	67%	easy	76%	easy
19. Questions about a text	Texts	57%	medium	71%	easy	44%	medium	47%	medium
15.5 Identify a vowel diphthong /plural word with long sound (Xho)	Phonics	62%	easy	52%	medium	78%	easy	65%	easy
22. Identify better caption	Texts	64%	easy	57%	medium	78%	easy	65%	easy
1. Cause and effect	Thinking	66%	easy	62%	easy	89%	very easy	59%	medium
12. Identify a synonym	Grammar	68%	easy	100%	very easy	100%	very easy	12%	very hard
4.4 Identify two rhyming words	Phonics	70%	very easy	57%	medium	56%	medium	6%	very hard
4.1 Identify two CVC words	Phonics	80%	very easy	76%	easy	89%	very easy		
9. List words that show a sequence	Thinking	85%	very easy	95%	very easy	78%	easy	76%	easy
14. Identify type of text	Texts	87%	very easy	100%	very easy	78%	easy	76%	easy

Key: Test comp= Test component; % corr= % of teachers who obtained the item correct; very hard= 0%-19% obtained the item correct; hard= 20%-39% obtained the item correct; medium= 40%-59% obtained the item correct; easy= 60%-79% obtained the item correct; very easy= 80%-100% obtained the item correct.



Table 81: Intermediate Phase curriculum pre-test item stats

Item number and description	Test comp	Total		Afrikaans		English		isiXhosa	
		% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty
8. Order steps in writing process	Writing	5%	very hard	0%	very hard	6%	very hard	10%	very hard
24. Draw bar graph	Graphs	18%	very hard	30%	hard	22%	hard	0%	very hard
25. Identify metaphor	Figurative	21%	hard	20%	hard	28%	hard	10%	very hard
6. Identify reading strategy	Texts	37%	hard	50%	medium	33%	hard	30%	hard
20. Identify alliteration	Figurative	39%	hard	50%	medium	44%	medium	20%	hard
2. Write questions based on text.	Texts	42%	medium	50%	medium	33%	hard	50%	medium
27. Questions to bring out social values in text	Texts	42%	medium	30%	hard	44%	medium	50%	medium
14. Identify correct sentence: past perfect tense	Grammar	45%	medium	10%	very hard	72%	easy	30%	hard
13. Identify correct sentence: verb	Grammar	47%	medium	30%	hard	67%	easy	30%	hard
28. Write caption/title	Texts	50%	medium	40%	medium	28%	hard	100%	very easy
25. Write two questions based on graph.	Graphs	53%	medium	60%	easy	44%	medium	60%	easy
26. What social values conveyed	Texts	58%	medium	60%	easy	61%	easy	50%	medium
19. Identify onomatopoeia words	Figurative	61%	easy	70%	easy	50%	medium	70%	easy
22. Identify figure of speech	Figurative	61%	easy	50%	medium	67%	easy	60%	easy
15. Identify correct sentence: subject verb agreement	Grammar	63%	easy	0%	very hard	89%	very easy	80%	very easy
5. Identify reading strategy	Texts	68%	easy	60%	easy	78%	easy	60%	easy
7. Identify purpose and audience	Texts	68%	easy	80%	very easy	78%	easy	40%	medium
10. Identify correct sentence: pronouns	Grammar	68%	easy	80%	very easy	78%	easy	40%	medium
9. Identify correct sentence: superlative form	Grammar	71%	easy	80%	very easy	94%	very easy	20%	hard
17. Identify correct sentence: conditional and tense	Grammar	74%	easy	20%	hard	94%	very easy	90%	very easy
1. Identify type of text	Texts	76%	easy	80%	very easy	78%	easy	70%	easy
16. Identify correct sentence: contractions	Grammar	82%	very easy	70%	easy	94%	very easy	70%	easy
11. Identify correct sentence: tense	Grammar	84%	very easy	70%	easy	83%	very easy	100%	very easy
3. Literal comprehension	Texts	89%	very easy	90%	very easy	89%	very easy	90%	very easy
23. Identify figure of speech	Figurative	89%	very easy	100%	very easy	89%	very easy	80%	very easy
12. Identify correct sentence: conjunctions	Grammar	95%	very easy	80%	very easy	100%	very easy	100%	very easy
18. Identify correct sentence: tense and prepositions	Grammar	95%	very easy	100%	very easy	100%	very easy	80%	very easy
4. Identify synonym for word	Grammar	97%	very easy	100%	very easy	94%	very easy	100%	very easy

Key: Test comp= Test component; % corr= % of teachers who obtained the item correct; very hard= 0%-19% obtained the item correct; hard= 20%-39% obtained the item correct; medium= 40%-59% obtained the item correct; easy= 60%-79% obtained the item correct; very easy= 80%-100% obtained the item correct.

Table 82: Intermediate Phase curriculum post-test item stats

Description	Test comp	Total		Afrikaans		English		isiXhosa	
		% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty
8. Order steps in writing process	Writing	11%	very hard	0%	very hard	18%	very hard	13%	very hard
24. Draw bar graph	Graphs	17%	very hard	20%	hard	24%	hard	0%	very hard
25. Identify metaphor	Figurative	31%	hard	50%	medium	24%	hard	25%	hard
25. Write two questions based on graph.	Graphs	34%	hard	50%	medium	18%	very hard	50%	medium
27. Questions to bring out social values in text	Texts	34%	hard	60%	easy	12%	very hard	50%	medium
14. Identify correct sentence: past perfect	Grammar	37%	hard	0%	very hard	59%	medium	38%	hard
2. Write questions based on text.	Texts	40%	medium	70%	easy	18%	very hard	50%	medium
6. Identify reading strategy	Texts	43%	medium	40%	medium	53%	medium	25%	hard
22. Identify figure of speech	Figurative	51%	medium	60%	easy	29%	hard	88%	very easy
20. Identify alliteration	Figurative	54%	medium	50%	medium	76%	easy	13%	very hard
26. What social values conveyed	Texts	54%	medium	70%	easy	53%	medium	38%	hard
28. Write caption/title	Texts	54%	medium	30%	hard	59%	medium	75%	easy
10. Identify correct sentence: pronouns	Grammar	60%	easy	70%	easy	65%	easy	38%	hard
19. Identify onomatopoeia words	Figurative	60%	easy	60%	easy	59%	medium	63%	easy
13. Identify correct sentence: verb	Grammar	63%	easy	60%	easy	65%	easy	63%	easy
7. Identify purpose and audience	Texts	66%	easy	70%	easy	71%	easy	50%	medium
15. Identify correct sentence: subject verb agreement	Grammar	66%	easy	10%	very hard	88%	very easy	88%	very easy
17. Identify correct sentence: conditional and tense	Grammar	69%	easy	30%	hard	88%	very easy	75%	easy
1. Identify type of text	Texts	83%	very easy	90%	very easy	88%	very easy	63%	easy
3. Literal comprehension	Texts	83%	very easy	100%	very easy	76%	easy	75%	easy
9. Identify correct sentence: superlative form	Grammar	86%	very easy	80%	very easy	94%	very easy	75%	easy
18. Identify correct sentence: tense and preposition	Grammar	86%	very easy	100%	very easy	82%	very easy	75%	easy
16. Identify correct sentence: contractions	Grammar	89%	very easy	100%	very easy	94%	very easy	63%	easy
11. Identify correct sentence: tense	Grammar	91%	very easy	100%	very easy	82%	very easy	100%	very easy
4. Identify synonym for word	Grammar	94%	very easy	100%	very easy	88%	very easy	100%	very easy
5. Identify reading strategy	Texts	94%	very easy	90%	very easy	100%	very easy	88%	very easy
23. Identify figure of speech	Figurative	94%	very easy	100%	very easy	94%	very easy	88%	very easy
12. Identify correct sentence: conjugations	Grammar	97%	very easy	100%	very easy	94%	very easy	100%	very easy

Table 83: Foundation Phase proficiency test item stats

Item number and description	Test comp	Total		Afrikaans		English		isiXhosa	
		% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty
17. Extended writing of a description.	Writing	0%	very hard	0%	very hard	0%	very hard	0%	very hard
7. Extended writing: Explain and justify position	Writing	2%	very hard	5%	very hard	0%	very hard	0%	very hard
23. Write sentence using word as adverb	Gram	15%	very hard	10%	very hard	22%	hard	18%	very hard
38. Express and justify opinion	Writing	17%	very hard	24%	hard	11%	very hard	12%	very hard
5.1 Correct mistake- verb tense	Gram	19%	very hard	19%	very hard	56%	medium	0%	very hard
11. Choose opposite of a word	Vocab	23%	hard	24%	hard	22%	hard	24%	hard
19. Features of a dictionary	Text	26%	hard	10%	very hard	33%	hard	41%	medium
5.3 Correct mistake- past perfect tense	Gram	32%	hard	24%	hard	33%	hard	41%	medium
24. Choose synonym for word	Vocab	38%	hard	67%	easy	33%	hard	6%	very hard
31. Write 4 statements to compare and contrast	Writing	38%	hard	38%	hard	33%	hard	41%	medium
5.2 Correct mistake- contractions and tense	Gram	40%	medium	67%	easy	56%	medium	0%	very hard
15.3 Identify subject	Gram	43%	medium	38%	hard	56%	medium	41%	medium
27. Literal comprehension	Comp	43%	medium	71%	easy	22%	hard	18%	very hard
30. Identify the root of a word	Vocab	43%	medium	62%	easy	78%	easy	0%	very hard
35. Comprehension	Comp	47%	medium	19%	very hard	78%	easy	65%	easy
15.2 Identify part of speech	Gram	51%	medium	62%	easy	67%	easy	29%	hard
20. Features of a dictionary	Text	51%	medium	86%	very easy	67%	easy	0%	very hard
33. Comprehension	Comp	51%	medium	62%	easy	22%	hard	53%	medium
37. Features of text	Text	53%	medium	67%	easy	67%	easy	29%	hard
9. Literal comprehension	Comp	55%	medium	86%	very easy	56%	medium	18%	very hard
22. Features of a dictionary	Text	55%	medium	76%	easy	89%	very easy	12%	very hard
8. Features of autobiographies	Text	57%	medium	62%	easy	78%	easy	41%	medium
15.1 Identify part of speech	Gram	57%	medium	76%	easy	78%	easy	24%	hard
5.5 Correct mistake-homonym	Vocab	60%	easy	81%	very easy	89%	very easy	18%	very hard
2. Inferential comprehension	Comp	62%	easy	67%	easy	89%	very easy	41%	medium
12. Inferential comprehension	Comp	62%	easy	48%	medium	67%	easy	76%	easy
32. Features of advertisements	Text	62%	easy	33%	hard	78%	easy	88%	very easy
25. Literal comprehension	Comp	66%	easy	90%	very easy	78%	easy	29%	hard
5.4 Correct mistake- possessive	Gram	68%	easy	71%	easy	56%	medium	71%	easy
6.1 Ask a question about statement	Gram	68%	easy	76%	easy	89%	very easy	47%	medium
16.4 Choose the correct word: verb tenses	Gram	68%	easy	95%	very easy	22%	hard	59%	medium
36. Identify whether statement is a phrase or a clause	Gram	68%	easy	71%	easy	56%	medium	71%	easy
21. Features of a dictionary	Text	70%	easy	81%	very easy	78%	easy	53%	medium
29. Use of quotations	Gram	70%	easy	81%	very easy	67%	easy	59%	medium
6.2 Ask a question about statement	Gram	77%	easy	95%	very easy	89%	very easy	47%	medium
4. Vocabulary comprehension	Comp	79%	easy	67%	easy	67%	easy	100%	very easy
28. Inferential comprehension	Comp	79%	easy	95%	very easy	78%	easy	59%	medium

34. Comprehension	Comp	85%	very easy	86%	very easy	100%	very easy	76%	easy
16.2 Choose the correct word: verb tenses	Gram	87%	very easy	100%	very easy	100%	very easy	65%	easy
16.3 Choose the correct word: verb tenses	Gram	89%	very easy	100%	very easy	67%	easy	88%	very easy
26. Literal comprehension	Comp	89%	very easy	95%	very easy	89%	very easy	82%	very easy
1. Literal comprehension	Comp	94%	very easy	95%	very easy	100%	very easy	88%	very easy
13. Literal comprehension	Comp	94%	very easy	95%	very easy	89%	very easy	94%	very easy
16.1 Choose the correct word: verb tenses	Gram	94%	very easy	86%	very easy	100%	very easy	100%	very easy
18. Recognition of a dictionary	Text	94%	very easy	100%	very easy	100%	very easy	82%	very easy
3. Features of interviews	Text	96%	very easy	100%	very easy	100%	very easy	88%	very easy
10. Vocabulary comprehension	Vocab	98%	very easy	100%	very easy	100%	very easy	94%	very easy

Table 84: Intermediate Phase proficiency test item stats

Item number and description	Test comp	Total		Afrikaans		English		isiXhosa	
		% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty	% corr	Level of difficulty
7. Extended writing: Explain and justify position	Writing	0%	very hard	0%	very hard	0%	very hard	0%	very hard
17. Extended writing of a description.	Writing	3%	very hard	0%	very hard	6%	very hard	0%	very hard
11. Choose opposite of a word	Vocab	25%	hard	10%	very hard	29%	hard	38%	hard
31. Write 4 statements to compare and contrast	Writing	25%	hard	60%	easy	6%	very hard	25%	hard
38. Express and justify opinion	Writing	33%	hard	70%	easy	24%	hard	13%	very hard
5.2 Correct mistake- contractions and tense	Gram	33%	hard	50%	medium	41%	medium	0%	very hard
23. Write sentence using word as adverb	Gram	36%	hard	30%	hard	35%	hard	50%	medium
5.1 Correct mistake- verb tense	Gram	36%	hard	30%	hard	59%	medium	0%	very hard
9. Literal comprehension	Comp	36%	hard	50%	medium	41%	medium	13%	very hard
19. Features of a dictionary	Text	39%	hard	0%	very hard	53%	medium	63%	easy
5.4 Correct mistake- possessive	Gram	39%	hard	60%	easy	12%	very hard	75%	easy
27. Literal comprehension	Comp	42%	medium	70%	easy	41%	medium	13%	very hard
30. Identify the root of a word	Vocab	44%	medium	60%	easy	53%	medium	13%	very hard
5.3 Correct mistake- past perfect tense	Gram	47%	medium	20%	hard	59%	medium	63%	easy
24. Choose synonym for word	Vocab	47%	medium	90%	very easy	41%	medium	13%	very hard
37. Features of text	Text	53%	medium	30%	hard	65%	easy	63%	easy
36. Identify whether statement is a phrase or a clause	Gram	56%	medium	80%	very easy	53%	medium	38%	hard
6.2 Ask a question about statement	Gram	56%	medium	60%	easy	41%	medium	88%	very easy
20. Features of a dictionary	Text	58%	medium	60%	easy	76%	easy	25%	hard
15.2 Identify part of speech	Gram	64%	easy	90%	very easy	53%	medium	63%	easy
12. Inferential comprehension	Comp	64%	easy	90%	very easy	59%	medium	50%	medium
25. Literal comprehension	Comp	64%	easy	90%	very easy	65%	easy	38%	hard
15.3 Identify subject	Gram	67%	easy	60%	easy	71%	easy	75%	easy
35. Comprehension	Comp	67%	easy	0%	very hard	100%	very easy	88%	very easy
8. Features of autobiographies	Text	67%	easy	60%	easy	76%	easy	63%	easy

15.1 Identify part of speech	Gram	69%	easy	90%	very easy	76%	easy	38%	hard
16.4 Choose the correct word: verb tenses	Gram	69%	easy	100%	very easy	47%	medium	88%	very easy
6.1 Ask a question about statement	Gram	72%	easy	70%	easy	76%	easy	75%	easy
34. Comprehension	Comp	72%	easy	50%	medium	94%	very easy	63%	easy
5.5 Correct mistake-homonym	Vocab	75%	easy	90%	very easy	76%	easy	63%	easy
28. Inferential comprehension	Comp	75%	easy	90%	very easy	71%	easy	75%	easy
22. Features of a dictionary	Text	78%	easy	100%	very easy	94%	very easy	25%	hard
4. Vocabulary comprehension	Comp	78%	easy	60%	easy	82%	very easy	100%	very easy
33. Comprehension	Comp	81%	very easy	90%	very easy	82%	very easy	75%	easy
32. Features of advertisements	Text	81%	very easy	70%	easy	94%	very easy	75%	easy
21. Features of a dictionary	Text	81%	very easy	100%	very easy	88%	very easy	50%	medium
29. Use of quotations	Gram	83%	very easy	90%	very easy	76%	easy	100%	very easy
16.3 Choose the correct word: verb tenses	Gram	83%	very easy	100%	very easy	76%	easy	88%	very easy
26. Literal comprehension	Comp	83%	very easy	90%	very easy	76%	easy	100%	very easy
2. Inferential comprehension	Comp	89%	very easy	90%	very easy	94%	very easy	88%	very easy
16.2 Choose the correct word: verb tenses	Gram	92%	very easy	100%	very easy	94%	very easy	88%	very easy
1. Literal comprehension	Comp	92%	very easy	80%	very easy	100%	very easy	100%	very easy
13. Literal comprehension	Comp	92%	very easy	80%	very easy	100%	very easy	100%	very easy
16.1 Choose the correct word: verb tenses	Gram	94%	very easy	100%	very easy	94%	very easy	100%	very easy
3. Features of interviews	Text	94%	very easy	100%	very easy	94%	very easy	100%	very easy
10. Vocabulary comprehension	Vocab	94%	very easy	100%	very easy	94%	very easy	100%	very easy
18. Recognition of a dictionary	Text	97%	very easy	100%	very easy	100%	very easy	100%	very easy

## 9.5 Fieldwork details

Table 85: Teachers visits for the Foundation Phase Literacy Course

School Name	Teacher name	Grade	LOLT	District	EMIS no.	Data collector	Date of visit
Bongolethu P.	Z. Mnana	2	Xho	M. South	106005109	M.R.	04/11/2010
Bongolethu P.	N. Noshauta	3	Xho	M. South	106005109	M.R.	04/11/2010
Ebenhaeser P.	W. Thomas	1	Afr	W. Coast	138340219	S.M.	05/11/2010
Elandsfontein P.	A. De Beer	3	Afr	W. Coast	136476358	S.M.	04/11/2010
Jongensklip P.	S. Sarine	1	Afr	Overberg	114309270	S.M.	01/11/2010
Macassar P.	M. Nell	3	Afr	M. East	110320811	S.M.	29/10/2010
Marconi Beam P.	G. Malgarte	2	Eng	M. North	103322474	E.F.	26/10/2010
Masonwabe P.	N. Maqethuka	2	Xho	M. North	107322415	M.R.	05/11/2010
Paarlzicht P.	N. Smith	1	Afr	C. W.	108470392	S.M.	02/11/2010
Rusthof P.	S. Steve	1	Afr	M. East	111320439	S.M.	26/10/2010
Rusthof P.	M. Swartland	1	Afr	M. East	111320439	S.M.	26/10/2010
Thembelitsha P.	T. Jijana	1	Xho	ECK	119041307	M.R.	02/11/2010
Uitkyk Laerskool	H. Groenewald	1,2	Afr/Eng	Overberg	114309364	E.F.	01/11/2010
Welwitschia P.	N. Siyaphi	2	Xho	M. North	107331023	M.R.	05/11/2010

Welwitschia P.	B. Madlongwana	1	Xho	M. North	107331023	A.G.	05/11/2010
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Key: A.G.= Anton Gibbons; E.F.=Eileen Fisher; M.R.=Mmaphake Ramasodi; S.M.=Susan Meyer

Table 86: Teachers visits for the Foundation Phase Numeracy Course

School Name	Teacher name	Grade	LOLT	District	EMIS no.	Data collector	Date of visit
ACJ Phakade P.	L. Shiyani	1	Xho	M. East	111007178	M.R.	04/11/2010
ACJ Phakade P.	N. Oyiso	1	Xho	M. East	111007178	A.G.	04/11/2010
A.P. Gedenk P.	C. Cloete	3	Afr	W. Coast	132476021	S.M.	04/11/2010
Bongoletu P.	T. Manengele	1	Xho	M. South	106005109	A.G.	04/11/2010
Denemere Prm	H. De Wet	3	Eng	M. East	107322229	E.F.	28/10/2010
Harmony P.	N. Young	1	Eng	M. South	105310441	E.F.	03/11/2010
Macassar P.	D. Williams	3	Afr	M. East	110320811	S.M.	29/10/2010
Masonwabe P.	P. Mondliwa	1	Xho	M. North	107322415	A.G.	05/11/2010
Mooi-Uitsig P.	A. Fransman	1	Afr	C.W.	126330507	S.M.	03/11/2010
Reygersdal P.	J. Daniels	2	Afr	M. North	132470473	S.M.	02/11/2010
Rusthof P.	M. Zass	1	Afr	M. East	111320439	S.M.	26/10/2010
Rusthof P.	M. Rhoda	3	Afr	M. East	111320439	S.M.	26/10/2010
Welwitschia P.	N. Pakade	3	Xho	M. North	107331023	A.G.	05/11/2010

Key: A.G.= Anton Gibbons; E.F.=Eileen Fisher; M.R.=Mmaphake Ramasodi; S.M.=Susan Meyer

Table 87: Teachers visits for the Intermediate Phase Language Course

School Name	Teacher name	Grade	LOLT	District	EMIS no.	Data collector	Date of visit
ACJ Phakade P.	N. Duba	6	Eng	M. East	111007178	A.G.	04/11/2010
A.P. Gedenk P.	W. Van Rooyen	4	Afr	W. Coast	132476021	S.M.	04/11/2010
Bongoletu P.	N. Mdaka	5	Eng	M. South	106005109	A.G.	04/11/2010
Ebenezer P.	F. Nackerdiem	6	Afr/Eng	C.W.	108470104	S.M.	02/11/2010
Ebenhaeser P.	D. Dirks	4,5	Afr	W. Coast	138340219	S.M.	05/11/2010
Harmony P.	M.K. Philander	4	Eng	M. South	105310441	E.F.	03/11/2010
Imvumelwano P.	P. Rosi	4	Eng	M. North	107322431	E.F.	28/10/2010
Kairos P.	L.V. Nombembe	4	Eng	M. North	107322466	E.F.	27/10/2010
Kairos P.	Y.B. Ngoma	5	Eng	M. North	107322466	E.F.	27/10/2010
Lwandle P.	F. Tyalana	4	Eng	M. East	106041206	E.F.	26/10/2010
Phakamisani P.	M.P. Skosana	6	Eng	ECK	119041309	M.R.	02/11/2010
Phakamisani P.	S. Lobishe	4	Eng	ECK	119041309	A.G.	02/11/2010
Sigcawu Public P.	V.M. Van Wyk	5	Eng	M. North	102041344	E.F.	03/11/2010
Sir Lowry's Pass P.	E.S. Carelse	7	Afr	M. East	110322075	E.F.	27/10/2010
Thembaletu P.	K. Ntengo	5,6	Eng	ECK	118325686	M.R.	01/11/2010
Thembaletu P.	Z. Nceba	6,7	Xho	ECK	118325686	M.R.	01/11/2010
Thembaletu P.	T. Gwarube	5,6,7	Eng	ECK	118325686	A.G.	01/11/2010
Wanganella P.	C. Davids	5,6	Afr	C.W.	126338664	S.M.	03/11/2010

Key: A.G.= Anton Gibbons; E.F.=Eileen Fisher; M.R.=Mmaphake Ramasodi; S.M.=Susan Meyer

Table 88 Teachers visits for the Intermediate Phase Maths Course

School Name	Teacher name	Grade	LOLT	District	EMIS no.	Data collector	Date of visit
Cavalleria P.	M. Joseph	4	Afr/Eng	M. North	101320986	E.F.	28/10/2010
Dennemere P.	J. Vergotine	4,5,6	Eng	M. East	107322229	E.F.	28/10/2010
Du Noon P.	Z. E. Madolo	4	Eng	M. North	103007995	E.F.	26/10/2010
Ebenhaeser P.	N. Cloete	4	Afr	W. Coast	138340219	S.M.	05/11/2010
Fraaisig P.	C. Bouw	5	Afr	ECK	119350036	M.R.	02/11/2010
Imperial P.	S. Benjamin	4	Eng	M. South	106490504	E.F.	02/11/2010
Imperial P.	F. February	6	Eng	M. South	106490504	E.F.	02/11/2010
Kretzenshoop P.	L. Sauer	6,7,8,9	Afr	ECK	118356336	M.R.	01/11/2010
Leiden P.	M. Mkhohli	4	Eng	M. North	107008018	M.R.	05/11/2010
Mooi-Uitsig P.	I. Hendriks	6	Afr	C.W.	126330507	S.M.	03/11/2010
Sigcawu Public P.	P. Duda	4	Eng	M. North	102041344	E.F.	03/11/2010
Sir Lowry's Pass P.	S. A. Persent	5	Afr	M. East	110322075	E.F.	27/10/2010
Thembaletu P.	J. Lufele	7	Eng	ECK	118325686	A.G.	01/11/2010
Thembaletu P.	Y. Jafta	6,7	Eng	ECK	118325686	A.G.	01/11/2010
Thembelitsha P.	N. Magantolo	6	Eng	ECK	119041307	A.G.	02/11/2010
Timourhall P.	A. Sparks	6	Eng	M. South	105309359	E.F.	26/10/2010

Key: A.G.= Anton Gibbons; E.F.=Eileen Fisher; M.R.=Mmaphake Ramasodi; S.M.=Susan Meyer

Table 89: Principal visits for the Principal as Manager of the Curriculum Course

School Name	Principal name	District	EMIS no.	Data collector	Date of visit
Huguenot P.	B. Hartnic	M. South	110321001	E.F.	27/10/2010
Masivuke P.	V.A. Giyose	M. South	106490180	E.F.	02/11/2010
Oklahomastraat P.	P. Beukes	M. East	106007100	S.M.	01/11/2010
Vredendal Sek.	K. Henderson	W. Coast	138473421	S.M.	05/11/2010

Key: A.G.= Anton Gibbons; E.F.=Eileen Fisher; M.R.=Mmaphake Ramasodi; S.M.=Susan Meyer