Education and Development CONsulting

EDCON

From Blaming to Reflecting

An Evaluation of the Quality Education Project (QEP) in Zimbabwe and Zambia

Carried out by

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Abbreviations

BEAM	Basic Education Assistance Module
CDS	Curriculum Depth Study
CRT	Cluster Resource Teacher
DEO	District Education Officer
DESO	District Education Standards Officer
EI	Education International
EFA	Education for All
ESO	Educations Standards Officer
ETF	Educational Transition Fund
FGD	Focus Group Discussions
GER	Gross Enrolment Ratio
JICA	Japanese International Cooperation Agency
MDG	Millennium Development Goals
MEC	Ministry of Education and Culture
NGO	Non-Governmental organisation
OG	Original Group
QEP	Quality Education Project
SACMEQ	Southern and Eastern African Consortium for Monitoring
SC	Save the Children
SCN	Save The Children Norway
TIMMS	Trends in International Mathematics and Science Study
TOR	Terms of reference
TTC	Teacher Training College
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
UNZA	University of Zambia
UZ	University of Zimbabwe

Executive Summary

Save the Children (SC) works to fulfil the right to *quality education* for all children and has this as one of its top strategic priorities. To this end the Quality Education Project (QEP) was initiated by Save the Children Norway (SCN) as a pilot project in 2002. The long-term objective of the QEP is to investigate and contribute to education quality development in order to improve children's situation in school and their opportunity for learning.

> The Quality Education Project targets teachers in pre-service and in-service teacher training and helps them analysing their own class-room behaviour. The QEP is learner-centred. It is about problem-solving and individual and collective feedback for improving teaching. The methodology used to reach this aim is educational action research. This means that teachers are trained in studying their own class-room, looking at the problems that exist, coming up with a solution to the problem, trying this solution out in practice and evaluate the outcome of the action. In some schools in Zambia all teachers in a school were at one point QEP-trained while in Zimbabwe only a few teachers in some schools were QEP-trained.

Originally four countries participated in the QEP – Ethiopia, Mozambique, Zambia and Zimbabwe. A final evaluation of the project in all four countries was conducted by Clive Harber and David Stephens from December 2008 to December 2009. Their study was based primarily on qualitative research methods like interviews, field diary impressions, photographs and observations. They concluded that QEP was a significant and innovative educational programme and a great deal had been achieved, but warned that there was no cheap or quick alternative to achieving the type and degree of educational change that QEP aspired to. The study recommended SCN and partners to "shift the focus more towards learning outcomes".

Following up this recommendation, in October 2013 SCN contracted an evaluation team to evaluate both the learning outcomes of pupils who had had QEP trained teachers in Zimbabwe and Zambia as well as the sustainability of the QEP project in these two countries. The field-work for the study was carried out between the 3rd and 21st of November 2013. The team interviewed more than 300 people, including pupils, parents, teachers, school heads, district education officers, university and college lecturers, and student teachers. The team conducted class-room observations in 36 classrooms, compared test scores (provided by the schools) in the 7th grade national examinations in both countries, before and after QEP was introduced, and administered tests in Mathematics and in English/Shona/Chitonga for 4th and 6th grade pupils taught by QEP and non-QEP trained teachers. Tests were given to 603 pupils in Zambia, 267 in grade 6 and 336 in grade 4 and to 840 pupils in Zimbabwe, 420 each in grade 6 and grade 4.

Learning outcomes on cognitive tests

Neither in Zambia nor in Zimbabwe did we find significant differences in achievement on national exams after 7th grade between QEP schools and schools where teachers had not been QEP trained. A likely explanation for the non-significant differences could be that in the QEP schools in Livingstone and Kazugula in Zambia, where all teachers originally had been QEP-trained, many teachers had moved away from the school and new teachers, who were not QEP trained, had come in. In Bikita in Zimbabwe only a few teachers (1 to 4) in each school were amongst those originally trained in QEP. There had been some in-service training at the school level from QEP trained teachers to non-QEP trained teachers, but we had no time to find out how much of such activity had taken place. It was also not part of our terms of reference. A comparison between QEP and non-QEP schools at the time of this study was actually not a valid measure since in the schools where originally many, or even all, of the teachers had been QEP trained, only three or four were still there.

For the tests administered to the 4th and 6th graders, only pupils of QEP trained teachers in the so-called QEP schools and of non-QEP trained teachers in the so-called non-QEP schools were included. The team found clear and statistically significant differences in favour of pupils who had had teachers who were QEP trained. In Zambia, there were statistically significant differences in grade 4 and grade 6, both in Language and Mathematics. For instance, 4th grade children taught by QEP trained teachers in Zambia had an average score of 15.0 on the language test while the average score obtained on the language test for children taught by non-QEP trained teachers was 9, a statistically significant difference[1]. Children in 4th grade taught by QEP trained teachers had a mean score of 15.8 on the Mathematics test while the mean score for 4th graders taught by non-QEP trained teachers was 9.9. Again, the mean difference was statistically significant[2]. Statistically significant differences were also found in Zambia's grade six results, both in Mathematics and English[3] in relation to whether the teacher was QEP trained or non-QEP trained.

In Zimbabwe, of the schools compared, most schools with QEP trained teachers were in remote areas while the schools we looked at where teachers had not been QEP-trained were in a more populated area (growth point). When we looked at the overall results on the English and Maths test, we did not find any statistically significant difference between pupils of non-QEP-trained teachers in the populated area Jerera and pupils of QEP trained teachers in the remote rural area where most schools with QEP trained teachers were located. But the comparison was not between schools in similar environments.

When we, however, compared achievement of pupils in schools with QEP trained teachers in the growth point area, Nyika in Bikita (the district where the QEP training had taken place), with the achievement of pupils of non-QEP trained teachers in the

[1] (*M= 6.50, SD = 4.45, t-value = 26.74, df= 334, P<.001*)

[2] (M= 6.39, SD= .50, t-value= 32.85, df, 334, *P<.001*).

[3] (M= 1.54, SD= .50, t-value = 50.54, df=268, *P<.001)*

Jerera growth point - a similar area in Zaka, where there had been no QEP training, there were statistically significant differences in favour of the pupils who had had QEP trained teachers. It should be noted that pupils in more populated areas have the advantage of hearing more English due to more television and internet access. Since English is the language of instruction from 4th grade, it is an advantage to have some exposure to the language outside school. Children in remote areas hardly have any such exposure.

Learning outcomes more broadly defined

Through classroom observations the team found evidence suggesting that QEP trained teachers posed more open and challenging questions to their pupils and they gave them more individual help. As a school head in Zimbabwe said about the QEP trained teachers in his school: “They seek new ways of teaching different topics to different children of different abilities.”

Interviews with parents indicated that the children with QEP trained teachers are more eager to learn. These children also show their critical thinking ability in the questions they pose to their parents. Parents, whose children have QEP trained teachers in Bikita in Zimbabwe, told that their children would e.g. ask parents how they could practice some aspects of “conservation farming” and improve the farming of small grain crops (Bikita is a drought stricken district that suffers from the effects of climate change in the Masvingo province and small grains can be a good alternative to conventional maize production). One child taught by QEP trained teachers wanted to gain knowledge on the advantages of using an ox-drawn plough. Another child wanted to learn how to cook different traditional dishes at home.

Evidence suggest that QEP trained teachers do not blame pupils, but try to find out reasons why a certain child has not done her or his homework or comes late to school. Pupils of QEP trained teachers told the team that their teachers did not beat them, so they really enjoyed going to school and would not miss a class. In both countries head-teachers, teachers and pupils alike said that corporal punishment was not practiced by QEP trained teachers.

Sustainability of the project

Almost all of the interviewees claimed that the project was not sustainable without some support from the outside, preferably from the Ministry of Education and bilateral or multilateral donors. We do not know how many schools use in-service training to teach action research. We could not find any systematic and regular tracing of in-service QEP training going on in the different schools the team visited.

The team found only one institution that had adopted the QEP approach whole-heartily and was not dependent on any funding from the outside, namely Charles Lwangwa Teacher College in Zambia. In Zimbabwe the Department of Teacher Education (DTE) at the University of Zimbabwe continues working on action research as an option to research designs in the 15 teacher training colleges under the DTE scheme of association. Save the Children is funding this.

Recommendations

This evaluation shows that pupils do significantly better in schools, get better grades, like school more and become more eager to learn when they are taught by QEP trained teachers. The fact that QEP-trained teachers have stopped beating children is worth any cost in the world.

There has been no tracer study following up those who have been QEP trained. How have they used their training? A study should be undertaken focusing on the sustainability of QEP. To what extent have those who have gone through the longest and most intensive QEP training shared their knowledge and acquired skills to fellow teachers and other colleagues? What form has this sharing taken? How could one assure a better and more systematic sharing of the QEP ideology?

A system or framework should be put in place to ensure that QEP training continues, is established in the Teacher Colleges, is part of a recognised programme of in-service training and is accepted by the Ministries of Education.

The faculties of Education in the universities as well as the teacher colleges are central institutions when it comes to promoting the QEP ideology and action research training. In Zambia there is a need for training of the staff at the University of Zambia in the QEP approach. Also the staff of Livingstone Teacher College should be QEP trained. At the University of Zimbabwe a renewed discussion on action research and its place in teacher training could be started giving examples of action research projects that have been carried out using more quantitative research methods, to diversify the scope.

The QEP needs some continued funding from Norway for the above recommendations to be effected. SCN should strive to form a partnership with the governments as well as NGOs and international organizations like UNICEF. It should be possible for QEP and SC to form partnerships with organisations like UNESCO's Teacher Training Initiative for sub-Saharan Africa (TTISSA). TTISSA sees it as imperative to upgrade and professionalize contract teachers (non-civil servant teachers) that are being employed as a solution to teacher shortage. Using the QEP ideology may here be of great value. The initiative is coordinated by UNESCO Dakar and led by a TTISSA coordination committee, comprising all major stakeholders[4]. Another organization which SC may form a partnership with is Read Educational Trust which is a South African based NGO that operates in the education and literacy sectors in Africa broadly, and in educator training and school resource provision specifically. Established in 1979 and funded by foreign donors and the private sector, READ works alongside the Department of Education to implement teacher training and literacy projects in schools[5].

[4] http://www.unesco.org/new/en/dakar/education/teacher-training-initiative-for-sub-saharan-africa/

[5] http://www.read.co.za/

Chapter 1: Introduction, the Quality Education Project, action research, purpose and use of the study

1.1 Introduction

During the 1980s and 1990s there was a strong focus on access to education at international level. From 2000 and onwards the concern about *quality issues* in education resurfaced, backed by documentation on inadequate teaching and low level of learning outcomes.

Save the Children (SC) works to fulfil the right to *quality education* for all children and has this as one of its top strategic priorities. During the past decade much has been done globally to provide quality basic education for children, an obligation stated in the Convention on the Rights of the Child. But how is quality education defined? There have been many attempts at defining this concept.

In reviewing the research literature related to quality in education, UNICEF (2000) argues for a broad definition involving learners, content, processes, environments and outcomes. In this publication UNICEF writes:

Quality education includes:

- Learners who are healthy, well-nourished, ready to participate and learn, and supported in learning by their families and communities;
- Environments that are healthy, safe, protective and gender-sensitive, and that provide adequate resources and facilities;
- Content that is reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV/AIDS prevention and peace;
- Processes through which trained teachers use child-centred teaching approaches in well-managed classrooms and schools and skillful assessment to facilitate learning and reduce disparities; and,

- Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.

Though there is some emphasis on teachers and the use of child-centred teaching approaches in this definition, the language in which learning is to take place is not mentioned. Fifty per cent of the world's out-of-school children live in communities where the language of schooling is rarely, if ever, used at home. According to the World Bank (2005) this fact underscores the biggest challenge to achieving Education for All (EFA): a legacy of non-productive practices that lead to low levels of learning and high levels of dropout and repetition. In these circumstances, an increase in resources, although necessary, would not be sufficient to produce universal completion of a quality primary school program.

In 2011 the World Bank released its Education Strategy 2020 called *Learning for All: Investing in People's Knowledge and Skills to promote Development*. According to the World Bank three quarters of the countries that are the furthest from meeting the Millennium Development Goals (MDG) on primary completion rates are in Sub-Saharan Africa (World Bank 2011:4).

The World Bank notes that for many students more schooling has not resulted in more knowledge and skills necessary for job creation. According to the World Bank group:

> Several studies illustrate the seriousness of the learning challenge. More than 30 per cent of Malian youths aged 15–19 years who completed six years of schooling could not read a simple sentence; the same was true of more than 50 per cent of Kenyan youths (World Bank 2011: 6-7).

In this publication the World Bank does not ask the obvious question: In whose language could the youth not read a simple sentence? In their own language or a language foreign to them, a language which they hardly hear around them?

In the countries under study here, Zimbabwe and Zambia, English was used as the LOI from grade 3 or 4. Teachers admitted that the communication with pupils was difficult because they did not understand what the teacher was saying. QEP trained teachers

several times told the team that if they had been allowed to use the local language, the pupils would have had no problem understanding. This was especially the case for the academically weakest and most marginalized students. Studies in which a familiar language has been used as a LoI instead of the unfamiliar exogenous language show that teachers smile more, do not punish pupils, encourage critical questions, are more learner-centred in their approach (Brock-Utne 2007,2012, Bamgbose 2005, Mwinsheikhe 2007, Mekonnen 2009, Vuzo 2012). Learning outcomes are also greatly improved when a familiar language that pupils master well is being used. In the 2003 TIMSS (Trends in International Mathematics and Science Study) mathematics test for grade eight, it was reported that out of the 45 countries that participated Ghana finished as number 44. Ghanian students scored 276 compared to the international average of 466. In two articles in the Ghana News Y. Fredua-Kwarteng and Francis Ahia (2005 a, 2005b) try to explain these low results. In the first, article they discuss the results in mathematics, in the second the results in science. They find that the main reason why the students do not learn problem-solving and problem-posing skills has to do with the use of a foreign medium as the language of instruction:

> Since Ghanaian students took the test in English (the so-called official language of Ghana), those whose first language is non-English are at great disadvantage. We are not surprised that countries that top-performed in the mathematics test – Taiwan, Malaysia, Latvia, Russia – used their own language to teach and learn mathematics (Fredua-Kwarteng and Ahia. 2005a).

The Unite for Quality Education is a campaign of Education International (EI), the voice of teachers and other education employees across the globe. On their web-site[6] they talk about the *three pillars of quality education*: teachers, tools and environments of

- QUALITY TEACHERS: Teachers are the most important educational resource and a critical determinant of quality
- QUALITY TOOLS: Appropriate curricula and inclusive teaching and learning materials and resources, including ICT

[6] www.ei-ie.org

Here we would like to add: teaching and learning in a language children master and are well familiar with, adequate number of textbooks and learning material and

- QUALITY ENVIRONMENTS: Supportive, safe and secure facilities enabling teachers to teach effectively.

1.2 Brief background to the Quality Education Project (QEP)

The Quality Education Project (QEP) was initiated by Save the Children Norway (SCN) as a pilot project in 2002 in order to address the need for improved quality issue in primary school education. In the original project document it is stated that:

> the long-term objective of the Quality Education Project (QEP) is to investigate and contribute to education quality development in order to improve children's situation in school and their opportunity for learning. The major focus is on capacity building of teachers and teacher educators in the area of action research and qualitative research methods (Nagel, 2006:54).

Originally four countries participated in the QEP project Zambia, Zimbabwe, Ethiopia and Mozambique. A final evaluation of the project was conducted from December 2008 to December 2009 including all four countries (Harber and Stephens, 2009). The study was based mainly on qualitative methods. The two researchers concluded that QEP was "a significant and innovative educational program and a great deal has been achieved", but warned that there is no cheap or quick alternative to achieving the type and degree of educational change that QEP aspires to.

The study recommended that SCN and partners "shift the focus more towards learning outcomes as well as learning and teaching methods and involve children more in decision-making about issues of quality."

The focus of QEP is on the pre-service and in-service training of teachers. Participatory action research methods and reflective practices are used and expected to throw light on factors pertinent for quality education as well as to identify hindrances to quality and suggest remedies. The knowledge generated in this process is aimed to empower the

teachers to continuous reflection and development and ultimately produce change in the teaching-learning situation and thereby improve quality in education for children.

In the terms of reference (TOR) for this evaluation the evaluation team was asked to conduct an impact assessment of the effects of the Quality Education Project (QEP) in Zimbabwe and Zambia, focusing on children's learning outcomes and the sustainability of the project.

1.3 Learning outcomes

It may not be quite fair to evaluate QEP using learning outcomes of pupils who have been taught by QEP trained teachers as a measure, especially not if one uses tests from national exams or even more locally made cognitive tests. The aim of QEP, as stated initially, was not to help pupils to achieve better results on national exams or other traditional tests. These tests normally measure rather narrow cognitive learning. They do not measure critical thinking, inventiveness, curiosity or ability to co-operate.

Schweisfurth (2013:94) notes that the cognitive benefits of learner-centred education seem pale in a context striving for high achievement on traditional exams, especially in a situation where the political context is not conducive to an emancipatory narrative. She gives, as an example, the success of Chinese learners on traditional exams based on rote learning taught through teacher centred methods. Cornelius-White (2007) shows that learner centred education is associated with a range of positive outcomes like critical thinking, but this learning outcome is one normally not needed in rote exams. It is also doubtful that teaching can become learner-centred in a situation where a foreign language is used as the language of instruction, a question we were not asked to look into, but which came popping out in our field-work all the time.

We were asked to analyse how and to what extent the learning environment differs for pupils who have teachers trained in QEP compared to pupils who have non-QEP trained teachers. Here, learning outcomes are looked at in an expanded sense where we, through non-participant observation and interviews, could learn whether pupils had

come to like school, become interested in learning and had learnt to cooperate.

1.4 Brief background to Educational Action Research

There are two main traditions within educational action research. Though they both are concerned with improving the environment and learning taking place in class-rooms, they vary in their emphasis. The Marburg elementary school project under the leadership of Wolfgang Klafki (1976) was inspired by Habermas and the Frankfurt school of thought (for example, Habermas and Luhmann, 1971). The Cambridge Action Research network under the leadership of John Elliot (1978) and in close cooperation with Lawrence Stenhouse at the University of East Anglia did not, to the same degree, discuss the philosophy behind educational action research but was concerned with training teachers in looking at their own class-rooms and the class-rooms of their colleagues in a critical manner. The teacher as researcher became an important concept. In two articles, Brock-Utne (1980, 1988) tries to combine these two research traditions.

The first book giving voice to Norwegian action researchers within education appeared in 1979 (Brock-Utne (Eds.) 1979). In an article in this edited volume Brock-Utne (1979) discusses the use of research methods within educational action research. She agrees with Wolfgang Klafki when he notes that both quantitative and qualitative research methods are useful within education action research, though they are employed somewhat differently within action research than they are in traditional empirical research. In an article Möllenhauer and Rittelmeyer (1975) argue that it is wrong to talk about empirical analytical research versus educational action research. This dichotomy does not exist. Also educational action research is empirical research. The same research instruments may be used in both types of research. It is important in this evaluation to stress this point, as the opposition to the use of action research came from lecturers adhering to quantitative research methods. They felt threatened by action research which some of them looked at as a type of research using only qualitative methods.

Those involved in educational action research are most often studying their own practice and know well the context of their work. The emphasis on action may partly explain the lack of attention to piloting studies being conducted within educational action research. Another explanatory factor is the fact that action research is more often than not an on-going process, not solely connected to a time-limited research project conducted by an external researcher. Given that participatory action research is understood in terms of improvement such as Kemmis and McTaggart (2005) describe it, pilot studies need to be included in the scholarly discussion within qualitative educational research and action research just as much as within quantitative research and in research within other disciplines.

It is an 'underutilized technique', as argued by Kezar (2000:385), which is not frequently conducted due to both financial and time constraints. By discussing two separate and different cases from their own research Greta Gudmundsdottir and Birgit Brock-Utne (2010) argue that it is helpful to publish the findings from pilot studies as well as the end result of main studies. Because of the few days set aside for the present study, it was not possible to do any piloting of our research instruments.

In 2013 a collection of practical ideas and examples of action research projects was published by Save the Children Zimbabwe (Chisaka et.al 2013). The publication consists of eleven chapters dealing with action research as a reflective practice and with the qualitative research paradigm. It gives concrete suggestions on how to write field-notes, how to use story telling in action research and how to undertake a qualitative data analysis.

1.5 Purpose and use of the study

According to the terms of reference (Appendix G) the main purpose of this evaluation is to study the extent of improved *learning outcomes* among pupils who have been taught by teachers and education officials trained in the QEP methodology. SCN wanted to test the thesis that pupils taught by QEP-trained teachers perform better than pupils who

have not been taught by teachers trained in the QEP methodology. The evaluation team was asked to:

1) Document results and assess impact

a.) Has QEP been effective in bringing about improved learning outcomes for learners who have or have had teachers trained in QEP? This should also include proxy indicators such as completion rate and retention and drop-out.

b.) Have the most marginalized pupils benefited from QEP?

c.) What major changes can be documented, and what are the results of these?

d.) Analyse the cost-benefit of QEP, if possible.

e.) Are there any unintended positive or negative effects?

f) How and to what extent does the learning environment differ for learners who have teachers trained in QEP compared to learners who have non-QEP trained teachers?

These key questions were meant as preliminary suggestions. The evaluation team was asked to develop the list of key questions to ensure the above objectives. This we did in our Inception Report (Brock-Utne et al 2013a) and we added the following research questions:

g) Will pupils who have been taught by teachers trained in the QEP methodology show their parents that they are happier at school than those pupils taught by non-QEP teachers who have not been trained in the QEP methodology?

h) Do pupils who have been taught by QEP trained teachers express greater satisfaction with schooling than pupils who have not been taught by QEP trained teachers?

i) What are the differences in class participation between pupils who have been taught by QEP trained and those taught by non-QEP trained teachers?.

We also added a hypothesis:

H1 At the national exams pupils who have been taught by QEP teachers will perform at the same level as pupils who have not been taught by QEP teachers.

After reviewing the terms of reference the evaluation team agreed on looking at learning outcomes in two different ways, a narrow and a broader way. A narrow definition of learning outcomes entails testing of cognitive skills. The team decided to test pupils taught by QEP and non-QEP trained teachers in English and Maths. A broader view on learning outcomes entails finding out whether pupils like to learn, are critical, creative and independent.

The only way to measure whether pupils have acquired such qualities is through conducting classroom observations, interviews and focus group discussions.

In the TOR we were also asked to

- analyse *the sustainability* of the project and
- discuss the potential for replicating and scaling up similar projects in other regions and countries.

We hope that this study will prove useful for Ministries of Education, regional and district education officers, teacher Unions, Teacher Colleges and Parent-Teacher organizations, Save the Children offices around the world as well as other international non-governmental and governmental organizations.

Chapter 2: Methodology, limitations of study and ethical issues

2.1 Introduction

Research approach refers to a general orientation to the conduct of social research (Bryman, 2004). In the field of evaluation research the case for a multi-strategy research approach seems to have acquired especially strong support (Tashakkori and Teddlie, 2003, Bryman, 2006). There is reason to question the soundness of the whole dichotomy between qualitative and quantitative research. The authors of a book called "Mixing Methods: Qualitative and Quantitative Research" (Brannen 1992) have the ambition to break down this dichotomy. One of the authors in the book Martyn Hammersley (1992:39) expresses himself this way: “I shall argue that the distinction between qualitative and quantitative is of limited use and, indeed, carries some dangers”.

Both qualitative and quantitative research approaches were utilized to collect data in this evaluation. This methodological triangulation provided the study a depth which a single approach could not have provided. This section presents the methodological approach that was employed in this study highlighting the research design, population, sample, data collection techniques, data analysis, reliability and validity, limitations of the study and ethical issues.

2.2 Population and sample

2.2.1 Population and sample: Zambia

In order to have a comprehensive evaluation, the target population for this study comprised the Colleges of Education and Universities that participated in the QEP implementation in Zambia and Zimbabwe: Charles Lwanga College of Education and the University of Zambia.

Teachers, parents and pupils from schools where the teachers had been trained in action research and the QEP ideology, and schools where the teachers had not been trained in action research and the QEP ideology from Livingstone and Kazungula districts in the Southern Province of Zambia formed part of the study population. The distribution was as shown in Table 2.1:

Table 2.1: Name of school by school type and by district-Zambia

NAME OF BASIC SCHOOLS	DISTRICT		QEP SCHOOL	NON-QEP SCHOOL
	LIVINGSTONE	KAZUNGULA		
1. Simukombo		X	X	
2. Riverview		X	X	
3. Simoonga		X	X	
4. Livingstone	X		X	
5. Kamwi		X	X	
6. MariaAssumpta	X		X	
7. Mujala	X			X
8. Mukuni		X		X
9. Songwe		X		X
10. Nachilinda		X		X

The distribution of respondents was as follows:

Total #. of pupils	603
# Grade 6	267
# Grade 4	336
#Teachers	24
#Head teachers	10
#Parents	58
# FGD for pupils	10
# FGD for parents	10
# University lecturers(trainers of Action Research (AR))	3
# College lecturers(trainers of AR	3
# College student teachers trained in AR	4

2.2.2. Population and sample in Zimbabwe

In Zimbabwe the target population for this study comprised the following Colleges of Education: Masvingo Teachers College, Bondolfi Teachers College and Morgenster Teachers College. It also comprised the University of Zimbabwe (UZ). All these institutions had participated in the QEP implementation in Zimbabwe. Teachers, parents and pupils from schools where the teachers had been trained in action research and the

QEP ideology, all from Bikita district, and schools where the teachers had not been trained in action research and the QEP ideology, all from Zaka district, formed part of the study population. The distribution was as follows:

Table 2.2: Name of school by school type and by district-Zimbabwe

NAME OF BASIC SCHOOL	DISTRICT		SCHOOL TYPE	
	Bikita	Zaka	QEP	NON-QEP
Duma	X		X	
Beardmore	X		X	
Mutsinzwa	X		X	
Makotore	X		X	
Chigumisirwa	X		X	
Negovano	X		X	
Zaka		X		X
Munjanja		X		X
Chinorumba		X		X
Chipezeze		X		X
Mushungwa		X		X
Vudzi		X		X

N.B In Zimbabwe a QEP school is one where 110/1131 (9.7%) teachers in Bikita were QEP trained.

The distribution of respondents was as follows:

Aspect	**Quantity**		
	QEP	**Non-QEP**	**Total**
Total #. of pupils tested	420	420	840
# Grade 6	210	210	420
# Grade 4	210	210	420
# Teachers	10	9	19
# School heads	6	6	12
# Parents	88	88	176
# FGD for pupils	5	6	11
# FGD for parents	6	6	12
# University lecturers (trainers of Action Research (AR)	3		
# College lecturers(trainers of AR	3		
# College student teachers trained in AR	2		
Ministry of Education Officials	5		

N.B 13 other Head Teachers were interviewed through FGDs in Bikita

2.3 Sampling procedure

The study employed both random, purposive and convenience sampling techniques to arrive at the desired sample. In Zimbabwe teachers, school heads and education officers from our so called QEP schools in the Bikita district were randomly selected from the 40 who were QEP trained at the inception of QEP in 2006. The Primary schools, School heads and Colleges of Education were selected using purposive sampling from the target of 40, based on their participation in QEP as criteria. Save the Children Harare provided the full list of this original group and their respective schools and offices. Verification was done with the district office by phone if indeed the QEP trained teachers and officers were still in the stations that were provided on the Save the Children Harare office list.

Some had indeed moved to other schools, districts or vertically to higher posts whilst others had naturally left the system through death. During this preliminary stage we had to sample conveniently 6 schools that still had the QEP trained teachers. A closer look at the list, we selected schools that still had 2 to 4 QEP trained teachers. This was a criterion that we used to come up with the six schools that we wanted rather than go for a school with only one QEP trained teacher. We also had to look at accessibility of the school as well as the surrounding population (populated or sparse), that is we had to select big schools and small schools as such. Big schools found in populated areas or growth points had to be selected as well as those found in rural and remote areas of the district. The justification being that schools in populated areas such as growth points were likely to portray different traits and pass rate as compared to rural and remote schools. The acting DEO for Bikita also verified our schools and the names of the teachers as had been provided on the Save the Children Harare's original group of 40 that was trained in 2006. From this original list we also selected the school heads, education officers as well as college lecturers that we followed up for interviews.

Convenience sampling was also used to select the non-QEP schools which often were pointed out to us by the authorities and, in Zimbabwe, were not too far away. Two schools in the non-QEP schools (Zaka and Munjanja) were near a populated area,

Jerera also known as a growth point. In Zimbabwe a growth point is generally defined as a rural settlement which central and local governments consider having a potential for further development (Wekwete, 1988). A growth point is a 'small town' in a rural setting characterised by a workforce other than subsistence farmers. Children from growth points in Zimbabwe are characterised by some basic urban traits such as exposure to local television, satellite television, the internet, close interaction with peers and willing parents who support and can afford better education for their children. Research noted that urban schools in Zimbabwe perform better than their rural counterparts (Chirume, Maisiri and Dirwai, 2009). In their report Chirume et-al (2009) argued that pass rate was higher in urban areas, growth points, mine and mission schools, than in remote rural areas. Urban, growth points, mission and mine schools often enjoy better infrastructure and (working) parents who often can afford paying for extra lessons for their children, more than parents in remote rural areas. The two growth point schools matched with one QEP school, Duma located in a similar geographical space, Nyika growth point. Four other non-QEP teachers were located some 10-15km away from the populated area of Jerera and these were the closest schools that were used to match with our 4 remote rural QEP schools. Deliberately left out in the sample was one mission school in the non-QEP district since we did not have a mission school in our QEP sample too.

A random sampling was also used when interviewing pupils in grade 4 and 6, classes that we had selected in our proposal. A group of 15 pupils of both boys and girls were chosen for focus group discussions from the selected classes. At times the classes had to be split into two classes of 15 to accommodate views from as many pupils as was possible. Parents were also randomly chosen and these were parents or guardians of children who currently attended the target school.

2.5 Data Collection Techniques

To provide as much detail as possible, data collection triangulation was utilised by employing both qualitative and quantitative methods. Qualitative data was collected through observations, semi-structured interviews, focus group discussions with parents

and pupils, and document analysis. When it came to the classroom observations, both quantitative and qualitative data were gathered. An observation matrix was used in the gathering of the quantitative data. At the same time the observer also noted down what type of questions teachers were asking, what the seating arrangement looked like and whether the classrooms had “talking walls” – walls that were mostly decorated by the pupils. To collect quantitative data, Mathematics and English tests were administered to pupils in Grade Four and Six. Data was collected with the help of six research assistants, three in Zambia and three in Zimbabwe.

2.6. Data analysis

Qualitative data was coded into themes as set out in research questions to allow for more detailed analysis. The statistical package for social sciences (SPSS) was used to analyse the quantitative data. Descriptive statistics such a frequency, means and percentages were generated to examine general trends in the data. T-Test was used to establish the emerging mean differences in pupil performance between QEP and non-QEP schools to test the single set hypothesis.

2.7. Reliability and Validity

Reliability is a question of whether repeated investigations of the same phenomenon will give the same result. Kleven (1995: 13) defines reliability as "relative absence of haphazard errors of measurement." He concludes that both within qualitative and quantitative methods validity is more important than reliability. In fact he raises the question whether we need the concept of reliability at all as an independent concept since the question of reliability has little relevance except in connection with the question of validity. Reliability, he claims, only has relevance because it is a necessary precondition for attaining validity. This applies equally well to quantitative as to qualitative data. The only difference exists in the fact that within the qualitative tradition one often overlooks the threat to validity of the data, which has to do with an insufficient concern for reliability.

In psychometric textbooks the types of error which lead to low reliability are grouped into conditions having to do with the test situation, conditions connected to the

researcher, conditions having to do with the test person in the test situation, and conditions having to do with the test itself. Kleven (1995), applying the concept of reliability to a qualitative research method such as participant observation finds that the following three questions are of great relevance:

1. Would we have seen the same and interpreted what we saw the same way if we had happened to have made the observation at another time?

This question deals with the stability of the observations.

2. Would we have seen the same and interpreted what we saw the same way if we had happened to pay attention to other phenomena during observation?

We may here speak of parallel form reliability.

3. Would a second observer with the same theoretical framework have seen and interpreted the observations the same way?

We may here speak of objectivity or intra-judge subjectivity.

When it came to the classroom observations we made, it would have been an advantage had we had time and resources to have had two researchers be in the same classrooms at the same time to fill in the observation forms and make participant observations. Most of the time, this was not possible. In one instance when we did so, there was a high degree of correspondence between the observations of the researchers.

In this study we used the conventional way of treating validity, triangulation. We triangulated data from focus group discussions with parents and children in order to come up with parameters to verify the possible changes that could be attributed to QEP training. Data on classroom observations augmented interview data from the school heads and education officers on the change noted in QEP trained teachers and yet to be noted in non-QEP trained teachers. Use of a 360^0 approach in our study confirms the concept of convergent validity which implies that different methods for the same construct should give relatively high inter-correlation. When it came to a phenomenon

like punishment or threat of punishment of pupils from teachers we found a high inter-correlation between the statements of school heads, parents and pupils. Such inter-correlation points at high validity. We made use of different methods belonging both to the quantitative (tests) and qualitative paradigm (observations and interviews) to arrive at our results. The results all point in the same direction, a high inter-correlation.

2.8 Ethical Issues

Ethical requirements are of critical importance in all social science research as Babbie (2003) observes, because often researchers have to come into intimate contact with their subjects. Some of the ethical principles that have to be fulfilled include: getting informed consent from respondents; ensuring that there is confidentiality, avoidance of inflicting harm to the respondents; respecting the respondents, and being honest.

In order to fulfil these important ethical requirements, Save the Children Head offices in Harare as well as in Lusaka sought permission from the Ministries of Education at Headquarters and District levels as well as Colleges of Education and Universities for us to visit the schools and conduct observations and interviews. The Ministry of Education officials facilitated access to schools and the school managers sought permission from the parents for the children to participate in the study. The scope and rationale of the study was well explained to participants. Interviews with parents and pupils were conducted in the local languages in both countries. At each research site, respondents were assured that all the information would be kept confidentially and that it would only be used for the purposes of evaluation. We have not disclosed names of the pupils we interviewed. But in many cases the pupils wanted their names, and especially their pictures, in the report. A group of pupils asked if they could not be on the cover page of our report. As mentioned, most of the parents, especially in Zimbabwe, wanted their names to be in the report.

Ethical research should not just be about not doing harm to the participants, but also the possibility for the research to benefit those you are researching or the community they live in. We count on Save the Children using our results to expand the programme, preferably in co-operation with the national and regional authorities.

2.9 Challenges and Limitations of the Study

The biggest challenge encountered was that the amount of time allocated for this study was inadequate. A study of such a magnitude requires an allocation of adequate time to enable a comprehensive coverage even though all the four researchers worked more days than originally allocated. In Zimbabwe we had a big challenge in that there was no baseline done in the non-QEP district for the 6 schools selected and neither was there tracer studies done on the QEP trained teachers. This made it not very easy to compare the schools with non QEP trained teachers against our 6 schools in Bikita with QEP trained teachers. We lacked trek data into how long the QEP trained teachers had been with the children or with a particular class. In Zimbabwe teachers at times do not seem to stick to a grade for long but tend to move with the class from lower to upper grades. The selection though based on accessibility, population size and school size, did not actually work for the best of our schools with QEP trained teachers as 6 of the schools with non-QEP trained teachers were all near and at the much populated areas, growth points whilst 4 of our schools with QEP trained teachers were in remote areas. This was a challenge when comparing tests results at both national grade 7 and at our grade 4 and 6 tests. The QEP trained teachers were scattered all over the district and some had already left as noted above.

In Zambia the main challenge was that the information on progression, repetition and drop- out rates were scant as some schools were not examination centres from the time the QEP began. Schools in this category did not provide results to cover the period defined in this study. The schools which did not provide grade 7 results did not do so because they were not examination centres then and all their grade 7 pupils were distributed to established examination centres. It was not possible to isolate such pupils from the many schools where they were distributed.

Chapter 3: Findings from Zambia

3.1. Introduction to the Zambian study

The QEP training in Zambia has mostly taken place in the south of the country, in the Livingstone and Kazungula districts. It was difficult for the District Education Standards Officer (DESO) in Kazungula, which is a large district with schools in very remote areas, to do her job properly, because of transportation problems. She accompanied us on our trips to the schools and was, thus, able to inspect the schools and get some up-dated information. When QEP was first introduced in this district, whole schools had been QEP trained. But here, as in Zimbabwe, the likelihood that QEP trained teachers will be promoted is high. We found that in some of the schools where all teachers once had been QEP trained, there might be just three or four of the original teachers left and several new teachers without QEP training had joined the staff. There was no systematic provision for training these new teachers in the QEP philosophy.

The findings of the Zambia report are presented both quantitatively and qualitatively along the research hypotheses provided in chapter 1 of this report. Quantitative results are presented using descriptive tables and t-tests highlighting means and mean differences. A thematic approach was used to present the qualitative results.

3.2 Teacher Training in the Quality Education Project

To establish the benefits of QEP training on learning outcome, we interviewed QEP trained teachers on their reflections about QEP training. Firstly, it was imperative to establish the level of training of teachers in QEP. It must be mentioned, however, that all the teachers who were interviewed were QEP trained although some of them were teaching in non-QEP schools.

Figure 3.1 shows the duration and nature of training in QEP, the QEP trainers as well as the school type. On Figure 3.1 the y-axis is a representation of the number of people trained in each category while the x-axis is the duration and mode of training. As can be seen from Figure 3.1 below, most of the teachers were trained by Save the Children while others indicated that they were trained by the Ministry of Education Board

Secretarial office. Duration of training varied from one year to seven years in some cases, with majority of the teachers indicating that their training took a period of two years. It is worth noticing that training was mainly done through workshops and school-in-service training.

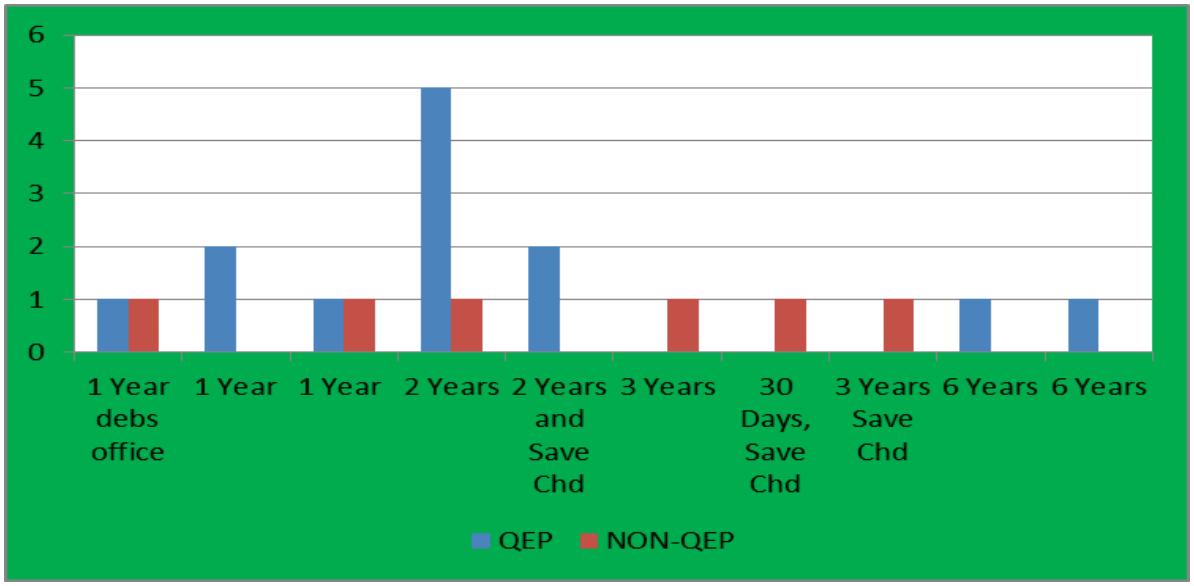


Figure 3.1: Period of Training in QEP by Trainer by School Type

When asked for the reasons for joining QEP, out of the 19 teachers who participated in the study, nine (9) indicated that they wanted to improve and provide quality education, eight (8) indicated that they wanted to implement the QEP teaching methodology, whereas two (2) observed that they wanted to help learners, identify problems, and find solutions. Teachers also indicated that because of QEP training they were able to implement action research and this had enabled them to identify problems and generate solutions aimed at improving the learning outcomes. They further noted that through QEP training, they were able to implement the learner centred approach in the classroom. For instance one teacher at Riverview Basic School (QEP) observed:

> *my teaching has now improved from the time I was trained in QEP. I am now able to give learners a platform to participate in classroom activities and enable them to come up with informed decisions…. My role as a teacher is to facilitate, guide and direct them.*

Another QEP teacher from Kamwi Basic (a non-QEP school) noted that because of QEP training he is able to involve the learners in teaching and that his relationship with colleagues has greatly improved from the time he was trained. Yet, another QEP teacher at Nachilinda Basic School (non-QEP school) observed that he is able to implement a learner centred approach because of the QEP training he underwent. Furthermore, QEP training provided teachers with critical thinking techniques they could use to solve problems and develop an action research agenda as a way of establishing why certain problems are there and establish possible solutions to those problems.

The practice in many QEP classrooms is for teachers to identify a problem through action research and then come up with solutions. Bryman (2008) also acknowledges the impact of action research as it involves people participating in the diagnosis and solution to different problems as opposed to pre-imposing solutions on them

At one QEP school, through action research QEP trained teachers identified low reading levels in the school as an immediate problem. The QEP trained teachers came up with a technique called “Red tracking” to help poor readers through a reading programme. “Red tracking” monitors children on a monthly basis and those who make progress graduate to higher reading levels. This technique was employed to help poor readers from Grade 1 to 7.

Pupils identified as poor readers are put in “Red tracking” and given support. Each month they are assessed to see whether they have made progress at reading. Below is Table 3.1 that was exhibited in the Head Teacher’s office for children identified as poor readers from Grade 1 to 7.

Table 3.1. Red Tracking for Poor Readers

MONTH	GRADE 1 to 7	
	BOYS	GIRLS
JAN, 2013	9	14
FEB, 2013	9	13
MARCH, 2013	8	14 (one newcomer)
APRIL, 2013	8	12
May, 2013	7	10

As can be seen from Table 3.1, the number of children who could not read kept on dropped progressively and was tracked monthly through assessments and monitoring.

The commitment by QEP teachers was further confirmed by the Director of Standards and Curriculum at the Ministry of Education Headquarters who underwent QEP training as Principal Inspector in Southern Province. The Director noted:

> *QEP training encouraged teachers to be reflective and emphasized the learner centred approach. The child became the central focus of the lesson and teachers were able to make follow up on children who were lagging behind. This in turn enhanced the ability of the parents and teachers to generate solutions to mitigate on the challenges individual children were facing.*
>
> *Through QEP training, Head teachers came up with a monitoring tool for quality teaching and as such teachers and teacher educators were able to get feedback on issues affecting their everyday delivery of quality services for the benefit of the learners.*

These factors improved management and monitoring techniques resulting in effective teaching.

At the supervisory level, the findings revealed that the main focus of QEP at all levels was action research. Standards officers who had been trained in action research were able to handle many curricular issues through this method. There were plans by the

provincial office to scale up QEP training to non-QEP schools within the province. These tenets of QEP might have had a multiplier effect in ensuring quality teaching not only in QEP schools but also in non-QEP schools. The teachers 'questionnaire showed that many teachers in non - QEP schools wished to have the same training as their colleagues. They were happy that we were engaged in this evaluation as they took it as a clear sign that the QEP training would start again as noted by one teacher at Mujala school:

> *We would also love to be trained in QEP because this training has equipped our fellow teachers with skills and competencies to analyse and understand issues in order to provide appropriate interventions to problems affecting classroom practices in teaching and learning. We trained together with some of these teachers in colleges but they seem to be teaching better than us. In fact this training should be given to all teachers in the country.*

It is clear from the above described interviews and survey results that QEP training has had a positive impact on the quality of teaching. The QEP ideology has, to some extent, been extended to non-QEP classrooms by QEP teachers who moved to those schools through transfers and promotions.

3.3. Findings on learning outcomes

To determine the effects of QEP on learning outcomes, we tested a number of hypotheses.

H1 Pupils who have been taught by QEP teachers will perform at the same level as pupils who have not been taught by QEP teachers.

To determine whether there is a significant difference in performance between pupils taught by QEP teachers and those taught by non-QEP teachers, we examined results in Grade Four, Grade Six and in national composite examinations in Grade Seven respectively. For Grade Four and Six, children were tested in English and Mathematics whereas the Grade Seven results from the National Composite Examinations were obtained from the schools.

3.3.1 Results in grade seven national composite examinations

The aim of this section is to establish performance trends in the period 2004 to 2012. It has to be mentioned that not all the schools had results covering the stated period as some schools only became examination centres in 2008. For the purpose of consistency in the trend analysis therefore, only results covering the period 2008 to 2012 were considered for this study. Figure 3.2 is an indication of the percentage of pupils who passed the Grade Seven examination in a given school as provided by the schools. These results support the notion that schools which had more QEP trained teachers and were formally known as QEP schools when the programme was on pilot still performed better than those perceived to be non QEP although they may have received QEP trained teachers. The perceptions of both QEP trained and non QEP trained teachers but familiar with the QEP philosophy is that the progression, retention, completion and achievements rates in the formally QEP schools, but still with a larger number of QEP trained teachers, was still better than that in the non QEP schools . The results could be valid despite the presence of an empirical baseline.

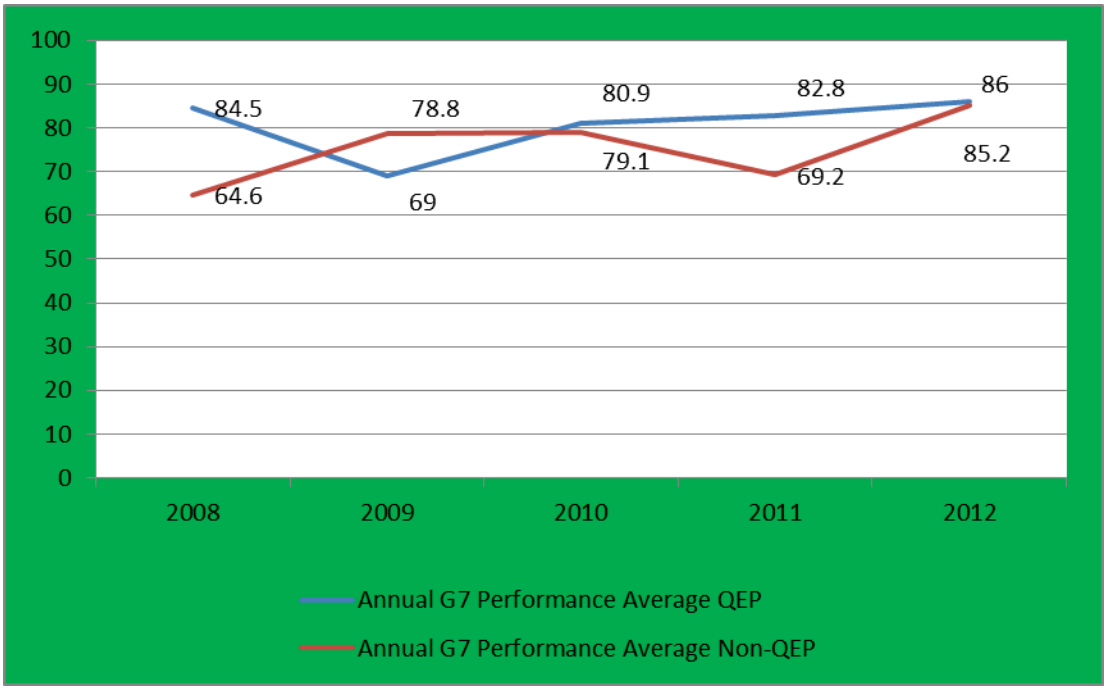


Figure 3.2 Grade Seven Results trend analysis 2008-2012

As can be seen from Figure 3.2, performance in the two groups fluctuated over the years. However, there is no statistically significant difference in the average performance between the two groups (QEP and non-QEP schools) in Grade Seven National Examinations. One plausible explanation for the non-significant differences in national examinations could be that results in the national examination were not a comparison of individual scores in outcome measures (e.g. Language and Mathematics) as schools did have records where individual scores could be deduced from. What we found in the field was that schools only tabulated performance trends for the total number of pupils who sat for Grade Seven examinations in a particular year. For instance, if 100 pupils sat for the Grade Seven Examination at a given school in a particular year, the school only kept record of pupils selected to Grade 8 and a number of those not selected as a way of determining progression and achievement rates. Performance of each child in core subject areas is indicated on the examination transcripts prepared by the Examination Council of Zambia and these are given to individual pupils' schools as Certification. The schools do not keep the actual scores for

individual pupils'. It was our anticipation that duplicates would be kept by schools but this was unfortunately not the case on the ground. They generate graphs on the basis of the number of pupils selected to grade 8 and those not selected because they did not reach the cut -off point.

Although there was no statistically significant difference in the average performance between the so-called QEP and non-QEP schools, parents' and pupils' who participated in the study indicated that performances of pupils before QEP was poorer than after QEP was implemented. In this study, we conducted a total of ten focus group discussions involving 88 parents. On average there were seven parents in each group. In this section, we present the group verbatim responses as the FGD was purely qualitative with the aim of strengthening quantitative data. One parent at Livingstone Primary School had this to say: *I have been at this school for more than 7 years. Results were very bad in the past but now teachers are hard-working and the pass rate has improved tremendously.* Commenting on the improved pass rate at the school, another parent at River View (QEP School) attributed it to the fact that some teachers have developed a strong relationship with the community. He noted that some teachers have been at the school for more than seven (7) years and have been very helpful to the pupils. He noted that:

> *..now teachers are hardworking, they give home work to learners at least three times in a week, they also provide counselling services and pupils are free to ask questions.*

Another parent at the same school had this to say;

> *the school is by far doing better now than before, my child has been at this school for four years and teachers are excellent.*

3.3.2 Grade four (4) and six (6) performance among learners taught by QEP and non-QEP trained teachers

As part of our evaluation we tested children in arithmetic and language abilities at both Grade Four and Grade Six Levels.

The maximum score for arithmetic abilities was 12 and the Cronbach's alpha[7] was .88 (N= 335). The maximum score for the language test was 13 and the Cronbach's alpha was .91 (N= 335). At Grade Six level, the Mathematics measures had 25 items and the Cronbach's alpha was .86 (N= 272) whereas the English measure had 30 items and the Cronbach's alpha was .95 (N= 272). We used the Cronbach's Alpha to measure the internal consistency of the test items as a group. As can be seen from the scores, the items have relatively high internal consistency.

3.3.3 Descriptive results for Grade Four English Results

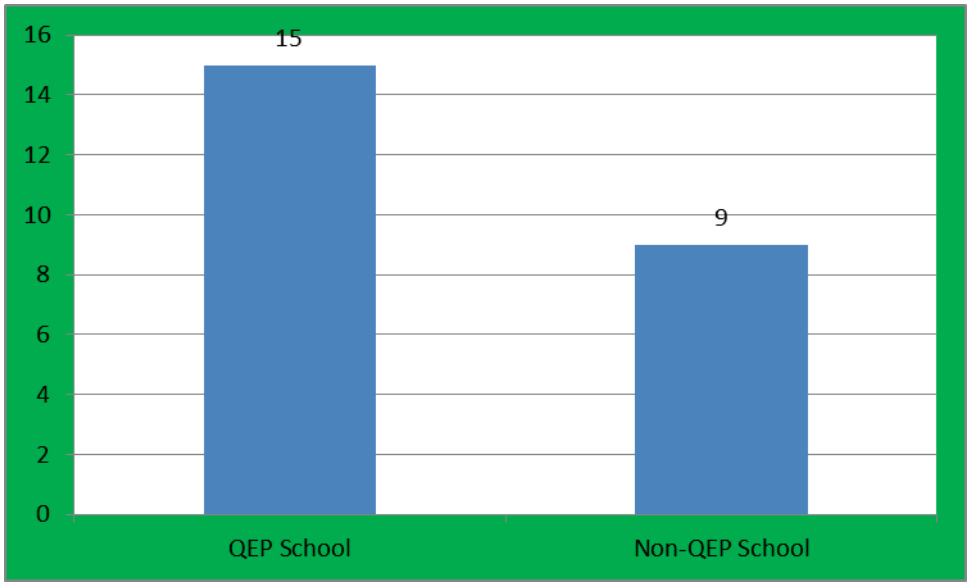


Figure 3.3 Mean Performance in English-Grade Four

[7] Cronbach's alpha is an indication of internal consistency in the test items. Cronbach's alpha is used to ensure that the test measured the same concept or construct

Children in QEP classrooms had an average score of 15.0 in the English test while the average score obtained in the English test for the non-QEP schools was 9.0. Thus on average QEP schools performed better than non-QEP classrooms by about 6 marks in the English test. As we shall see this difference is statistically significant.

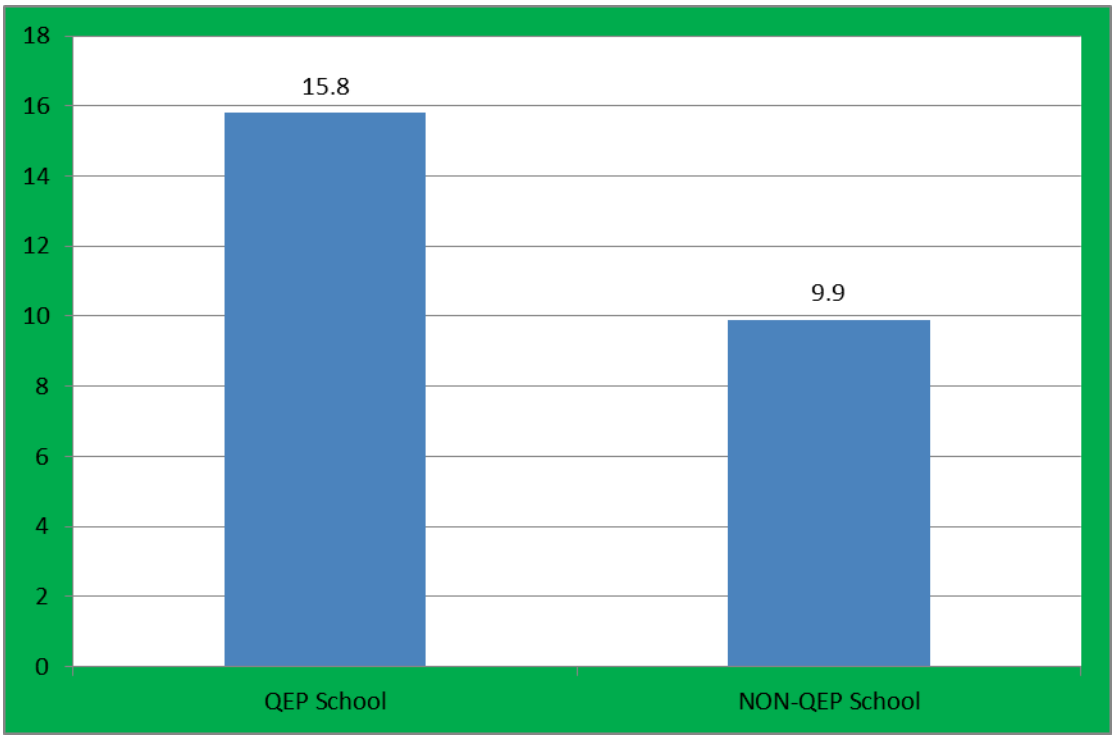


Figure 3.4 Mean Performance in Mathematics Grade Four

Children in QEP classrooms had a mean score of 15.8 in the Mathematics test while the mean score for non-QEP was 9.9. Thus on average pupils taught by QEP trained teachers performed better than pupils taught by non-QEP trained teachers by about 6 marks in the Mathematics test.

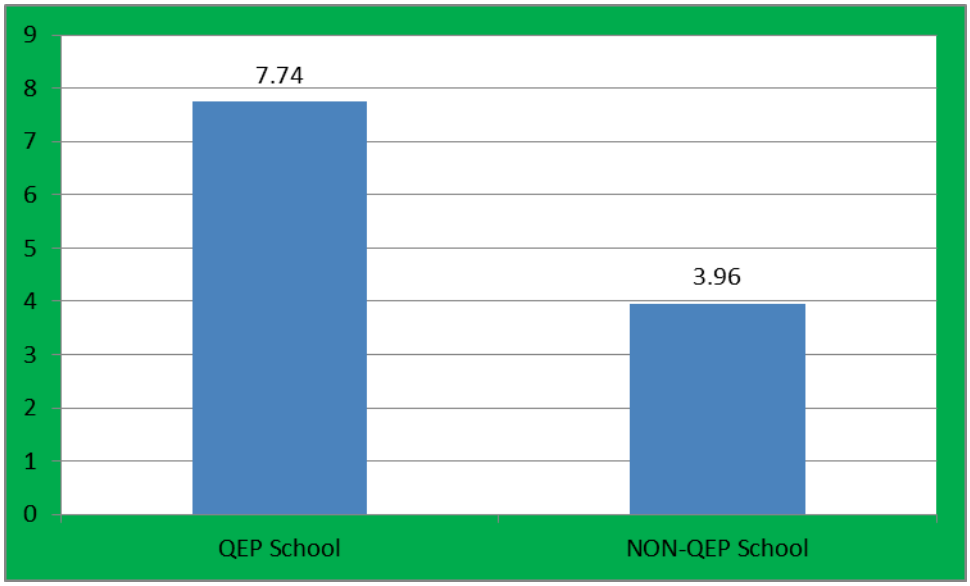


Figure 3.5 Mean Performance in Mathematics Grade 6

As can be seen from the figure above, the mean difference for pupils taught by QEP trained teachers in QEP schools was 7.74 while it was 3.96 for pupils taught by Non QEP trained teachers in non-QEP schools. .

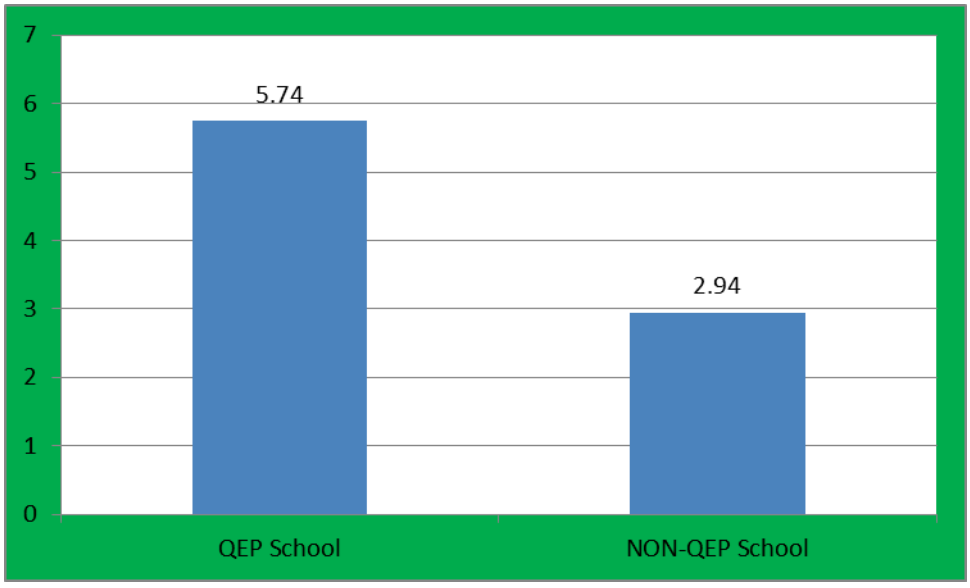


Figure 3.6 Mean Performance in English Grade 6

The mean performance in English was 5.74 and 2.94 for pupils taught by QEP trained teachers in QEP schools and for pupils taught by non-QEP trained teachers in non-QEP schools respectively.

3.4 Examination of means performance between QEP schools and non-QEP schools using the T-Test

The T-test was used to compare the means in outcome measures (Mathematics and Language abilities) in relation to whether the pupils were taught by QEP trained teachers in QEP schools or were taught by non-QEP trained teachers in non-QEP schools. There was a statistically significant difference between QEP and Non QEP schools (M= 6.50, SD = 4.45, t-value = 54.99, df = 334, *P<.001*) with QEP schools being superior over Non QEP schools in all outcome variables.

The mean difference for Mathematics was M=6.39, SD= 3.56 and this was statistically significant (*T-value = 32.85, df= 334, P<.001*).

Similarly, the mean difference in the language test was statistically significant (M= 6.50, SD= 4.45, *t-value = 26.74, df= 334, P<.001*).

We further examined the means in outcome variables (Mathematics and Language abilities) in relation to whether the classroom teacher was QEP trained or non-QEP trained. The mean difference for Mathematics was statistically significant (M= 6.39, SD= .50, t-value= 32.85, df, 334, *P<.001*). The mean difference in Language abilities was also statistically significant (*M= 6.50, SD = 4.45, t-value = 26.74, df= 334, P<.001*).

Significant statistical differences were also found in Grade six results in both Mathematics and English (M= 1.54, SD= .50, t-value = 50.54, df=268, *P<.001)* in relation to whether the teacher was QEP trained or non-QEP trained.

The mean difference in Mathematics was statistically significant (*M= 9.52, SD= 5.40, t-value = 28.92, df = 268, P<.001*) for pupils taught by QEP trained and non-QEP trained teachers respectively. Similarly, the mean difference in English Language was

statistically significant (*M = 14.11, SD = 8.99, t-value = 25.74, df = 268, P<.001*) with pupils taught by QEP teacher performing better in the language test. We further found statistically significant differences between QEP and non-QEP schools (*M= 1. 34, SD= .47, T-value = 46. 31, df = 268, P<.001*) with QEP schools being superior over non-QEP school in Mathematics and language abilities.

The results clearly demonstrate that children taught by QEP trained teachers in QEP schools are performing better than children taught by non-QEP trained teachers in non-QEP schools in both Mathematics and Language abilities. The results indicate that pupils who were taught by QEP trained teachers were performing better in both Mathematics and Language than the pupils taught by non-QEP trained teachers. Obtaining results prior to the introduction of QEP which could have acted as baseline proved difficult as some schools were not examination centres then. Views from parents on the performance of these schools showed that the performance of the schools in national examinations improved drastically with the coming of QEP trained pupils. This was based on the performance of pupils in the tests administered and supported by parents; and teachers' perceptions as reflected in the views expressed in the FGDs by both parent and pupils. Prior to the introduction of QEP in the sampled schools (2001 and 2002), the performance was below that experienced in the preceding years of QEP. However, the challenge experienced in this study was that some QEP and non QEP schools alike that were not examination centres made their grade 7 candidates write national examinations in the neighbouring schools which may not have been QEP and vice versa. With this scenario candidates taught by QEP trained teachers but writing the national examination in a non QEP school would be recorded as pupils of that non QEP School.

We further compared means across schools to establish whether there was an effect on performance in outcome measures. For this particular analysis, schools were not segmented on the basis of type of either QEP or non-QEP. Results revealed mean differences across schools in both mathematics and language. The mean difference for Mathematics was statistically significant (*M= 6.39, SD= 3.56, t-value = 26.74, df= 334,*

P<.001). Similarly, the mean difference for Language was statistically significant (*M= 6.50, SD= 3.56, t-value = 32.85, df = 334, P<.001*).

The mean difference in Grade Six outcome performance was equally statistically significant. Some QEP trained teachers from QEP schools have been transferred to non-QEP schools either as Head Teachers or classroom teachers. It is possible that the QEP concept has had a spill-over effect on teachers in non-QEP schools through teacher group meetings. For instance, one QEP trained Head Teacher from one non-QEP school we visited observed that:

> *The training that non-QEP trained teachers get from QEP trained teachers through teacher group discussion in school In-service Training meetings is taken so seriously to the extent that some NON-QEP schools are doing as good as QEP schools.*

We do not know, however, how much of this training is going on in which schools and for how long.

Was there any difference in drop-outs rate between pupils who have been taught by QEP teachers and those taught by non-QEP Teachers?

Although the study did not establish the progression and completion rates as such since statistics were not available at the school level, comments from the parents gave an indication of patterns in progression and completion rates. For instance, parents observed an improvement in progression and completion in pupils taught by QEP trained teachers in QEP schools compared to pupils taught by non-QEP trained teachers in non-QEP schools. They talked about visits and follow-ups by teachers to children's homes each time problems of absenteeism and pupils intending to stop coming to school were identified through action research. The interventions by teachers seem to have arrested the drop-out rates in schools known by parents as QEP schools. This close relationship between teachers and parents and the involvement of parents in the learning of their children were mostly recorded in schools known by parents as QEP schools.

This close relationship between parents and teachers in QEP schools was something teachers in non-QEP schools said they admired. They wished they had also been trained in how to cultivate such relationships and the strategies QEP trained teachers exhibited. A pupil in a focus discussion group in one QEP school (Livingstone) said: *when we stop coming to school, teachers follow us to our homes to talk to us and our parents.* A parent from this same school had this to say:

> *The teacher- pupil relationship is very positive and teachers are willing to help pupils at all times. They even follow our children to our homes when they notice some absenteeism and poor performance. This has helped us a lot in supporting our children.*

Do pupils who have been taught by QEP teachers talk more in class than pupils who have not been taught by QEP teachers?

The findings from the classroom observations (table 3.2) and the pupils' Focus Group Discussions (FGDs) showed that there was a marked difference between the participation of pupils in QEP classrooms and those in non-QEP classrooms. Pupils who were in QEP schools and taught by QEP trained teachers frequently reported that they were able to participate more in the learning process through group activities than pupils in non-QEP schools taught by non-QEP trained teachers. One pupil at Riverside Basic School observed that, *we are free to ask questions in class and demonstrate on the board*. Yet another pupil from Livingstone Basic School said that, *our teachers allow us to ask questions without us having to fear being punished*.

Most of these pupils also reported that after their homework is marked in class that they are free to discuss in groups and with the teachers and they are free to ask teachers questions on points where they are not clear. This has also been confirmed by QEP trained teachers who reported that through QEP training, they have been able to implement a learner centred approach by providing a platform for learners to participate in classroom activities. The study revealed that QEP training equipped teachers with skills to deliver lessons, assessment and supervision based on newly acquired skills of

solving immediate challenges using solutions established through action research and involving all stakeholders including learners themselves. In one class at Livingstone Basic school a QEP trained teacher noted:

> *..where there was a problem of noise, we made pupils get involved in setting class rules. Since noise making was mainly experienced each time there was no teacher in class, a solution was found through action research to establish peer support. Peers would choose a particular topic and share with their peers.*

It is clear that through QEP training, teachers are able to encourage learners to take on responsibility of generating solutions to the problems being encountered in class. This QEP principle is in line with what Jones (2007) writes when he noted that in a learner centred classroom, the role of the teacher is to help and encourage pupils to develop their skills. He further noted that in a learner centred classroom, the teacher and the learner are a team working together to make sure everyone benefits from the lesson through supporting one another. This is further supported by UNESCO (2005) which holds that learner centeredness influences what and how well the students learn and what benefits they draw from their education. This is to ensure that students achieve decent learning outcomes and acquire values and skills that help them play a positive role in their societies.

Pupils who were taught by non-QEP trained teachers reported that they were not often given an opportunity to participate in classroom activities. For instance, one pupil from Mukuni Basic School in Kazungula District had this to say:

> *..our teacher does not like us asking too many questions, because when you do so, they think it is an indication that you are not following the lesson and you can be punished.*

At Mujala Basic school - a non-QEP school - one pupil said; *we don't ask questions When the teacher asks you to demonstrate on the board, we can be punished so we fear to ask questions.* Another pupil at the same school said:

> *I don't talk much in class because when you give a wrong answer, the teacher asks the class to boo you, so it is embarrassing so I would rather keep quiet and allow pupils who are intelligent to talk*.

When non-QEP trained teachers were asked to state whether they allow pupils to talk in class, most of them said it was difficult because classes were large and there is no time to give individual attention to children. For instance, one non-QEP trained teacher said the following, *how can I allow all the pupils to ask questions when the class is too big and some of them ask irrelevant questions and distract the flow of the lesson*.

From these responses it appears that pupils in QEP schools are given more opportunities to talk in class and participate in their own learning than pupils in non-QEP schools. This is an indication that QEP training has had effect on teacher- pupil interaction and QEP teachers are able to use the reflective approach in teaching.

Do pupils who have been taught by QEP teachers express greater satisfaction with schooling than pupils who have not been taught by QEP teachers?

To establish whether pupils were satisfied with schooling, pupils were asked to indicate what they liked most at school. Pupils in both QEP and non-QEP schools indicated that they liked reading and writing. We cannot show percentages of pupils as we employed FGDs as stated earlier. All that we have done is to quote views of pupils who gave their personal views on how they are treated by their teachers. We can give estimations of FGDs who strongly agreed or disagreed on this issue. For example, one pupil taught by a QEP trained teacher at a QEP school observed that they were encouraged to play and read books with their friends. Pupils taught by QEP trained teacher in QEP schools also indicated that they were given home work at least three times a week and that home work was corrected and discussed in class. This observation is in line with what was earlier observed by parents whose children were taught by QEP trained teachers in QEP schools that their children were given home work at least three times a week. One pupil taught by a QEP trained teacher at a QEP school noted:

> *..we are always given home work, and when I do well in my homework, the teacher asks the class to clap for me and the teacher praises me and puts stars in my book. I feel very good about it and when I show my parents the stars in my book; they also feel happy about my achievement*.

This is in line with the observation by McCombs & Whistler (1997) when they noted that learner motivation and actual learning increase when learners have a stake in their own learning and are treated as co-creators in the learning process. They further observed that learners who meet with success gain self-confidence and feel good about themselves. Aaronsohn (1996) observed that learners demonstrate higher achievement when they can attribute success to their own abilities and effort. However, children in non-QEP schools noted that they were not often given home work. If they were given homework at all, it was usually given on Fridays and the homework was not usually marked but pupils were still punished for not doing the home work.

Pupils taught by QEP trained teachers in in QEP schools indicated that they often received individual attention in class whereas pupils taught by non-QEP trained teachers in non-QEP schools were not helped as individuals. This observation by pupils was confirmed in our classroom observations (see below) Most of the pupils in QEP schools talked favourably about peer support. In a focus group discussion one of the pupils said: yes, *we do a lot of group work and we get a lot of support from group members*. This is supported by earlier work by Habermas (1970) who stated that pupil centred techniques (like group work) were useful tools and had a positive effect on pupil performance, learning experience and subject evaluation. He further noted that repeated group work made pupils think in a more critical and reflective manner. Most of the pupils in the non-QEP schools claimed that they did *not get that kind of support. They did not see how their peers could help.*

3.5 Views from parents of children taught by QEP and non-QEP trained teachers

The views that we collected from parents through FGDs enhanced the achievement tests and the classroom observations. Addressing the following research question:

How and to what extent does the learning environment differ for learners who have QEP trained teachers compared to learners who have non-QEP trained teachers?

Neuman (2000) holds that in social sciences, the cross-tab is viewed as a useful tool to bring out relationships in two variables The Chi-Square Test can be used to investigate whether distributions of categorical variables such as the different parents' views between parents whose children are taught by QEP trained teachers and those parents whose children are taught by non-QEP trained teachers, differ from one another or whether parents participation in school activities differed between QEP schools and non QEP schools by district:

The fact that more parents in schools with QEP trained teachers were likely to attend to school activities than parents in schools with non-QEP trained teachers, might have been a result of the QEP training of teachers. Parents felt comfortable to support activities at school where their children attend.

Parents in both QEP and non-QEP schools noted that their children had become curious to learn. They reported that their children would usually show parents home-work and marks. One parent at Nsongwe - a Non-QEP school -observed that; *my son is not happy when he has not passed.* Parents in QEP schools told that their children would ask questions about their home-work and they would read to the parents. They often talk about school and wanting to go to school and they also talk about good things about their teachers.

Parents in QEP schools noted that the schools were girl friendly because they had clean toilets, less pregnancies and good environment. One parent at Mujala Basic School (non-QEP) noted that the school was girl friendly and teachers counsel pupils who develop inappropriate relationships with fellow pupils of the opposite sex as a way of curbing early pregnancies. On the other hand among the non QEP trained teachers, in schools perceived to be non QEP, this was reported to be an punishable office. This could be deemed as a negative response and largely because of lack of the Action research philosophy of researching the hearts of the leaners and reason with them as a long lasting problem solving strategy.

Another parent at a school perceived to be a QEP school noted, however, that the school had no Tuck Shop and there was no wall fence. The parent had this to say; "*because the school has no Tuck Shop, pupils go far to buy things and this is not good for girls".*

Addressing the following research question: Do pupils who have been taught by QEP trained teachers express greater satisfaction with schooling than pupils who have not been taught by QEP trained teachers?

Prents in schools with QEP trained teachers think their children are now more eager to learn at school, varied by school type. Parents in FGDs conducted said that in schools with QEP trained teachers , their children enjoyed doing regular homework (three times a week) in either reading, writing or doing maths) as compared to those in schools with non-QEP were givinh home work though the number stated was at least once per week In QEP trained teacher. In almost all FGDs in schools with QEP trained teachers,parents noticed that their children demanded other reading materials apart from the school text books. In some cases the children (QEP) are often seen doing maths through counting kitchen utensils such as spoons, pots and porridge sticks at home. This measure of eagerness to learn in children taught by QEP trained teachers we did not find in schools with non-QEP trained teachers. Parents inn alomsot all FGDs reported that children taught by QEP trained teachers were eager to attend school everyday since the teachers were following up pupils who absented themselves and discussed with their parents. The fact that some parents in two FDGs had children taught by both non QEP trained teachers and QEP trained teachers set a level of significance, prompting us to conclude that these differences in parents' views about children's measure of eagerness to learn was brought about by the QEP training in Livingistone and Kazungula districts.

Some parents in four FGDs with children with QEP trained teachers reported having other reading materials such as church reading materials other than just school text books for their children to read at home. Other differences noted from the FDGs were that schools with QEO trained teachers allowed children to take books home unlike

those taught by non QEP trained teachers who feared that books would either be lost or damaged. Such fears were not registered among pupils taught by QEP trained teachers. This can be ascribed to an understanding between QEP parents and teachers on how children should take care of the said textbooks at home and the value of taking such books for extended reading and writing under the monitoring of parents and their sibblings.

3.6 Views from pupils with QEP and non-QEP trained teachers

Addressing the research question:

Are pupils who have been taught by QEP trained teachers report that they have not been punished as often or as much as pupils who have been taught by Non - QEP trained teachers?

In all the FGDs conducted, pupils both taught by QEP and by non-QEP trained teachers noted that they were punished when they did something wrong. However the mode of punishment varied between QEP schools and non-QEP schools. Children taught by QEP trained teachers in QEP schools mostly reported that they were punished *after* class and usually they would be asked to water the plants and clean the surrounding. Pupils taught by non-QEP trained teachers in some non-QEP schools reported that they were often punished quite severely through a type of punishment which meant a physical strain on their bodies. One pupil reported in a focus group discussion:

> *Sometimes we are punished during class. We have to stand in the corner and lift a stone in a squatting position until the lesson is over (*several pupils demonstrated for us how they squat with a brick/stone in the hands*)*.

When parents were asked to indicate things they disliked about the school, they were quick to mention that some teachers beat pupils and when pupils report late for school they are sent back home. Parents in schools perceived to be non-QEP Schools highlighted a number of issues that they did not like about the school. One parent at Mujala (Non-QEP) noted that beating of pupils was quite rampant. She noted that; *teachers at this school always resort to beating whenever pupils do something wrong*

instead of punishing them in other ways. Parents and pupils did not report any beating being done by QEP-trained teachers.

What has emerged from the parent FGDs was that parents in QEP schools praised the good relationship between the teachers and the community. For instance, it was only in QEP schools that parents were able to mention certain teachers by name; this was the case in a number of QEP schools, showing good relationship, established probably through following up on pupils with challenges. This was not the case with non-QEP schools. What has also come out strongly from the (FGDs with children are the variations in the modes of punishment and the times at which they are administered. Corporal punishment was frequently reported to have been given by Non-QEP trained teachers in Non-QEP schools but not among QEP trained teacher in QEP schools. It was also reported that QEP trained teachers in QEP schools, punished pupils after class. A mode of punishment with a direct impact on pupils' performance reported in non-QEP and schools conducted by non-QEP trained teachers was that pupils who come late for class were sometimes sent out of class. In QEP schools, QEP trained teachers would engage such pupils in counselling and make visits to their parents' home to establish possible causes of their children's late-coming to school.

The study has revealed that QEP trained teachers often apply behavioural approaches as a mode of punishment rather than corporal punishment , a type of punishment which is frequently reported in Non-QEP trained teachers in Non-QEP schools. Research has shown that corporal punishment has a negative effect on pupils' performance as children are physically and emotionally affected and it derails concentration on academic work (Cherian, 1990).

Nsamenang (2008) argues against using cleaning of the surroundings as a form of punishment since it may make pupils shun normal cleaning of their surroundings. Similary, working in a field or garden should not be part of punshment as it demonises what pupils would later choose as their future career.

3.7 Inside the classrooms of QEP trained and non-QEP trained teachers

We used an observation matrix in Table 3.2 when observing eight lessons taught by QEP trained teachers and 3 lessons taught by non-QEP trained teachers.

The observation scheme was divided into ten slots of 3 minutes each. We put a cross in the box which indicated the activity that had been most prevalent in those three minutes. Sometimes there were several activities going on in the three minutes and we wrote crosses in more than one box. When learner activity took place, we indicated whether it was a boy (b) or a girl (g) that was asked or said something. As in Zimbabwe the girls seemed to dominate more than the boys. Below is a summary of the observations in the eight schools with QEP trained teachers and the three schools who had teachers who were not QEP trained.

Since we observed classes and teachers in eight schools with QEP trained teachers but only in three schools with non-QEP trained teachers, we had to divide the sums from observations in schools with QEP trained teachers into eight and the sums from observations in schools with QEP trained teachers into three to get an average and therefore be able to make a comparison.

We had planned to visit more schools where teachers had not been QEP trained. Unfortunate circumstances, like in one instance the suicide of one of the staff members, made it impossible for use to do observations in the school. Two other Non-QEP schools had sent the pupils back home because their class-rooms were used for end of term exams.

Table 3.2 Observation Matrix for QEP and non-QEP Schools in Zambia

Activity/ District	No of minutes 8 QEP-trained teachers	Average 8 QEP-trained teachers	No of minutes 3 non-QEP-trained teachers	Average 3 non-QEP-trained teachers
Teacher writes on the board	94	11,75	36	12,00
Teacher asks question to class	68	8,50	36	12,00
Pupils writing in exercise books	106	13,25	32	10,66
Teacher corrects exercise books	54	6,75	16	5,33
Listening to the teacher talking	14	1,75		
Copying from the board	6	0,75	4	1,33
Pupils writing on the board	28	3,50	4	1,33
Pupils answering Questions (B/G)	36	4,50	20	6,33
Pupils working in pairs	36	4,50	12	4,00
Pupils working in groups	72	9,00	16	5,33
Teacher facilitating in group or pair work	88	11,00	16	5,33
Feed-back by pupils on pair/group work (Boy or Girl?)	8	1,0		
Pupils asking teachers questions (B or G?)			4	1,33
Teacher responding to pupils questions				
Giving home-work to pupils	4	0,50		
Teacher demonstrating/ experimenting/illustrating	12	1,50		
Pupil's experimenting/role-playing demonstrating/dramatizing/debate.	12	1,50		
Clapping of hands	4 times	0.5 times	12 times	4 times
Chorus reading/answering	12	1.50	32	10,66

***Developed by**: Birgit Brock-Utne and Dennis Banda in Cape Town 17. October 2013, further developed by Birgit Brock-Utne and Crispen Dirwai in Bikita 4.November 2013.*

We found the same differences between classrooms managed by a QEP versus a non-QEP trained teacher in Zambia as we found in Zimbabwe.

Again we found that the QEP trained teachers, whether in schools in Livingstone or Kazugula, facilitate their pupils more in group work than the non-QEP trained teachers do. They also give more individual help. Through non-participant observation we again saw how the teacher moved from one group to another, one pupil to another and gave

assistance. Our observations correspond to what pupils told us about their QEP trained teachers, who would give them more individual support than Non-QEP trained teachers would. There was more group work taking place in classes taught by QEP teachers than in classes taught by non-QEP trained teachers. This finding also corresponds to what the pupils told us.

We found through our class-room observations that the QEP trained teachers demonstrate, experiment, illustrate more than the non-QEP trained teachers do. Pupils who have QEP trained teachers experiment, demonstrate, use role-playing, dramatization and debating more than pupils who have non-QEP trained teachers.

There was considerably more chorus reading and chorus answering in classes taught by the non-QEP trained teachers than in classes taught by QEP trained teachers.

3.8 Sustainability of QEP in Zambia

In Zambia action research has become a part of the curriculum of all Teacher Training Colleges. All student teachers are supposed to do an action research project during their teaching practice period. We did not gather data on this and should be a possible follow-up research.

The staff at the Faculty of Education at the University of Zambia (UNZA) act as external examiners at the Colleges. The problem is, however, that these members of staff have not been QEP trained, although many of them wish they were. There does not seem to be any negative attitude towards QEP at UNZA, but a great wish for training of the staff ending with a certificate. In Zambia as well as in Zimbabwe it has been a problem that the QEP training has not led to a certificate. This was also pointed out in the Harber and Stephens (2009) evaluation, but nothing has happened since.

Since Livingstone is a district with many QEP schools, one would think that David Livingstone Teachers' College would be an excellent partner. In the beginning of the project there were plans for using this college and many of the staff wanted the training and wanted to become trainers themselves. Levels above the College decided that the staff of the college could not be used since most of them only had Diplomas and not

degrees. Instead many District Education Standards Officers (DESO) got extensive training. How many of them have used this training for organising workshops and sharing their knowledge, we do not know. It was not part of our terms of reference to find this out, but it would be interesting to know how the QEP-trained DESOs have used their training.

The model of training entire schools in action research and the QEP ideology seems sensible. Teachers move, however. We found schools where hardly any of the originally QEP trained teachers were still there. How many new teachers, who come to the QEP schools, are trained in the QEP philosophy varies and there is no systematic account of this. To some degree the QEP trained teachers who move to a non-QEP school bring with them the QEP ideology and cascade their knowledge through in-service seminars. However, data on the degree to which QEP ideology is spread to non-QEP schools is not systematically collected. It should be possible to collect such information on a yearly basis.

3.9 An example of an institution that has managed to make QEP sustainable

Of all the institutions we visited in Zimbabwe and Zambia there was only one that had managed to make QEP sustainable; that is, being able to continue without any external resources whatsoever. That institution is the Charles Lwanga College of Education at Monze. In an interview, the Principal of the College Mr. Frederick Kabwe noted*:*

> *I do not look at QEP as a project. A project has a life-span. Projects come and go, QEP is a programme. It has come to stay. It is an integral part of our work and life at the College*

The Principal equated QEP with action research. He said that initially the whole college staff had been trained in action research, but apart from that at the beginning of each academic year the College would use its own resources to train new staff that came and hold refresher courses for already trained staff.

If QEP is going to be sustainable in the long run, such a systematic approach to training new staff seems necessary.

Chapter 4: Findings from Zimbabwe

4.1 Introduction and background

Harber and Stephens (2009) in their evaluation state that the whole of Bikita district is QEP trained. Bikita is the district we chose for our study. On our arrival in Bikita we learnt from Mrs.Chioneso Maradza, the Acting DEO of Bikita that the quality education project (QEP) training started with a program that ran from 2006 to 2009 and included 40 decision makers within education heads of schools, education officers at cluster and district level and education officers for the province. Her description and names corresponded well with what we had on our list from Save the Children Harare office. Many in this original group (O.G) had been to as many as 12 workshops, done several action research projects and were great promoters both of the QEP philosophy and action research as a research paradigm. We met several of the O.Gs. In spite of their extensive training they had no certificate to show for it, a fact many of them deplored. We took this issue up both with the Save the Children Office in Harare and the Department of Teacher Education (DTE) at the University of Zimbabwe. The certificate may come at long last.

In the period 2009 and 2010 a parallel QEP training program was going on in the three Teacher Colleges in the area: Morgenster, Masvingo and Bondolfi Teachers' Colleges. In each college, 15 people participated in QEP training and trained the rest of the staff upon their return. By 2011 of the 1,131 teachers in Bikita, 110 (9.7%) teachers (among them several school heads) had been QEP trained in the period 2010 – 2011. All in all, 124 were trained including the decision makers at district and cluster level we noted above. In Zimbabwe we do not have QEP schools perse, but we have schools with teachers trained in QEP skills.

In Bikita six (6) schools with 2 to 4 QEP trained teachers were randomly selected. The selection done with the assistance of the Acting DEO Bikita and SC Harare office was based on the availability of the original 40 QEP trained teachers, school heads and education officers. Accessibility to the schools was also a factor considered in locating the sample of 6 schools, since the evaluation was done during the rainy season when

dirty roads in Zimbabwe often make accessibility to remote areas, difficult. The 6 schools selected in Bikita were: Beardmore, Chigumisirwa, Duma, Makotore, Mutsinzwa and Negovano. Of the 6 Duma was located at a growth point called Nyika. Duma being a growth point (small town in a rural setting) performed better than the other 5 Bikita schools which were located away from this 'urban' influence (Chirume et-al, 2009). We also compared pupils taught by QEP trained teachers located in remote rural schools with those from Zaka district in similar settings. Apart from location, school size also might have had an influence in mean performance. Big schools with over 1000 pupils such as Negovano, Zaka, Munjanja, could not match well with much smaller schools such as Vudzi. A small school with better facilities was likely to perform better than a large school with similar facilities because of the number effect and this might have been the case of Vudzi outperforming Zaka and Munjanja primary schools of Zaka district as well as Makotore, Chigumisirwa in Bikita (QEP) district.

We chose a nearby district, Zaka, where no QEP training had been going on, as our control group. We acknowledge that there was no baseline done in Zaka and neither were there tracer studies on the QEP trained teachers in Bikita. This made the comparison difficult but we had to compare our QEP district schools with a district with similar conditions to Bikita. Zaka district was nearer to that. The DEO for Zaka purposively selected 6 schools for us that could possibly compare in performance with our Bikita district schools. The selection process was also based on accessibility due to poor weather conditions at the time of the research.

The 6 schools selected in Zaka were: Chipezeze, Chinorumba, Munjanja, Mushungwa, Vudzi and Zaka. Two of the 6 primary schools (Munjanja and Zaka) were selected from a growth point called Jerera. As noted in Chapter two growth points in Zimbabwe generally possess some urban traits and pupils at growth points just as good as those in urban areas perform better than those from remote rural areas. The two growth point schools could compare well with our Duma and any differences in performance could be attributed to the contribution of QEP at Duma. The other 4 Zaka district schools were located some 15-20 km away from the growth point. We also compared these 4 rural

Zaka schools against our remote rural Bikita schools, hence the growth point was not the only variable for comparison in this evaluation. To avoid bias the DEO Zaka also avoided a prominent high performing mission school in the nearby area since in our Bikita sample there was no mission school selected except for the growth point and remote rural schools. At school, the school head selected the classrooms to be observed.

In Bikita we also met those who said that they were trained at cluster level. They were scheduled to have three workshops, but only had two. They missed the third workshop where they were to be given feed-back on the small action research projects they had carried out. There has been no systematic attempt at finding out how much cascading of QEP ideology has been going on from the QEP-trained to the non-QEP trained teachers in Bikita. But there was some evidence that the official QEP training of 2010-2011 was followed by some in-house staff development of non-QEP trained teachers at school level. This was done by those who had gone through the full cycle of QEP training, the O.Gs. At Negovano primary school for instance, one QEP trained teacher claimed to have staff-trained as many as 25 other teachers on action research and other QEP skills at his school. This was also the case in the other QEP schools that we interviewed.

For the purpose of this evaluation in Bikita district, only the original QEP trained teachers were observed teaching and the pupils taught by these QEP trained teachers were chosen for the focus group interviews. We also chose Grade 4 and Grade 6 pupils for the achievement tests and in the sampled Bikita schools, these were taught by QEP trained teachers. In some instances we found that a QEP-trained teacher had held a workshop for his colleagues when he came back from the training as noted above. Some teachers had just learnt a bit about QEP in the staff room. Grade 4 was chosen as the Grade to be tested because this is the level in which children start to be taught in English; and, Grade 6 was chosen to replace Grade 7 which had closed after their national Grade 7 exams. From the 14 QEP trained Education officers we had face to face interviews with 5. We also interviewed 13 school heads who were attending a

workshop in Bikita and these were amongst those QEP trained at cluster level. This was apart from the 6 school heads in our sample of Bikita schools with QEP trained teachers. We found between 1 to 4 QEP trained teachers in the selected Bikita schools. The QEP trained teachers were pointed out for us by the school head whilst we verified the names from the list of QEP trained teachers we got from the Acting DEO as well as SC Harare office. We managed to observe 10 QEP trained teachers teaching in Bikita. We also interviewed 6 non-QEP trained school heads in Zaka and observed 9 non-QEP trained teachers teaching in Zaka as our control group.

4.2 The Learning outcomes at national level and on the cognitive tests

The data on learning outcomes at national level was derived from the national Grade 7 pass rate. All this secondary data was obtained from the district education offices in Bikita and Zaka. The analysed data in this case was processed data per school and not the individual unprocessed pupils' results (continuous data) as was the case with our evaluation tests of 2013. At this national grade 7 analysis we compared the mean test marks for 6 schools with 2 to 4 QEP trained teachers (Bikita) against 6 schools with no QEP trained teachers (Zaka). Our learning outcomes results here are based on the hypothesis set:

H1 At the national exams pupils who have been taught by QEP teachers will perform at the same level as pupils who have not been taught by QEP teachers.

We used the independent **t-test** as a useful technique for comparing mean values of the two sets of marks by grade and by type of school. The comparison provided us with a statistic for evaluating whether or not the difference between the two means is statistically significant. The two populations from 6 schools with 1 to 4 QEP trained teachers and 6 schools without any QEP trained teachers are in our case taken as independent groups. In our interpretation, where the t-value is 1 or more than 1 and the significant value is less than 0.01, 0.05 or 0.1, the noted mean differences will be

statistically significant. The statistical test results, for the national grade 7 examination pass rate, had a calculated mean difference of 4.12% between the 6 Bikita schools (with some QEP trained teachers) and 6 Zaka schools (non-QEP trained teachers). This mean difference of 4.12% was not statistically significant. This was confirmed by a t-test value of 0.463 and p>0.1 set level of significance. Thus we fail to reject the above set hypothesis as pupils' mean marks in QEP and non-QEP were not statistically different. Why there was little difference in performance at this level could be explained by several factors that include the fact that not all grade 7 teachers in Bikita were QEP trained. Only a few teachers in each school in Bikita were QEP-trained and because of a lack of tracer data we could not verify how many QEP trained teachers had been teaching grade 7 and for how long after the QEP training. We also analysed the national grade 7 results prior and during QEP training. Learning outcomes at grade 7 prior QEP training, 2004 in particular, varied by school. Figure 4.1 shows performance of schools with QEP trained teachers in the period before and during the QEP training.

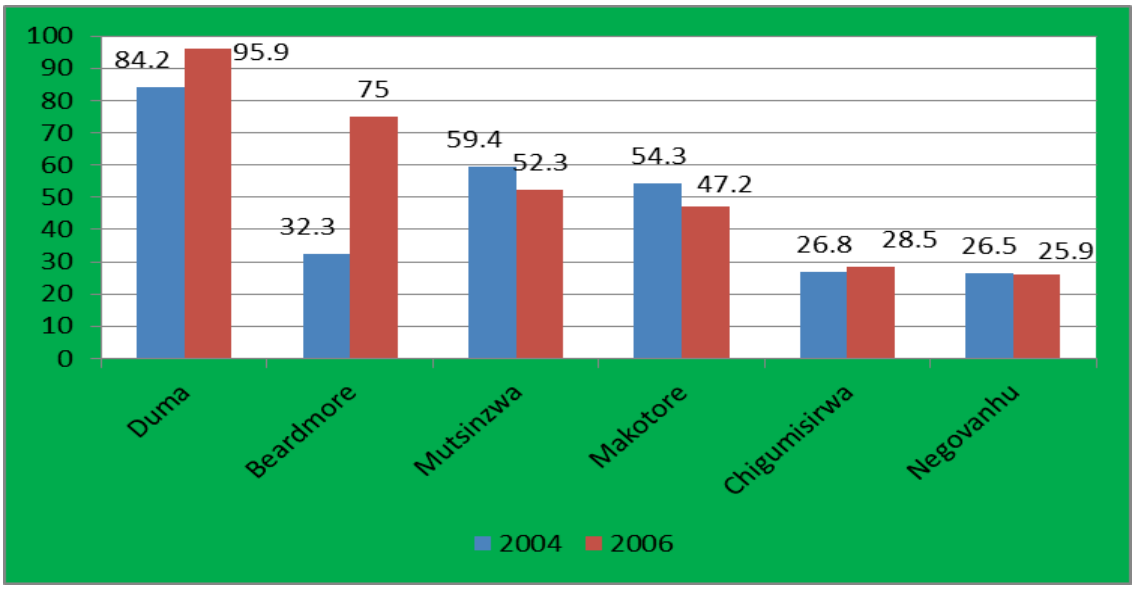


Figure 4.1 Percent distribution by mean mark by school in pre and during QEP training period in Bikita district

At national grade 7 exams Duma had (84.2%) mean pass rate before QEP training and the pass rate was 95.5 % during the QEP training. Beardmore had a mean percent of 32.3% in 2004 and 75% during the QEP training of 2006. The other 4 QEP schools did

not experience the same immediate upward gradient in performance prior to and during QEP training period. The gains in pass-rate after the QEP training was cut-short across schools in the district as most schools in rural Zimbabwe, literally closed at the height of the economic challenges of 2008. Schools resumed early 2009 and the 2009 Grade 7 results were rather low in all schools, schools with QEP trained teachers included. These were the disadvantaged grade 7 children who had not fully attended grade 6 in the year 2008. The year 2010 to 2012 saw the recovery in the education system with improved pass-rates. In schools with QEP trained teachers, both parents and children claimed that the situation in schools had improved and children were eager to learn.

Improved national grade 7 pass rates were noted at Duma and Beardmore between 2010 and 2012. Both parents and children acknowledged the changes in teachers who had suddenly become motherly-fatherly in their approach towards children's education after QEP training. The good pass rate noted at Duma was not the same at Chigumisirwa and Mutsinzwa, some two rural or remote schools in Bikita. Duma is located at a growth point and the same argument by Chirume et-al in 2009 might help explain why Duma performed better than the other schools with QEP trained teachers in the same district. Figure 4.2 shows the situation in Zaka in 2004 and 2006.

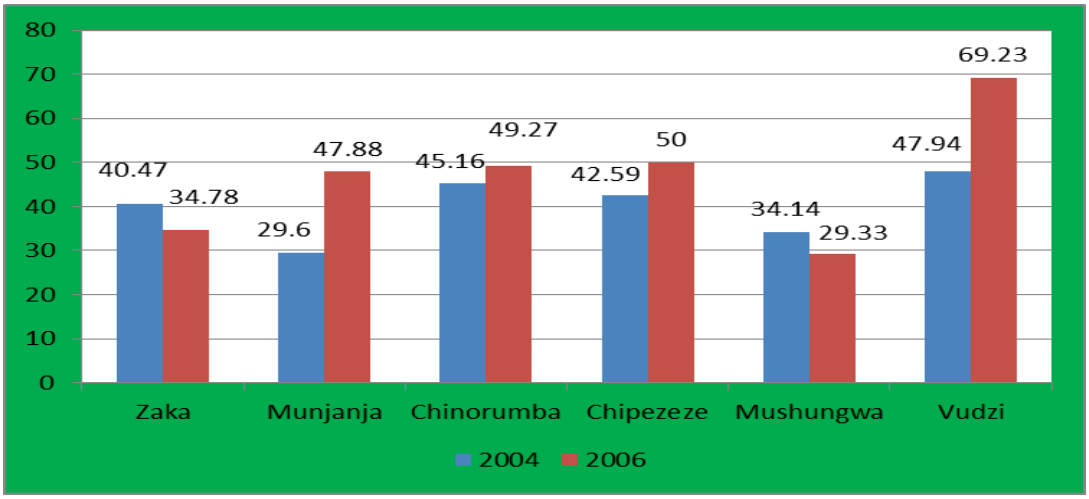


Figure 4.2 Percent distribution by mean mark by school in pre and during QEP training period in Zaka district

In Zaka district all the schools performed below a mean of 50% in 2004 and the performance varied by school in 2006 with Vudzi, 69.23% and the rest performing at and below 50%. In our district with QEP trained teachers, Bikita, 4 schools performed way above 50% in 2012 an improvement from only two schools experiencing that similar magnitude in 2006. Parents and children from schools with QEP trained teachers wanted to attribute the improvement in results at national grade 7 to teachers who have suddenly become friendly after the QEP training amongst other variables.

4.2.1 Classroom observations

Classroom observations were used to extract both quantified and qualitative information. We observed 10 teachers teaching from Bikita (QEP) and we did the same to 9 teachers in Zaka district (non QEP). We used the observation matrix for 30 minute lesson observations in both Bikita (QEP) and Zaka (non-QEP) schools. The observation matrix used both quantitative and qualitative (non-participant observation) in classrooms. We also interviewed teachers, headmasters, pupils and parents, to triangulate with what we observed teachers doing in class. We actually observed eleven lessons in Bikita but found out afterwards that one of the teachers was non-QEP trained so we dropped this teacher in the final analysis. This teacher was, by the way, the only teacher we met who threatened the children with beating them if they did not come up with the right answers. The information from classroom observations shown in Table 4.1 below was used to address the research question (i):

What are the differences in class participation between pupils who have been taught by QEP trained and those taught by non-QEP trained teachers?

Table 4.1 Observation Matrix Analysis for Bikita and Zaka

Activity/ District	No of minutes Bikita	Average Bikita	No of minutes Zaka	Average Zaka
Waiting for the teacher to start the lesson	6	0.60	3	0.33
Waiting for the teacher writing on the board	9	0.90	0	0.00
Teacher asks question to class	24	2.40	56	6.22
Pupils writing in exercise books	6	0.60	30	3.33
Teacher corrects exercise books	3	0.30	12	1.33
Listening to the teacher talking	48	4.80	21	2.33
Copying from the board	6	0.60	9	1.00
Pupils writing on the board	15	1.50	21	3.33
Pupils answering Questions (b or g?)	75	7.50	66	7.33
Pupils working in pairs	0	0.00	6	0.66
Pupils working in groups	45	4.50	42	4.66
Teacher facilitating in group or pair work	66	6.60	27	3.00
Feed-back by pupils on pair/group work (B or G?)	36	3.60	30	3.33
Pupils asking teachers questions (B or G?)	12	1.20	3	0.33
Teacher responding to pupils questions	15	1.50	3	0.33
Giving home-work to pupils	15	1.50	6	0.66
Teacher demonstrating/ experimenting/illustrating	36	3.60	12	1.33
Pupils experimenting/demonstrating/ role-playing/ dramatizing/debating	21	2.10	6	0.66
Clapping of hands	3	0.30	12	1.33
Chorus reading/answering	6	0.60	3	0.33

***Developed by**: Birgit Brock-Utne and Dennis Banda in Cape Town 17.October, 2013 and further developed by Birgit Brock-Utne and Crispen Dirwai in Bikita 4.November 2013.*

The observation scheme in Table 4.1 was divided into ten slots of 3 minutes each. We put a cross in the box which indicated the activity that had been most prevalent in those three minutes. Sometimes there were several activities going on in the three minutes and we wrote crosses in more than one box. When learner activity took place, we indicated whether it was a boy (b) or a girl (g) that was asked or said something. The girls seemed to dominate more than the boys.

Since we observed ten teachers in Bikita but only nine in Zaka, we had to divide the sums from the Bikita observations into ten and the sums from the Zaka observations

into nine to get an average and be able to make a comparison. When we study the observation matrix above and compare the districts, we find some clear differences. From Table 4.1 it can be noted that the teachers in the Zaka schools ask more questions to their classes than the QEP trained teachers in the Bikita schools do. As can be seen in the matrix, teachers in the Bikita schools on average used 2.40 minutes of a 30 minute lesson to ask questions while teachers in Zaka schools used 6.22 minutes. Non-participant observation revealed, however, that the questions posed by Zaka teachers were almost all recall and control questions, used to recapitulate parts of a previous lesson or train for a test. They were closed questions starting with: when? what? who? The questions posed by QEP trained teachers in Bikita were much more challenging, open questions. The questions started with: when? what? where? Questions posed by QEP trained teachers in Bikita were often more open, asking for reflection. They would often start with: why?

- The pupils of QEP trained teachers listen more to the teacher talking than the pupils of non-QEP trained teachers. This may seem surprising if one just studies the numbers. Observing in the class-room one sees, however, that the teacher is not drilling, but using time to explain a phenomenon at some length and sometimes demonstrating what s/he talks about.
- The QEP trained teachers in the Bikita schools acted more often as facilitators of their pupils more in group work than the teachers in the Zaka schools do (6.60 minutes on average against 3 in Zaka schools in a 30 minutes lesson). They also give more individual help. Through non-participant observation we saw how the teacher moved from one group to another, one pupil to another and gave assistance. This observation corresponds to an observation made by one of the headmasters we interviewed who claimed that the QEP trained teachers in his school were “able to seek new ways of teaching different topics to different children of different abilities”.

  Photo 4.1 shows a QEP trained teacher assisting a group.

Photo 4.1 Groupwork in a QEP trained teacher's classroom.

- The QEP trained teachers in the Bikita schools demonstrate, experiment, illustrate more than the teachers in the Zaka schools do.
- Pupils who have QEP trained teachers experiment, demonstrate, use role-playing, dramatization and debating more than pupils who have non-QEP trained teachers.

We have already noted that in our control group, the Zaka district education officer purposively selected schools for us to observe. These were schools that could match our schools with 2 to 4 QEP trained teachers in Bikita, schools in remote rural areas and those at a growth point. The district education officer deliberately avoided good mission schools in Zaka since we did not have any mission school in our Bikita sample. We have also already acknowledged that at school level the school head chose the class-rooms for us to visit. In Zaka schools, it might have been likely that the teachers, in whose class-rooms we made our observations, were among the best teachers in those schools. They were all friendly to us with the exception of one teacher. Almost all questions asked by the teachers in Zaka were recall and control questions, with the exception of one teacher at Munjanja who had more open questions to the pupils and took them outside to observe landforms. The schools in Zaka, as well as the desks and boards, were in better physical condition than most of the schools in Bikita. They had recently been restored and refurnished by UNICEF. At Munjanja the furniture was

especially smart and good. Each child had a separate desk. All of the class-rooms we visited had more than 40 pupils, normally around 45. Photo 4.2 shows a classroom with good furniture at a school in Zaka district.

Photo 4.2 Furniture at a non-QEP trained teacher's classroom in Zaka

In both districts, Bikita and Zaka, children were seated in pairs or groups and were very disciplined. All of the teachers in both districts had lesson plans. All of the pupils in both districts, as in all schools in Zimbabwe, got their own textbooks in English, Mathematics, science and Shona in 2010 from the Educational Transition Fund (ETF) managed by UNICEF. The aim was that each child should have his or her own textbooks in all the four subjects. Some schools reported that they had more children in each class than the ETF had foreseen so a topping up of books to the schools took place in 2011.The publisher for all the textbooks is Longman. A couple of the teachers in Zaka complained that the books were not following the syllabus while tests were made on the basis of the syllabus. The teachers preferred earlier books from College Press and used those in class even though they just had one copy which was in bad condition.

The walls in all schools both in Bikita and Zaka had meaningful charts covering most of the subjects e.g. Shona, English, Art and Science. In Zaka some schools had small "gardens" in a corner of the classroom. This seems to have been a product of a gardening project financed by JICA. Most of the classrooms of the QEP trained

teachers we visited in Bikita had drawings and art displays by children. In Zaka it was only at Zaka primary where there were drawings or writings by pupils on the walls.

All of the schools in both districts had a sizable number of orphans, who were not able to pay the levies, had tattered clothes, different uniforms and came hungry to school. It was impressive that they did come to school in spite of their lack of proper clothing and food.

Therefore from the triangulated methods, including quantitative average times as shown in Table 4.1, the qualitative interviews with teachers, school heads and pupils and the observations made, it can be concluded that indeed there was a significant difference in class participation between pupils who have been taught by QEP trained and those taught by non-QEP trained teachers. A multiple method approach was used to reject the set Null hypothesis mentioned before.

4.2.2 Characteristics of some QEP and non-QEP schools tested.

In Zimbabwe we did not have QEP schools perse as was the case in Zambia, but we had schools with teachers trained in QEP skills. The QEP trained teachers claimed that they cascaded the QEP skills to peers at school level. We did not know the degree of this cascading at school level. Luckily the children tested in our achievement tests were all taught by a teacher who was QEP trained. These were the OGs (original group as noted in our introduction to the chapter).

The 6 schools where children wrote the achievement tests in Bikita had 2 to 4 QEP trained teachers. These QEP trained teachers stated that they shared the QEP skills with their peers at school level. This might show that teachers at schools with original QEP trained teachers might have had some basic understanding of QEP although we did not know the degree of this sharing. The 6 schools with QEP trained teachers were purposively chosen for us by the district office and we verified the list against the list of

schools with QEP trained teachers that we got from SC Harare office. The sampling depended thus depended on the availability of the QEP trained teachers and accessibility to the school since the data collection took place during the rainy season. Some roads are dirty and difficult to travel along in wet weather conditions and schools with QEP trained teachers that were along such poor roads were deliberately not selected.

Included in the sample was Duma, a school located at a growth point and 5 others located in the rural areas (remote). We have already referred to the growth point as a small urban-like nucleus in a rural setting. The infrastructure in a growth point matches that of a small town and the majority of the population are employed in areas other than subsistence agriculture. The children in such urban-like settings tend to perform much better than those in remote rural areas based on the research by Chirume et-al (2009).

At Duma we tested children who were wholly taught by QEP trained teachers. This was also reflected in the consistently better performance of children at national grade 7 exams and in our achievement tests. The grade 6 teacher actually confirmed that he was teaching grade 6 in 2013 and will take the children up to grade 7 in 2014 whilst the third QEP trained teacher was taking grade 4. At Beardmore the teacher we observed teaching grade 6, confirmed that he got good in-house training at school level from the OG (QEP trained teacher who had gone to mark national grade 7 exams of 2013 and the two rotated in their teaching of grade 6 and 7. At Negovano we had two QEP trained teachers, one teaching a special class and another teacher teaching Grade 5. It was this grade 5 teacher who said that he had staff-trained 25 other teachers including the grade 4 and 6 teachers whose pupils we tested. At Makotore the grade 6 teacher was QEP trained. At Mutsinzwa the grade 4 teacher was QEP trained as well as the grade 6 teacher who also happened to be the school head. As a teaching school head the school was at an advantage as the school head stated that he cascade the QEP skills to all other teachers according to an interview we had with the head, a fact we could not verify. At Chigumisirwa the one QEP trained teacher was also the school head and taught Grade 4 but confirmed staff developing grade 6 and 7 teachers on QEP skills in

order to improve on the grade 7 results. His claim was evidently shown in improved results as this school managed to out-perform some 'urban' Zaka schools with non QEP trained teachers.

Apart from school location, school size was also an important factor to be considered. Very big schools (1000 pupils plus) such as Negovano, Zaka and Munjanja could not match well with much smaller schools such as Beardmore and Vudzi. Big schools tend to have many pupils who pass but have many again who fail and when the mean is used as the basis of measuring performance then the outlier effect might come into effect in lowering down the school performance. We can take an outlier as the value far away from others as was the case with Vudzi's 2012 national grade 7 results as well as in our achievement test results in the Zaka district or that of Duma in Bikita district.

Whilst we could not systematically measure the cascading done at school level, we should note the cases of Chigumisirwa and Mutsinzwa where school heads stated that they cascaded QEP skills at school level. Here, the results at national grade 7 as well as our achievement tests showed some improvement. If we are to believe the school heads' word, this can be through the efforts from QEP training.

4.3 Test Results to Grade 4 and 6 in QEP and Non-QEP schools in Zimbabwe

Our achievement tests were administered to grade 4 (language tests comprising English and Shona as well as Maths test) and to grade 6 (English and Maths tests). Unlike the national grade 7 exams that covered 4 main subject areas: English, Maths, General paper, Shona/Ndebele, our achievement tests covered few subject areas English, Shona and Maths in a combined paper at grade 4 and English and Maths at grade 6. Our achievement tests were given to children who had been taught by QEP trained teachers only against those children taught by non-QEP trained teachers, a situation that was not considered in the national grade 7 exam. Apart from Duma, we

are not sure whether or not all the grade 7 pupils were taught by QEP trained teachers, but the grade 4 and 6 pupils that we tested, all were taught by QEP trained teachers.

When combined by district, all the achievement test results at grade 4 and 6, like the case at grade 7, showed a small difference in performance between pupils taught by the QEP trained teachers and those taught by non-QEP trained. The t-test results against the set p-value, was greater than the set p-value of 0.1. This looks like there was no significant difference between performance at grade 4 and 6 pupils in schools with QEP trained teachers and those without. This does not take away anything from the QEP training but the case of school location and infrastructure might have played a role with a few outliers' (Vudzi for example) performance accounting for this small difference in pupils' mean performance where the mean is taken as the ultimate measure of performance.

When individual school performance was considered, 2 schools with QEP trained teachers actually out-performed those without. A similar scenario was noted on the national grade 7 results where very little difference in mean performance between the schools with QEP and those with non QEP trained teachers and yet at national grade 7 exams 4 schools with QEP trained teachers performed higher than schools with non-QEP trained teachers in 2012. At grade 7 Vudzi had a very high pass rate in 2012 (69.23%) with the rest of the non QEP schools performing at 50% and below, but, such an outlier in Vudzi, might have helped reduce the gap in mean performance between QEP and non QEP schools. Table 4.2 shows the achievement test results from grade 4 and 6 for Zimbabwe's Bikita and Zaka districts.

Table 4.2 Mean Test Mark by: School Name, School Type, Grade and Subject

School Name	School Type	Grade 4 Word-Maths	Grade 6 English	Grade 6 Maths
Duma	**QEP**	77.21	92.93	90.76
Vudzi	non-QEP	70.26	59.47	59.29
Zaka	non-QEP	69.94	78.76	83.90
Munjanja	non-QEP	68.59	78.81	61.94
Beardmore	**QEP**	67.58	68.08	59.68
Makotore	**QEP**	67.26	61.97	64.38
Chigumisirwa	**QEP**	67.22	69.25	72.22
Chipezeze	non-QEP	63.40	80.43	78.50
Chinorumba	non-QEP	59.36	76.00	72.53
Mutsinzwa	**QEP**	57.91	63.39	61.23
Negovano	**QEP**	54.72	66.22	60.00
Mushungwa	non-QEP	54.65	44.74	47.61

N.B Green colour for test results from schools with QEP trained teachers only.

From Table 4.2 it can be observed that Duma performed well at both grade 4 and 6 tests. Duma had two teachers who were QEP trained and these were very enthusiastic about their work. This is a comment that one of the QEP trained teacher made:

> *'When one of the two of us (QEP trained teachers) take Grade 7 classes, the results are excellent, the year Non-QEP trained teachers (teacher who only benefitted from cascaded QEP skills at school level), take Grade 7 classes the results are slightly lower and the National Grade 7 exam results peak again when one of us takes Grade 7s again.'*

Duma primary school has had 2 QEP trained teachers rotating in teaching grade 7 for some time. Duma, topped the list in performance at grade 4 and 6 achievement tests with 77.21% mean percent mark at grade 4. Whilst Duma enjoyed some 'mini-urban' status as a growth point, we cannot take away the influence of enthusiastic QEP trained teachers and supportive parents. Vudzi, a non QEP school was ranked second in our evaluation with mean percent mark of 70.26% at grade 4. Vudzi is one of the small non QEP schools that enjoys good infrastructure, good transport network, good leadership, donor support and support from the community and is nearer a growth point, Jerera. Vudzi also performed well at grade 7 in 2012. Zaka and Munjanja, two growth point

located schools in Zaka are ranked 3 and 4 respectively based on grade 4 tests. The growth point influence might help us explain this performance and rank position (Chirume et-al, 2009). Three schools with QEP trained teachers were ranked 5th, 6th and 7th whilst Mushungwa a non QEP school in Zaka was ranked last in the 12 schools studied. A head-on-head comparison has been made between schools with QEP and those with non QEP trained teachers. Figure 4.3 compares Duma (QEP) and Zaka (non-QEP) primary schools.

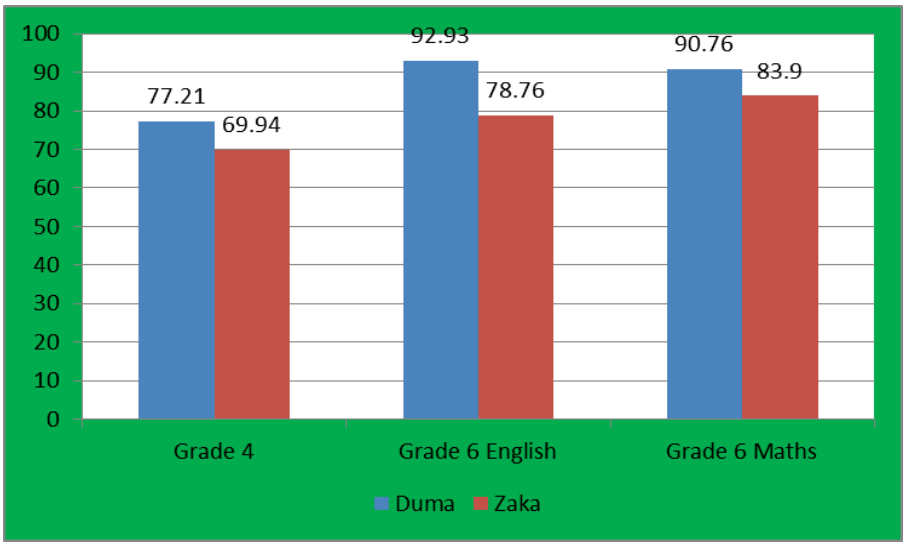


Figure 4.3 Percent distribution by test results and by grade and school type

The mean percent difference between children taught in a school with QEP trained teachers, Duma primary, as compared to children taught in a school with non-QEP trained teachers, Zaka primary school, is statistically significant with a t-value of 2.353 and P=0.021<0.05 at Grade 4; t-value of 4.599 and P=0.000<0.01 at Grade 6 English and T-value of 3.765 and P=0.000<0.01 at Grade 6 Maths (equal variances not assumed). As noted before, we tested the hypothesis at a set significant level (0.01; 0.05 or 0.1) and we compared the p-value on the output labelled 'Sig' value to the set 'Sig' level or the specific alpha level. In our case the p-values for the compared means were less than the set alpha values of significant levels of 0.05 for Grade 4 and 0.01 for

the two Grade 6 tests in significant 2-tailed test. These results made us fail to confirm the hypothesis that:

H_1 At the national level pupils who have been taught by QEP teachers will perform at the same level as pupils who have not been taught by QEP teachers.

Pupils at Duma performed better than those at Zaka primary school. This comparison was a sensible comparison to make since the two schools were both located at a growth point in their respective districts, each had well built infrastructure, good furniture, qualified teachers, available textbooks, willing parents who could afford school fees and other educational support materials. QEP training could be considered as one of the main contributory factors to this difference in performance between Duma and Zaka. Figure 4.4 shows the QEP evaluation test results for Duma (QEP) against Mushungwa (non-QEP).

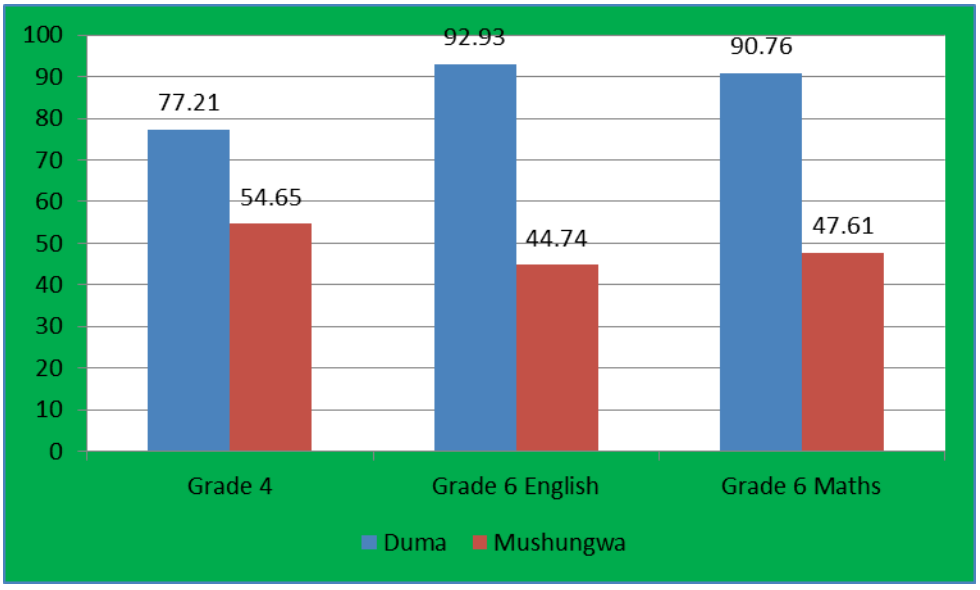


Figure 4.4 Percent distribution by mean mark by school and by grade

Duma primary school (QEP) out-classed Mushungwa, non QEP in all the three QEP evaluation class tests. Duma in total had three QEP trained teachers with a possible cascading being done at school. Mushungwa is a much smaller school than Duma and

it is found in non QEP Zaka district. The difference in this case is statistically significant, in all the three tests with t-test values way above 5 with $p<0.001$ set level of significance. This further supports the strength of QEP over non-QEP in terms of increased performance and based on this, we reject the above hypothesis as the difference in performance between these two QEP and non QEP school pupils in our achievement tests at grade 4 and 6 was statistically significant. Assuming all other variables being equal, the only difference was brought about by the QEP training. Apart from Duma which was a much bigger school, Makotore a much smaller school (a big school has 1000 pupils and above and a smaller school is hereby taken as a school with less pupils than that) compares better against a school with non-QEP trained teachers, Mushungwa. Makotore and Mushungwa are located 10-15 km away from a growth point and both are small schools.

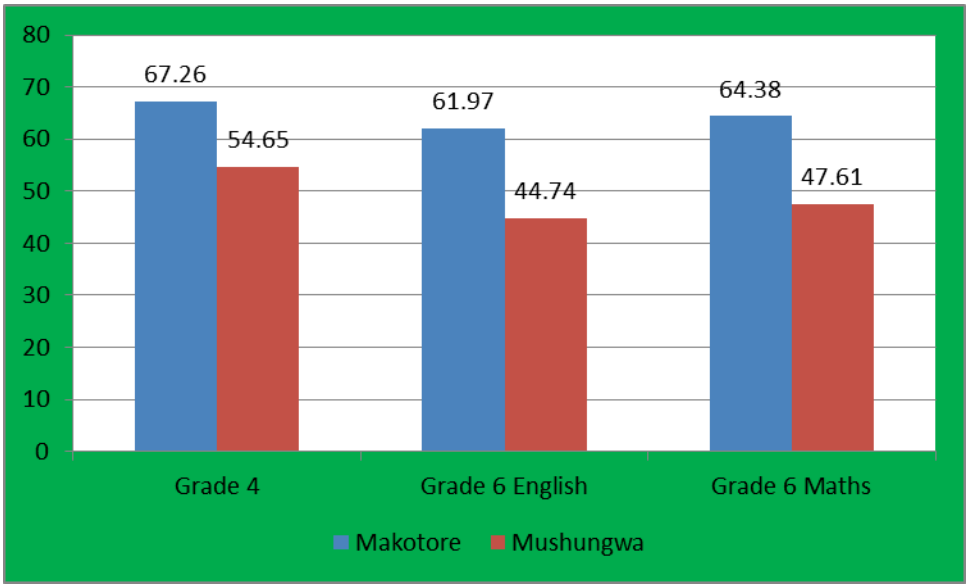


Figure 4.5 Percent distribution by mean mark by school name and by class

The mean difference of marks shown in Figure 4.5 are all statistically significant and can possibly be explained by the QEP training done to two of the Makotore teachers. Children in both schools have text books like all other primary school children in Zimbabwe. All other variables as noted before seem to be equal and the difference in

performance can possibly be attributed to QEP training of two Makotore teachers. The mean difference in children's performance at Grade 4 tests between Makotore (QEP) and Mushungwa (non-QEP) was 12.61 % and this was statistically significant in an Independent t-test with a t-value of 2.508 and $p=0.015<0.05$. In maths grade 6 the mean difference of 16.77% was statistically significant as tested in an Independent t-test with a t-value of 3.323 and $p=0.002<0.01$ and the same applies to grade 6 english test. Chigumisirwa, one of the most remote rural QEP schools, also performed better than Mushungwa (peri-urban) with results statistically better in grade 4 and 6 Tests. The same was observed with Chigumisirwa (QEP)'s grade 6 test results which were better than Vudzi (non-QEP) which was the best school in Zaka and second best in the 12 schools tested. These results might also be used to confirm results for our research question:1 (a) Has QEP been effective in bringing about improved learning outcomes for learners who have or have had teachers trained in QEP?

But not in all cases did the the schools with QEP trained teachers performed better than those without any QEP trained teachers. Figure 4.6 compares the performance of children between Munjanja (non-QEP) and Negovano (QEP).

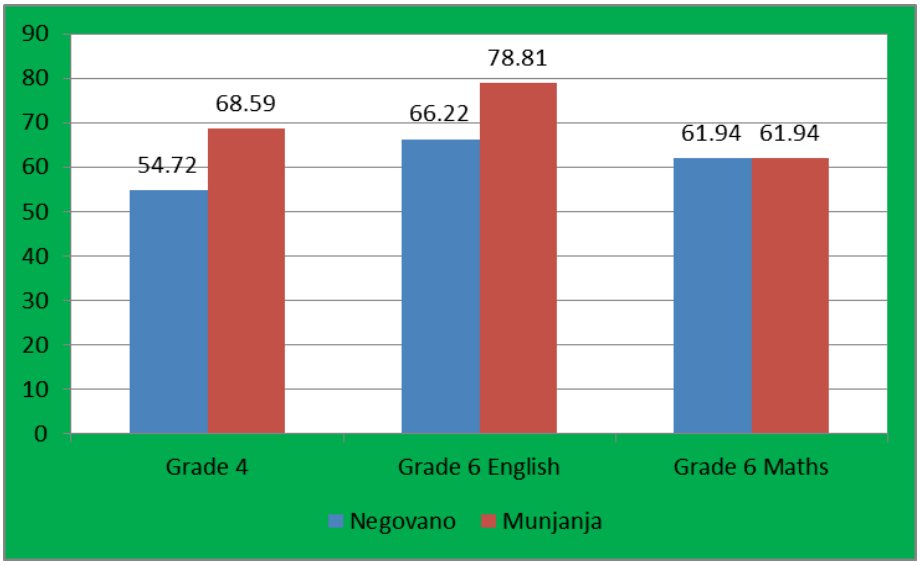


Figure 4.6 Percent distribution by mean mark by school name and by class

Munjanja (Zaka) and Negovano (Bikita) are both big schools. Munjanja is located in an urban setting and Negovano, in a rural setting. Munjanja primary school without any QEP trained teachers, performed better than Negovano in grade 4 and grade 6 english with mean difference of 13.87% and 12.59% respectively. In Maths the two schools scored the same 61.94%. At grade 4 test the mean difference was statistically significant at $p<0.01$ favoring a non QEP school, but the situation was different in Maths grade 6. The impact of QEP at Negovano despite poor infrastructure might not be under-mentioned.

4.4 Views from parents of children taught by QEP and non-QEP trained teachers

In Zaka and Bikita we managed to interview a total of 176 parents of which 121 (68.8%) were mothers or female guardians and the remaining few were males. In Zimbabwe all parents were able to read and write During the focus group, the facilitator would introduce the subject of discussion and clarify points whenever parents needed clarrification whilst the parents voluntarily completed the instrument as individuals. Parents were also free to discuss and come up with their varying opinion as they completed the instrument. All completed instruments in the case of Zimbabwe were processed for quantitaive analysis. The views that we collected from parents through FGDs augmented the achievement tests and the classroom observations in addressing our research questions. Parents' views helped to address the following research question 1 (f):

How and to what extent does the learning environment differ for learners who have teachers trained in QEP compared to learners who have non-QEP trained teachers?

In social sciences the cross-tab is regarded as a useful tool to bring out relationships in two variables (Neuman, 2000). The Chi-Square Test can be used to investigate whether

distributions of categorical variables such as the different parents' views between parents whose children are taught by QEP trained teachers and those parents whose children are taught by non-QEP trained teachers, statistically differ from one another. Table 4.3 shows a cross table on parents participation in school activities by disctrict-QEP and non-QEP.

Table 4.3 Do parents participate in school activities by Disctrict-Cross-table

District	Do you particiapte in school activities?		Total
	Yes	No	
Bikita (QEP)	82 93.2%	6 6.8%	88 100%
Zaka (non-QEP)	70 79.5%	18 20.5%	88 100%
Total	152 86.4%	24 13.6%	176 100%

P=0.008<0.01

Testing parents' views by district (QEP and non-QEP) on participation in school activities in a cross-tab, more parents (93.2%, N=82) in schools where teachers had QEP training compared to schools with teachers who were not QEP trained (79.5%, N=70) participated in school activities. Attending school activities was taken in this study as a possible measure of good rapport between teachers and parents. School activities such as consultation days, prize giving days, school development meetings or even sporting actitivies, were important days where teachers had the chance to interact with parents and talk about classroom based activities such as the proper monitoring of home work and how best parents can monitor the up-keep of school textbooks at home. Thus being parents of children taught by QEP trained teachers, might have accounted for the parents' eagerness in supporting their children to learn through attending to the different school activities, an aspect that was not well pronounced in some parents of children whose teachers had not been QEP-trained. The difference in parents' views was significant to a Chi-Square test at p=0.008<0.01, set level of significance,

prompting us to believe that the QEP training might have accounted for this difference in parents' views. The fact that more parents in schools with QEP trained teachers were likely to attend to school activities than parents in schools with non-QEP trained teachers, might have been a result of the QEP training of teachers. More parents (93.2%) in schools with QEP trained teachers might have felt comfortable to support activities at school where their children attend than those in schools with non QEP trained teachers (79.5%). We also addressed research question 1 (c):

What major changes can be documented, and what are the results of these?

Table 4.4 Mention somethings that you like about the school by District-cross-table

District	Mention some things that you like about the school						Total
	Disciplined teachers, hard working, well trained, children pass	Tangible evidence of school development, infrastructure new classrooms.	School excels in sport and arts	Pupils bring homework and are not late for school	Motherly, fatherly teachers who understand children	Plenty of teaching and learning resources	
Bikita	16	3	10	8	31	19	87
(QEP)	18.4%	3.4%	11.5%	9.2%	35.6%	21.9%	100%
Zaka	50	22	3	5	1	3	84
(non QEP)	59.5%	26.2%	3.6%	6.0%	1.2%	3.5%	100%
Total	66	25	13	13	32	22	171
	38.6%	14.6%	7.6%	7.6%	18.7%	12.9%	100%

P=0.000<0.001

The major changes that have resulted in improved pass rate in schools as perceived by parents varied by district (QEP and non QEP). More parents in Zaka (non-QEP) 50 (59.5%) as compared to 16 (18.4%) in Bikita (QEP), liked to state that disciplined and well trained, hard working teachers and hardworking children, were the major changes that contributed to noticed pass rate at school. Parents whose children are taught by non-QEP trained teachers attributed their liking of their schools more to disciplined teachers but not specifying the quality of discipline. Some 13.4% (N=9/67) non-QEP trained teachers confirmed that they used corporal punishment and other forms of hard

punishment during lessons or after school, often delaying the small primary school children from going home. This was neither supported by the parents nor the pupils, but corporal punishment was still referred to as a form of discipline by parents. The children taught by non-QEP trained teachers stated in a FGD that there were cases when children did not want to be absent from school because they feared being beaten by teachers.

Parents in Bikita (QEP) attributed quality education and noticed passrate, to teachers who have suddenly become motherly-fatherly in approach and teachers who now understand children. Teachers who do not beat children but reflect on practices. This was noted in 31 (35.6%) as compared to a single parent in Zaka (1.2%) who stated this important attribute. In parents from schools with QEP trained teachers in Bikita also noted plenty of teaching learning resources (21.9%, N=19) as compred to to 3 (3.5%) in non QEP Zaka as contributors to improved quality education. We also observed plenty of teaching and learning resources in Bikita schools with talking walls apart from the textbooks that every school in Zimbabwe have.

More parents in Bikita than in Zaka noted that children were bringing homework and that the schools in their district were excelling in sports and art festival activities. More parents in Zaka acknowledged infrastructural developemnt in their schools (26.2%, N=22) as compared to 3 (3.4%) in Bikita. We also observed that in Zaka the infrastructure was good with good furniture (Photo 4.2) too, a situtaion that was not evident in 4 of the Bikita schools. Negovano and Beardmore for example had very old classroom blocks, although Beardmore had one classroom block donated by SC, the rest of the buildings needed urgent attention. This might be the reason why parents with children taught by QEP trained teachers did not like to talk much about good infrastructure at school as a factor contributing to quality education, as was done by Zaka parents (26.2%). All in all parents noted different aspects that attributed to good pass rate in their schools and these views varied by district with Zaka dwelling on infrastructure development and disciplined teachers whilst parents from schools with

QEP trained teachers, having varying views including motherly-fatherly teachers with children at heart and teachers who do not blame the children but reflect of practices and teachers who understands children and teachers who do not resort to beating children. Parents, whose children are taught by QEP trained teachers, also said that the teachers now understand their children more than they did before the training. Their children were now happy to be at school. The evidence brought forward by parents was that children now woke up early to go to school (9.2%, did their homework well and enjoyed reading at home (21.9%). This aspect is not clearly stated in parents whose children are taught by non-QEP trained teachers (6.0% and 3.5% respectively). We also addressed research question 1 (e):

Are there any unintended positive or negative effects?

Parents and children in three schools with QEP trained teachers disliked the poor infrastructure (classroom blocks, furniture and teachers' houses). This comes as a result of few donors operating in the three Bikita schools. Negovano primary school for example has very old buildings whilst Beardmore and Makotore had a new classroom block each, courtesy of SCN. On the other hand Zaka district seemed to have had assistance from a good number of donors, hence new class room blocks and good furniture could be found there. If what we observed in the 6 schools of Zaka was anything to go by, then we can safely say Zaka as a district seemed to be enjoying a higher share of donor support for their schools than Bikita district did. Also noted in interviews with parents in Zaka district was the cooking of porridge in some of the Zaka schools. Children, especially orphans, often come to school hungry and that can be a source of poor performance and poor concentration or even drop-outs at primary school. In Zaka the provision of porridge in some schools was a plus in children's daily school attendance, an aspect that was not mentioned by Bikita (QEP) parents. There were no funds to feed orphans in the QEP schools of Bikita. Orphans in Bikita also lacked school uniforms apart from food. These were a few negatives that we noted in schools with QEP trained teachers.

We also addressed research question 1 (h):

Do pupils who have been taught by QEP trained teachers express greater satisfaction with schooling than pupils who have not been taught by QEP trained teachers?

To address this research question we asked parents to mention some things that make them think their child/ren learn/s well at school. The results are presented in a cross table measured by district in Table 4.5 below.

Table 4.5 District by Mention some things that make you think your child learns well at the school-crosstabulation.

District	Mention some things that make you think your child learns well at the school						Total
	Children now happy attending school everyday	Children now able to read and write well	Good pass rate	Child enjoys doing homework	Child is respectful of adults and is well cultured	Nothing has been noted	
Bikita (QEP)	11 12.9%	5 5.9%	11 12.9%	55 64.7%	1 1.2%	2 2.4%	85 100%
Zaka (Non QEP)	1 1.4%	26 37.1%	2 2.9%	20 28.6%	5 7.1%	16 22.9%	70 100%
Total	12 7.7%	31 20.%	13 8.4%	75 48.4%	6 3.9%	18 11.6%	155 100%

P=0.000<0.001 set level of significance.

The attributes tested in order to show which children showed greater satisfation at school between schools with QEP trained teachers and those without, varied by district. Parents helped in bringing out these attributes. In schools with QEP trained teachers parents (64.7%, N=55) observed that their children now enjoy doing homework (reading, writing and doing maths) as compared to (28.6%, N=20) in non-QEP parents.

Eagerness to learn was also reflected in the type of activities the child does at home. In QEP schools, parents noticed that their children demanded other reading materials apart from the school text books. In 2 cases the children (QEP) were said to be enthusiatic to learn such that they were often seen doing maths through counting kitchen utensils such as spoons, pots and porridge sticks at home. This measure of eagerness to learn in children taught by QEP trained teachers we did not find in schools with non-QEP trained teachers. Parents reported that children taught by QEP trained teachers were eager to attend school everyday since the teachers were motherly-fatherly and the pass rate was on the increase. This was said by 12.9% (N=11) in QEP parents as compared to only a single parent (1.4%) in non QEP parents. The difference in parents' views also tested significantly to a Chi-Square test at $p=0.000<0.01$ set level of significance, prompting us to claim that these differences in parents' views about children's measure of eagerness to learn was brought about by the QEP training in Bikita.

Parents of children with QEP trained teachers also reported having other books for their children to read at home, apart from the school textbooks more than their non QEP counterparts. This was confirmed by 64 (74.4%) parents in schools with QEP trained teachers as compared to 43 (61.4%) in parents with non QEP trained teachers. In schools with QEP trained teachers children are allowed to take textbooks home more than schools with non-QEP trained teachers (74.4%, N=64 as compared to 48.6%, N=35 in non QEP). The trust that children can take textbooks home can be attributed to an understanding between parents in QEP trained teachers and the teachers on how children should take care of the said textbooks at home and the value of taking such books for extended reading and writing under the monitoring of parents. We found that in schools with non-QEP trained teachers, less parents (48.6%) than those in schools with QEP trained teachers (74.4%) claimed that their children were not allowed to take school textbooks home.

4.5 Views from school heads

We noted already that we interviewed 13 school heads who were at a workshop in Bikita and these noted that they missed one important component of QEP which was a project in action research. We also managed to capture views from 7 school heads in Bikita and Zaka who filled in our instrument as individuals. There were 5 school heads from schools with QEP trained teachers (Bikita) and 2 from non QEP trained teachers Zaka. The 5 school heads from Bikita schools with QEP trained teachers had the following observations made on the difference between QEP and non QEP trained teachers in their schools:

QEP trained teachers do not blame children or point fingers at them. High competence skills and the teachers are reflective, practice self-criticism and the teachers involve the class in decision-making. The QEP trained teachers are more commited to work and can easily cope with change when need arises. Teaching by QEP trained teachers is now child centered, improved participation, likes and enjoys work, facilitates staff development, became cooperative.

One school head claimed that at his school there were 2 QEP trained teachers who cascaded the skills to 5 other teachers. QEP teachers are self starters, they are now very inquisitive, dont blame others as they solve problems on their own. Employing a variety of teaching methods hence enforcing quality education.

One school head who also was a product of QEP training said that the training had helped him quite a lot especially in the way he supervise teachers. Improved on skills of needs assessment on both teachers and students at the station.

‘Teachers at my school don’t see problems but challenges and device methods of going about such educational challenges. QEP trained teachers at my school are more friendly, hardworking and have children at heart’, to quote him word by word.

One of the school heads had this to say about QEP trained teachers at his school:

'These QEP trained teachers have been selected to be mentors of student teachers on teaching practice and other staff members look up to them and often rely on them for professional advice. They say the QEP trained teachers are hardworking and work focussed'.

On the sustainability of the project the 7 school heads noted that the Ministry of Education in Zimabbwe has to be fully involved. Other organisations noted in the sustainability of the project were SC, Better Schools Programme Zimbabwe (BSPZ) and the School Development Association (SDA). Only two school heads noted that they were currently spending $200 and $50 respectively in funding QEP activities at their schools. The 2 school heads of Zaka wanted QEP in their schools, but they wanted at least all teachers in their schools to be trained.

4.6 Views from pupils with QEP and non-QEP trained teachers

Addressing the research question 1 (f):

How and to what extent does the learning environment differ for learners who have teachers trained in QEP compared to learners who have non-QEP trained teachers?

To address this research question we used focus group interviews with children whom we had tested at grade 4 and 6. Where the group exceeded the 15 we wanted of mixed boys and girls, we had to split the group into two or so in order to accommodate views from all the children who had written our achievement tests. This data was qualitative and we did not make the group effort look quantitative.

Children taught by QEP trained teachers reported during focus group discussions that they were now able to read and write and do counting in maths. They reported that they cry if they were told not to go to school. In a rural Zimbabwean setup children at times are supposed to stay guarding homes and the maize fields against 'straying' domestic animals when parents attend to social gatherings such as funerals. Pupils taught by

QEP trained teachers said that they were against this practice as they would miss school. They did not want to miss a single lesson. In most of the schools such as Duma and Beardmore children could be seen loitering around the school premises in groups socialising way after the formal school lessons. They liked being at school most of the time. In schools with non-QEP trained teachers children reported that their class teachers would often come unprepared and these teachers were noticed through lack of home-work given and poor communication with the children. Only 28.6% in schools from non QEP trained teachers enjoyed doing homework. One child in a school with non QEP trained teachers complained about teachers not being prepared for lessons:

> *"These teachers should treat us as fellow human beings. If they have a problem, it is good for them to tell us rather than just sitting in their chairs in front of us without saying a word to us"*,

This was a complaint from one child on behalf of a whole group of pupils taught by non-QEP trained teachers, in a focus group discussion in Zaka district. Corporal punishment was reported several times in schools with non-QEP trained teachers; children said they did not like it.

Basic research skills as an indicator of quality learning in schools with QEP trained teachers:

Pupils taught by QEP trained teachers whose parents had reported that they were now asking "genius questions", also said that they enquired about a lot of things from their parents at home as a form of practicing and developing some basic research skills. They asked parents how they could practice some aspects of 'conservation farming' and farming of small grain crops (Bikita is a drought stricken district in the Masvingo province and small grains can be a good alternative to conventional maize production). It is important also to note that all focus group discussions were done in vernacular language, Shona, and children expressed themselves freely. One child taught by a QEP trained teacher also wanted to gain knowledge on the use of an ox-drawn plough as knowledge gained at home. Another child wanted to learn how to cook different

traditional dishes at home. This was a good sign of reflection on practices from the children's immediate community and how to improve on the practices in future.

Apart from the noted practices, some form of caring rationality was shown more by children in schools with QEP trained teachers than in schools with non-QEP trained teachers where QEP children were more likely to ask for reasons why their peers were absent from school. This care for others was a good sign of quality education going on in these QEP schools, a type of education likely to have come from the QEP training of their teachers.

4.7 Dropouts

We used data on dropout rates to address the research question:

b) Have the most marginalised pupils benefited from QEP?

In terms of drop-out rates both schools with QEP and non-QEP trained teachers showed very low drop-out rates. The few drop-outs were noted from children who had lost a parent or a bread winner. In Zimbabwe there is an existing mechanism to keep vulnerable children in school. Vulnerable children include the orphaned and those with terminally sick parents as well as those physically challenged. The mechanism in place is called the Basic Education Assistance Module (BEAM). The government and other stakeholders provide educational funds for the disadvantaged children. As a result dropout rates remain minimal in both schools with QEP and non-QEP trained teachers. Secondly, the Zimbabwe government discourages schools from sending children away for failure to pay school fees. Mechanisms are put in place for the schools and parents to work out a school fees payment plan whilst the child remains in school. Thus with reference to our research question, '***Have the most marginalised pupils benefited from QEP?',*** there is little or no difference brought about by QEP training when it comes to benefits to marginalised children. Both children taught by QEP and non-QEP trained teachers might have benefited from mechanisms that were beyond QEP as far as retention of children in school was concerned. However this does not mean that QEP

was not significant at all. This aspect of the research was analysed by qualitative data as the figures of dropouts were negligible.

4.8 Views on gender issues and repeating of grades:

In Zimbabwe the district with QEP trained teachers and the one without, girls were encouraged to participate in school work. There is no streaming in Zimbabwean education and repeating of grades is not common and no discrimination by gender. Only one parent reported that her child had repeated a grade. The main reason for repeating, as noted by this single parent, was poor performance by the child. Parents agreed that the major reason why children dropped out of school was financial. These were orphaned and vulnerable children (those with terminally sick parents or guardians). After the death of the parent or guardian the child often drops out of school, at least for some months or sometimes shifts place of residence as s/he is adopted by a different gaurdian, hence will not be found in the initial school of registration. More children were reported to have dropped out of school in Zaka (non-QEP) than in the QEP schools of Bikita. But the reasons being the same where a parent was reported dead and the child being removed out school. It is not clear of the child totally drops out of school or just unofficially 'transfers' to another school.

Parents in both districts in Zimbabwe confirmed that children from their schools progressed well to secondary school level. Very few pupils dropped out at grade 7 level in the two districts and gender was not a factor. Primary education is 'free' in Zimbabwe and all children are supposed to attend school up to grade 7. There is no discrimination at entry to secondary school, by gender, creed or by performance. All children who complete grade 7 are supposed to enter into secondary schooling despite their passes at grade 7 as long as they enrol within their designated cathment areas (a catchment area of a school is where the school draws its pool of students).

In both districts parents noted in equal terms that there were some teachers they wanted to retain at the school their child attended. A very high frequency of QEP trained

teachers featured in the lists of teachers parents wanted to retain in their different schools. The reason more QEP trained teachers featured more than the non-QEP trained teachers on the list of teachers whom parents wanted to retain was seen in more parents in schools with QEP trained teachers (98.9 %, N=87) as compared to those in schools with non-QEP trained teachers (76.1 %, N=54) viewing that QEP trained teachers made their children, curiuos to learn. The main traits showing eagerness to learn as noted in pupils with QEP trained teachers were: waking up early and enjoying going to school, asking what parents called ‘genius’ questions at home, consulting parents, guardians or even siblings during home work time, reading and writing even during weekends, asking parents or guardians for more reading and writing materials including maths materials, apart from the basic textbooks and crying if asked to be absent from school. In all this gender parity was noted. It was reported that pupils of non-QEP trained teachers would also be crying when asked to be absent from school, but one of them said that she cried because she feared being beaten by teachers at school.

Chapter 5: Discussion and analysis of QEP

5.1 The impact of QEP on learning outcomes for children taught by QEP-trained teachers

5.1.1 Learning outcomes more widely defined

We have in this study defined learning outcomes more widely than results on cognitive tests. We have also been interested in knowing whether pupils taught by QEP trained teachers have become more eager to learn and go to school with more joy and less fear than pupils taught by non-QEP trained teachers.

While a previous evaluation of QEP (Harber and Stephens, 2009) mostly focused on how teachers evaluated the QEP training and how this training had benefitted them as teachers, our focus has been more on the pupils (Brock-Utne et.al, 2013b, Brock-Utne et.al, 2014). We have had extensive interviews with pupils both in Zimbabwe and Zambia and we have interviewed the parents of pupils who have or have had QEP trained teachers and also parents of pupils who have not had such teachers. The parents confirmed the findings we already had from the interviews with the pupils; that pupils taught by QEP trained teachers were enjoying school more than before their teachers were QEP trained or when they were taught by non-QEP trained teachers. They were eager to go to school, did not want to miss school even when they were ill. They were constantly asking questions and tried to find more literature on various topics.

Neither pupils who had QEP trained teachers nor those who had non-QEP trained teachers wanted to miss school or come too late but the reasons were totally different. Pupils with QEP trained teachers did not want to miss school because they liked school and did not want to lag behind their schoolmates. Pupils with non-QEP trained teachers did not want to miss school because they were afraid that if they did so, they would be punished, often beaten, apart from liking school. A finding that really stood out in this study is the fact that school heads, parents and pupils confirmed that QEP trained teachers did not beat their pupils. They seldom punished them and if they punished

them at all, it would be a punishment commensurate with the offence. It would not be for coming too late to school or not having learnt the lesson. The teacher would instead try to find out why the pupil had come too late or not done the home-work.

5.1.2 Learning outcomes more narrowly defined

We looked at the results obtained on national exams after 7th grade. The grade 7 results from the National Composite Examinations were obtained from the district offices and schools. We also administered cognitive tests to 4th and 6th graders taught by QEP and non-QEP trained teachers. Neither in Zambia nor in Zimbabwe did we find significant differences in achievement on national exams after 7th grade between schools with QEP trained teachers and schools where teachers had not been QEP trained. One plausible explanation for the non-significant differences in national examinations could be that results in national exams were not a comparison of individual scores in outcome measures (e.g. Language and Mathematics). Schools only tabulated performance trends for the total number of pupils who sat for Grade Seven examinations in a particular year. For instance, if 100 pupils sat for the Grade Seven Examination at a given school in a particular year, the school only kept record of pupils selected to Grade 8 and a number of those not selected as a way of determining progression and achievement rates. Performance of each child in core subject areas is indicated on the examination transcripts prepared by the Examination Council of Zambia and these are given to individual pupils' schools as Certification. The schools do not keep individual pupils' actual scores as they do not have duplicates of examination transcripts. They generate graphs on the basis of the number of pupils selected to grade 8 and those not selected because they did not reach the cut -off point. At national Grade 7 exams, we combined the mean percent marks for the QEP schools against the mean per-cent marks for non-QEP schools but we are not sure how many QEP teachers actually taught the 7th graders.

Another explanation for the non-significant differences could be that in the so-called QEP schools in Livingstone and Kazungula in Zambia, where all teachers originally had

been QEP-trained, many had moved away from the school and new teachers had come who were not QEP trained. While no teacher had originally been QEP trained in Zaka, a few QEP trained teachers might have moved to the district as school heads or as lateral transfer as teachers. In Bikita in Zimbabwe only few teachers had been amongst those originally trained in QEP. There had been some sharing of QEP knowledge and skills going on through in-service training at the school level, but we do not know how much of such activity had taken place. Not all QEP trained teachers taught the 7th graders as some remained teaching lower grades with some moving up as school heads. This could account for the non-significant difference between the performance of children taught be QEP and those by non-QEP trained teachers.

When we administered the tests to the 4th and 6th graders, we made an effort only to include QEP trained teachers in the so-called QEP schools and only non-QEP trained teachers in the so-called non-QEP schools. In both countries we succeeded in doing so in all cases. When it came to the achievement tests we administered we found clear and significant differences in favour of pupils who had had teachers who were QEP trained. In Zambia, where the schools in which we administered the tests were rather similar, we found significant differences both in 4th and 6th grade. In Zimbabwe several of the schools with QEP trained teachers were in remote areas while the non-QEP schools we compared the QEP schools with were in more of a peri-urban, also called growth point, area. The comparison was thus not quite fair. When we, however, compared achievement of pupils in schools with QEP trained teachers in a growth point area in Bikita (a district where the QEP training had gone on) with the achievement of pupils of non-QEP trained teacher in a growth point area in Zaka (where there had been no QEP training) there were significant differences in favour of the pupils who had had QEP trained teachers. Pupils in growth point areas have the advantage that they hear more English around them, they often have television and internet. Since English is the language of instruction already from 4th grade, it is an advantage to have some exposure to the language outside of school. Children in remote areas hardly have that.

5.2 Drop-out rates and marginalized pupils

Both QEP and non-QEP schools in Zambia and Zimbabwe had very low drop-out rates. We found in Zambia that most children who were deregistered had actually just moved with their family to another district. So they had just changed school and not dropped out of schooling all together. In neither of the countries, whether QEP nor non-QEP, was there much evidence of drop-outs. As already mentioned in Zimbabwe there is an existing mechanism to keep vulnerable children in school. Vulnerable children include the orphaned and those with terminally sick parents as well as those physically challenged. The mechanism in place is called the Basic Education Assistance Module (BEAM). The government and other stakeholders provide educational funds for the disadvantaged children. As a result drop-out rates remain minimal in both QEP and non-QEP schools. Secondly the Zimbabwe government discourages schools from sending children away for failure to pay school fees. Mechanisms are put in place for the schools and parents to work out a school fees payment plan whilst the child remains in school.

Through the use of an observation matrix we found that the QEP trained teachers both in Zimbabwe and Zambia facilitate their pupils more in group work than the non-QEP trained teachers do. They give more individual help. Through non-participant observation we saw how the teacher moved from one group to another, one pupil to another and gave assistance. This observation corresponds to an observation made by one of the head-teachers we interviewed in Zimbabwe who claimed that the QEP trained teachers in his school were “able to seek new ways of teaching different topics to different children of different abilities”.

5.3 Sustainability and scaling up

5.3.1 Why should QEP be sustained?

All of the teachers, college lecturers, school heads, DEOs and Education officers, both in Zimbabwe and Zambia, who had been QEP trained, were of the opinion that they had

benefited a lot from the project. The project was good, should not only be sustained but introduced to other colleagues, schools and colleges. QEP was by some, both QEP and non-QEP trained lecturers, equated with action research and the use of qualitative research methods. But we found that QEP was so much more. There is a whole philosophy behind the programme as one of the strong promoters of the project explained to us. This philosophy might be even more important than the action research component itself.

- The philosophy of QEP is one that defends the child, refuses to blame a child if there are problems s/he is involved in. Instead of blaming the child, blaming the victim, the QEP trained teachers will be reflecting, analysing the situation and searching for solutions for the problem encountered anywhere, including analysing their own practices. Maybe they were part of the problem? They take time reflecting and analysing the situation. If a child has not done her or his homework, they do not blame the child, do not assume it is laziness that has prevented him or her from doing the home-work. As one QEP trained teacher in Bikita said: "I do not think I had explained well enough what to do. If I had repeated the message in Shona, that particular child would have understood what to do." Below some quotes:

A pupil in Livingstone	A teacher in Bikita	An administrator in Livingstone
• The teachers have changed. They go some-where to be trained.When they come back they love us more • These teachers that go for training do not beat us any more	• QEP has helped me to become more reflective. It works on the inner you.It has changed my life • You start reflecting even at home and the community, you stop blaming others	• The training was excellent.It has produced reflective teachers. I say they have become "baptized" • QEP should not end. All teachers need it

- School heads in both countries claimed that QEP trained teachers helped to increase the pass rates and lower the drop-out rates.
- Zero tolerance for corporal punishment. Corporal punishment is in principle outlawed both in Zambia and in Zimbabwe but there are exceptions to this rule. A teacher can refer a pupil to the head-teacher for corporal punishment. The head-teacher has to follow strict rules when it comes to how many strokes for what offence. It must all be written down. Even though it is not allowed for a teacher just to beat a child, some teachers still do. Some pupils we interviewed in Bikita told about a certain non-QEP trained teacher that if they had not done their home-work or did not know the answer to the teacher's questions, she would beat them. Of the ten head-teachers we interviewed in Bikita about QEP trained teachers in their school nine of them claimed that these teachers did not ever use corporal punishment in contrast to other teachers in the school**.** All of the head-teachers said that no QEP-trained teacher had turned a child to them for corporal punishment.

- The action research philosophy in itself is practical and applicable to the classroom situation. The piece of research done is aimed at improving the educational practice of the teacher and is not merely an academic exercise.

5.4 How sustainable is QEP?

Discussing sustainability with our informants both in Zimbabwe and Zambia we were given the following reasons why QEP has not been as sustainable as initially hoped for:

- Full reliance on funding from SCN made it impossible for the programme to continue when the funding was not there anymore.

- The conference training model was too expensive and created an impression in teachers and other beneficiaries of money that would flow endlessly.

- ❖ The mere fact that QEP came as a project meant that its life span was short lived.
- ❖ The QEP skills teachers received and applied made them become marketable and therefore prone to promotions and transfers, a situation that was reported in both Zambia and Zimbabwe. In Zambia transfers and promotions often leave schools where all teachers originally had been QEP-trained manned by non-QEP teachers. Due to these transfers, a situation has arisen where you have QEP trained teachers headed by a non-QEP trained head- teacher.
- ❖ While action research can be carried out both through the use of quantitative and qualitative methods, the emphasis on the sole use of qualitative methods caused an unfortunate opposition to action research, especially at the University of Zimbabwe.
- ❖ The project was never owned by the Ministry or by those trained as it was a SCN project and when SCN pulled out, so did the project.
- ❖ The model used of starting with individual districts compromised the sustainability of the programme.
- ❖ There were no exit measures/plans put in place for the continuation of the project once the funding from SCN was over.
- ❖ Failure to integrate the Action Research programme into the conventional courses and routines made it impossible to continue implementing it.

5.5 Three views on the sustainability of QEP

Discussing sustainability of QEP with our informants we found basically three views:

- ➢ Some QEP trained head-teachers, teachers and professors were great promoters of QEP and thought it should be spread to all schools in the country. They were themselves involved in scaling up the project, spreading the

philosophy and techniques to other schools and colleges. They were, however, of the opinion that they should have been given a certificate showing that they had gone through QEP training and done action research. This should also be given to those they trained. At the University of Zimbabwe (UZ), the trainers were dissatisfied with the small facilitation fee of $40 per day they got for holding a QEP-training workshop and wanted this salary to be much higher. Save the Children Zimbabwe remarked that the trainers also had all expenses (travel, accommodation, per diem) paid. In Zimbabwe no one seemed to think that the project would be sustainable without some financial support and back-up from the Ministry of Higher and Tertiary Education or the donor community. Money was needed for materials, for transport, for a nice lunch for participants and remuneration to the trainers. All of the ten school heads we had face-to-face interviews in Zimbabwe mentioned that for the project to be sustainable there was a need for more regular evaluations of the programme, for more workshops at school and cluster level for those who had not been trained and refresher courses for those already trained. At the district office in Zaka they had heard about QEP from colleagues in Bikita and wanted the project to come to them.

- A cycle of three workshops seems to have been a minimum cycle. The first workshop would introduce the action research methodology, in the second workshop participants would suggest an action to try out in their classrooms and in the third workshop the action would be discussed among the participants. A group of teachers and administrators in Zimbabwe, who had gone through two of the three QEP workshops but not got the third one, claimed that they were disillusioned with the whole project and had no intention of sharing it with colleagues in their school because they had not got the whole training themselves. They had carried out the action research but not had any feed-back.

- Some few professors at the University of Zimbabwe (UZ) did not support the project. One went as far as to say that it had not been a success and the colleges were now having the option to do action research or other the traditional

> research approaches.. He said that the mistake which had been made was equating action research with qualitative research methods only. This limited the students to qualitative research only and little on quantitative methodologies. Insisting that action research, equated to qualitative research only, should be introduced in all colleges and all students should do such an action research project during their teaching practice, was a mistake.

The Department of Teacher Education at UZ is responsible for appointing external examiners to examine work at the Teachers' Colleges in the whole country. Some of these examiners have been rather critical to action research. We were told that from May 2013 student teachers had the option to use a more traditional approach to research for their small research projects connected to their period of teaching practice. It is now very much up to the lecturers at the Teacher Colleges and the advice they give the student teachers on what type of research they will be doing. These lecturers are heavily influenced by the attitudes of their external examiners who come from the Department of Teacher Education at UZ. We met a couple of QEP trained lecturers from this department. They praised the programme but were among those who complained that the remuneration they themselves got for doing QEP training in the colleges was too low.

They had been active in scaling up the programme and spreading the ideas to other colleges but it did not seem like they had had much success influencing their own colleagues, disseminating the ideas to the Department of Teacher Education staff or spreading the programme to teachers in other departments that are used as supervisors and external examiners of student teachers at the Teacher Colleges. This institution is key to teacher training in the country and can act both as a facilitator and a bottle-neck. We recommend that a cycle of three workshops ending with a certificate be administered to staff in this department and the external examiners they use to go to the Teacher Colleges. Since QEP seems to have polarized the staff of this department, the training should probably not be given by one of the Zimbabwean great promoters of

QEP but rather by someone from the outside, e.g. a professor from Zambia, e.g. from Charles Langwa College of Education.

The situation in Zambia is different since action research there has become a part of the curriculum of all Teacher Training Colleges. All student teachers are supposed to do an action research project during their teaching practice period. Whether they really do so, we do not know. Also in this country the staff at the Faculty of Education at the University of Zambia (UNZA) act as external examiners at the Colleges. The problem is, however, that this staff has not been QEP trained, although many of them wish they were. There does not seem to be any negative attitude towards QEP at UNZA, but a great wish for training of the staff ending with a certificate. Also in Zambia it has been a problem that the QEP training has not led to a certificate. This was also pointed out in the Harber and Stephens (2009) evaluation, but nothing has happened since. Since Livingstone is a district with many QEP schools, one would think that Livingstone Teacher College would be an excellent partner. In the beginning of the project there were plans for using this college and many of the staff wanted the training and wanted to become trainers themselves. Levels above the College decided that the staff of the college could not be used, since most of them only had diplomas and not degrees. Instead many DESOs got extensive training. How many of them have used this training for organising workshops and sharing their QEP knowledge and skills, we do not know.

5.6 How could the sustainability be increased?

All lecturers in Teacher Education in all Teacher Colleges in Zimbabwe and Zambia should be trained in Action Research so that they in turn train their student teachers. The action research skills pre-service teachers acquire will be valuable both for their small research projects they conduct under training and for the improvement of practice once they graduate from college.

QEP trained lecturers in colleges should develop learning and teaching materials for the sustainability of the programme. This material can be developed together with student teachers and spread to other colleges.

All UNZA lecturers in Zambia should be trained in Action Research so that teachers graduating from UNZA are not left behind. This is important since UNZA staff has a responsibility for monitoring teaching and research in the Teacher Colleges.

The Charles Lwanga model of integrating Action Research into the college curriculum is excellent. In that way there is internalization of all the practices and attitudes acquired. The teachers here could tell about their experiences at workshops for other teacher Colleges both in Zambia and Zimbabwe.

Integration of QEP into the examination system of the Teacher Colleges has to take place since pupils/students do not take anything not examined seriously.

New teachers who have been QEP trained through their pre-service period should be sent to schools where there are other QEP trained teachers for continuity. In this way the new teachers come to colleagues who will appreciate their newly acquired skills.

5.7 Possible partners when scaling up the project

One of the questions we posed to the head-teachers we interviewed in Zimbabwe and Zambia was: For possible scaling up, whom do you consider to be partners that can work with you in the QEP's Action Research Approach? The head-teachers answered:

- The Ministry of Education
- University departments of Education
- The district education office
- The Teacher Unions

- The donor community like Save the Children and UNICEF Community leaders, e.g. church leaders, chiefs; traditional leaders.
- Parent assemblies, PTAs (SDC)

The donor community contains many more organisations than the ones pointed at by the head-teachers. Apart from UNICEF there are multilateral and bilateral donors like USAID, EU, DFID, DEZA, GIZ[8], World Bank and UNESCO. There are also many more NGOs than Save the Children working with education in Africa, e.g. African Revival Zambia[9] . That organisation has so far delivered new educational opportunities for 7,000 pupils and 150 teachers in 17 schools in the Kalomo District in Southern Zambia . The organisation assists each school with projects designed to help improve their learning environment and quality of education, in line with their priorities. It should be possible for QEP and SC to form partnerships also with organisations like UNESCO's Teacher Training Initiative for sub-Saharan Africa (TTISSA). TTISSA sees it as imperative to upgrade and professionalize contract teachers (non-civil servant teachers) that are being employed as a solution to teacher shortage in Africa. Using the QEP ideology may here be of great value[10]. Another organization which SC may form a partnership with is Read Educational Trust which is a South African based NGO that operates in the education and literacy sectors in Africa broadly, and in educator training specifically[11]. A UNICEF project has developed a useful manual[12].

5.8 Spreading the programme to neighbouring countries

Several of the QEP trainers mentioned that it might be a good idea to start QEP training in neighbouring countries like Botswana, Swaziland, Lesotho, South Africa and Tanzania. They could be used as trainers and would probably meet less resistance

[8] The German Agency for International Cooperation: http://www.giz.de/en/
[9] http://www.africanrevival.org/what-we-do/zambia.aspx
[10] http://www.unesco.org/new/en/dakar/education/teacher-training-initiative-for-sub-saharan-africa/

[11] http://www.read.co.za/

[12] http://www.unicef.org/publications/files/Child_Friendly_Schools_Manual_EN_040809.pdf
Accessed 28.01.2014

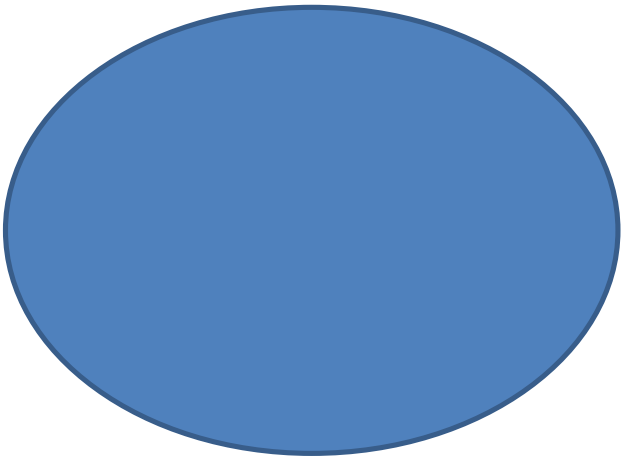
there than in their own country. Both in Zambia and Zimbabwe most of those interviewed said that they still needed scaling up in their own countries.

5.9 An example of an institution that managed to make QEP sustainable

Of all the institutions we visited in Zimbabwe and Zambia there was only one that had managed to make QEP really sustainable to continue without any external resources. That institution is Charles Lwanga College of Education at Monze in Zambia. Below is a quote from an interview with the Principal of the College Mr. Frederick Kabwe:

I do not look at QEP as a project. A project has a life-span. Projects come and go, QEP is a programme. It has come to stay. It is an integral part of our work and life at

Initially the whole college staff had been trained in action research, At the beginning of each academic year the College would use its own resources to train the new staff that came and hold refresher courses for the already trained staff.



Chapter 6 Conclusions and recommendations

6 .1 Conclusions

The main conclusion to be drawn from this evaluation is that the QEP training of teachers in Zimbabwe and Zambia has generally been a success. When we look at the situation for *pupils* QEP has led to:

- Pupils who do significantly better on achievement tests than pupils being taught by non-QEP trained teachers in otherwise comparable schools
- Pupils who are more eager to learn and have a desire to expand their knowledge
- Pupils who are happy to go to school and do not want to miss a class
- Pupils who are more independent and pose more critical questions

When it comes to QEP trained *teachers* we found the following results:

- Corporal punishment is not being practiced by QEP trained teachers
- There is better cooperation between parents and QEP trained teachers
- QEP trained teachers do not blame pupils but try to find out reasons why a certain child has not done her or his home-work or comes too late to school. They may often blame themselves, their way of teaching or they put blame on the medium of instruction, a question they cannot do much about but see that causes problems for the pupils
- QEP trained teachers give more individual help to pupils. As a headmaster in Zimbabwe said about the QEP trained teachers in his school: “They seek new ways of teaching different topics to different children of different abilities”

When it comes to QEP *teacher training* we found the following results:

- Doing an action research project has become part of the curriculum in teacher training in Zambia
- A teacher college in Zambia has shown that it is possible to develop QEP from a project to a programme and make it sustainable

The QEP training has met with severe challenges which partly could have been avoided

- Equating action research with qualitative research methods only, which was done from the start of the programme, raised considerable resistance to action research. This was especially the case at the University of Zimbabwe, a central institution in monitoring the work going on at the Teacher Colleges in the country. Actually action research projects often use a combination of quantitative and qualitative research methods.
- The University of Zambia has a similar function to the University of Zimbabwe when it comes to monitoring the work going on at the Teacher Colleges in the country, but the staff here had not been QEP trained.
- We heard many complaints from teachers and administrators, who had been QEP trained, about the fact that they had not received any certificate showing that they had gone through the training.
- Full reliance on funding from SCN made it difficult for the project to continue when the funding was not there anymore. No exit measures/plans had been put in place for the continuation of the project once the funding from SCN was over.

- The conference training model was too expensive and created an impression in teachers and other beneficiaries of money that would flow endlessly.

- The QEP skills teachers received and applied made them become marketable and therefore prone to promotions and transfers, a situation that was reported in both Zambia and Zimbabwe. In Zambia, transfers and promotions often leave QEP schools with few QEP trained teachers and manned by non-QEP trained head-teachers. Due to these transfers, a situation has arisen where you have QEP teachers headed by a non-QEP trained head-teacher.

- Some teachers, head-teachers and district education officers were trained through a rather expensive conference training model. Some of those trained underwent as many as nine, or even twelve, workshops, while most had three. Some of those trained later gave courses and workshops to other teachers and

colleagues in action research and the QEP ideology. As far as we could find out, there has been no systematic following up of the efforts from those trained to share their QEP knowledge and skills with the non-trained. In what form did this sharing of knowledge take place? For how long? How often? How many were trained this way?

- The project was never owned by the Ministry of Education as it was a SCN project and when SCN pulled out, so did the project in many places
- Failure to integrate the Action Research programme into the conventional courses and routines made it difficult to continue implementing it. Where it has been done, e.g. in teacher training in Zambia, we do not know how systematically it has been done. It is a strange fact that the lecturers at Livingstone Teacher College, who are supposed to oversee the action research process, have not themselves been trained in action research.

6.2 Recommendations to Save the Children Norway (SCN)

A shortcoming of the QEP project, which happened in the start of the project, is the lack of baseline data and a system of tracing where QEP trained teachers went and what they did with their training. It is recommended that a tracer study be undertaken. Such a study should be focusing on the sustainability of QEP. To what extent have those who have gone through the longest and most intensive QEP training shared their knowledge and acquired skills with fellow teachers and other colleagues? What form has this sharing of QEP skills taken? How many have been trained through a cascading model and for how long? The study should also look into how QEP can be made more sustainable.

There are other organisations working with teacher education and quality education in Zambia and Zimbabwe. Some of these organisations have been mentioned here. Some are multilateral or bilateral donors, others are NGOs. Some information about the organisations can be found on their web-sites but there is a risk that the information is

neither up-dated nor accurate. We recommend that SCN commissions a study that would outline education projects in the two countries that are working with similar interventions as QEP. Where do they work? What do they do? How is their work being monitored?

We found through our study that the faculties of Education in the universities as well as the teacher colleges are central institutions when it comes to promoting the QEP ideology and the action research training. In Zambia there is a need for training of the staff at UNZA in QEP. Also the staff of Livingstone Teacher College should be QEP trained. At UZ a renewed discussion on action research and its place in teacher training could be started giving examples of action research projects that have been carried out using more quantitative research methods.

QEP, as we have shown, is such a good project that it ought to be continued. It needs some continued funding from Norway but exit strategies need to be planned right from the start.

6.3 Recommendations to Save the Children Zimbabwe (SCZIM)

It is necessary to undertake a study to find out how and to what degree the cascading from QEP trained to non-QEP trained teachers and school heads in Bikita has taken place and to put in place a mechanism for QEP training of those who have not been QEP trained.

Many of those who have been QEP trained miss having a certificate which shows the training they have had and the action research project they have undertaken. It should not be so difficult for SCZIM, maybe together with staff from UZ, to make such a certificate.

There is a great wish for QEP training among teachers in Zaka. We found that the teachers in Zaka have heard about QEP training from colleagues in the neighbouring district Bikita and they think it also will benefit them and their pupils

There is a need for further discussion on QEP and action research at UZ making lecturers aware of the fact that action research does not necessarily mean that qualitative research methods are the only research methods employed. It might be a good idea to have teaching staff and student teachers from Charles Langwa College of Education in Zambia visit UZ and talk about their experiences. A less expensive option may be one-to-one meetings between SC Zimbabwe staff and college officials.

We recommend that SCZIM has further discussions with the Ministry of Education on how to share responsibility for QEP training of administrative and training staff

6.4 Recommendations to Save the Children Zambia (SCZAM)

In Zambia, unlike in Zimbabwe, all teachers in several schools were originally QEP-trained. Many of the QEP trained teachers have, however, moved to other schools. We do not know how much sharing of their QEP training they have undertaken in the new schools they have moved to. There is a need for a tracer study to find this out. We also need to know in what form, or whether at all, new teachers who have not been QEP trained get such training when they move to a school where the staff was QEP trained some years back. It is necessary to undertake a study to find out how and to what degree the cascading from QEP trained to non-QEP trained teachers and head-teachers in Livingstone and Kazungula has taken place and to put in place a mechanism for QEP training of those who have not been QEP trained.

Also in Zambia many of those who have been QEP trained miss having a certificate which shows the training they have had and the action research project they have

undertaken. It should not be so difficult for SCZAM, maybe together with staff from UNZA, to make such a certificate.

We found a great wish for QEP training among teaching and administrative staff at UNZA. This training is important since UNZA monitors the work taking place in the Teacher Colleges.

QEP training should also be given to the teaching staff of Livingstone Teacher College since this College is placed right in the middle of many of the QEP schools in the south of Zambia. Staff from Charles Langwa College of Education would be well placed to visit Livingstone and tell how they work.

In Zambia action research has come into the curriculum in all Teacher Training Colleges. We do not know to what extent the action research projects take place and whether they are based on the QEP ideology where the point is to find solutions to a problem, to reflect and not to blame. We recommend that a study be made of this, e.g. as commissioned research for a couple of master students.

We recommend that SCZAM has further discussions with the Ministry of Higher and Tertiary Education on how to share responsibility for QEP training of administrative and training staff.

6.5 Recommendations to other stakeholders

6.5.1 Cooperation with Governments, especially Ministries of Education

Ministries of Education in both countries have welcomed QEP into their countries and acknowledged the important support from SCN in getting this project going in order to improve the quality of education. We recommend that a partnership structure be set up with the Ministries of Education in the lead role in order to increase the sustainability of QEP .

6.5.2 Cooperation with NGOs like parent- teacher and church organisations

In several of the schools where we conducted interviews with parents they said that parents had been so happy with the way teachers had changed after undergoing QEP training that they thought the small sums collected from parents for projects and improvement in schools could well be used to organise QEP training for teachers who had not had such training. As one parent said these funds were funds the school could more easily rely on than funds from the government which may not be forthcoming.

In some communities churches are strong and work to improve the life in the community including in the local schools. It may be possible that also local churches or mosques would co-operate in strengthening the QEP training of teachers.

6.5.3 Cooperation with other international organisations

As already mentioned there are other organisations working with teacher education and quality education in Zambia and Zimbabwe. Some are multilateral like UNESCO and UNICEF or bilateral donors like DfID, EU, NORAD, others are NGOs. We have recommended that SCN commissions a study that would outline education projects in the two countries that are working with similar interventions as QEP. Where do they work? What do they do? How is their work being monitored?

It might e.g. be possible that QEP trained teachers from the QEP project could teach the action research methodology to some of the child-friendly schools of UNICEF and/or and also that the QEP project could learn from the child-friendly school project. Another project to work with is the UNESCO's Teacher Training Initiative for sub-Saharan Africa (TTISSA). Using the QEP ideology may here be of great value.

6.6 Transferability to new countries?

As noted in chapter five several of the QEP trainers mentioned that it might be a good idea to start QEP training in neighbouring countries like Botswana, Swaziland, Lesotho, South Africa and Tanzania. They could be used as trainers and would probably meet

less resistance there than in their own country. Both in Zambia and Zimbabwe most of those interviewed said that they still needed scaling up in their own countries.

References

Aaronsohn, Elizabeth (1996). *Going against the grain: Supporting the student centred teacher*. Thousand Oaks, CA: Corwin Press.

Altrichter, Herbert, Stephen Kemmis, Robin McTaggart, Ortrun Zuber-Skerritt, (2002) The concept of action research, *Learning Organization, The*. Vol. 9.No. 3, pp.125 – 131

Babbie, Earl (2003). *The practice of social research* (10th ed.) Belmont: Wadsworth/ Thomson Learning

Bamgbose, Ayo (2005) Mother-tongue education: Lessons from the Yoruba experience. In: Brock-Utne, Birgit and Rodney Kofi Hopson (Eds.): *Languages of instruction for African emancipation*. 231–57. Cape Town: CASAS.

Brannen, Julia, ed. (1992). *Mixing Methods: Qualitative and Quantitative Research*. Aldershot: Avebury

Brannen, Julia. (1992) 'Combining Qualitative and Quantitative Approaches: An Overview', in Brannen, Julia (ed.) *Mixing Methods: Qualitative and Quantitative Research*, pp. 3–37. Aldershot: Avebury.

Brock-Utne, Birgit (Ed). (1979). *Fra ord til handling. Pedagogisk aksjonsforskning i utdanningssamfunnet* [From words to deeds. Educational action research]. Oslo: Universitetsforlaget.

Brock-Utne, Birgit (1979 Hva er pedagogisk aksjonsforskning? In: Brock-Utne, Birgit (Ed). (1979). *Fra ord til handling. Pedagogisk aksjonsforskning i utdannings-samfunnet* [From words to deeds. Educational action research]. pp.17 - 27 Oslo: Universitetsforlaget.

Brock-Utne, Birgit (1980). What is educational action research? *Cambridge Classroom Action Research Network Bulletin* 4, October: 10–15.

Brock-Utne, Birgit (1988). What is educational action research? In: Kemmis, Stephen. and Robin McTaggart (Eds.) *The Action research reader* 253–259. Deakin: Deakin University Press.

Brock-Utne, Birgit. (1996). Reliability and Validity in Qualitative Research within Education in Africa. *International Review of Education.* 42(6): 605-621.

Brock-Utne, Birgit (2000). *Whose education for all? The recolonization of the African mind?* New York/London: Falmer. Reprinted in 2006, Seoul: Homi Publishing.

.
Brock-Utne, Birgit (2007). Learning through a familiar language versus learning through a foreign language: A look into some secondary school classrooms in Tanzania. *International Journal of Educational Development* 27, no. 5: 487–98.

Brock-Utne, Birgit. (2012) Language and inequality: global challenges to education. *Compare*. Vol. 42. No.5. 1-21.July 2012

Brock-Utne, Birgit, Crispen Dirwai, Dennis Banda, Beatrice Matafwali (2013a) *Inception Report from EDCON for the EPQ Evaluation*. 14 pp. with appendixes: 34. Delivered on 31.10.2013. Oslo: SCN

Brock-Utne, Birgit, Crispen Dirwai, Dennis Banda, Beatrice Matafwali (2013b) From Blaming to Reflecting. An Evaluation of the Quality Education Project (EPQ) in Zimbabwe and Zambia . *Preliminary Report*. 22 pp. Delivered on 9.12.2013. Oslo: SCN

Brock-Utne, Birgit, Crispen Dirwai, Dennis Banda, Beatrice Matafwali (2014) From Blaming to Reflecting. An Evaluation of the Quality Education Project (EPQ) in Zimbabwe and Zambia . *Preliminary Report*. 136 pp. Delivered on 31.01.2014. Oslo: SCN

Bryman, Alan. (2004) *Social Research Methods* (2nd edition). Oxford: Oxford University Press.

Bryman, Alan (2006) Integrating quantitative and qualitative research: how is it done? *Qualitative Research* vol. 6(1) 97–113.
The online version of this article: http://qrj.sagepub.com/cgi/content/abstract/6/1/97

Carter, G. L. (2001) *Learning Research Methods with SPSS*, Harcourt College Publishers

Cherian, V.I (1990). Relationship between corporal punishment of pupils and their academic achievement. *South African Journal of Education*, 10: 96-100.

Chirume Francis, Maisiri Ebba and Dirwai Crispen (2009) A rapid assessment of the 2008 teaching, learning and assessment processes in Zimbabwe primary schools: A study for future educational interventions. Zimbabwe School Examinations Council, UNICEF and SNV.

Chisaka, Bornface,Atwell Mamvuto, Sheasby Matiure, Moses Mukabeta, Tamuka Shumba, Davison Zireva(2013) *Action research: Some Practical Ideas for Educational Practice.* Harare: Save the Children.

Cornelius-White, J. (2007) Learner-centered teacher-student relationships are effective: a meta-analysis. *Review of Educational Research,* 77(1), 113–143.

Creswell, John. (1998). *Five Qualitative Traditional of Inquiry. In Qualitative Inquiry and Research Design: Choosing among the Traditions*. London: Sage Publication.

Creswell, John.W. (2003) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (2nd edition). Thousand Oaks, CA: Sage

Elliot,John (1978) What is Action Research in Schools? *Journal of Curriculum Studies.* Vol.10.No.4

Elliot,John (2009) Building Educational Theory through Action Research. In: Noffke, Susan and Somekh,Bridget (Eds) *The Sage Handbook of Educational Action Research.* pp.28 – 38. London: SAGE Publications Ltd.

Fredua-Kwarteng, Y and Francis Ahia. (2005a). Ghana Flunks at Math and Science: Analysis (1).Feature article. *Ghana News* 8 January 2005.

Fredua-Kwarteng, Y and Francis Ahia. (2005b). Ghana Flunks at Math and Science: Analysis (2).Feature article. *Ghana News* 23 February.

Gudmundsdottir, Greta Bjørk and Birgit Brock-Utne (2010): On the importance of piloting. *Educational Action Research* Vol.18. No.3. September 2010, 359–372

Haberrmas, Jürgen (1970). *Toward a rational society: student protest, science, and politics. .* Boston: Beacon Press.

Habermas, Jürgen and Niklas. Luhmann (1971). *Theorie der Gesellschaft oder Sozialtechnologie?* [Theory of the society or social technology?]. Frankfurt am Main: SuhrkampVerlag

Hammersley, Martyn. 1992. Deconstructing the Qualitative-Quantitative Divide. In: Julia Brannen, ed., *Mixing Mehthods: Qualitative and Quantitative Research* (39-57).Aldershot: Avebury

Harber, Clive and David Stephens (2009). *From shouters to supporters*. *Quality Education Project—Final evaluation report. Report no. 02/2010.* ISBN 978-82-7481-183-6. Save the Children Norway

Jones, L (2007). *The student-Centred classroom*. London: Cambridge University.

Kemmis, Stephen and Robin McTaggart (2005). Participatory action research. In: . Norman K. Denzin and Yvonna S Lincoln (Eds) *The Sage handbook of qualitative research*. pp. 559–603. Thousand Oaks,CA: Sage.

Kezar, Adrianna (2000). The importance of pilot studies: Beginning the hermeneutic circle. *Research in Higher Education* 41, no. 3: 385–400.

Klafki, Wolfgang (1976). *Aspekte kritisch-konstruktiver erziehungswissenschaft* [Aspects of a criticalconstructive educational science]. Weinheim und Basel: Beltz Verlag.

Kleven, Thor Arnfinn. (1995). Reliabilitet som pedagogisk problem (Reliability as an Educational Problem) *Mimeo. Doctoral lecture 17. February 1995.* Oslo: Institute for Educational Research

McCombs, B. & Whistler, J. (1997). *The learner centred classroom and school: Strategies for increasing student motivation and achievement*. Francisco: Jossey-Bass Publishers.

Mekonnen AlemuGebre Yohannes (2009). Implications in the use the use of Mother Tongue vs. English as Languages of Instruction for Academic Achievement in Ethiopia. In: Brock-Utne, Birgit and Ingse Skattum (Eds.) *Languages and Education in Africa: A comparative and transdisciplinary discussion,* 189-200. Symposium Books, Oxford

Mirabella, Jim (2006) Hypothesis Testing with SPSS: A Non Statistician Guide & Tutorial. http://math.csuci.edu/ocspss/hypothesistesting.pdf.

Möllenhauer, Klaus und Christian Rittelmeyer (1975) "Empirisch-analytische Wissenschaft" versus "Pädagogische Handlungsforschung" eine irreführende Alternative. [Empirical-analytical science vs educational action research- not opposing alternatives] *Zeitschrift für Pädagogik*. Vol.21.No.5. S.688ff.

Mwinsheikhe, Halima Muhammed (2007). Overcoming the language barrier: An in-depth study of Tanzanian secondary school science teachers' and students' strategies in coping with the English/Kiswahili dilemma in the teaching/learning process. *Ph.D. dissertation*. University of Oslo

Nagel, Tove (2006) "Before we were teaching subjects, now we teach children". In: Halvorsen ,Torill Aagot (Ed.): Evaluation of Education – on Whose Terms? Report from the NETREED Conference 2004. pp.52-73. *Report no.2.2006*. University of Oslo: Institute for Educational Research

Neuman, W. Laurence, (2000) *Social Research Methods: Qualitative and Quantitative Approaches,* Allyn and Bacon, London

Nsemanang, A. B (2008). (Mis) Understanding ECD in Africa: The force of Local and Global motives In M. Garcia, A. pence & L.J. Evans (Eds), *Africa's Future, Africa's Challenge* (pp. 135- 150). Washington D.C: The World Bank.

Ouane, Adama and Christine. Glanz, eds. (2011). *Optimising learning, education and publishing in Africa: The language factor. A review and analysis of theory and practise in mother tongue and bilingual education in sub-Saharan Africa*. Hamburg: Unesco Institute for Life-Long Learning and Tunis Belvedere: Association for the Development of Education in Africa.

Prah, Kwesi Kwaa and Birgit Brock-Utne, eds. (2009). *Multilingualism: An African advantage. A paradigm shift in African language of instruction polices*. Cape Town: CASAS.

Qorro, Martha (2009). Parents' and policy-makers' insistence on foreign languages as media of education in Africa: Restricting access to quality education. In: Brock-Utne, Birgit and Ingse Skattum (Eds.) *Languages and Education in Africa: A comparative and transdisciplinary discussion,* 57-82. Symposium Books, Oxford

Ragin, Charles (1987). *The Comparative Method: Moving beyond Qualitative and Quantitative Strategies.* Berkeley and Los Angeles: University of California Press.

Ragin, Charles (1994). *Constructing Social Research: The Unity and Diversity of Method*. London: Pine Forge Press.

Schweisfurth, Michele (2013*) Learner-centred Education in International Perspective Whose pedagogy for whose development?* London and New York: Routledge Taylor and Francis

Silverman, David (2005). *Doing Qualitative Research : A Practical Handbook* (2nd ed.). London: Sage

Tashakkori, Abbas and Charles Teddlie (2003) *Handbook of Mixed Methods in Social and Behavioral Research*. Thousand Oaks, CA: Sage.

UNESCO, (2005) EFA report (www.unesco.org/en/efareport/reports/2005-quality/)

UNICEF, (2000) Defining Quality in Education. A paper presented by UNICEF at the meeting of the International Working Group on Education in Florence, Italy. June 2000 *Working Paper Series*. Education Section. Programme Division Education. Document No. UNICEF/PD/ED/00/02

Vuzo, Mwajuma (2012).A Comparative Analysis of Teaching and Learning Strategies used in Private and Government Primary Schools in Mathematics, Kiswahili and English in Tanzania. In: Qorro, Martha, Zubeida Desai and Birgit Brock-Utne (Eds) *Language of Instruction. A Key to Understanding what the Teacher is Saying.* Dar es Salaam: KAD Associates.pp.117-133

Wekwete, K. H (1988) Rural Growth Points in Zimbabwe —prospects for the future. *Journal of Social Development in Africa*. Vol. 3,(2), 5-16.

World Bank, (2005). *Education Notes*. In Their Own Language…Education for All. Washington DC: World Bank. 4 pp.

World Bank Group (2011) *Education strategy 2020 Learning for all: Investing in people's knowledge and skills to promote development*. Washington, DC: WB.

Appendix A: Itinerary QEP Impact Evaluation in Zimbabwe and Zambia: 2nd – 21st November 2013

Saturday 2nd of November	
2125 hrs	Dr Birgit Brock-Utne was picked up from airport and driven to Bronte hotel
Sunday 3rd of November	
1130 hrs	Briefing with Birgit Brock-Utne and Crispen Dirwai at Bronte hotel, Harare
1200 hrs	Meeting with Stephen Masawi, SC-Zim (hotel)
1400 hrs	Meeting with the research assistants Ms.Margaret Gorejena, and Ms.Tsitsi Sarayi,Departure for Masvingo.Working lunch on the way paid by EDCON
1900hrs	Meeting with research assistant Ms.Shoorai Konyana in Masvingo
20.00hrs	Check-in at Great Zimbabwe hotel
	Further planning (Birgit and Crispen) untii 22.00 hrs
Monday 4th of November	
Morning	Meeting at the Masvingo District Office with:
	Ms. Jerivengwa, Director of Primary Education and ECD, Masvingo District,
	Mr.S,R,Tererai,Acting Dep.Director of Primary Education and ECD, Masvingo District,
	Mr.Kainus Marambire, Inspector Primary Education and ECD, Masvingo District
	Mr.Richard Magomo, Education Officer, Planning, Masvingo District,
	Mr.J.Mahofa, District Education Officer, Zaka District,Mr.Nyaganga

	Shadreck, Education Inspector, Bikita rural district
Mid-morning	Photocoypying all instruments and tests until one o'clock
Afternoon	Ms.Chioneso Maradza, Acting District Officer (DEO),Bikita rural district Ms.Helena Tirivaviri, Deputy Head of Duma primary school Mr.Morgen Ngezi, Assistant Dep- Head of Duma Interview with the Ag, DEO, with the Deputy Head and Ass,Deputy Head of Duma, interview with eleven parents
1700 hrs	Travel back to hotel/lodge, further planning
Tuesday the 5th of November	
07.15	Travel to Masvingo to pick up the three research assistants
Morning	Observation of two QEP teachers at Duma and interview with the teachers. Administering tests to 4th and 6th grade pupils at Beardmore. Observation of one QEP and one non-QEP teacher teaching at Beardmore. Interviews with two QEP and one non-QEP teacher. Interview with eight parents. Focus-group interviews with children, eighteen (10 girls and 8 boys -3rd graders taught by a QEP teacher, second group 10 girls and 9 boys, all in all 20 girls and 27 boys =37 children. Interview with 5th graders, also split into two groups, 12 girls and 7 boys, second group 12 girls and 7 boys. All children were being taught by QEP teachers.
Afternoon	We administered tests to 4th and 6th graders at Makotore. We interviewed 20 parents, among them 13 women, 7 men. Observed the Deputy Head who is QEP trained teach a lesson. Interview with him. Interview with 40 children from the QEP teacher' class, 21 girls and 19 boys. We administered tests to 4th and 6th graders at Chigumisiwa and interviewed 14 parents, among them 12 women, 2 men. Observed one QEP trained teach a lesson. Interview with him. Interview with the school-head. We administered tests to 4th and 6th graders at Mutsinzwa. We interviewed 15 parents, 9 females and 6 males. Observation of a QEP trained teacher and interview with her.
Late	Interview with 13 head-teachers at Bikita rural district Council training

afternoon	Centre
21.00 hrs	Travel back to hotel/lodge at 21.00
Wednesday the 6th of November	
Morning	Travel to Negovanhu, interview with Mr.Chabata Vushe, Head of Negovano primary school, Ms.Elemencia Mudondo, Acting Deputy Head,Negovanhu primary school. Observation of three QEP teachers and interviews with them. Focus group interviews with 19 children, 15 girls and 4 boys (5th graders)-Interview with 15 parents, 13 female and 2 males. Administering tests to grade 4 and 6. Travelled to Zaka. Brief meeting with Mr.Samson Chidzuria, Acting DEO, Education Inspector, Zaka rural district
Afternoon	We administered tests to 4th and 6th graders at Chipezeze primary. We interviewed 22 parents, 16 females and 6 males. Observation of a grade three class. We administered tests to 4th and 6th graders at Mushungwa primary. We interviewed 21 parents, 9 females and 12 males. Observation of a grade five class. Interview with the Head. We administered tests to 4th and 6th graders at Vhudzi primary. We interviewed 15 parents, 7 females and 8 males. Observation of a grade five class.
1900 hrs	Travel back to hotel/lodge
20.00	Working dinner Crispen and Birgit until 23
Thursday the 7th of November	
Morning	We administered tests to 4th (14 boys and 17 girls) and 6th) graders (19 boys and 22 girls)(Zaka primary observed two classes and interviewed the teachers, interviewed15 parents (9 women and 6 men)and the Head-teacher. We administered tests to 4th and 6th graders at Munanja primary, observed one class and interviewed the teacher, interviewed15 parents (12 women and 3 men and the Headmaster. We interviewed 31 children in grade 5 (one with 16 and 15) 6 boys and 9 girls, 6 boys and 10 girls.

Afternoon	We administered tests to 4th and 6th graders at Chinorumba primary, observed three classes and interviewed the teachers, interviewed 20 parents and the Head-teacher.
Friday the 8th of November	
Morning	Visit to Morgenster Teacher's College to talk to the Principal, three lecturers and one student. Visit to Masvingo Teacher College to meet with the Acting Vice Principal and three lecturers. Went to Chinorumba primary and tested 34 Grade 6 pupils. 15 girls and 19 boys. The same number was interviewed in Grade 6. In grade 4 we interviewed 38 pupils, 22 girls and 16 boys were. We also intervewed 31 grade 5 pupils, 15 girls and 16 boys.
Afternoon	Meeting with Mr.Magomo, Education Officer, Planning
Saturday the 9th of November	
0900 hrs	Travel to Harare via three hours at Great Zimbabwe monument
1700 hrs	Arrival and check-in at Bronte hotel in Harare
Evening	Work on report
Sunday: 10 November	
9.00 hrs	Report writing, further planning
16.00 hrs	Crispen and Birgit meet with the three research assistants, working snacks sponsored by EDCON
Monday 11 November: Evaluators meet with Harare based stakeholders and MoE	
0900 hrs	Meet with Save the Children SMT
1000 hrs	Meet with Prof Bornface Chenjerai Chisaka, Director of Research, Zimbabwe Open University (Chief QEP Facilitator 2005 – 2009; and in the first part of the scale up period
Afternoon	Meet with Dr. Attwell Mamvuto, Head of Department of Teacher Education, University of Zimbabwe Mr. Oliver Mavundutse. Lecturer in the Department of Teacher

	Education, University of Zimbabwe
19.30	Birgit meet with Prof.Chimhundu
Tuesday: 12 November: Wind up and departure	
Morning	Telephone conversation with Professor Bornface R.S. Chivore, Professor at the Department of Teacher Education, University of Zimbabwe Evaluators mop up activities (meeting space at Save the Children) Crispen and Birgit working with Moses, lunch sponsored by Save the Children, Zimbabwe. Departure formalities with the SC Office
Afternoon	Departure for Lusaka, Zambia Hotel shuttle to Intercontinental hotel
Wednesday: 13 November:	
Morning	Meeting with Country Director and staff at Save the Children's Office in Lusaka. Meeting with Dr. Mbozi, former QEP manager for Save the Children at the Save the Children's office in Lusaka
Afternoon	Meeting with Mr. Cheyka, lecturer at the University of Zambia, QEP facilitator
Thursday: 14 November:	
Morning	Report writing
Afternoon	Interview with Mr. Frederick Kabwe, Principal, Charles Lwanga College of Education. Monze
Friday: 15 November:	
Morning	Travel by car from Lusaka to Livingstone
Afternoon	Interview with Mr. Aiden Kambunga, Senior Education Standards

	Officer, Livingstone Provincial Education Office (Focal Point person SC) Focus group interview with Ms. Alice Manyepa Sichela, Acting District Board Secretary. Livingstone, Ms. Loveness N.Mulundano, Acting Head teacher, Highlands primary school, Ms. Vine Michelo, District Resource Centre Coordinator, Livingstone
Saturday: 16 November:	
Morning	Collecting the bag with test papers that had been sent from Harare with DHL- Buying 600 pencils and stationary. Visit to Mosi – ou – tunya (the fog that thunders) - by the missionary and explorer David Livingstone , who was shown the waterfall by the local people and thus "discovered" it, named Victoria falls after Queen Victoria
Afternoon	Meeting from 15 to 18 with Ms. Lilien Hangooma, District Education Standard Officer (DESO),Kazungula district, Mr. Michelo Kaliba, Senior Education Standards Officer –mathematics, former District Resource Centre Co-ordinator, Kazungula district, Ms. Audrey Chiwala, Ass. DRCC/ZIC, Riverview, Kazungula district
Evening	Working dinner at Waterfront with the group above, Dennis, Stephen and Birgit. Sponsored by EDCON
Sunday: 17 November:	
Morning	Meeting with the three research assistants: Mr.Francis Kasebula, lecturer at David Livingstone College of Education (research assistant) Mr.Lweendo Matonga, University of Zambia (research assistant) Ms.Beatrice Kalumba, lecturer at David Livingstone College of Education (research assistant)
Afternoon	Dinner at Ocean basket.
Monday: 18 November:	
Morning	Classroom observation in Grade 4 Livingstone primary school and interview with the teacher and Head-teacher at Livingstone primary school. Interviewed parents and pupils, administered tests to 4th and 6th

	Grade.
Afternoon	Classroom observation in Grade 5, Mujala demonstration school. Interview with the teacher of that class and the Head-teacher at Mujala. Interviewed parents and pupils, administered tests to 4th and 6th grade Classroom observation in grade 5 at Simoonga primary school. Interview with the teacher of that class and the Head teacher at Simoonga. Interviewed parents and pupils, administered tests to 4th and 6th grade Interview with the Acting Deputy Head teacher at Maria Assumpta primary school
Evening	Working dinner with Ms. Alice Manyepa Sichela, Acting District Board Secretary. Livingstone. EDCON paid for her. Report writing.
Tuesday: 19 November:	
Morning	Teamed up with Lilian Hangoom, District Education Standard Officer (DESO), Kazungula district. First went to Simukombo primary (QEP – school) observed a lesson there and conducted an Interview with the teacher of that class and the Head teacher. Interviewed parents and pupils, administered tests to 4^{th} and 6^{th} grade.
Afternoon	Went to Nachilinda primary school (non-QEP school) observed a lesson there in grade 3 (taught by a QEP trained teacher) and conducted an Interview with the teacher of that class and the Head teacher. Interviewed parents and pupils, administered tests to 4th and 6th grade. Went on to Maria Assumpta primary school. Observed a lesson there in grade 5 (taught by a QEP trained teacher) and conducted an Interview with the teacher of that class and the Head teacher. Interviewed parents and pupils, administered tests to 4th and 6th grade.
Evening	Report writing and team meeting- Dinner at Ocean basket.
Wednesday: 20 November:	
Morning	We were accompanied the whole day by Ms. Lilian Hangooma, District Education Standard Officer (DESO),Kazungula district. We first went to Mukuni Basic school (non-QEP school) observed a lesson there in grade 5 (taught by a non-QEP trained teacher) and conducted an Interview with the teacher of that class and head teacher (non-QEP trained) and Deputy Head teacher (QEP trained). Interviewed parents

	and pupils, administered tests to 4th and 6th grade.
Afternoon	Went to Nsongwe Basic school (non-QEP school) observed a lesson there in grade 5 (taught by a non-QEP trained teacher) and conducted an Interview with the teacher of that class and head teacher (non-QEP trained). Interviewed parents and pupils, administered tests to 4th grade. Also went to Kamwe primary school (QEP school) observed a lesson there in grade 5 (taught by a QEP trained teacher) and conducted an Interview with the teacher of that class and the head teacher. Interviewed parents and pupils, administered tests to 4th grade.
Evening	EDCON invited the whole team including the three research assistants to a farewell meal at Ocean basket
Thursday: 21 November:	
Morning	Left Livingstone at 7 a.m and travelled back to Lusaka via Charles Lwanga College of Education. Monze Meeting with Lewis Chulu, Vice Principal, Alfred R.Shanzie, Head of section. mathematics and Moses Chuubo Hacimvwa, Senior Lecturer – all QEP trained. Further meeting with the following four student teachers who all had carried out action research projects: Mr.Amos Jembe, second year student, Mr.Abraham Chewe,third year student, Ms.Sthokozhile K.Malasha,third year student, Ms.Chintu S.Kaunda, third year student
Afternoon	Reached Lusaka at 6 p..m. Here Birgit had to change to winter clothes and rearrange a suitcase left at the hotel.
Evening	Working dinner with Beatrice Matafwali to discuss experiences with QEP in Livingstone +Kazugula. Beatrice drove the team leader to the airport

Appendix B: People met during the QEP evaluation –Nov. 2013

Zimbabwe:

Mr.Brian Hunter, Country Director, Save the Children, Harare

Mr.Moses Mukabeta, Educational Adviser, Save the Children, Harare

Mr.Stephen Masawi, Programme Officer Education, Save the Children, Harare

Mr.Alois Chitewe,driver, Save the Children, Harare

Ms. Jerivengwa, Acting Provincial Education Director, Masvingo Province

Mr.S,R,Tererai, Acting Provincial Education Deputy Director of Primary Education and ECD , Masvingo Province

Mr.Kainus Marambire, Inspector Primary Education and ECD, Masvingo Province

Mr.Richard Gundumore Magomo, Education Officer, Planning, Masvingo Province

Mr.J.Mahofa, District Education Officer, Zaka District

Mr.Nyabanga Shadreck, Education Inspector, Bikita district

Ms.Chioneso Maradza, Education Inspector, Acting District Education Officer, Bikita district

Ms.Helena Tirivaviri, Deputy Head of Duma primary school

Mr.Morgen Ngezi, QEP trained teacher, Duma primary school

Mr.Gift Gadyadze, QEP trained teacher, Duma primary school

Mr.Nollia Mangonga, Non-QEP trained teacher, Duma primary school

Mr.Mabhachi, Non-QEP trained teacher, Beardmore primary school

Ms.E.Chikomo, QEP trained teacher, Beardmore primary school

Ms.Elizabeth Machingura, QEP trained teacher, Beardmore primary school

Ms.Porina Mhembere, Head of Makotore primary school

Ms..Machingura, Head of Beardmore primary school

Mr. Taurayi.Albert J.Mhembere. Head of Duma primary school

Mr.Daniel Sithole, Deputy Head, Makotore primary school, Bikita

Mr.Chabata Vushe, Head of Negovano primary school, Bikita

Mr.K. Janyure, QEP trained teacher Chigumisiwa primary school, Bikita

Ms.Ester Kanjanga, QEP trained teacher, Negovano primary school, Grade 2

Mr.Boas Manjokoto, QEP trained teacher, Negovano primary school, special needs

Mr. James V Masuka, QEP trained teacher, Negovano primary school, Grade 5

Ms.Elemencia Mudondo, Acting Deputy Head, Negovano primary school

Mr.Samson Chidzurira, Education Inspector, Acting DEO, Zaka rural district

Mr.Chivanga Tapson. Local government district administrator, Zaka

Mr.Isao Mashantare, Civil Service Commission District Inspector,Zaka

Ms,T. Fusirai, teacher, 3rd grade, Mutsinzwa Primary; Bikita

Ms,S. Mudhari, teacher, 5th grade, Mushungwa Primary; Zaka

Mr.S. Muyocha, teacher, 5th grade, Vhudzi Primary; Zaka

Ms.T. Madzodze, teacher, 3rd grade, Chipezeze Primary; Zaka

Ms.Biulla Shambambeva, Education Inspector, Zaka rural district

Mr.T.S.Masabe, Headmaster, Zaka primary school

Ms.Ndoro Peggy Rutendo, teacher, Zaka primary school

Mr.Njovoringo, sixth grade teacher, Chinorumba primary school

Ms.Hildah Chikwanda, teacher, Chinorumba primary school

Mr.Tendai Machingambi, 4th grade teacher, Chinorumba primary school

Ms.R.Chipato, Principal, Morgenster Teacher's College

Mr.Davison Zireva, Lecturer, Morgenster Teacher's College

Mr.Sebastian Rwakonda CDS tutor, Morgenster Teacher's College

Mr. T.F.Mudzinhwa, Lecturer, Morgenster Teacher's College

Ms. Annastancia Masaga, student teacher, Morgenster Teachers' College

Mr. I.N. Makonese, Acting Vice Principal, Masvingo Teachers' College,

Mr.Tamuka Nyakunhuwa Shumba, Lecturer, Masvingo Teachers' College

Mr. A.Kombora, Lecturer, Masvingo Teachers' College

Mr. S.R.Tererai, Lecturer, Masvingo Teachers' College

Ms. Albetine Kunodziya, Lecturer, Masvingo Teacher College

Mr Mudongi QEP trained teacher Duma primary school

Professor. Chenjerai Chisaka, Professor, Director of Research, Zimbabwe Open University

Dr.Attwell Mamvuto, Head of Department of Teacher Education, University of Zimbabwe

Mr.Oliver Mavundutsei. Lecturer in the Department of Teacher Education, University of Zimbabwe

Professor Bornface R.S.Chivore, Professor at the Department of Teacher Education, University of Zimbabwe

List of Parents

Mrs Chivinge parent at Zaka Primary school.

Mr Chandiposha parent at Zaka Primary school.

Mrs Mutambarashata parent at Zaka Primary school.

Ms Maruvamba parent at Zaka Primary school.

Ms Maggie Matonga parent at Zaka Primary school.

Mrs Mujuta parent at Zaka Primary school.

Mr R. Hapazari parent at Zaka Primary school.

Mrs Mashanyare parent at Zaka Primary school.

Mrs Mavenga parent at Zaka Primary school.

Mrs Manwadi parent at Zaka Primary school.

Mrs Gova parent at Zaka Primary school.

Mr Mabayi parent at Zaka Primary school.

Mr Maramba parent at Zaka Primary school.

Mrs Zimuto parent at Munjanja Primary school

Mrs Runesu parent at Munjanja Primary school

Mrs Zinguvo parent at Munjanja Primary school

Mrs. Rosi Gobho parent at Munjanja Primary school

Mr Nhapi Finesse parent at Munjanja Primary school

Mr Elliot Gomo parent at Munjanja Primary school

Mr Wilbert Mahoya parent at Munjanja Primary school

Mrs R Dera parent at Munjanja Primary school

Miss T Mundingi parent at Munjanja Primary school

Mr Patrick Gwenhure parent at Munjanja Primary school

Miss Mandityira parent at Munjanja Primary school

Mrs Mazhara parent at Munjanja Primary school

Miss M Murambasvina parent at Munjanja Primary school

Miss F Chinyakata parent at Munjanja Primary school

Mr Choga Junic parent at Munjanja Primary school

Mr Chigwete Simbarashe parent at Munjanja Primary school

Mrs Vongai Nyathi parent at Chipezeze Primary school

Ms Rumbidzai parent at Chipezeze Primary school

Mrs Liah Muchabaiwa parent at Beardmore Primary school

Mrs Christina Musevenzo parent at Beardmore Primary school

Mr. Rainos Munyanyiwa parent at Beardmore Primary school

Mr Shumba TCZ parent at Beardmore Primary school

Mr Ivan Nherere parent at Beardmore Primary school

Ms Ruth Tizwi parent at Beardmore Primary school

Ms Apolonia Chiwara parent at Beardmore Primary school

Ms Letwin Bishi parent at Beardmore Primary school

Ms Elm Beatrice Chikuwa parent at Beardmore Primary school

Ms Jennifar Wenyika parent at Beardmore Primary school

Mrs E Masvokisi parent at Beardmore Primary school

Mrs T Makovere parent at Beardmore Primary school

Mrs Esinati Rushwayo parent at Duma Primary school

Mr. G. Pasina parent at Duma Primary school

Mr. Jetro Cheuma parent at Duma Primary school

Mrs M Chiguyi parent at Vudzi Primary school

Mr S Zvenyika parent at Vudzi Primary school

Mrs E Magombedze parent at Vudzi Primary school

Mrs A Nenjana parent at Vudzi Primary school

Mrs Machingambi parent at Vudzi Primary school

Mr M Namadire parent at Vudzi Primary school

Mr W Chiwange parent at Vudzi Primary school

Mr G Tomukai parent at Vudzi Primary school

Mr M Chiguvi parent at Vudzi Primary school

Mr S Zvenyika parent at Vudzi Primary school

Mrs E Magombedze parent at Vudzi Primary school

Mrs A Nenjana parent at Vudzi Primary school

Mrs M Machingambi parent at Vudzi Primary school

Mr M Namadire parent at Vudzi Primary school

Mr W Chiwange parent at Vudzi Primary school

Mr G Tomukai parent at Vudzi Primary school

Mr M Chiguvi parent at Vudzi Primary school

Mr S Tarowa parent at Vudzi Primary school

Mr CP Svondo parent at Vudzi Primary school

Mr K Chiguvi parent at Vudzi Primary school

Mr S Makara parent at Vudzi Primary school

Mr E Gatava parent at Vudzi Primary school

Mrs A Vudzi parent at Vudzi Primary school

Mrs E Mutiro parent at Vudzi Primary school

Ms Evelyn Gatahwa parent at Vudzi Primary school

Mr S Zvada parent at Mushungwa-i Primary school

Mr R Mutembwa parent at Mushungwa Primary school

Mr F Madhidwa parent at Mushungwa Primary school

Mr F Chidiya parent at Mushungwa Primary school

Mr P Muzvori parent at Mushungwa Primary school

Mr V Mujabuki parent at Mushungwa Primary school

Mr T Marwa parent at Mushungwa Primary school

Mr B Bengeni parent at Mushungwa Primary school

Mrs Z Tendai parent at Mushungwa Primary school

Mrs T Zia parent at Mushungwa Primary school

Mr G Mushauri parent at Mushungwa Primary school

Mrs K Tichavavangani parent at Mushungwa Primary school

Mrs R Gaza parent at Mushungwa Primary school

Mrs M Ndanga parent at Mushungwa Primary school

Mrs P Hove parent at Mushungwa Primary school

Mrs S Mugabe parent at Mushungwa Primary school

Mrs S Mangoma parent at Mushungwa Primary school

Mrs P Munodavapa parent at Mushungwa Primary school

Mrs C Mupfunda parent at Chigumisirwa Primary school

Mrs S Chikomo parent at Chigumisirwa Primary school

Mrs S Kangai parent at Chigumisirwa Primary school

Mrs M Mutema parent at Chigumisirwa Primary school

Mr T Muwengwa parent at Chigumisirwa Primary school

Mrs G Masuka parent at Chigumisirwa Primary school

Mr Mukarati parent at Chigumisirwa Primary school

Mrs M Moyo parent at Chigumisirwa Primary school

Mrs M Chitumbura parent at Chigumisirwa Primary school

Mrs S Matarise parent at Chigumisirwa Primary school

Mrs I Muchekwete parent at Chigumisirwa Primary school

Mrs I Muchayana parent at Chigumisirwa Primary school

Mrs E Machadu parent at Chigumisirwa Primary school

Mr C Shereni parent at Chigumisirwa Primary school

Mr I Mafumbate parent at Chigumisirwa Primary school

Mr A Madzivire parent at Mutsinzwa Primary school

Mrs S Tazvirowa parent at Mutsinzwa Primary school

Mr I Chapwanya parent at Mutsinzwa Primary school

Mrs R Sachiti parent at Mutsinzwa Primary school

Mr R Madziwanyika parent at Mutsinzwa Primary school

Mrs I Mukarare parent at Mutsinzwa Primary school

Mrs C Nikisi parent at Mutsinzwa Primary school

Mrs M Gwaya parent at Mutsinzwa Primary school

Mrs I Takaendesa parent at Mutsinzwa Primary school

Mr I Musambidzi parent at Mutsinzwa Primary school

Mr I Mutade parent at Mutsinzwa Primary school

Mr T Chakupa parent at Mutsinzwa Primary school

Mrs R Sarudzai parent at Mutsinzwa Primary school

Mr FG Pfumai parent at Mutsinzwa Primary school

Mr S Matunzeni parent at Mutsinzwa Primary school

Mrs Betserai Kundiona parent at Negovanhu Primary school

Mrs Irene Rusvava parent at Negovanhu Primary school

Mrs Betty Tambararai parent at Negovanhu Primary school

Ms lynn Zvenyika parent at Negovanhu Primary school

Ms A Chitevere parent at Negovanhu Primary school

Mr C Mupamaonde parent at Negovanhu Primary school

Mr P Mundoga parent at Negovanhu Primary school

Mr J Mugomba parent at Negovanhu Primary school

Mrs Petronella Gotora parent at Negovanhu Primary school

Mrs G Chireshe parent at Negovanhu Primary school

Mr N Maswera parent at Negovanhu Primary school

Ms Ellen Kunosaraani parent at Negovanhu Primary school

Ms O Chitata parent at Negovanhu Primary school

133 Parents provided names and 43 did not out of a total 176 parents interviewed.

People met in Zambia;

Mr.Tamer Kirolos, Country Director, Save the Children, Lusaka

Mr.Fred Nkowe, Educational Adviser, Save the Children, Lusaka

Ms.Ntenda Chimponda, Programme Officer Education, Save the Children, Lusaka

Ms.Chama Chime, Logistics and Security Officer, Save the Children, Lusaka

Mr. Stephen Kapusa ,driver, Save the Children, Lusaka

Ms. Cecilia Sakala, Director Standards and Curriculum, Ministry of Education and Training(in QEP she was Principal Inspector/Standards Officer in southern province

Mr. Geofrey Tambulukani, lecturer and team leader of the University of Zambia training team in action research under QEP

Mr. Evan Mbozi, former Educational Adviser and QEP manager, Save the Children, Lusaka, regional QEP trainer

Mr. Cheyka, lecturer at the University of Zambia, QEP facilitator

Mr. Frederick Kabwe, Principal, Charles Lwanga College of Education. Monze

Mr. Aiden Kambunga, Senior Education Standards Officer, Livingstone Provincial Education Office (Focal Point person SC)

Ms.Alice Manyepa Sichela, Acting District Board Secretary. Livingstone

Ms.Loveness N.Mulundano, Acting Headteacher, Highlands primary school

Ms. Vine Michelo, District Resource Center Coordinator, Livingstone

Ms. Lilian Hangooma, District Education Standard Officer (DESO),Kazungula district

Mr. Michelo Kaliba, Senior Education Standards Officer –mathematics, former District Resource Centre Co-ordinator, Kazungula district

Ms. Audrey Chiwala, AssDRCC/ZIC, Riverview, Kazungula district

Ms. Rose Mubambe, grade 4 teacher, Livingstone primary school

Ms. Grace Munanyanga, Headteacher, Livingstone primary school

Ms. Grace Kabwe Banda, Headteacher, Mujala demonstration school

Ms. Regina Situmbeko, grade 5 teacher, Mujala demonstration school

Mr. Chester Mufalali, Headteacher, Simoonga primary school

Ms. Inonge Kanona , grade 5 teacher, Simoonga primary school

Mr. Solomon Mugololo, Acting Deputy Headteacher, Maria Assumpta primary school

Ms. Percy Mubita Namataa, Headteacher, Simukombo primary

Mr. Julius Liawabai, Senior teacher, Simukombo primary

Mr. Cornwell Habole, Headteacher, Nachilinda primary school

Ms. Mable Mutize Simasiku, grade 3 teacher, Nachilinda primary school

Ms. Janet Sautu, Headteacher, Maria Assumpta primary school

Ms. Matilda Mukonka, grade 5 teacher, Maria Assumpta primary school

Mr. Mulenga, Headteacher, Mukuni Basic school

Mr. Fine Halwiindi, Deputy Headteacher, Mukuni Basic school

Ms. Mercy Kawana, grade 5 teacher, Mukuni Basic school

Ms. Regis Makala, Headteacher, Nsongwe Basic school

Ms. Sandra Makala, Nsongwe Basic school

Mr. Lewis Chulu, Vice Principal, Charles Longwa College of Education

Alfred R.Shanzie, Head of section. mathematics Charles Longwa College of Education

Mr. Moses Chuubo Hacimvwa, Senior Lecturer ,Charles Longwa College of Education

Mr. Amos Jembe, second year student, Charles Longwa College of Education

Mr. Abraham Chewe,third year student, Charles Longwa College of Education

Ms. Sthokozhile K.Malasha,third year student ,Charles Longwa College of Education

Ms. Chintu S.Kaunda, third year student, Charles Longwa College of Education.

Appendix C: Observation matrix for a 30 minute lesson –QEP evaluation 2013

The lesson is divided into ten slots of 3minutes each. Put a cross in the box which indicates the activity that has been most prevalent in those three minutes. A few places when there is learner activity going on we want you to indicate whether it is a boy or a girl l that is asked or says something, indicate that with b=boy or g=girl

Activity	0-4	5-8	9-12	13-16	17-21	22-25	26-29	30-33	34-37	38-41	Total minutes - boy or girl where applicable
Teacher writes on the board											
Teacher asks question to class											
Pupils writing in exercise books											
Teacher corrects exercise books											
Listening to the teacher talking											
Pupils writing on the board											
Pupils answering Questions (B or G?)											
Pupils working in pairs											
Pupils working in groups											
Teacher facilitating in group or pair work											
Feed-back by pupils on pair/group work (Boy or Girl)											
Pupils asking teachers questions (B or G?)											
Teacher responding to pupils questions											
Giving home-work to pupils											
Teacher demonstrating/ experimenting/illustrating											
Pupils experimenting/ demonstrating/role-playing/ dramatizing/debating											
Clapping of hands											
Chorus reading/answering											

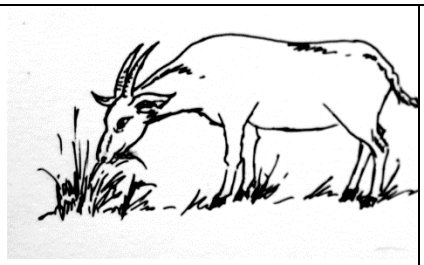
Developed by: Birgit Brock-Utne and Dennis Banda in Cape Town 17.October 2013 further developed by Birgit Brock-Utne and Crispen Dirwai in Bikita 4.November 2013.

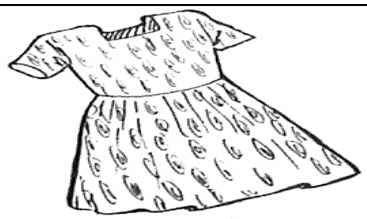
A**lso look at**: Does the class-room have ”talking walls” (walls with drawings or writings by pupils)? What type of questions does the teacher ask?

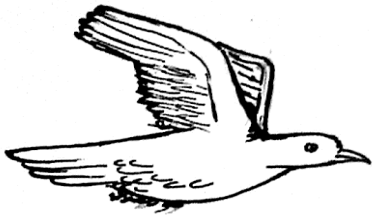
Appendix D: Word Test for 4th Grade

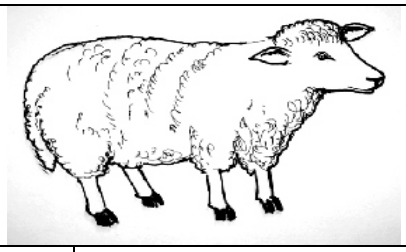
Write the names of the pictures numbered 1-12 in English and Chitonga/Shona

1. 

2. 

3. 

4. 

5. 

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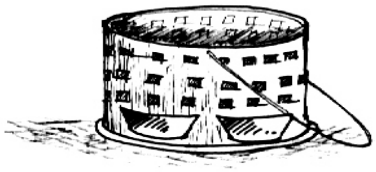
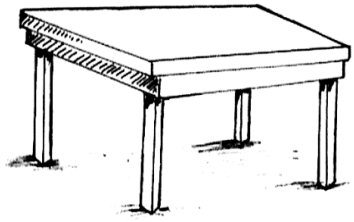
8. 

9. 

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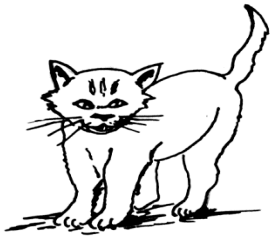
12. 

TOTAL MARKS OBTAINED:

Test in Mathematics for 4th Grade

Test on addition, subtraction, division, multiplication – written version for pupils to fill in

Number	Test
1	10 + 6 =
2	7 + 6 =
3	11 + 23 =
4	15 – 7 =
5	13 – 8 =
6	25 – 12 =
7	12 x 6 =
8	9 x 12 =
9	8 x 7 =
10	48 ÷ 4 =
11	18 ÷ 3 =
12	30 ÷ 6 =

Appendix E: English tests for 6th graders – QEP and non-QEP in Zimbabwe and Zambia.

Read the following passage and answer the questions that follow.

Once upon a time, there lived an old man in a cave, which was in Mount Mahori. He had no one to talk to because he lived alone. He kept two dogs, a black dog and a white one. He used the dogs for hunting. The black dog was faster than the white dog.

1. The old man lived in a _____.
2. He kept_____dogs.
3. What were the colours of the dogs?_____
4. How many people lived in the cave?_____

Choose the correct word to complete the sentences.

near on along with under

5. Put the book_____the table.
6. Tendai's house is_____the shops.
7. Grandmother was sweeping_____the chair.

Write down the word with the correct spelling

8. classrom classroom clasroom crassroom
9. everyne everiyone everyone everione

Choose and write down the correct sentence

10. Running was the boy

    Boy was the running

    The boy was running

    Was running the boy

Write down the word that comes first in the alphabet.

11. Log hat kennel food

Complete the sentence with a suitable word.

Butcher baker hospital

12. A_____sells meat.

13. Sick people go to the _____.

14. A_____sells bread.

We say:

15. One ox but two_____.

16. One boy but three_____.

17. I am _____to town. (go, going, went)

18. Tomorrow he will_____soccer. (playing, play, plays)

Choose the correct word to complete these sentences.

his her its

19. Mr. Moyo is driving_____car.

20. Mother is wearing _____hat.

21. The dog is eating _____bone.

Join each pair of sentences using one of these joining words.

and but because

22. The boy fell down_____he was tired.

23. I like bananas_____I don't like oranges.

Appendix F: Mathematics Tests for 6th Graders – QEP and non-QEP in Zimbabwe and Zambia.

1. 𝍸 | | shows

2. Write down the number shown by the following picture.

TENS	UNITS
□ □ □ □ □	□ □ □

3.
	T	U
	7	0
+	1	4

4.
	T	U
	4	1
-	1	8

5. 105 in words is_____
6. Joseph planted 14 trees. Linda planted 40. How many trees did they plant altogether?
7. 10 take away 4 is_____
8. Draw a clock face to show the time 4 O'clock.
9. A day has _____hours.
10. What fraction is shaded?

11. (50c) + (20c) + (10c) =

12. Rudo has 86 oranges in a bag. 15 are bad. How many are good?

13. 1 metre = _____ centimeters.

14. 7 + 6 + 5 =

15. The sum of 9 and 6 is _____

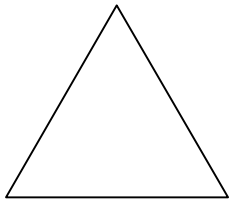
16. The difference between 15 and 5 is _____

17. What is the missing number in the pattern? 6 ___ 12 15 18.

18. Share 18 sweets among 6 boys. How many will each boy get?

19. 30 ÷ 3

20. What shape is this?



21. Write the correct sign > or <

$\frac{1}{2}$ * $\frac{3}{4}$

22. 38 to the nearest 10 is _____

23. How many days are in two weeks?

24. 1 kg = _____ grams

25. 6.6 to the nearest whole number is ……

Appendix G: Interview guides

Guide for interviewing the pupils (primarily focus group interviews)

1. What do you like about school?
2. What do you miss in school when you are not there?
3. Do teachers treat you differently because you are a boy/a girl?
4. If so, in what way?
5. Do you get homework to do?
6. If so, how often?
7. Do your parents help you with homework? Who helps you, mom or dad or anyone else?
8. Is your homework corrected? If so, are you satisfied with the corrections?
9. Are you getting individual support from the teacher?
10. Do your teachers make you want to learn?
11. Have you become eager to gather information which is not homework?
12. What type of information is that and how do you gather it?
13. Do you get peer support?
14. Are you punished in school? If so, for what type of offences?
15. What type of punishment do you get?
16. Is the punishment given in class or after class?
17. Do you think your teacher comes to class prepared for the lesson s/he is going to teach? Do teachers allow you to ask questions in the class? Do you get satisfactory responses from teachers?
18. When you have done well, are you praised by the teacher?
19. Do teachers come to school regularly?

Interview guide for interviewing the school inspectors/district officers

1. Do you think QEP has contributed to better learning outcomes for children?
2. If so, in what ways?
3. Has the QEP training continued after the support from SCN ended?
4. If so, how many training seminars have you organized over the last four years?
5. Will the programme go on without support from outside?
6. Do you think QEP should be introduced in other African countries? If so, in which ones?

Guide for interviewing the head-teachers

Date----------

Name of school----------Centre Number----------

School responsible authority----------

Designation of respondent----------

Gender----------

School enrolment by gender in 2003----2004------2006--------2008------2012—2013.

1 Did you school participate in the QEP?

Yes [ ] No [ ]

2.If the answer to question 1 is yes, indicate when the QEP was implemented at your school.

3.Do you see any difference between the QEP trained teachers and the other teachers (who maybe were recruited after QEP training was not organised by SC any more)?

Yes [ ] No [ ]

4. If the answer to question 3 is yes, please explain the differences that you observe

_____
_____
_____

5. Do you find less absenteeism among QEP teachers than among non-QEP teacher?

Yes [ ] No [ ]

6. Do QEP trained teachers punish pupils les frequently than non-QEP trained teachers?

Yes [ ] No [ ]

7. As head teacher of this school, are there advantages of QEP that you have observed?

Yes [ ] No [ ]

8. If the answer to question 7 is yes, please specify what you have seen as advantages of the QEP:

_____

_____

9. What have been the challenges working with QEP?

10. How can the QEP programme be sustained?

11. What do teachers in your school say about the performance of the QEP Teachers?

12. Do you want teachers in your school who did not go through QEP to go through the same training?

13. What do PTA members say about the QEP teachers during your PTA meetings?

14. How much does your school spend on QEP activities? In your opinion how much does QEP spend on your school, in terms of trainings, supervision and materials used What about other costs such as time?

15. For possible scaling up who do you consider to be partners that can work with you in the QEP's Action Research Approach

Guide for interviewing principals and lecturers of colleges that have implemented QEP training

1. How have you been involved in the QEP project?
2. For how long, how many years?
3. How many training seminars did you participate in?
4. Are the training seminars still going on?
5. What do you think you learnt through the project?
6. Are you yourself practising what you learnt? In what way and how often?
7. What do you see as the QEP ideology?
8. Are you teaching the trainee teachers this ideology?
9. Do you see any difference between the QEP trained trainee teachers and the other trainee teachers (who may have been there before QEP training was organised by SC)?
10. Is there any notable difference between your colleagues who went through QEP and those who did not have the QEP training programme?
11. If so, what are the differences?
12. What have you seen as the advantages of the QEP in your training of teachers?
13. What have been the challenges with working with QEP in your college?
14. How can the QEP programme be sustained in the colleges?
15. Would you be in favour of extending the QEP to other colleges of Education in the country? Give reasons for your answer
16. Do lecturers in your college who did not go through QEP wish they had done so?

Semi structured questions for parents of children taught by QEP trained teachers

Sex £ Male £ Female

Name of School_____

Name of Child_____

Grade of the Child_____

District_____

Province_____

Location QEP School [ ] non-QEP School [ ]

Level of Education No Education [ ] Primary [ ] Secondary [ ] Tertiary [ ]

Period of stay in the area_____

1. For how long has your child been learning at this school? _____ Years
2. Do you participate in school activities?

   Yes [ ] No [ ]
3. If the answer to question 3 is Yes, please specify the kind of participation
4. How would you rate the quality of education at the school where your child is enrolled?

   Very Good [ ] Good [ ] Average [ ] Poor [ ] Very Poor [ ]
5. Do you like the school where your child is enrolled?

   Yes [ ] No [ ]
6. Mention some things that you like about the school

---

7. Mention some things that you dislike about this school

---

8. Do you interact with teachers at the school where your child is enrolled?

   Yes [ ] No [ ]

9. Mention some things that you like in the teachers at your child's school

---
---

10. Mention some things that you dislike in the teachers at your child's school

---
---

11. Mention three things that makes you think your child learns well at this school

---
---

7. Mention three things that make you think your child does not learn well at the school

---
---

8. Does your child show interest in learning?

   Yes [ ] No [ ]

9. If the answer to question 8 is Yes, please specify what makes you think the child has interest in learning.

_____
_____
_____

10. Does the child read or do Math at home?

    Yes [ ] No [ ]

11. If the answer to question 10 is Yes, please specify how many times in a week.

    Once [ ] Twice [ ] Three Times [ ] Daily [ ]

12. Does the child bring home work?

    Yes [ ] No [ ]

13. If the answer to question 12 is Yes, please specify who helps the child with school activities.

    Mother [ ] Father [ ] Guardian [ ] Sibling [ ]

14. Do you have books or other reading materials in your home?

    Yes [ ] No [ ]

15. Does the school allow the child to bring home text books for reading?

    Yes [ ] No [ ]

16. Does the school encourage participation of girls?

    Yes [ ] No [ ]

17. If the answer to question 16 is Yes, mention some things which make you think the school is girl-friendly or not girl friendly

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---

18. Has the child repeated any Grade?

    Yes [ ] No [ ]

19. If the answer to Question 18 is Yes, please indicate the Grade the child repeated

    Grade _____

20. Please explain what made the child to repeat a Grade:

_____

_____

21. Do you know any child/children in the area who have dropped out of school?

    Yes [ ] No [ ]

22. If the answer to question 21 is Yes, please specify why the child/children dropped out of school:

_____

_____

23. Are there things that you think the school should improve on for your children to learn even better?

Yes [ ] No [ ]

24. If the answer to question 23 is Yes, please specify:

_____

_____

25. Are there things you think the school is already doing well and they should carry on doing?

Yes [ ] No [ ]

26. If the answer to 25 is Yes, please specify:

_____

_____

27. Has your child become curious to learn? If so, how have you noticed this?

_____

_____

28. How would you rate the progression of pupils from Grade Seven to Grade Eight at this school?

Very Good [ ] Good [ ] Average [ ] Poor [ ] Very Poor [ ]

29. If you have been in this area for a long time (since 2002) what do you think is the main difference between the teachers your child had in the past (before 2002) and the ones your child has now (from 2003 to date)?

_____

_____

30. Are there some teachers you would especially like to retain? Give reasons for your answers.

Appendix H: Terms of Reference: Impact evaluation of Quality Education Project

This evaluation is to be conducted as an impact assessment of the Quality Education Project (QEP), focusing on learning outcomes of children and the sustainability of the project.

1. Background

Save the Children (SC) works to fulfill the right to quality education for all children and has this as one of its top strategic priorities. During the 1980s and 1990s there was a strong focus on access to education at international level. Gradually from 2000 and onwards the concern about quality resurfaced, backed by documentation on inadequate teaching and low levels of learning outcomes.

The QEP was initiated by Save the Children Norway (SCN) as a pilot project in 2002 as our response to address the quality issue in education. Participatory action research methods and reflective practices were used and expected to investigate factors pertinent for quality education as well as to identify hindrances to quality and suggest remedies. The knowledge generated in this process was aimed to empower the teachers to continuous reflection and development and ultimately produce change in the teaching-learning situation and thereby improve quality in education for children. This process of change should be supported at system level such as the Ministry of Education, District Education Officers, Teacher education institutions, teacher educators and teachers.

Four countries participated in the QEP project: Ethiopia, Mozambique, Zambia and Zimbabwe. In 2002 the QEP project was introduced in Ethiopia. The project was implemented in North Gondar in close collaboration with Gondar Teacher Education College. Later the project spread to the three other countries. In Zambia the project was implemented in 2003 in close collaboration with the Ministry of Education, David Livingstone College of Education, Charles Luangwa College of Education and the University of Zambia. In Zimbabwe the project was conducted in close collaboration with the University of Zimbabwe, starting in 2004. In Mozambique the project was created in 2004, but ended three year later.

The Quality Education Project aimed at improving the quality of education in the participating countries through providing training for university and college lecturers, education standards officers at provincial and district levels, and teachers in the Gonder

district Ethiopia, the Southern Province of Zambia, the Sofala and Manica province in Mozambique and the Bikita district in Zimbabwe.

A final evaluation of the project was conducted in 2009. The study concluded that QEP was “a significant and innovative educational program and a great deal has been achieved”, but warned that there is no cheap or quick alternative to achieving the type and degree of educational change that QEP aspires to. The study recommended SCN and partners to “shift the focus more towards learning outcomes as well as learning and teaching methods and involve children more in decision-making about issues of quality”.

In 2009, it was difficult to difficult to document the impact on the learning outcomes of children affected by QEP, and also to evaluate the sustainability of the project.

Four years later, in 2013 SCN would like to explore at the current stage if it is possible to assess the impact this project have had on children in the target areas in Zambia and Zimbabwe, and its sustainability.

2. Purpose of the Evaluation

The main purpose of this evaluation is to study the extent of improved learning outcomes among students who have been taught by teachers and education officials trained in the QEP methodology. We want to test the thesis that students taught by QEP-trained teachers perform better than other students (in control groups).

1) Document results and assess impact

a.) Has QEP been effective in bringing about improved learning outcomes for learners who have or have had teachers trained in QEP? This should also include proxy indicators such as completion rate and retention and drop-out.

b.) Have the most marginalized pupils benefited from QEP?

c.) What major changes can be documented, and what are the results of these?

d.) Analyze the cost-benefit of QEP, if possible.

e.) Are there any unintended positive or negative effects?

2) Analyze how and to what extent the learning environment differs for learners who have teachers trained in QEP compared to learners who have non-QEP trained teachers.

3) Analyze the sustainability of the project and discuss the potential for replicating and scaling up similar projects in other regions and countries.

These key questions are meant as a preliminary suggestion. The external researchers/ researchers should develop the list of key questions in close cooperation with the Resource Group and other stakeholders to ensure the above objectives.

3. Methodological Approach

The researchers should apply the most appropriate research methods within the timeframe and budget limits given for this impact assessment. A mix of quantitative and qualitative tools would be recommended. A methodological framework should be shared with SCN for comments before applied. As provisional guidelines, the evaluation process should include:

- Review of relevant documents such as the QEP Evaluation “From Shouters to Supporters” and other relevant research and project documents developed at national level;

- Review of pupils’ performances in schools that have teachers (and education officers) educated in QEP or are under the supervision of District Education Officers educated in QEP, and compared to schools that have not been part of this project .

- Collecting data from education officials and teachers that were trained in the QEP methodology.

- A participatory component including children ;

All research involving children will be conducted in full respect of child safeguarding procedures and in agreement with the children, parents and guardians. All material collected during the research process should be handed over to Save the Children prior to the termination of the contract. All results of the research, including the results of interviews and analysis, will be treated on a confidential basis and will remain the property of Save the Children.

4. Deliverables

The researcher(s) shall deliver:

- Inception report including methodological design and framework for the evaluation, in close cooperation with SCN, SC in Zambia and Zimbabwe.

- Start-up workshops in Oslo and each of case countries.

- Brief QEP country reports from Zambia and Zimbabwe with main findings, lessons learned and recommendations, aimed mainly for advocacy purposes towards the Ministry of Education in both countries and other key stakeholders, not exceeding 25 pages;

- A final synthesis report with main findings, lessons learned, conclusions and recommendations, not exceeding 30 pages;

- An easy-read and child-friendly version summing up the case studies and the Synthesis report, not exceeding 10 pages;

- Oral presentation of draft reports for SCN, SC in Zimbabwe and Zambia.

5. Organization of the assessment

The evaluation should be led by a team of at least one team leader and two national researchers/researchers from the case countries.

The researcher(s) are expected to fill the following requirements:

- Extensive experience on impact evaluation and good knowledge of basic education and quality of education.

- Documented experience in undertaking similar assessments.

- Experience from working with education in Zimbabwe and Zambia.

- Preferably be familiar with the concept of children's participation (at least one of the researchers).

- Advantage with knowledge of Save the Children's work.

- Ability to communicate in English and produce a well-written and analytical report in English. Knowledge of local languages in Zambia and Zimbabwe is an advantage.

A key aspect of the impact assessment is to promote learning among the key stakeholders, thus one SCN staff might take part in the fieldwork along with the external researchers to ensure the knowledge generated during the course of the study will remain with the organisation.

6. Timeframe

- ToR sent out for tender to external researchers by 13 September 2013

- Deadline for Expression of Interest by 23 September 2013

- Signing of contract by 27 September 2013
- A draft methodological framework to be presented to SCN, SCI and chosen countries by early October 2013
- A methodological framework to be finalized by 10 October 2013
- Fieldwork and primary data collection need to be conducted in the period 10 October and 30 November 2013.
- Analysis and write up of a draft analytical report by the end of November 2013.
- Comments from SCN and SCI Zambia/SC Zimbabwe by mid-December.
- Final reports to be submitted by 31 January 2014.

7. Budget

The study is calculated to spend in total 70-80 working days, including the participation of both international and national researchers/researchers. Please note that Save the Children Norway encourages the research team to have at least one national researcher from each of the case countries and to spend as much as needed to collect data from the education authorities and SC in the involved countries.

Save the Children Norway will fund the review by covering research fees, local and international travel costs, accommodation and daily subsistence during field visits for the evaluation team. SC offices in Zambia and Zimbabwe will assist in the data collection and the participation of children and other stakeholders.

Research firms, academic research institution, universities etc. can submit their Expression of Interest (EOI) by submitting: a) brief proposal of approach and methods (max 3 pages, please note that proposals exceeding 3 pages will not be considered), b) CVs of proposed researchers/researchers, c) budget for the estimated fees and travel costs.

8. Contracts and payments

Save the Children Norway will sign a research contract with one company/person.

50% of the fees will be paid upon submitting the first deliverable and the remaining amount upon the submission of the final report.