Quality in Education as a Means to Development: The Case of Sierra Leone

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"The greatest good you can do for another is not just share your riches,

but to reveal to him his own"

Benjamin Disraeli

Abstract

Improving education has in recent decades been a central part of development strategies in international organizations and in most countries around the world. The discourse is though marked by statements such as; achieve total access to education, ensure completion of education, and increase enrollment rates, which all focus the attention of education improvement on quantitative measures. Research now shows that putting more individuals through the education system does not automatically increase development, and focus should instead be on improving *quality* in education.

With the assumption that quality education is a catalyst for national development, this study sets out to research how Sierra Leone can improve quality in basic education in a way that contributes to development. The research of the thesis is conducted in Sierra Leone which likewise constitutes the case of interest. Quality in education is therefore examined in the context of Sierra Leone with the view that quality education cannot be generalized and the circumstances for generating meaningful learning within students change depending on the context. The education system must thus be adapted to the students it is supposed to educate; not the other way around.

With an interpretive approach I examine challenges to quality in education in Tonkolili district, Sierra Leone, and analyze observations of different activities, situations, behaviors, and settings related to education in the country. Through theoretical and empirical discussions I identify the areas, within the scope of the research, in which improvements are required in order for the system to provide quality education to the extent that it contributes to national development. Reforms of both internal structure and policies are necessary as education in its present form is not able to contribute to the process of development in the country.

I conclude that inclusion of Sierra Leonean culture and traditional knowledge and more focus on decentralization in the system are central aspects in improving both internal structural problems and issues related to irrelevant curricula and methods.

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Foreword

The inspiration for this thesis derives from my stay in Sierra Leone in 2012 where I worked in an education and computer centre in the town Magburaka in Tonkolili district. I was hired to work as project manager at the centre by a small Danish NGO and the work constituted an internship semester in my studies in international development. It was my first time in Sierra Leone and I was immediately taken by the warmth and sincerity that characterize the people.

My Danish background and my cultural "luggage" quickly became very clear to me, as the differences between Denmark and Sierra Leone are tremendous in every way imaginable; everything from climate, food, and ways of living to work ethic and infrastructure. Living in Denmark, I was well aware of the luxuries of society and how this is not the life for millions of people around the world; but still I was overwhelmed when I was confronted with the reality of children dying because of no access to clean water, adults not knowing how to write their own name, people with disabilities because of injuries from war, and the necessity to change the size of banknotes to different sizes so people can tell them apart because they do not understand the numbers on them. A world very far from what I had ever experienced before. In the middle of all this; outside people would call it misery, I found people living their lives, going to work, and raising their children just as we do in Denmark. And people were not unhappy or despaired; they live under the circumstances and the conditions they are given. When I saw this "paradox" of happy people living in poverty I wondered how improvements to the country can be made without losing the spirit of Sierra Leone and it forced me to acknowledge the fact that the best solution for Sierra Leone is not necessarily to simply adopt structures and methods from our part of the world.

My motivation for taking the job in Sierra Leone is a strong interest for education and learning in the field of development. During my stay, I observed an education system that to me did not seem effective in any way. My first thought, which expresses the weight of my "luggage", was that in order to improve education, the best solution would be to implement structures and methods as we know them in Denmark. However, as I became more and more aware of the fact that people could live normal, happy lives in poverty, the best way to improve education would not be to insist on a universal model of "good" education, but to find a way to improve the system within the mentality of Sierra Leone. This moved me to investigate the education system in the country and the challenges that occur within it with the aim of proposing suggestions for improvements without disconnecting the system from the people.

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List of Abbreviations

BECE	Basic Education Certificate Examination
B.Ed.	Bachelor of Education
B.Sc.	Bachelor of Science
CFS	Child Friendly School
CGG	Campaign for Good Governance
DFID	Department for International Development
EFA	Education For All
EU	European Union
GCR	Gross Completion Rate
GDP	Gross Domestic Product
GNI	Gross National Income
HDI	Human Development Index
HDR	Human Development Report
HND	Higher National Diploma
HTC	Higher Teachers Certificate
IMF	International Monetary Fund
JSS	Junior Secondary School
MCA	Missionary Church Association
MDG	Millennium Development Goal
MECC	Magburaka Education and Computer Centre
MEST	Ministry of Education, Science, and Technology
MSSB	Magburaka Secondary School for Boys
NGO	Non-Governmental Organization
NPSE	National Primary School Examination
OECD	Organization for Economic Co-operation and Development
RUF	Revolutionary United Front
SSS	Senior Secondary School
TC	Teachers Certificate
TDC	Tonkolili District Council
UN	United Nations
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific, and Cultural Organization
UNICEF	United Nations Children's Fund
WAEC	West African Examination Council

Introduction

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Method

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- Conceptual framework

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- Discussion of empirical results

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- Quality
- Development

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Conclusion

1.0 Introduction

The United Nations' (UN) Millennium Development Goal (MDG) number two states; achieve universal primary education. The target for this goal is to ensure that, by 2015, children everywhere will be able to complete a full course of primary schooling (UN 2013).

Meeting the MDG first and foremost ensures children's access to and completion of primary education. However, as a subsequent benefit education and an educated population can contribute to a diminution of generational cycles of poverty and by that provide a foundation for development (Hannum & Buchmann 2005: 333; UNICEF 2011). Education is an essential condition for sustainable development in any society (Indabawa & Mpofu 2006: 14) as it equips children with the knowledge and skills they need in order to adopt healthy lifestyles and take active roles in social, economic, and political decision-making as they transition to adulthood (UNICEF 2011). Based on this, the importance of education cannot be stressed enough. The MDG is, though, a quantitative goal of giving children the opportunity of *accessing* primary education; however the quality of education must be attended to as well by making sure that the education generates meaningful learning and cognitive skills within the students (Hanushek 2013: 8). Examining ways to how this can be done in the case of Sierra Leone is addressed throughout this thesis.

In Sierra Leone the public examination results are very poor (Banya 1993: 162). In the academic year of 2004/2005 the gross completion rate[1] (GCR) for primary education was 65 percent and for junior secondary education 31 percent, considerably short of the government's goal of 100 percent (Wang et al. 2007: 6). Furthermore, numbers from the academic year 2010/2011 provided by the Ministry of Education, Science, and Technology (Ministry of Education) show that less than 50 percent of students enrolled in the first grade are enrolled in the final grade. This demonstrates a severe problem with high dropout rates during a student's education (MEST 2012: 28; Banya 1993: 164). GCR in the academic year 2010/2011 is gone up to 76 percent for primary education and 49 percent for junior secondary education. Given that the national goal is universal access and completion of basic education these GCR values are still of concern even though they have improved from 2004/2005 (MEST 2012: 59). Although many students manage to make it to the end of junior secondary level, which ends the nine years of basic education, the Ministry of Education states that student performances in the final exams need to be further improved (MEST 2007: 41).

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[1] Gross completion rate (GCR) is the total number of students completing (or graduating from) the final year of primary or secondary education, regardless of age, expressed as a percentage of the population of the official primary or secondary graduation age (World Bank 2013a).

Given that quality education contributes to learning, human development, gender equality, human security, community development, and national progress UNICEF (2012) states that education of poor quality is equivalent to no education at all (UNICEF 2012a). However, education cannot cause sustainable development single-handedly. It is a contributing factor among several important elements that need to be addressed in order for development to happen. The MDGs are a demonstration of this as they represent different aspects in a development process as they work to reduce extreme poverty in the name of development. The MDGs are though criticized for being misinterpreted as development planning instruments, which is not their intention (Higgings 2013: 10). The MDGs have been less successful at framing the development agenda at country level (Klasen 2012: 1) because they have been applied as one size-fits-all targets for all countries to meet. This is despite the fact that they were designed as global targets to be reached collectively. This misinterpretation has caused *"countries starting with lower bases in terms of initial conditions, many in sub-Saharan Africa, to be labelled "failures" despite significant absolute progress"* (Higgings 2013: 11). Finally, Klasen (2012) criticizes the way the MDGs are structured for implicating the measuring of potential progress. Taking MDG number two about education as an example, focus is on universal primary completion rates with less regard for education quality (Hanushek 2013: 4). This criticism emphasizes the fact that although the MDGs constitute tangible objectives for development they are not to be considered as planning tools without regard for the specific country.

Despite the fact that education is widely accepted as a means to development, the debate continues about quantity versus quality, how to define and ensure quality, how to measure progress, and how to integrate quality education into different contexts. Next, I outline how this study addresses these issues and explores them in the case of Sierra Leone.

1.1 Significance of the Study

The point of departure for this thesis is quality education as a catalyst for development for both society and the individual. Inspired by my stay in Sierra Leone, I have learned the significance of education in people's lives in a developing country as it empowers individuals to trust their own abilities and contributes to the creation of committed, enlightened citizens.

The statistics for Sierra Leone prove that the country has much work ahead. It ranks 177 out of 187 countries in the Human Development Index[2] (HDI) (UNDP 2013: 146) and 70 percent of the population lives below the poverty line; 26 percent live in extreme poverty (European Commission 2012). These conditions put Sierra Leone among the poorest countries in the world which makes improving education both extremely important and extremely difficult. The research of this study therefore aims to emphasize the matters of concern in improving basic education, demonstrate how changes can be implemented, and how improvement of the education system can contribute to development.

1.2 Aim of the Research

After the UN Millennium Summit in 2000, which urged the world to provide basic education for all by 2015, the government of Sierra Leone designed several policies to improve access to and quality of education in the country. One of these was the Education for All (EFA) Action Plan. Included in the EFA Action Plan were the abolition of primary school tuition fees and the provision of teaching and learning materials (Government of Sierra Leone 2004: 5). The aim of the policy was to ensure that all children from primary class 1 to junior secondary school (JSS) 3 have free access to education no matter their gender, social, cultural, or economic backgrounds. Since this policy was made, evidence reveals that there has been much success in the area of enrollment at the primary school level, but not much has been done to improve the quality of education in the schools (CGG 2006: 3).

In this study I examine why quality continues to be absent in the Sierra Leonean education system despite the fact that the government has increased numbers of schools and enrollment (MEST 2012) which are main objectives in MDG 2 (UN 2013). I look into the concept of quality and question the universal notion of quality presented in international initiatives such as EFA and the MDGs.

A poor developing country such as Sierra Leone relies heavily on donors' aid which currently accounts for 19 percent of the country's gross national income[3] (GNI) and an even higher percentage of the national budget. Foreign assistance primarily comes from multilateral donors

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[2] Human Development Index (HDI) was introduced in 1990 as an alternative to conventional measures of national development, such as level of income and the rate of economic growth. The HDI represents a broader definition of well-being and provides a composite measure of three basic dimensions of human development; health, education and income (UNDP 2013).
[3] Gross national income (GNI) is GDP less net taxes on production and imports, less compensation of employees and property income payable to the rest of the world plus the corresponding items receivable from the rest of the world (OECD 2003).

such as World Bank, International Monetary Fund (IMF), and the European Union (EU). United Kingdom and United States are among the biggest bilateral donors in Sierra Leone (DFID 2012: 2; U.S. Bureau of African Affairs 2013). Being this dependent on external actors to support financially, Sierra Leone must follow the restrictions and conditions that come with the funds (Marphatia & Archer 2005: 3; Government of Sierra Leone 2012). This means that initiatives such as the EFA Action Plan are influenced by ideas about education and quality which originate in donors' points of view instead of being based on ideas and plans grounded in the cultural and historical context of Sierra Leone (Kanu 2007: 67, 74).

With this in mind as a possible contributing factor to poor quality outcomes, I examine the concept of quality education and what quality means in the context of Sierra Leone. I work with the assumption that quality in education cannot be generalized as different factors depending on the context must be taken into consideration. How to achieve quality may be different in aid providing countries than it is in Sierra Leone. Implementation of policies which are not integrated in the country's culture can therefore be a difficult task.

In order to determine how Sierra Leone can improve education in the country, I investigate the challenges that the education sector faces. The main objective of this study is therefore to explore how to improve quality of education in primary and secondary schools in Sierra Leone. In order to do that the conditions for quality in structure and methods need to be examined. The aim of the study is therefore to establish a foundation for future development through improvement of education. By investigating and analyzing challenges to quality basic education, I hope to contribute to the field of education in development by pointing out areas where change and improvement are necessary and proposing recommendations to these improvements.

1.3 Problem Formulation

In the case of Sierra Leone the education system faces numerous challenges in order to be competent to ensure quality education for all students. The challenges examined later in the thesis demonstrate a system with deficiencies and fundamental problems which cannot generate learning unless considerable changes are made.

The overall question is now; how can Sierra Leone improve quality in basic education in a way that contributes to development?

In order to answer the question of *how*, it is important to first examine what actually characterizes quality in education in a Sierra Leonean context; which elements are imperative to include and which structures or practices need to be changed. Considering this, I identify and analyze challenges limiting to quality education in order to subsequently be able to detect the course of action needed to overcome these challenges and ensure quality in education.

The research of this thesis is conducted in the period August 2012 - January 2013 in Tonkolili district in central Sierra Leone, in and around the town of Magburaka.

1.4 Historical Background

In this chapter the history of Sierra Leone is briefly presented. In order to understand the current status and present challenges in education and society it is important to understand the historical background of the country in general. The subsequent chapter describes the educational background of the country and presents the current system in structure and status.

Sierra Leone is a relatively small country of about six million people located in West Africa. It was home for the victims of the Atlantic slave trade (Foray 1977: xxxii) as Britain chose the country as settlement for freed slaves. In 1787 the first settlers arrived in Sierra Leone (Foray 1977: xxxvii), and in 1808, one year after British Parliament declared slave trade illegal, the part of the country today known as the Western Area became a British Crown Colony (Foray 1977: xvi). The settlers were later accompanied by Nova Scotians from Canada, Maroons from Jamaica, and recaptives, or liberated Africans, freed from illegal slave ships (Foray 1977: xl). Together

Figure 1: Map of Sierra Leone
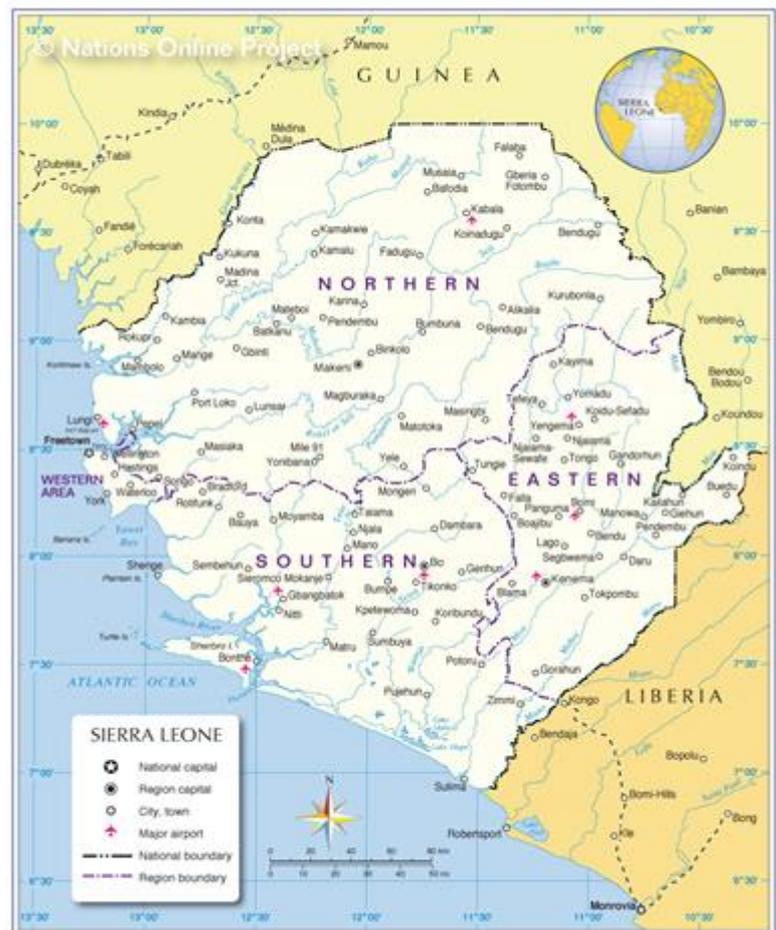
Source: Nations Online 2013

these and their descendants are referred to as the Creoles which were the original inhabitants of the Colony (Wright 1994: 182). The tribal peoples; the Mende, Temne, Limba, Kono, and other peoples were the inhabitants of the hinterland; from 1896 the Protectorate (Foray 1977: xxxii). Colonization was, however, not as straightforward as the British anticipated. Representatives of the two biggest tribes; Mende and Temne, fought against the colonial leaders. They fought to preserve a political, economic, and social system grounded in their African history which was now being challenged by European power. The battle was however lost for the tribal people and despite a brief moment of early colonial violence that marked the transition from pre-colonial to colonial times, the peoples of Sierra Leone settled into a relatively peaceful existence with the colonial power (Magaziner 2007: 169).

In 1961 Britain declared the independence of Sierra Leone (Foray 1977: liii). After independence Sierra Leone struggled with a poor and undeveloped economy as extraction and exportation of raw materials had benefitted mostly British companies. During British rule education had only been available to parts of the population, favoring the elite (Kanu 2007: 66-67). Colonial strategies had accentuated the differences between the various ethnic groups in the country resulting in a divided population where people identified themselves firstly as tribal members and secondly as Sierra Leoneans (Kanu 2007: 66). All this contributed to political instability, economic stagnation, and social upheaval in the country.

In 1991, the war in Liberia spilled over the border to Sierra Leone through the Revolutionary United Front (RUF) rebel movement. (BTI 2012: 3). The war ended in 2002 after 11 years of destruction of most social, economic, and physical infrastructure (Wang et al. 2007: 15). According to most estimates, between 50,000 and 120,000 people lost their lives, even more were maimed, and more than 1.5 million people were displaced. The war was notorious for the RUF's use of child soldiers and female sex slaves, mutilation, and the sale of conflict diamonds to fund the war (CountryWatch 2012: 1). As a post-conflict country, Sierra Leone engaged in reconstruction of systems and institutions that were ravaged by the civil war. Since the end of the war the priority of the government has shifted from emergency rehabilitation to implementation of sustainable long-term development policies (UNESCO 2008: 3).

From this brief historical overview it is clear that colonization and subsequent struggle with poor and undeveloped economic and social infrastructure, including an 11 yearlong destructive civil war,

have impacted education and the quality of education in the country tremendously. In the next chapter I outline the history and background of education and the educational system.

1.5 Educational Background

Pre-colonial education approaches in Sierra Leone emerged from indigenous knowledge systems based on understandings of the physical, social, and spiritual environments grounded in norms, values, and traditions developed over many generations (Kanu 2007: 71-72). With focus on the Mende ethnic group, Kanu (2007) emphasizes features in indigenous Sierra Leonean education. The first is interwoven curriculum which means that content and learning processes were derived from the needs of the society. Education was regarded as an introduction into society and preparation for adulthood which made social responsibility, spiritual and moral values, and community participation important principles. Furthermore, education was closely related to productive activity which means that there was no division between theory and practice (Kanu 2007: 72). The second feature in indigenous education was communalism characterized by *"the activity and success of the wider society rather than, although not necessarily at the expense of, the individual"* (Kanu 2007: 74). In communalism it was important for the individual to identify with the group so each member became equally responsible. This was the basis for the relationship between the individual and the group (Gyekye 1995: 156). Thus, the values characterizing communalism were; solidarity, interdependence, cooperation, and reciprocal obligations (Kanu 2007: 75).

When Sierra Leone became a British Crown Colony in 1808 the colonial government assigned the responsibility of controlling education in the country to the Christian missions. The main mission body was the Church Missionary Society as it received direct financial support from the British government (MEST 2007: 5). This means that education in Sierra Leone was designed after the British education system which was used as a way to control social change (MEST 2007: 5). Over 150 years of British rule changed the approach to education as European approaches and structures were introduced. The critical voices of Bledsoe (1992) and Kanu (2007) convey that this was done in order to use formal education as a systematic tool for economic exploitation, political suppression, reduction of local resistance to colonial rule, and transformation of the indigenous point of view (Bledsoe 1992: 186; Kanu 2007: 66). British colonial rule introduced curricula of alien content such as European history, literature, and arts, and didactic teaching methods hindering learner reflection, challenge, or questions (Kanu 2007: 73-74).

After independence in 1961 the British style education system continued, which mainly targeted the urban middle class and favored academically gifted students who were able to proceed to tertiary education and operate in government offices (MEST 2007: 5). The system maintained colonial social order which, with its promotion of elitism, did not prepare individuals for life in their communities and in a changing world (Kanu 2007: 65).

As we can see the development of western education in Sierra Leone started as far back as the 19th century. In the time after independence in 1961 the country has relied heavily on external aid which has stimulated the continuance of the development of an education system based on western terms. Positive or negative, change in the educational system is obvious though. The Education Act of 1964 ensured the Ministry of Education as the supreme authority in control of education (MEST 2007: 5). In the time up until the beginning of the civil war in 1991 the government issued several policy documents such as reviews, reports, and action plans *"all of which helped to define a long term pattern of educational development for Sierra Leone"* (MEST 2007: 5). Reforms were also launched in the 1990s; e.g. the 6-3-3-4 system[4] in 1993, and the Basic Education Certificate Examination[5] (BECE) in 1996, but a full implementation of the reforms were impossible because of military rule and civil war which eventually brought the education sector to a standstill (MEST 2007: 6). The education sector suffered much from the war. During the conflict, hundreds of schools were destroyed or severely damaged and it is estimated that close to 70 percent of the school-age population had limited or no access to education throughout the war resulting in a whole generation of people with no education. The World Bank estimates that by 2001, just 13 percent of schools were usable. Thousands of teachers and children were killed, hurt, or displaced (Novelli 2011: 8).

After the end of the war in 2002, many foreign agencies and organizations have contributed with resources and knowledge on educational reconstruction in post war situations (Kanu 2007: 67). This has, however, as mentioned previously, determined several education policies on the terms of western actors. In 1999, free primary education for students in class 1-3 was introduced, and in 2000 extended to include class 4-6 as well. These initiatives were followed by a rapid increase in school enrollment (MEST 2007: 6).

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[4] The 6-3-3-4 system refers to the education structure of 6 years of primary school, 3 years of junior secondary school, 3 years of senior secondary school, and 4 years of tertiary education (MEST 2007)
[5] Basic Education Certificate Examination (BECE) is the secondary school examinations coordinated by West African Examinations Council (WAEC)

1.5.1 Structure of the Current Education System

Figure 2 illustrates the current education system in Sierra Leone;

Figure 2: Structure of the Current Education System
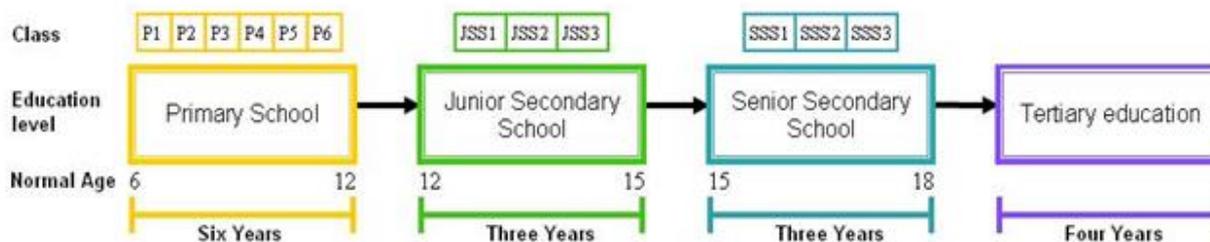
Source: MEST 2007

Not shown in the figure are three years of optional preprimary schooling in the age 3-5. This is followed by six years of compulsory primary school and three years of compulsory junior secondary school as illustrated in the figure. These nine years are the definition of basic education. The goal for the government is that all children have access to nine years of formal basic education which is why primary school is free for all children. JSS in the northern and eastern provinces is free of charge for girls as an attempt to close the gender gap in education (MEST 2007: 7). In order to progress from primary to secondary education the students must pass the National Primary School Examination (NPSE) which ends primary school. The fees for the NPSE were abolished in 2004 together with the primary school fees. After the required nine years of basic education, JSS students can continue on to Senior Secondary School (SSS) and tertiary education, however, this is optional (MEST 2007: 7).

1.5.2 Present Educational Status

Since the end of the civil war in 2002 the government designed several policies to improve access to and quality of education in the country, including the EFA Action Plan (Government of Sierra Leone 2004: 5). The aim was to ensure free access to basic education for all children which has resulted in much success in the area of enrollment at primary school level (CGG 2006: 3). The Ministry of Education claims that steps have been taken towards improvement of the quality in primary schools through the construction and reconstruction of several primary schools, provision of text books and furniture, training of school management, and in-service teacher training for unqualified teachers at primary level (MEST 2007: 24-25). Numbers from the Ministry of Education (2012) regarding the construction of schools show that the number of schools in the country has increased tremendously since the 2004/2005 school year. Between 2004/2005 and

2010/2011 1,633 new primary schools and 816 new secondary schools were established making the number grow 38 percent on primary level and 291 percent on secondary level (MEST 2012: 24).

However, despite the initiatives to improve basic education, there are nevertheless several challenges concerning the improvement of quality education. In the following I identify a number of the challenges, both observed during the study, and described by the government, the Ministry of Education, UNICEF, and the World Bank.

1.5.2.1 Teaching Staff

According to the Ministry of Education (2007) one of the leading factors contributing to poor education quality is the large number of untrained and uncertified teachers in the system. The availability and the number of qualified teachers are very low, especially in the rural areas of the country (MEST 2007: 24) and 40 percent of teachers at the primary level are unqualified and have outdated knowledge and skills (Wang et al. 2007: 8). Furthermore, there is a problem with the teachers' motivation; they are not motivated enough to encourage quality delivery in class. Unfortunately, many teachers spend time on private lessons at the expense of their primary teaching job (MEST 2007: 52). This lack of motivation is a result of low or absent salary which is a common problem for teachers in Sierra Leone (Bledsoe 1992: 193). Without addressing the inadequacies of the teachers it is impossible to improve student learning outcomes (Wang et al. 2007: 8).

1.5.2.2 Teaching Materials

Another challenge to quality education is the lack of adequate quality teaching and learning materials. There is an obvious shortage in materials which makes the Ministry of Education's policy of provision of core text books at a 1:1 ratio yet to be realized nationwide. The objective of the Ministry is to provide books in sufficient quantity so each child can have a set of books to not only use in school, but to take home as well (Nishimuko 2007: 25; MEST 2007: 23). Without relevant and quality materials the curriculum becomes irrelevant and it barely meets the needs of the students and thus the needs of society (MEST 2007: 41). Furthermore, the reselling of school materials by school authorities is a great challenge to quality education as it induces the lack of materials in schools.

1.5.2.3 Teaching Methods

"Achieving learning for all children cannot be achieved without committed professional teachers" (MEST 2007: 123). This is the statement from the government, and as we have seen, one of the

major challenges in the education system is the lack of qualified teachers. It goes without saying that the number of teachers needs to be increased, but the question is; what makes them qualified?

The observations made in the schools in Tonkolili district clearly demonstrated that the methods applied by the teachers in the classrooms were characterized by rote learning and student repetition of the teacher's words. I interviewed students in class 6 after a mathematics class and asked them what they had learned and they simply answered; math. Then I asked them where and how they could use what they had learned; their answer was that it was for school and for the teacher. It was clear that the children did not understand the concept of mathematics and how they can use it which shows that they did not learn anything in class. Hence, the teaching method was not generating any learning.

From observations it was evident that this was a widespread phenomenon. Some teachers involve the students a little, but the general method of teaching is that of repetition and rote learning. Indeed, the individual teacher cannot be blamed for this so focus should be on the training and education of the teachers. The Ministry of Education states that creating a contemporary and intellectual teaching profession where teachers are equipped with content knowledge and knowledge of learning-promoting teaching methodologies is key in order to retain learning for the future (MEST 2007: 123). It is clear that teaching methods need to be revised and more innovative methods should be explored for the enhancement of quality (Wang et al. 2007: 95).

A challenge related to the challenge of inadequate teaching methods is high teacher-student ratio. The country average is 66 students to one teacher and 112 students per qualified teacher (MEST 2007: 24). This needs to be improved as it contributes to the current method where involving the students and encouraging discussions and group work is close to nonexistent cf. annex 1, tables 4, 5, and 6.

The combination of poor teaching methods and lack of qualified teachers and materials could be the reason for the weak public examination results which characterize the NPSE and BECE. Since more and more students complete basic education, the issue of poor exam results now needs to be addressed otherwise the country will end up with people who has gone to school, but learned nothing (MEST 2007: 41).

1.5.2.4 Physical Conditions

Continuing to the physical conditions, schools and classrooms are generally in very poor conditions. As a result of the high numbers of damaged schools from the war, classrooms are inadequate which often leads to overcrowding. It is critical that more spacious classrooms are established in order for effective teaching and learning to take place. There is a general shortage of desks and chairs for teachers and students in the schools and where available the furniture is of very poor quality (MEST 2007: 23). Furthermore, classrooms are totally lacking in modern equipment and technology (MEST 2007: 52).

Another issue in regard to the physical conditions is the lack of toilet facilities and access to clean water in many schools. Often students at schools without these facilities are not provided with hygiene lessons which together with access to safe water and toilet facilities are essential to protect children's health and their ability to learn in school (MEST 2007: 24).

1.5.2.5 Gender Issues

When it comes to gender issues in education there are many challenges to consider. The overall challenge is to eliminate gender disparity in education (UN 2013). The challenges observed or recounted during the study were; discrimination between boys and girls in the classroom, favoritism of boys, and exploitation of girls by the boys or the teacher. The latter is very concerning because encouraging girls to go to school is, besides from education, a way to keep them away from marriage and pregnancy at a young age. Early marriage and pregnancy are two of the main reasons responsible for a high dropout rate of girls in school. The fact that what should be a safe place for girls to learn and play sometimes was taken advantage of is very alarming.

According to UNICEF (2010) the largest obstacle to educational achievement worldwide is gender discrimination; girls are the single largest group denied the right to learn (UNICEF 2010). In basic education quality plays a critical role when it comes to closing the gender gap. For families with limited resources where girls can contribute financially to the household, it is essential that the parents feel that the girl is learning, that the education is useful, and that the school environment is safe, otherwise they will not send their daughters to school as there is more use for them at home (UNICEF 2010). The government of Sierra Leone abolished school fees in junior secondary education for girls in the Northern and Eastern provinces in 2003 (MEST 2007: 7). This program that pays for uniforms, teaching materials, and school fees for girls enrolled in junior secondary

education is an attempt to further close the gender gap to avoid financial restraints to be the reason for girls not going to school (MEST 2007: 40).

1.5.2.6 Financial Issues

Even though primary school fees were abolished in 2000 I observed or was made aware of several schools charging unofficial fees for books, examinations, sports, and report cards during the study. Furthermore, all students in Sierra Leone must have school uniforms, bags, and shoes which are a financial burden for poor families with many children (Nishimuko 2007: 26). The Ministry of Education confirms that parents struggle with hidden costs for their children's education even at primary level where education is supposed to be free. It is the responsibility of the Ministry to spare families of these costs (MEST 2007: 16).

This brief survey of the challenges confronting quality in education proves that much is to be done despite quantitative progress and advances in the education sector. Therefore these challenges require attention if the stability and development of the country is not to be compromised. This study examines the challenges identified above and I present and discuss them further in chapter 4 as findings. The empirical results then form the basis of the analysis of quality education as a catalyst for development in Sierra Leone and determine the course of action proposed in the final part of the analysis. As I describe above, insufficient physical conditions are observed to be challenging to the education system which is why they are identified as a challenge. However, they are not a focus of this study and hence not included in the empirical discussion. Gender issues are likewise identified as a major challenge to the improvement of quality education; however, this issue is not the focus of this study as the empirical data do not primarily reflect this. It is however recognized that gender disparity is one of the most incriminating issues for the education sector in Sierra Leone and evidence of this was in truth observed; however the research of this study is not intended to investigate this problem. Consequently, problems concerning gender disparity are not included in the analysis.

This ends the introductory part of the thesis. Next, I proceed to the methodological part where I first present the scientific approach and second account for the research methods applied in the study.

Introduction	• Significance of the study • Aim of the research • Problem formulation • Historical and educational backgrounds
Methodology	• Ontological considerations • Epistemological considerations
Method	• Research design, approach, and strategy • Empirical framework • Theoretical framework • Conceptual framework
Discussion	• Presentation and discussion of empirical data • Discussion of empirical results
Analysis	• Two recurring motifs • Quality • Development
Course of action	• Suggestions for solutions
Conclusion	

2.0 Methodology

So far, I have introduced the point of departure for this thesis. I have traced the historical background of Sierra Leone as well as the educational background including an account of the present status of and challenges in the education system.

In order to clarify the research strategy of the thesis, the following chapter outlines the methodological approach.

2.1 Ontological and Epistemological Considerations

Ontology is the subject in theory of science which studies whether an objective reality external to social actors exists or whether it is considered to be a social construction built up from the perceptions and actions of social actors (Bryman 2008: 18). Epistemology is the subject in theory of science which studies the question of how knowledge of the world is acquired; how we see things (Blaikie 1993) and whether the social world can and should be studied according to the same principles and procedures as the natural sciences (Bryman 2008: 13).

This study concerns improving quality in basic education by identifying challenges that limits this progress. The ontological position of constructivism is applied as I view human action as making up social reality which therefore does not exist independently. The reason for this is that people create and uphold meaningful worlds by acting within these worlds and interacting with each other so that meaning is produced in reality. Consequently, this means that social phenomena are under a constant state of revision (Bryman 2008: 19). Education and learning are two closely connected phenomena, however not conditional. Learning is not an automatic outcome of education as it is determined by human activity within the education process. Consequently, I consider learning and knowledge to be constructed phenomena created by human actions and interactions. Objectivism is thus rejected in this thesis because of its formulation of social phenomena as external facts which cannot be affected by social actors (Bryman 2008: 18). Consequently, the research of this study is mainly made up of participant observations in order for me, as the researcher, to gain access to information through the points of view of informants. This places me in the middle of the research observing different actors within the research and their perceptions of their interests and identities. My choice of method therefore demonstrates my subjective view. As I regard social reality as the result of human activity I recognize reality as a subjective and individual entity. Being a researcher with a certain cultural and educational background my world view is subjective, though constructivism allows me to realize the existence of the social world of other human beings. In the

field of education new knowledge is constructed in human processes. Knowledge is thus subjective and individual as well.

The data of this study are primarily the outcome of a field study in Sierra Leone and thus considered to be products of meaningful human activities. The importance of interpreting the subjective social actions which constitute social reality is therefore crucial in order to understand this reality. The study, therefore, applies the epistemological position of interpretivism. This position requires comprehending the subjective meaning of social action, interpreting human action, and understanding human behavior (Bryman 2008: 15). My job is to gain access to the "common-sense thinking" of the people in the study, and then interpret their actions and their social world from their point of view (Bryman 2008: 16). This was undertaken by conducting participant observations which are described in detail later. In the research I thus try to capture the characters of people through both observation and interaction in order to interpret their actions and understand behaviors. With the recognition that all people have something to contribute I take on an inclusive view, and the opposite epistemological position of positivism is consequently rejected as this position advocates that only phenomena and knowledge confirmed by the senses can genuinely be accepted as knowledge (Bryman 2008: 13).

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3.0 Method

Continuing to the method of the study, I first describe the research design, followed by an account of the research approach and strategy. This chapter therefore aims to explain several considerations for the research as well as reasoning for the research perspective, the applied method, the structure and design of the thesis, the methods for collecting the data, and methods of analysis. Furthermore, this chapter outlines the relevance and limitations of this study as it specifies reliability and validity of the data.

Using quality in education as a point of departure, and through the analysis of the case of Sierra Leone, I examine the research questions stated in chapter 1.3. Focus of the analysis is on the question of quality in basic education and how this can be improved in a way that contributes to development. Before engaging in the empirical level of the study, this chapter ends with a presentation of a referential framework of theory and concepts.

3.1 Research Design

3.1.1 Case Study Research

The case study is a strategy of investigating an empirical topic by following a set of preidentified procedures (Yin 2003: 15). Case study research is concerned with precise and fair presentation of empirical data (Yin 2003: 2) and an analysis of this data which examines a contemporary phenomenon within its real life context (Yin 2003: 13). The strength of the case study method in social science is the fact that it allows the researcher to preserve holistic and meaningful characteristics of real life events (Yin 2003: 2). That means that the researcher can understand behavioral conditions through actors' perspectives (Tellis 1997) by handling a full variety of evidence. Case study research has been challenged, though, by criticism of being weak, imprecise, and subjective (Yin 2003: 8-10).

When conducting case study research the first matter of attention is to identify the case and choose a single case or a multiple case design (Yin 2003: 39). For this thesis I have chosen a single case design structure as it best fits the purpose and the scope of the research. Despite the fact that it is viewed as less compelling and therefore the results less robust than multiple cases designs (Yin 2003: 46), the single case study allows me to go in depth with the analysis of the educational system in Sierra Leone by examining schools and actors of education in Tonkolili district. I have chosen the case study method because the research covers the contextual conditions of education as I

consider these to be highly significant to the study. As all data are collected in and about Sierra Leone, this is regarded as the very topic of this study and consequently likewise the unit of analysis.

3.1.1.1 Sources

In a good case study the researcher uses as many sources of evidence as possible. The six most commonly used sources are; documentation, archival records, interviews, direct observations, participant observation, and physical artifacts (Yin 2003: 85). When multiple sources of evidence are used it allows the researcher to address a wider range of issues such as historical, attitudinal, and behavioral. The most important advantage of using multiple sources is the fact that a conclusion is expected to be more convincing and precise if it is based on several different sources of information, following a corroboratory mode (Yin 2003: 98-99). The primary sources for this study are participant observations of events and situations in the community and direct observation of educational settings. Observation as a source of evidence is presented in detail in the following chapter. Other primary sources for this case study are; interviews, meetings, encounters, and conversations with people with different relations to the concept of education. Secondary sources such as scholarly articles, documents, reports, plans, and policies from the government of Sierra Leone, the Ministry of Education, different bodies of the UN, the World Bank, national and international NGOs, and other significant stakeholders of education are included as well. By using multiple sources of evidence I seek to address a range of issues of historical, cultural, behavioral, and social perspectives. The empirical data are discussed further in the following chapter and in chapter 3.6; empirical framework.

3.1.1.2 Observation

Observations of behaviors and environmental conditions are possible when making a field visit to the case study site. This type of observation is referred to as direct observation. Observations can be more or less formal when it comes to data collection. Formal observations are usually well-planned with observational protocols. Informal or casual observations usually happen when collecting other data such as an interview (Yin 2003: 92). Another mode of observation is participant observation which involves the immersion of the researcher in a social setting for a period of time, listening, asking questions, and observing behavior (Bryman 2008: 402). In participant observation the researcher, as the name suggests, goes from being a passive observer to an active investigator and takes on a role within a case study situation. This gives the opportunity of collecting data which could not be collected otherwise by gaining access to specific events or groups. Furthermore, it

gives the researcher a unique ability to understand fully the complexities of many situations and perceive reality from the viewpoint of someone inside the case (Patton 2002: 21; Yin 2003: 94). One problem with participant observation is that the researcher, because of the active role assumed, may have to go against being a good scientific researcher in order to fulfill this role. Another problem that can occur with participant observation is the phenomenon of becoming a supporter of the group being studied. Finally, it is problematic if the participant role requires too much time and attention relative to the observer role (Yin 2003: 96; Bryman 2008: 386). These problems are very important to consider as the credibility of the entire study could be jeopardized if the participant observation is not carefully conducted.

3.1.1.2.1 Observations of Real Life Situations

Observing real life situations first and foremost requires that the researcher is a good listener. The researcher must be able to assimilate large amounts of new information without bias. When an informant describes an incident a good listener hears the exact words and terminology, captures the mood, and understands the context from which the informant perceives the world (Yin 2003: 60).

In real life situations the researcher naturally collects data from people and institutions in their everyday situations; this means that there is little control over the data collection environment contrary to other research strategies. In addition, the researcher enters into the world of the subject being studied rather than the reverse. This means that the researcher is the one to make special arrangements in order to act as an observer or participant observer. As a result, the behavior of the researcher, and not the informant, is likely to be constrained (Yin 2003: 72).

The study for this thesis consists of participant observation in Sierra Leone over a period of almost six months. The majority of observations were conducted in the town of Magburaka and the surrounding area in Tonkolili district. The main purpose of my stay in Magburaka was to work as project manager at Magburaka Education and Computer Centre (MECC) and to develop and improve courses offered to the community at the centre. This work entailed much research of education, teaching methods, and learner behavior, especially in an African context. It was within this research process that many of the observations for this thesis took place. During the process of data collection, I made first-hand observations of activities and interactions in the setting. I undertook the role as active participant in the community as work and life in the town and area naturally promoted interaction with the local community and different stakeholders.

Therefore, when it comes to the relationship between the researcher and the inhabitants of Magburaka, I was a participant in the community engaged in the daily life of the community and in the lives of the people. Additionally, I took on the active role of learner since the approach to gathering information was to ask as many questions as possible and learn as much as possible about the people and their perspectives and experiences, the community, the history, and the norms. The casualty and informality in the conversations allowed flexibility by letting the person or persons involved in the conversation control the situation and tell anything they wanted. In this way, the hope was to prevent them from sharing only what they thought they were supposed to and thus gain a more detailed image of their perspectives. Furthermore, I participated in structured data collection for REACT – Retro Association[6] (project REACT) in which observation studies at 12 primary schools were conducted in connection with an evaluation study of project REACT's activities in Sierra Leone from 2009-2012. Observation guides for the study are found in annex III. The 12 primary schools observed in the study are; Malongba, Maraka, Masanga, Matham, Mathora, Ro-Mangoro, Mabom, Magbas, Magbom, Mamankemoi, Missionary Church Association (MCA) primary school, and Tonkolili District Council (TDC) primary school. The first six schools are referred to in both project REACT's and in this study as collaboration schools which means that these are schools that project REACT has collaborated with in terms of lending books and other school materials, providing different life skills programs, and offering teacher training to the employed teachers. The next four schools are referred to as comparison schools which means that these schools have comparable conditions to those of the collaboration schools. These schools were included in the study as a base line to evaluate the effect of the help provided to the collaboration schools. The last two schools are well-funded schools which means that these schools have relatively sound financial situations due to better funding and central locations. Project REACT's evaluation study focuses on different topics in the observations of the 12 primary schools. Only the topics relevant for this study are included in the thesis. During the collection of these data I undertook the primary role of passive observer, occasionally interacting by asking questions.

3.2 Inductive Research Approach

The relationship between theory and research can be looked upon from primarily two different perspectives; a deductive approach and an inductive approach. When adopting an inductive

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[6] Project REACT is a Danish NGO under the humanitarian organization; Retro Association. Project REACT works in Sierra Leone where it wants to create a socio-economic project combining business and humanitarian work with the vision of making the project economically independent of funding from Denmark. Project REACT has worked in Sierra Leone since 2009 (REACT 2013).

approach, theory is the outcome of research as findings lead to theory by drawing conclusions out of observations (Bryman 2008: 11). The opposite is the case when applying a deductive approach which concerns testing an already developed theory (Bryman 2008: 10). Both approaches, however, entail an element of the other which means that a 100 percent inductive or deductive approach to the relationship between theory and research hardly ever happens. Often the researcher weaves back and forth between data and theory, and there is a repetitive interplay between collection of data and analysis of data (Bryman 2008: 12, 539).

In this study an inductive research approach is applied. By abstracting and analyzing notions from the data explanations are proposed. This means that the data do not generate a new theory per se; more an empirical clarification. The reason for choosing the inductive approach is that the observations of the study shape the analysis of the data, allowing me to develop a framework of ideas that explain the subject of research, and consequently determine the theoretical approach. A deductive approach is rejected for the reason that the research of this study is not theory testing. That said, it is not possible to be 100 percent inductive since preexisting knowledge always plays a part as some form of base theory from which an assumption about the world is made and the study formulated. In this case I consider quality education as an empowering tool for human beings and I work with the assumption that quality in education cannot be generalized as different factors depending on the context must be taken into consideration. This view is expressed in chapter 3.7 that presents the theoretical framework for the analysis. Here I discuss how cotemporary theoretical approaches to learning can be combined with traditional Sierra Leonean approaches to education in order to create a foundation for quality.

Case study research is most commonly associated with the inductive approach to the relationship between theory and research. This does not mean that a case study cannot follow the deductive tradition, but mostly case studies aim to generate an intensive examination of a case in relation to which a theoretical analysis is conducted which categorizes case study research as an inductive approach (Bryman 2008: 57).

In the context of an inductive approach it is important to note that the term theory is to be considered differently than in a deductive context. What researchers most often end with when applying an inductive approach is more empirical understandings and explanations than it is actual theory (Bryman 2008: 12; Gillham 2000: 35). When applying an inductive research approach in case studies it is important to stress that theory which guides the study is to be considered as a form

of blueprint and not with the formality of grand theory. This means that even though an inductive approach is about generating theory, the researcher must suggest theoretical propositions to why events, structures, and thoughts occur as a guidance to the entire study (Yin 2009: 36). In this study theory is used as an underlying understanding which assists in noticing patterns in data and seeing links between ideas (Thomas 2011: 180).

3.3 Qualitative Research Strategy

Qualitative research provides the researcher with convincing descriptions of the qualitative social world (Kvale & Brinkmann 2009a) by stressing the understanding of the social world through interpretation of interactions between individuals (Bryman 2008: 366). Qualitative research can include several diverse research methods; this study utilizes; observations, qualitative analysis of texts and documents, discussions, interviews, encounters, and conversations. Kvale (2000) identifies different ways of using conversation as research interview, these are; conversation as a part of everyday life interactions and professional conversation. In conversations in everyday life not much attention is directed at the purpose and the structure of the conversation, whereas in professional conversations the opposite is the case with formal structures and questioning techniques (Kvale 2000: 31). This thesis largely relies on unstructured and semi structured interviews as a part of a participant case study. This means that most of the interviews conducted are somewhere in between conversation as part of everyday life interaction and professional conversations, and some interviews can be characterized as being entirely everyday life conversation. The reason for this is that, as a participant in the community, I carried out conversations in different situations; some situations where scheduled and with an agenda about the topic in mind, and other situations simply occurred and conversations developed without any prescheduled planning. By doing research and collecting data in this manner I avoided the power imbalance that often occurs in a "normal" interviewer-interviewee situation where the interviewer questions the interviewee (Kvale 2000: 32).

During the study I applied various qualitative approaches in collecting the data, as I described above. These methods were the most appropriate ways to collect reliable data in the context of African society. I understand that this way of collecting data seems a little unstructured since much information is gathered in informal settings as they happened. For that reason the data collection was dependent on whom I interacted with at a certain time. This means that data from conversations, discussions, and encounters as part of participant observations are generally

unstructured and data from meetings and interviews are somewhat semi structured because of the presence of an agenda. Data from the observations conducted for project REACT are structured with prepared observation guides found in annex III.

3.4 Validity

Validity in qualitative research is defined somewhat broader than in quantitative research. In general terms it refers to the truth, the correctness, and the strength of a statement (Kvale & Brinkmann 2009b: 246). In quantitative research validity is restricted to measurement which would make qualitative research invalid if it does not result in measurements. Therefore validity is extended in qualitative research to regard to what extent observations reflect the phenomena of concern (Pervin 1984: 48).

In case study research validity can be increased in a number of ways. In this study I use multiple sources of evidence such as; observations, interviews, documentation, encounters, and conversations with people with different relations to the concept of education. By doing this, I expect the conclusions to be more convincing and precise because they are based on several different sources of information. These different sources furthermore require different methods to data collection. Using more than one method or source in a study corresponds with the strategy of triangulation which is argued to result in greater confidence in findings and confirm the validity of the process (Bryman 2008: 379). An example of triangulation in this study is confirming or elaborating on observations by conducting small interviews and asking questions or vice versa; e.g. checking numbers of students informed by a head teacher by also counting the students manually during observation. Another strategy of increasing validity is to link to literature. I have done this by including several views and theories by scholars and researchers in order to confirm a link or lack thereof between empirical findings and theory, and different aspects of the subject matter.

The methodical approach to research must furthermore be the one to best reflect the phenomena of concern in order to validate the study. This is what Yin refers to as construct validity (Yin 2003: 35). This study is about examining how to improve quality in basic education in a way that contributes to development in Sierra Leone. In order to propose a course of action it is important to explore what actually characterizes quality in education in a Sierra Leonean context; which elements are imperative to include and which structures or practices need to be changed. I chose a case study design with participant observation as the best method to gain access to situations that could provide a comprehensive view of the matters I was looking to investigate. By using

observations I obtained data in the most direct way possible as I observed first-hand actual situations and events contrary to being told or reading about them later. Furthermore, I included other methods, as described above, to ensure the most accurate reflection of phenomena of concern.

External validity is an aspect of validity that can represent a problem for qualitative researchers as it refers to the degree to which findings can be generalized across social settings (Bryman 2008: 376). The inability of case studies; especially single case designs, to provide a generalizing conclusion is a subject of concern for many critics since scientific generalization is a central criterion to measure external validity of research (Bryman 2008: 57; Yin 2003: 37). In regard to whether or not it is possible to generalize from a single case, Yin (2003) suggests that case studies are treated, as are experiments, as generalizable to theoretical propositions and not to populations or universes. This means that the case does not represent a sample of one (Yin 2003: 10). Stake (1995), too, argues that case study research is not sampling research as the purpose is to understand this one case, not study a case primarily to understand other cases. The emphasis is on uniqueness and on understanding the case itself (Stake 1995: 4, 8). This reflects well the notion of generalizability in this case. The study aims to generate a thorough examination of a single case, Sierra Leone, based on empirical investigations in the country. The inductive approach advocates that findings lead to theory by drawing conclusions out of observations (Bryman 2008: 11). It is this theory that is generalizable. Yin (2003) refers to this mode of generalization for case studies as analytic generalization as opposed to statistical generalization (Yin 2003: 32). It is thus important to stress that this case is not representative in a way that the findings can be applied to other cases.

3.5 Reliability

Reliability again represents difficulties for qualitative researchers as it concerns the degree to which a study can be replicated. Social settings and circumstances change which make it impossible to replicate findings of qualitative research in the exact same environment (Bryman 2008: 376). Furthermore, the rejection of objectivism and thereby the existence of one objective truth adds to the difficulty of precisely replicating a study to confirm the results. Yin (2003) argues that by minimizing errors and biases in a study and by documenting all data and every step thoroughly it is possible for a later researcher to conduct the same study as an earlier researcher by following the same procedures (Yin 2003: 36-37). Then, the later researcher is expected to find a high correlation between study number one and study number two and arrive at the same findings and conclusions (Bryman 2008: 149; Yin 2003: 36). This study attempts to ensure reliability by documenting

empirical encounters and observations with a close description of time and place and a methodical explanation of access and collection of evidence. This and the credibility and trustworthiness of sources are examined in detail in the next chapter. Though, a complete replication of the study is not possible because of a subjective approach, I have thoroughly chosen the sources of the study and triangulated the research methods in order to increase reliability and trustworthiness of the results.

3.6 Empirical Framework

The empirical data of this thesis consist of observations made in the time period; August 2012 to January 2013. The observations are categorized as direct observation and participant observations. The direct observations are of teachings in educational settings conducted in a more structured manner and the participant observations are of any form of events or situations with relation to the research questions as the result of me living in and being a part of the community for the time of the study. Furthermore, data collected in the form of unstructured interviews, meetings, encounters, and everyday life conversations are included as well. Secondary sources such as scholarly articles, documents, reports, plans, and policies from the government of Sierra Leone, the Ministry of Education, different bodies of the UN, the World Bank, national and international NGOs, and other significant stakeholders of education in Sierra Leone are included.

Annex I presents the bulk of my empirical findings. The data are presented without much commentary as they are discussed and analyzed in chapter 4. Only the findings that relate to the research questions of this thesis are presented in order to preserve a thread of argument.

Fieldwork in Sierra Leone is the basis for the collection of primary data. The primary data consist of field notes, notes from meetings, informal conversations, and observations. The notes are to a great extent mental notes and brief recordings of specific events, situations, and encounters. The raw data in these field notes have later been organized and converted into a detailed record of data supplemented with further notations from memory, resulting in readable, narrative descriptions; cf. annex I.

3.6.1 Credibility of Sources

When conducting observations; especially participant observations, it is important to regard the problems that can occur which can risk the credibility of the study. First, the researcher needs to be careful when entering a new social situation in order to gain social acceptance (Gillham 2000: 45).

As previously described, I entered the community with the primary task of running MECC. This gave me the opportunity to interact with members of community and education stakeholders rather quickly because of the service of the centre. In order to gain social acceptance I, however, was very aware of appropriate behavior and gestures of respect. Examples are; wearing appropriate clothes by covering my knees, addressing people; especially people older than me, with respectful and correct forms and titles, and receiving and giving small gifts of appreciation.

Second, the researcher must balance the researcher role and participant role both in time and attachment (Yin 2003: 96; Bryman 2008: 386). Time was for me not an issue of concern. Participant observations occurred naturally and direct observations, meetings, and conversations were an integrated part of my job which made sure that I did not lose focus by participating in activities. I must however accept the difficulty of remaining unattached. Being a part of the community and working closely with different members of community caused relationships to grow which cannot be denied. Given the constructivist nature of this study, I do however not claim objectivity. I consider this connection with the people of the study a strength as it allowed me to gain access to information and knowledge that I would otherwise not have been able to which made it easier for me, as a researcher, to understand the complexities of situations and perceive reality from the viewpoints of people inside the case.

Moving on to informants of the study the purpose was to obtain information about situations from their points of view. As a result these accounts are individual and subjective and true in the social world of the informant. This contributes to an analysis of the case from different perspectives in society.

In regard to quantitative data such as; enrollment statistics, numbers of students, and qualifications of teachers, obtaining information from some school authorities was difficult due to poor records. This made it difficult to document reliable information at some schools. There is also a credibility issue in the answers obtained from school authorities as it is difficult to tell if they told the truth or simply guessed the answers. In school observations I double checked answers of student and teacher numbers by manually counting students and teachers in order to obtain more reliable data.

Data from the government and the Ministry of Education about the status and progress of the country's educational sector are considered with caution as Sierra Leone has a history of corruption and dishonesty in the system. Several reports and studies from the Ministry are though conducted in

cooperation with different UN agencies which increase the level of credibility, though they too can be assumed to have personal agendas. In general, different international sources; UN bodies, NGOs, and World Bank, just to mention some, are expected to have agendas based on their different focus of strategies of e.g. children, women, economy, environment, conflict management, or democratization. Being aware of this, I consider using different sources in their respective fields reliable.

The primary data are collected in Tonkolili district which makes it difficult to generalize results on a national scale based on only these data. It would have been optimal to conduct research and collect data in several or all districts in the country to obtain more representative data, however, time and resources did not allow this.

3.6.2 Role as Researcher

To identify my role as a researcher Gold's (1958) classification of participant observer roles is included.

Figure 3: Gold's classification of participant observer roles
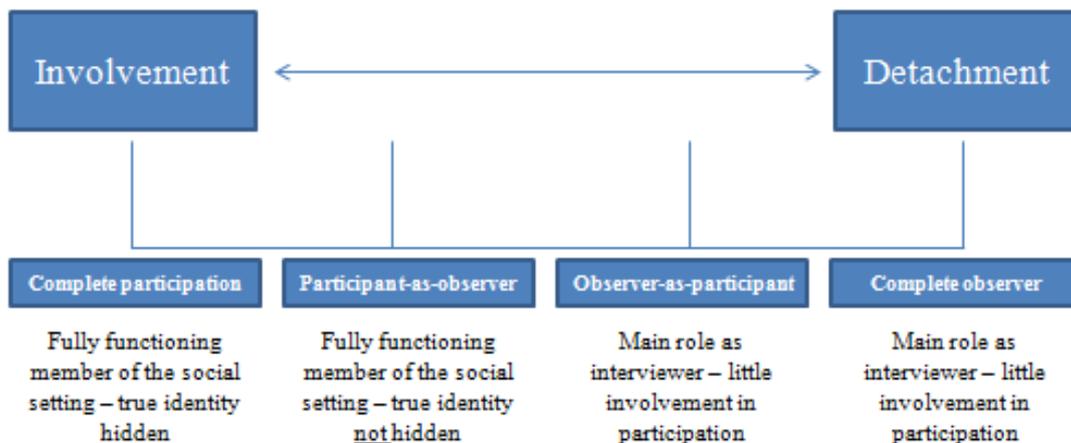
Source: Gold 1958

My role is somewhere in between complete participant and participant-as-observer for the reason that my identity as researcher was not disclosed to all members of the study; only the ones that worked as informants or were present in direct observations of educational settings knew my role as researcher. People observed in daily life or during casual conversations were not made aware of my researcher role.

This leads to the next issue of the impact of my involvement or the observer effect (Yin 2003: 86; Gillham 2000: 47). I am aware of the fact that people in the study may have acted differently simply

because of my presence. I being there can have affected behavior of the people I observed. Being socially accepted into society as a member of the community was my attempt to avoid this by creating a connection of trust and my hope was thereby to see real, unaltered situations and behaviors. Furthermore, by distancing the research from traditional interview procedures I eliminated the hierarchical relationship which is often present between interviewer and interviewee so that answers would be more sincere and not merely reflect what the informant thought I wanted to hear. Even though I was an integrated part of the community, one factor cannot be denied; my background as a European and the color of my skin was indeed a factor of concern. In Sierra Leone light skin is still considered a symbol of status and Europe is, based on my encounters, considered to be a wonderful place to live in the eyes of Sierra Leoneans. For those reasons I was confronted with questions and expectations of my ability to improve situations for the area or for individuals; mostly in regard to finances. This could be all from asking for money to build a school or sending young people to university, to paying for tickets for locals to go to Europe and writing letters of recommendation and providing people with contacts to Danish companies. The perception that I, because of my nationality, am able to make things happen, can have influenced how people treated me and what they told me. They can e.g. have made themselves look better by embellishing the truth or have described their situation worse than it actually is in the hope of receiving help or money. This affects the credibility of information from people in the community.

3.7 Theoretical Framework

In this chapter I move on to the theoretical framework for the analysis. With an inductive approach to the relationship between theory and research this chapter does not present theory with the purpose of testing it as would be the case when applying a deductive approach. Conversely, this chapter presents the theoretical basis for the study which constitutes a frame for the analysis.

The chapter summarizes key concepts of learning theory with focus on student centered learning. The contrasting theoretical approach of traditional teaching is furthermore briefly presented. In order to grasp the contextual aspect of African society and its education tradition and learning culture, traditional education in Sierra Leone is presented with focus on indigenous knowledge and teaching methods. Finally, I discuss present teaching in Sierra Leone and argue for an improved technique by combining contemporary, western approaches and traditional Sierra Leonean ways.

3.7.1 Learning Theory

On a general ground learning can be defined as: *"any process in living organisms that causes permanent change in ability which is not merely related to forgetfulness, biological maturation, or aging"* (Illeris 2006: 15). This definition suggests that learning is not only characterized by the learning process itself, but by the conditions that determine, affect, and is affected as well. Figure 4 demonstrates the main components of learning;

Figure 4: The main components of learning

Source: Illeris 2006
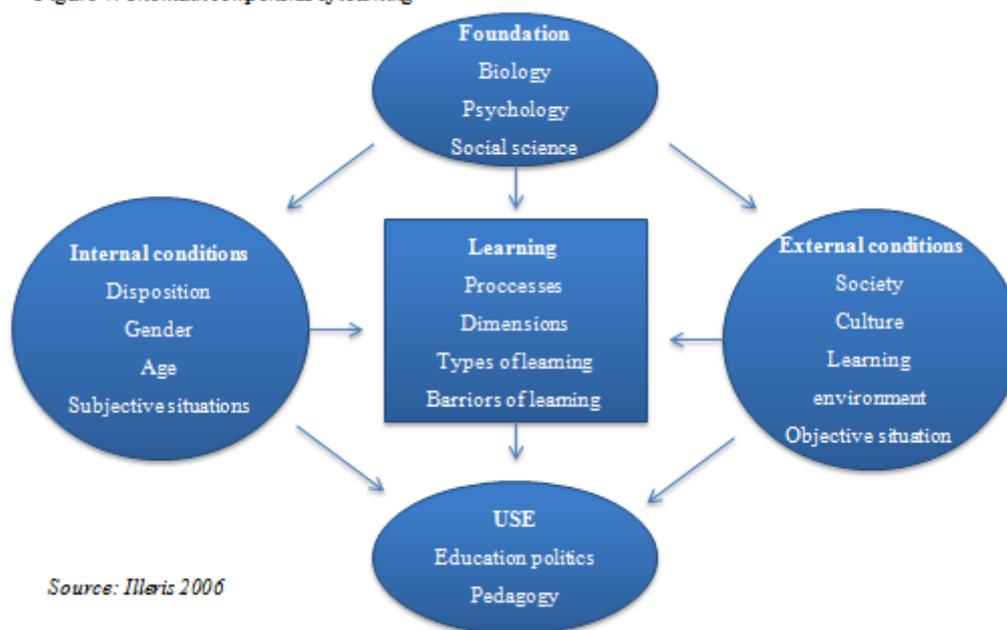
Illeris' figure shows that learning is conditional on internal as well as external conditions of the learner. Furthermore, biological, psychological, and situational circumstances of society create the foundations of both the internal and external conditions of the learner and learning itself including the processes, dimensions and types and barriers of learning. The final component is the use of learning as the field of application effects learning as well.

3.7.1.1 Traditional Teaching

The traditional understanding of learning in schools in general emphasizes the student as the receiver of knowledge and the teacher being the one in control of covering academic content. The student is rather passive and teaching is characterized by rote learning and memorization (Corley 2012: 23). In the traditional understanding of education, the role of the school is to transmit information and skills from one generation to the next (Dewey 2007: 17) Learning is therefore seen as something that is transferred from an expert, the teacher, to an untrained person, the student, causing the teaching to be teacher centered. Consequently, teaching is standardized which means

that all students receive the same amount and type of teaching without any individualization (Illeris 2005: 13; Dewey 2007: 18-19).

3.7.1.1.1 Traditional Teaching in Sierra Leone

Earlier in the thesis I touched upon the aspect of traditional education, or pre-colonial education, in Sierra Leone and how it changed into a western based system because of British colonial rule. Traditional education in Sierra Leone is not to be confused with traditional teaching presented above which were limited to western societies. Traditional education in Sierra Leone was much more "traditional" in the actual sense of the word; it was grounded in the norms, values, and traditions in the community which were developed over several generations and based on understandings of the surrounding environments (Kanu 2007: 71-72). Education in pre-colonial Sierra Leone was considered to be introduction to and preparation for adulthood in order to become a contributing member of the community. It was easy to grasp the purpose of the education as it was practical training in different tasks needed in society such as; hunting, fishing, spinning, weaving, and being a member of the secret society (Wright 1994: 181). Theory and practice were thus two intertwined concepts (Kanu 2007: 72). The community was therefore always the focus of the education and training of the young; it was understood that everyone was a part of the group, and better results could be reached together. Values such as; interdependence, solidarity, and cooperation were largely integrated in indigenous education (Kanu 2007: 75).

3.7.1.2 Modern Teaching

Around the turn of the 20th century an idea within the field of education developed in the western world that students' intellectual growth should follow a more "natural path" and wait for interest in a subject to emerge. This idea was first advocated in the 18th century, but did not gain common currency until it was adopted by social scientist John Dewey (SQE 2013). Dewey formulated a new theory of progressive education as a reaction and critique of traditional education characterized by rote learning and memorization. In progressive education emphasis is on the notion that the process is more important than the product, and experiences have a fundamental role in learning and education. Dewey was well-known for his "learning by doing" approach (Dewey 2007).

3.7.1.2.1 Student Centered Learning

Student centered learning is an approach to learning which derives from Dewey's ideas about progressive education. In student centered learning the learning environment is characterized by learner responsibility and activity and the needs of the students are in focus (Corley 2012: 23).

Student centered learning has gained more and more attention during the past decades and there has been an increasing emphasis on moving toward student centered learning and away from traditional teaching in which the power is with the teacher (Corley 2012: 23). The student is to be considered as a co-creator in the teaching and learning process, and included in the decisions about how and what to be learned. For this to happen the teacher must respect and accommodate individual differences in students' backgrounds and abilities (McCombs & Whisler 1997). The role of the teacher is to construct authentic, real-life tasks which encourage student involvement and participation making students learn from each other and by discovery instead of from the teacher (Weimer 2002). This means that the teacher must consider and recognize the fact that each student is different and has different ways and rates of learning. In the learning process, students integrate what they learn with previous knowledge and skills and from that construct new meaning. It is important that the student feels respected and acknowledged in order for learning to occur (McCombs & Whisler 1997).

This approach to learning means that the student is an active and responsible participant in his or her own learning and the teacher undertakes a more passive role as facilitator. Learners interact through group work and by teaching each other, and learning thereby becomes an active search for meaning (Moffett & Wagner 1992). By assuming new responsibilities students gain confidence and self-assurance as they associate success of their work with own effort and ability instead of merely luck (Aaronsohn 1996).

3.7.1.3 Traditional vs. Modern Teaching in Sierra Leone

When examining education and teaching methods in Sierra Leone it is clear that, as already established, many challenges exist.

Traditional teaching in the western world and traditional teaching in Sierra Leone are two very different things. As a matter of fact, what is described as traditional in the West is more or less what is referred to as "modern" or "present" in Sierra Leone. Colonial Britain introduced an education system and teaching methods of the time which meant suppression of African traditional ways, values, systems, and methods (Wright 1994: 181). The "modern" education system was thus brought in by foreign rulers and was primarily designed to serve and support Britain as colonial power (Banya 1993: 165). It was characterized by a teacher centered approach, focusing on memorization of western curricula and rote learning. The subject-matter as well as the standards of proper conduct was handed down from the past and the attitude of the student was to be one of

receptivity and obedience (Dewey 2007: 18). These methods continue to be the trend of education in Sierra Leone; Banya (1993) describes the present system of education as: *"a bi-product of British imperialism"* (Banya 1993: 164). For that reason, traditional African education is more or less non-existent in Sierra Leone. Traditional education, as seen as traditional western education, is however remaining as the dominant approach to structure and method. While this approach is long left behind by the West, Sierra Leone is still stuck with old-fashioned, uninspiring methods of teaching which have been proven to not generate any meaningful leaning at all; Novak (2010) explains; *"when learning by rote, no effort is made to relate new ideas with relevant existing ideas in cognitive structure"* (Novak 2010: 21-22). Furthermore, no considerations are made for external and internal conditions of the learner which Illeris advocates; cf. figure 4. In particular, I want to highlight external conditions as conditional factors to learning such as society and culture. Without consideration for and inclusion of learners' backgrounds, education is unlikely to produce any meaningful learning or personal development within the learners (Illeris 2006: 28-32). This goes for learning in an African context as well. Therefore, taking the history, culture, and traditional values into account which were abandoned during colonial rule is crucial in creating education of quality. Finding a way to merge traditional Sierra Leonean education and contemporary methods is therefore essential in order to create an improved system of quality education in the country (Kanu 2007).

As previously established, Sierra Leone is extremely dependent of external donors to provide financial aid which additionally comes with requirements and conditions (Government of Sierra Leone 2012). Concurrent with the fact that the country adopted a European structure of education of the time, there has been close to no room to change and evolve the educational system in a way that corresponds with the country's own values and norms.

As part of the EFA initiative the government has tried, though, to implement methods of teaching closer to the student centered approach. UN's child friendly school model (CFS), which is the advocated strategy from UN to ensure quality education as a human right, is widely accepted in district education offices around the country; however, implementation of a student centered approach to teaching is still to be realized as the method often proves inadequate in practice. Some aspects of the approach such as student participation and praise have, however, become widely recognized by educators in sub-Saharan Africa as characteristics of good teaching (Barrett 2007; Mtika & Gates 2010; Vavrus 2009). The challenge here lies in adapting the approach to the context.

It is important that teaching methods and education structure make sense to the people who are to use them in order for any implementation to be successful. Several researchers have examined the need for a system grounded in traditional ways; Wright (1994) advocates for decolonization of the education system. He is concerned about the fact that education is irrelevant to students' actual lived experiences; it excludes culture and language of the people and highlights European culture with Shakespeare as the most significant author in literature curricula (Wright 1994: 181-182). Banya (1993) is likewise concerned about how repercussions of colonial dependency continue to impact the Sierra Leonean education system. In particular, he criticizes the lack of relevance in the content of curricula, antiqued teaching methods, and mechanical routines dominated by rote learning (Banya 1993: 162).

As a solution Kanu (2007) suggests that traditions grounded in the past are reacquired and reinterpreted in education in order to meet the demands of living successfully in a post-colonial and global context (Kanu 2007: 65). Therefore, she suggests not going back in time, but bringing traditions forward to challenge the indifference present in curricula and practices today. She emphasizes the concept of "Sankofa" which means; returning to the past to move forward (Kanu 2007: 68-69). To use what is positive from indigenous knowledge and education in a modern setting as a possible way to generate meaningful learning in young Africans is advocated by several scholars (Kanu 2007: 67; Tedla 1996) and is a way to restore the link between school and community which is desperately needed (Wright 1994: 177). It is important though to not merely see traditions and norms as they once were; it is of course not an option to simply go more than 200 years back in time and conduct education as they did then. Traditions must be rethought in order to fit the present. Kanu exemplifies by stressing the importance of not going back to the student-teacher relationship of obedience and submission as it can result in students lacking the spirit of initiative, creativity, and critical thinking (Kanu 2007: 79).

This theoretical outline of approaches to teaching and learning evidently show how colonization has affected the educational system. Sierra Leone is caught in a position where education has not developed either according to western approaches or according to traditional African approaches. Introducing western ways did not bring modernization and development to the country; it simply brought the indigenous system to a standstill. Today, we clearly see the consequences.

3.8 Conceptual Framework

Before moving on with discussions and analysis it is important to establish the concepts of quality education and development. In the following I discuss the question of what quality is when it comes to basic education in Sierra Leone, followed by a discussion of the concept of development and the relationship between the two.

3.8.1 Defining Quality

It is established that quality in education is crucial in order to maintain a sustainable system that generates meaningful learning in the students. Now the question is; what is quality in basic education in a Sierra Leonean context? In order to answer this question and define the concept of quality in this study, I next consider different scholars as well as national and international stakeholders' characterizations of quality.

The Ministry of Education relates several aspects to the concept of quality in education. A clear definition is not presented in the official material, instead a number of issues related to the improvement of quality are emphasized such as; an increase in the number of teachers, improvement of facilities, a decrease in the number of students in each class, and improvement of the teaching methods and materials (MEST 2007). These are all issues from which challenges outlined in this study are identified. In a 2012 report Ministry of Education equates quality in education with more classrooms, smaller classes, and more spacious environments (MEST 2012: 64). It is clear that the Ministry works with the assumption that numerous aspects influence quality and they are all interdependent. A distinct definition of meaning and outcome has not been formulated though.

UNICEF defines quality education as *"education that works for every child and enables all children to achieve their full potential"* (UNICEF 2012b). This definition concentrates more on the learner and not on the circumstances that lead to this outcome which is what the Ministry of Education focuses on. It is not very tangible though. UNESCO (2005) furthermore states that there are two principles which characterize most attempts to define quality in education; the first identifies cognitive development of learners as the key objective of all education systems. The second emphasizes the role of education in promoting values and attitudes of responsible citizenship (UNESCO 2005: 17). This means that education cannot be characterized as quality education and meaningful learning if it does not generate personal development and realization within the learner. Furthermore, education must contribute to a responsible set of values within the

learner as a member of society. Sauvé et al. (2005) share this definition by arguing that the intrinsic purpose of education is to engage learners in critical, reflective, and metacognitive processes that lead to self-discovery and the co-creation of knowledge (Sauvé et al. 2005). With this definition quality determines to what extent children will benefit from education; the more quality, the larger the benefit. Moreover, this definition allows for an understanding of education as a complex system embedded in a political, cultural, and economic context.

In order to achieve quality in education to a degree that will generate meaningful learning to foster development within the learner, quality education must, according to Colby et al. (2000), include;

- *"Learners who are healthy, well-nourished and ready to participate and learn, and supported in learning by their families and communities;*
- *Environments that are healthy, safe, protective and gender-sensitive, and 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;*
- *Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society"* (Colby et al. 2000: 3)

All of these dimensions are, as are the dimensions in improving quality in education presented by the Ministry of Education, interdependent.

Based on the above mentioned definition UNICEF has created a rights-based, comprehensive educational model that embraces a multi-dimensional concept of quality and addresses the needs a child has as a learner. It is explicitly linked to student centered processes of teaching and learning. This definition is based on a human rights approach to education (Tikly & Barrett 2011: 3-4). Although this approach is respected as a powerful conceptual tool for considering quality in education there are some points of criticisms that need to be considered. Tikly & Barrett (2011) emphasize the problem of constructing schools as set apart from local contexts not considering the lived realities of the learners and educators. While the intention of creating a safe, gender-sensitive

learning environment is good, it must not happen at the expense of inclusion in the socio-cultural context. (Tikly & Barrett 2011: 6). It is important to take factors of historical as well as contemporary issues into consideration in order to understand and recognize the different characteristics children bring when entering the education system (Hickling-Hudson 2007). This is understated in UNICEF's definition.

Taking everything into account, a definition of quality education in the African context of Sierra Leone must embrace both the individual development of the learner as well as the necessary circumstances that must be taken into account in order to achieve meaningful learning. As pointed out by Hickling-Hudson (2007) one of these circumstances is the historical, cultural, and contemporary background of the learner and of society which are important aspects in defining quality education as well. Adding inclusion of historical and cultural perspectives, in order to understand the local, contemporary context, to the five dimensions that form the basis of UNICEF's definition presented above, I consider it to be a comprehensive and satisfactory definition of quality of education. The components of quality education discussed in this chapter form the basis for examining the data in the analysis.

Next, I discuss the concept of development as quality in education is widely accepted as a significant contributor to development (UNICEF 2001; Indabawa & Mpofu 2006: 14; EI 2013). This discussion aims to define development in this study.

3.8.2 Defining Development

In the dictionary development is defined as; *"a process in which someone or something grows or changes and becomes more advanced"* (Cambridge Advanced Learner's Dictionary 2013). This definition is very general while all at once very precise. In the field of international development, growing and becoming more advanced is the criterion for success; however the issue is how to reach growth and advancement and what elements of society that are to be the objects of this growth and advancement. In international development a number of factors such as healthcare, gender equality, education, environment, human rights, and economic growth are taken into consideration when talking about development, making it a complex and multifaceted concept. This is seen in development initiatives by major organizations such as the MDGs by UN, Agenda for Change by EU, and Putting People First by World Bank (UN 2013; EU 2013; World Bank 2013a). These initiatives all emphasize the importance of a broadly-based view of societal issues in order to

obtain development. Two different approaches to development are however highlighted, although they are very closely related; these are; economic development and human development.

In economic development economic growth is the common measure of development aligning economic progress, measured most often in GDP, with development. However, focus on economic policies alone cannot cause development and it is recognized that development is a result of progress in a number of interdependent areas of society. This recognition is seen in e.g. World Bank shifting from a mere focus on economy to a more comprehensive development framework (World Bank 2013a). The focus is nonetheless still economic development, but with the acknowledgement that economic growth is dependent on progress in other sectors such as health and education as well.

Another way to consider development is by looking at it from a social or human perspective with living standards and quality of life as focal points. Amartya Sen is one of the largest contributors to human development theory introducing capabilities[7] as an alternative to economic wealth as a measure of development (Sen 1999). The HDI is based on human development theory and introduced as a way of measuring development by combining indicators of life expectancy, educational attainment, and income (UNDP 2013). The HDI has become an important alternative to the traditional measure of development; GDP. The Human Development Report (HDR) in which the HDI is annually published is though criticized for having become stagnant and repeating the same rhetoric without increasing the applicability of the HDI; however, it has broadened the discussion about evaluation of development (Sagar & Najam 1998: 249).

Taking everything into account development can only be successful if there is invested in both people, institutions, and infrastructure causing economic as well as social development. Development is thus considered to be a socioeconomic concept of interrelated factors. In a Sierra Leonean context this means that the road to development is particularly difficult as all these factors are associated with problems and underdevelopment.

3.8.3 Discussion of the Relationship between Quality and Development

In this chapter I discuss the relationship between quality of education and development. I present different views in order to demonstrate the role of quality in education in a development process.

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[7] Capabilities are what people are capable of being or doing (Sen 1999). Capabilities are the combinations of "functionings" which can be everything from being well-nourished and well-educated to having self-respect. Individuals have to realize different "functionings" that they have reason to value (Walker 2006).

One of the dominant approaches to understanding education quality is based on human capital theory which emphasizes economic growth as a measurement of development (Tikly & Barrett 2011: 4). Work by Mincer in the 1970s argued that schooling was what primarily developed general skills in individuals (Mincer 1974). This was widely accepted and resulted in measuring human capital by the amount of schooling completed by individuals which was subsequently adopted by growth modeling (Hanushek 2013: 2). This was though later challenged as the increase in quantitative factors such as enrollment rates did not show any significant economic growth; as Hanushek (2011) puts it: *"countries in the developing world were led to believe that education would put them on the path to becoming modern economies"* (Hanushek 2011: 33). In Sierra Leone this resulted in an EFA Action Plan and several other policies which initially increased school enrollment significantly. Hanushek though continues by stating that *"many countries did not reap the promised rewards of economic success [which] led to skepticism about the role of human capital development"* (Hanushek 2011: 33). The initial focus on quantity of education in the human capital approach as a way to increase economic development turned out to be insufficient. As an example, Vegas and Petrow (2008) argue that; expansion of education in Latin America has not caused any notably reduction of income inequality, underdevelopment, or poverty, probably because of the poor quality of education (Vegas & Petrow 2008: xxii). Hannum and Buchmann (2005) conclude in their study of empirical evidence on five related assumptions about the consequences of educational expansion for socioeconomic development that considerable controversy surrounds the effects of educational expansion on national economic growth (Hannum & Buchmann 2005: 347). Alternatively, several scholars emphasize the importance of quality in education as a determinant for economic growth; Wang and Wong (2011) conclude based on their study of the connection between foreign direct investment, economic growth, and education, that quality education imposes a significant impact on economic growth and that less developed countries can profit by improving the quality of education (Wang & Wong 2011: 105). Hanushek and Wössmann (2007) conclude that student achievement and cognitive skills as products of quality education have a much greater effect on economic growth than quantitative measures of education (Hanushek & Wössmann 2007).

As we can see, there is proven to be a strong connection between quality education and development from a human capital perspective based on the claim that improving quality education leads to economic growth. So, the human capital approach has changed from emphasizing

quantitative measures of education to emphasizing quality as the driver for development; development being identified as economic development measured by economic growth.

Another way to examine the relationship between education quality and development is by defining development, not as economic growth, but as human development. Tikly & Barrett (2011) mention rights-based approaches as alternatives to the human capital approach. Rights-based approaches emphasize quality education as a human right and see human development as a concept of multiple dimensions. Human rights are thus at the centre of this approach as they are considered fundamental, indivisible, and central to the development process (Tikly & Barrett 2011: 5). The human rights framework to development operates with national governments as the principal duty bearers giving the state the responsibility of guaranteeing basic rights (Banik 2010: 44; Tikly & Barrett 2011: 4). This, in theory, protects people from power exertion and consequently facilitates development as a matter of obligations. A human rights approach to development in general and education in particular requires strong capacity of the state (Tikly & Barrett 2011: 5). The way a rights-based approach has been introduced to education in Sierra Leone is through international agencies and organizations, with UN being the largest, advocating this discourse on state level. The framework is widely accepted in Sierra Leonean schools, though the question is if it suffers from the lack of link to national history and culture as discussed in chapter 3.8.1. The argument of rights-based approach is that focus on human rights in education ensures quality and learning which consolidate development.

By examining different views on the relationship between quality in education and development it is obvious that it is as much a question of definition of various terms as it is different arguments of the relationship between the two terms. As we can see, the meaning of development is increasingly regarded as more than economic development and economic growth and the meaning of education in the development debate is increasingly regarded as quality instead of mere quantity. The overall argument, though, is that quality education has an effect on development; whether it is economic or human development, however defining the relationship between the two terms is not easy when the meaning of the terms themselves are shifting.

3.9 Flow of Argument

This chapter ends the methodical part of the thesis. To this point, I have outlined the problem and identified the challenges that Sierra Leone faces regarding quality in education. I have presented background knowledge of the case and introduced the methodological approach of the study

including design, approach, strategy, and limitations. Last I have outlined the theoretical and conceptual frame for the following discussions and analysis. The structure of the following is illustrated in figure 5.

Figure 5: Structure of analysis
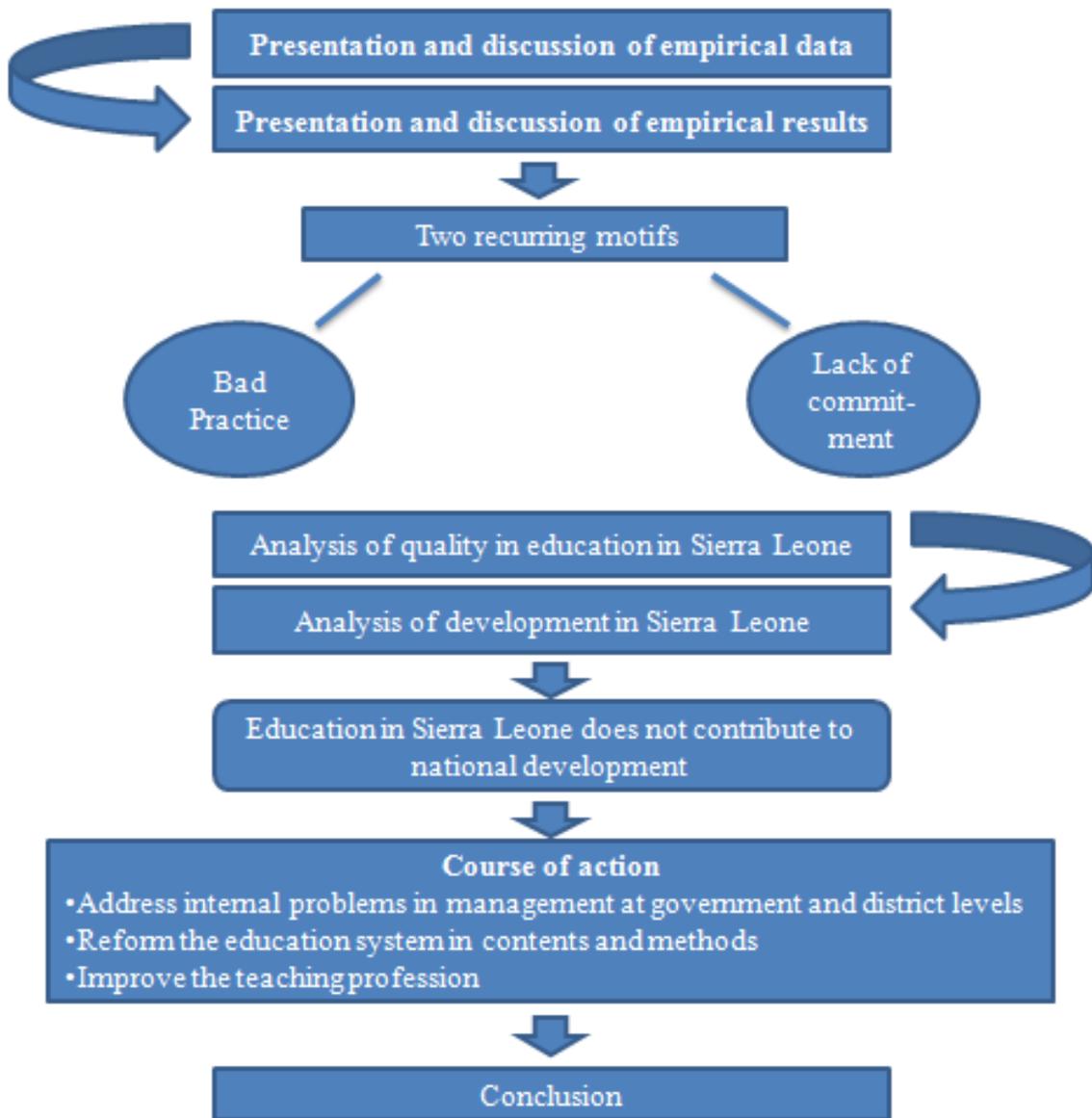
Source: Author's own figure

Introduction

- Significance of the study
- Aim of the research
- Problem formulation
- Historical and educational backgrounds

Methodology

- Ontological considerations
- Epistemological considerations

Method

- Research design, approach, and strategy
- Empirical framework
- Theoretical framework
- Conceptual framework

Discussion

- Presentation and discussion of empirical data
- Discussion of empirical results

Analysis

- Two recurring motifs
- Quality
- Development

Course of action

- Suggestions for solutions

Conclusion

4.0 Discussion of Empirical Data

In this chapter I present and discuss the empirical data of this study. The data are found in annex I.

The government acknowledges the importance of education in the country's recovery process; the two most significant evidences of this are the increasing number of primary schools and the growing enrollment rates. Although initiatives have been taken in the post-war years the education sector still have numerous challenges as described in chapter 1.5.2. These challenges contain lack of quality education including human, material, and financial resources. This shows that the education sector, despite the immediate attention after the war, has been given less attention over the years. In the following I discuss the identified challenges to quality education on the basis of the empirical findings.

4.1 Teaching Staff

Teachers are the center of the entire education system; without teachers there would be no such thing as education. That said; the quality of teachers has to be at an adequate level for the education to be substantial and for meaningful learning and knowledge to occur.

From several observations it is clear that there is a wide-ranging lack of teachers. The data furthermore suggest that the qualifications of many teachers in Tonkolili district and in Sierra Leone in general are very low. The Ministry of Education confirms the lack of teachers; especially qualified teachers with training or a degree (MEST 2007: 24). The problem is largest at primary level in the rural areas, but schools in the town of Magburaka experience the problem as well. Table 1 presents data collected at the 12 primary schools which were also the basis for the REACT evaluation study. The schools are listed by number and name; number 1 to 6 are collaboration schools, number 7 to 10 are comparison schools, and number 11 and 12 are well-funded schools.

Table 1: Numbers of teachers and classes at 12 primary schools

Schools	Teachers present	Classes present	Teachers in total	Classes in total	Students in total
1. Malongba	2	6	4	6	187
2. Maraka	2	5	3	6	154
3. Masanga	2	6	6	6	176
4. Matham	2	4	4	6	124
5. Mathora	1	3	3	3	68
6. Ro-Mangoro	2	6	5	6	186
7. Mabom	3	6	6	6	147
8. Magbas	1	6	2	6	106
9. Magbom	2	6	2	6	135
10. Mamankemoi	1	6	1	6	132
11. Missionary Church Association (MCA) primary school	4	6	6	6	215
12. Tonkolili District Council (TDC) primary school	6	6	6	6	183

Source: Research data from observations 2012

From table 1 it is clear that out of the 12 schools studied only one had enough teachers for all classes at the same time on the day of the observation. The problem in the remaining 11 schools was evident as teachers were teaching several classes simultaneously, either in the same room or in different rooms where the teacher moved from room to room and left the children unsupervised for long periods of time. Furthermore, it is apparent from table 1 that only five of the 12 schools had enough teachers in total to teach all classes. It is clear that it is the well-funded schools that have the most teachers, and the poorest schools that lack.

The problem of lack of teachers is moreover reflected in the teacher-student ratios for the 12 schools that show that TDC primary school (a well-funded school) had a ratio at the day of the observation at 1:31 and Mamankemoi (a comparison school) had a ratio at 1:132. Assuming that a low teacher-student ratio means more attention to each student (Nishimuko 2007: 24) it is clear that the students at poor schools are receiving significantly less quality education. The average teacher-student ratio for the 12 schools is however optimistic when using the number of teachers employed

in total which is 1:38; this ratio is considerably lower than the country average of 1:66. However, using the numbers of teachers present on the day of observation which, the data taken into account, perhaps is a more accurate number on a daily basis, the ratio becomes 1:65. These data add to the fact that teachers are highly outnumbered.

The alarming number of only one school having enough teachers to teach all classes at the day of the observation considering the fact that five schools actually have enough teachers employed shows that there could be a tendency of teachers not showing up for work. One teacher explains:

"This is not unusual. The school does not have enough teachers to teach all the classes at the same time, and most of the teachers are only here part time, so they can keep other jobs on the side since the pay for being a teacher is not sufficient to provide for their families" (Male teacher at primary school in Tonkolili district).

This statement shows the punctuality of teachers as a typical problem with insufficient salary as the main reason.

The first major challenge is therefore that there are simply not enough teachers and the ones that are employed are not 100 percent committed to the job because of other responsibilities. The next challenge is the fact that the teachers employed rarely have training or a degree, especially the ones employed in the rural areas.

It was not possible to learn how many of the teachers in the study referred to in table 1 that had adequate training or education, but data from research by the Sierra Leonean NGO; Campaign for Good Governance (CGG) show that in four out of six districts studied in 2006 the percentage of unqualified teachers exceeds that of the qualified; cf. table 2.

Table 2: Percentages of qualified and unqualified teachers in six districts

Districts	Qualified Teachers	Unqualified Teachers	Total
Bonthe	39 %	61 %	100 %
Moyamba	59 %	41 %	100 %
Kenema	67 %	33 %	100 %
Kailahun	29 %	71 %	100 %
Port Loko	47 %	53 %	100 %
Bombali	46 %	54 %	100 %

A qualified teacher was defined in the CGG research as an individual that had successfully completed a course in a teacher training institute and awarded one or more of the following; Teachers Certificate (TC), Higher Teachers Certificate (HTC), Bachelor of Education (B.Ed.), Bachelor of Science (B.Sc.), and other Diplomas.

Source: CGG 2006

It is clear from these data that teachers without qualifications are a tremendous challenge. Obviously, these data do not show the numbers from the entire country; however they are a good indicator of a general tendency.

These data as well as the findings of this study clearly demonstrate the lack of teachers in general and in particular qualified teachers. The reasons for this are several. According to the EFA Action Plan the government of Sierra Leone is strongly committed to meet the challenge of unqualified teachers in the country. However, an employee at the Ministry of Education says:

"We know there are not enough teachers, especially outside of Freetown. The problem is big and we are working on it, but the responsibility of hiring and paying teachers is with the district councils" (Male employee at MEST 2012).

This statement suggests an attitude of shifting the responsibility of the shortage of qualified teachers onto other levels in the system which reveals that the commitment to meeting the challenges might not be as large as proclaimed in the Action Plan. For that reason, and with the data of this study to back it, there seems to be a tendency of underappreciating the teaching profession in terms of both attention and financial means. This could be the reason for the fact that numerous teachers are underpaid and several unqualified teachers work for nothing at all or are paid in goods by the community. This low or no salary leads to low commitment from the teachers; firstly, because the

motivation drops when their work is not adequately rewarded; and secondly and most importantly, the teachers have to find other jobs for them to be able to provide for their families (Nishimuko 2007: 25). This affects teachers' ability to be punctual and attend their teaching job which influences the quality of the teaching and with that the outcome of the students' learning.

So, the challenges concerning the teachers are closely related which means that the solutions are as well. By increasing the number of qualified teachers along with the salary, the teaching profession would become more attractive and it would be easier for schools in rural areas to attract teachers. Teachers would thus be more motivated and committed.

This scenario is however not realized overnight which is why alternative measures have to be taken in order to improve quality in education. One way to do this is by offering teacher training and skill development courses to the teachers in order for them to improve their competences. An attempt to do this was observed at MECC during the summer of 2012 where computer courses were offered free of charge to teachers in the community in the summer break. It was however difficult for the participants to use the newly acquired skills in their everyday work, as computers and electricity are not accessible in the schools where they are employed. Nevertheless, follow-up conversations with three of the course participants revealed joy from having taken part in the course. One of the teachers stated with regret that he was not able to teach his students what he had learned, however, he had still experienced personal development from learning something new:

"I have grown as a teacher because I see some things differently now than I did before. I encourage my students to always be willing to learn new things; whether it is a new subject, computers, or ways of living" (Male teacher at Pampana junior secondary school in Tonkolili district).

This statement clearly demonstrates that even a computer course which had no actual use in everyday work has the power to motivate which confirms the argument that quality in education is contingent on personal development of the learner. The experience shows that teachers are prepared to further educate themselves and widen their frame of reference if they get the opportunity; however offers of skills improvement must be free or very low cost and be geographically close to the participants; otherwise they are not able to attend.

Another example of teachers' willingness to improve their skills is found at a meeting I had with the chairman of the Head Teachers' Council in Magburaka, Mr. Sankoh. This meeting was about

offering computer courses to head teachers of primary schools in the district in order for them to use the skill when exam results are to be reported to the West African Examinations Council (WAEC) at the end of the school year. This must be done electronically due to the fact that WAEC is an international institution. With reservations of the possibility of exaggeration from Mr. Sankoh's part, he stated that the general motivation among teachers for improving the school system exists in the form of them wanting to become better teachers and learn new methods. The obstacle is, as mentioned, that offers about upgrading skills are close to non-existent in Tonkolili district.

A picture emerges that the future of the education system relies more on structural changes than on attitudinal changes. The data suggest that there is will and determination on the part of the teachers if only they have the right circumstances. It is, however, a difficult and time consuming task to establish offers of further studies for teachers around the country; nevertheless, the motivation to improve exists.

4.2 Teaching Materials

In this chapter I discuss the role of teaching materials in quality education based on the empirical findings. As stated by the Ministry of Education quality learning materials in sufficient quantity are necessary in order to have quality education (MEST 2007: 23).

The data in table 3 show that this is probably far into the future.

Table 3: Percentage of students with books
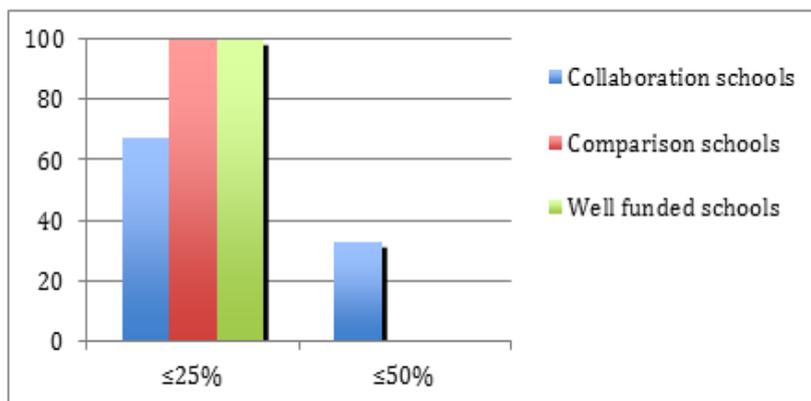
Source: Project REACT 2012

In 10 out of 12 observed primary schools in Tonkolili district the percentage of students with books was 25 or less, and no schools had a percentage of students with books over 50 percent. Considering that the study includes both very poor schools in rural areas and better equipped

schools in the town of Magburaka the problem seems to be widespread and not specific to particular types of schools or particular areas. This means that the Ministry of Education has much work to do if the goal of 1:1 student-book ratio is to be realized.

The large percentage of students without books could be the result of the fast expanding enrollment rates since the abolition of tuition fees and the end of the civil war in the beginning of the 2000s. The Ministry of Education is the main distributor of government approved books, which are preferred, and it has been difficult to keep up with the growing number of students around the country. This is, nevertheless, a possible explanation not an excuse. Another explanation for the large percentage of students without books concerns the stealing and reselling of school materials which means that fewer books actually reach the students in the schools (Jabbi 2007: 12; annex I: 93).

Another problem regarding the low percentage of students with books is the problem of the students not having access to them. Several schools I observed in the study had books and learning materials, but did not allow the students to use them as the concern was that they would steel them or break them. I asked a head teacher at one school about school materials as I observed that the students in the classrooms did not have books, and he showed me another room where many books where piled up on the floor and in an old cabinet (annex I: 94). This way only the teacher has a copy of the book which makes the students 100 percent dependent on the teacher formulating and communicating everything in the book without them having a chance to read for themselves or learn at their own pace. This in itself is an obstacle to quality and meaningful learning.

The quality of the books is furthermore an issue as the content was observed to be discouraging creativeness and restraining a student centered approach to teaching with no student directed questions to elaborate or make the children explore the content further. The books for the youngest students in class one and two resembled picture books with close to no challenges for the students.

In regard to teaching materials, clearly there are challenges regarding both quantity and quality. The fact that content is irrelevant and distant from real experiences makes it difficult for students to identify with it and ultimately they lack commitment to their education as they do not see the purpose of what they learn and read about in books. The mistrust that school management shows the students by not giving them books furthermore contributes to a feeling of discouragement.

Next, I continue to the presentation and discussion of findings about teaching methods.

4.3 Teaching Methods

Old fashioned and unimaginative teaching methods grounded in structures from British colonial rule are other contributors to education of poor quality. Empirical data concerning this issue are examined next.

Tables 4, 5, and 6 illustrate teachers' use of methods, use of class time, and the extent of input-based teaching. It is clear that all schools observed in the study are characterized by lack of creativity in the teaching methods, and the schools demonstrating an attempt are obviously the well-funded ones. As table 4 shows the dominating teaching method in all observed schools is clearly the auditory method. Other teaching methods are applied, but not to the large extent as the auditory. This means that students use most of their time in school listening to the teacher.

It is clear that as the schools rely mostly on auditory teaching methods, teacher monologue becomes the main practice in the classroom, as illustrated in table 5. This results in a method that does not revolve around the student, but instead around the teacher.

Table 4: Teachers' use of different teaching methods
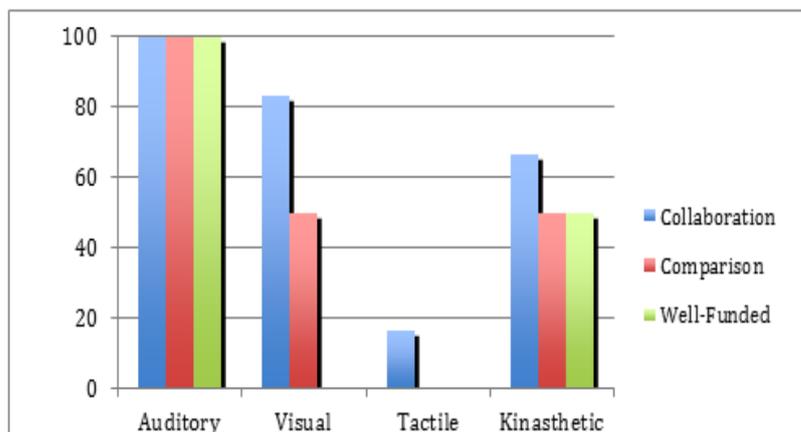
Source: Project REACT 2012

Table 5: Use of class time
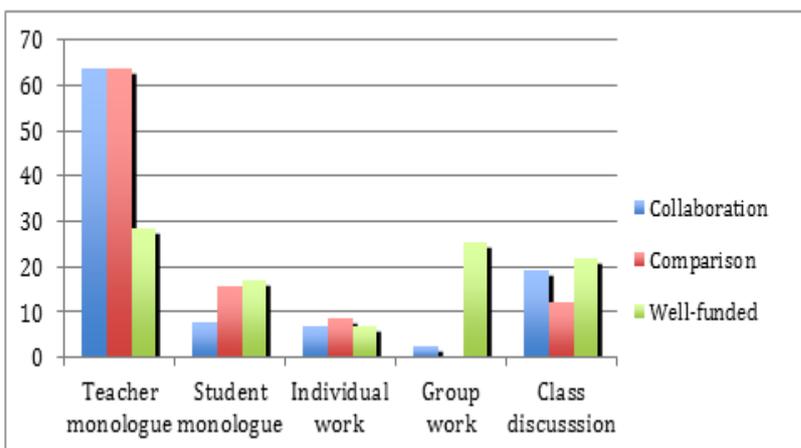
Source: Project REACT 2012

*Table 6: Extent of input-based teaching*
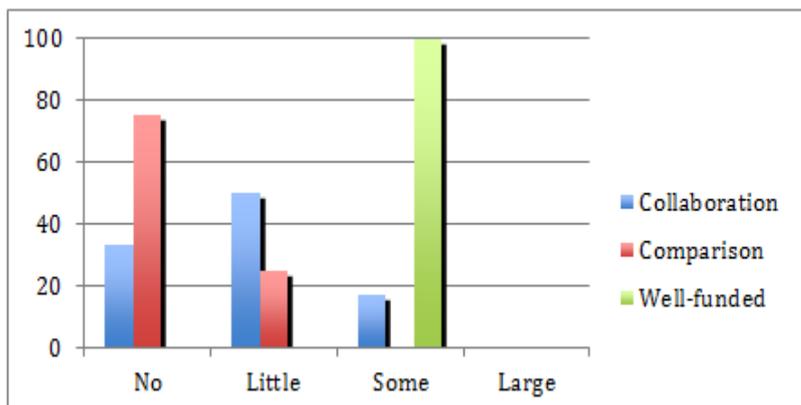
Source: Project REACT 2012

The consequence of the use of these teaching methods is that students do not go through the individual development process which defines quality education and the outcome of the teaching and often the entire education is very poor. This is primarily seen in poor exam results and low completion rates; in 2011 the completion rate at primary level was 76 percent and at junior secondary level only 49 percent (MEST 2012: 59). This proves that the academic level of the students is considerably low. When the students do not learn what they are supposed to academically they are unable to achieve their full potential and the personal development and self-knowledge, which are other outcomes of quality education, fail to happen. At worst the consequence can be poorly educated, uninspired young people with no interest in the future of themselves or of society.

To return to the data, table 7 furthermore shows that teachers in the poorest schools of the study do not have or do not use lesson plans in contrast to teachers in well-funded schools.

Table 7: Percentage of teachers that used a lesson plan
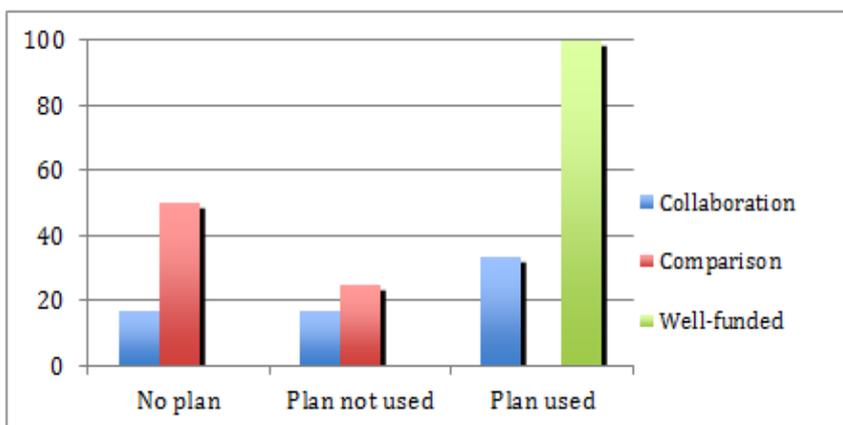
Source: Project REACT 2012

This contributes to the weak teaching methods that ultimately cause poor results both academically and personally since the teachers simply teach from memory without a plan.

These methods of teaching of repetition and teacher monologue without student involvement are some of the main reasons why the level of quality in education is so low. Using iteration to such a great extent show that; 1) the teachers do not know how to teach in any other way, 2) the schools do not have resources to hire teachers with a qualified education, and 3) the education system is caught in an untenable and unsustainable situation as the learning culture has not changed much and development in the field has been minimal.

4.3.1 Attitude towards Education

Possible evidence, that the teaching methods and the poor quality education cause students to be uninterested and uninspired, is the attitude towards education I observed in many older children and young adults during the study. The data show that there is a tendency of not taking school and education seriously (annex 1: 99) which is, however, not uncommon for many students around the world. However, when the exam results are taken into consideration the difference between students in e.g. Denmark and in Sierra Leone becomes clear. Most Danish students move on in the education system from basic level (9 years) and obtain some kind of degree despite the fact that they at some points in their education were uninspired. This is not the case for many Sierra Leonean children, which is why the attitude towards education is more than simply the indifference of young students; it is a symptom of a system and teaching methods that do not provide them with the necessary tools for personal and academic progress and development.

This attitude was observed at several occasions, but the tendency was described with most concern by the librarian Princess Sesay:

"I often see children hanging around in the streets, listening to music or talking to their friends when they are supposed to be in school. If they are not going to school because they have to help out at home, maybe I would understand. But I talk to many children because of my work and my interest in the subject, and I feel that many young people just do not care and do not have any sense of reality when it comes to their future" (Princess Sesay, librarian at Magburaka town library).

Princess' level of frustration made me consider her motive. Considering her age; she is 33, she was a teenager during the civil war. This could be significant in the way that she did not herself have the opportunities for education that young people have today in Sierra Leone, and she therefore perhaps feels that they are wasting precious time and priceless opportunity. She explained that she has two sons of her own whom she encourages every day to do their best in school. Her motive as a mother is a very strong motive and her urge to help children is strongly connected to her role as a mother. It is obvious in everything she does that she is very passionate about education as she sees it as the only way for children to learn, to stay out of any kind of trouble, and to become informed and committed citizens of the community. Returning to the aspect of quality, of course it is best to stay in school. However, the low level of quality in the teaching makes it difficult for students; especially older children and young teenagers, to see what good education does for them as it does not motivate or equip them with the necessary skills for the future.

4.4 Financial Issues

The final issue of concern displayed in the empirical findings is the challenge of financial issues which I discuss next.

Despite the introduction of free primary education in 2000, unofficial fees are nevertheless common in the Sierra Leonean education system. This issue is of great concern for many families and a number of parents interviewed expressed much frustration in the matter:

"This new system is no better than the old one where we were required to pay tuition fees for the children. The fees are still there" (Male, father of four school aged children).

This issue can eventually result in parents removing their children from school or parents not sending them to school at all due to unofficial charges they cannot afford.

Teachers at several schools confirmed the fact that the school charges fees for books and enrollment. Data from research done by CGG (2006) presented in table 8 furthermore confirms this.

Table 8: Percentages of schools in six districts that requested school charges from students in the 2004/2005 academic year

Districts	Schools that Requested Charges from students	Schools that Did Not Request Charges from students	Total
Bonthe	73 %	27 %	100 %
Moyamba	78 %	22 %	100 %
Kenema	49 %	51 %	100 %
Kailahun	64 %	36 %	100 %
Port Loko	57 %	43 %	100 %
Bombali	62 %	38 %	100 %

Source: CGG 2006

The numbers in table 8 clearly demonstrate the overwhelming tendency of charging extra unofficial fees for education that is supposed to be free of charge which can cause the EFA initiative to fail due to the simple fact that parents cannot afford to pay these extra fees.

Findings from CGG additionally reveal that many school authorities deliberately inflate school registers in order to receive more money from the state resulting in what is called "ghost teachers and children" practice in schools (CGG 2006: 7). This means that there are teachers on the payroll

that do not exist and students in the student registration lists that do not exist either. The plausible conclusion of these data is that school management and authorities put the extra money aside for themselves as the most common complain I heard from school management members during the study was that they never received enough money to hire teachers or maintain an adequate level of materials. This is another serious challenge to obtaining the goal of free basic education for all children as money never reaches the intended purposes and the cost of providing a free education system becomes even larger. The problem with ghost teachers questions the number of registered teachers employed at the schools. In reality the actual number could be significantly lower than the number school managements inform to the Ministry of Education which makes the teacher-student ratio even worse than assumed.

Another financial challenge for parents of school aged children is the cost of uniforms, bags and other mandatory equipment such as pencils, booklets, and paper which according to interviewed parents have increased significantly in price over the last couple of years. These expenses are a financial burden for many poor families, especially the ones with many children, and to add unofficial fees from the schools for books, examinations, sports, and report cards could be the tipping point for many families.

Another significant financial problem was described by Deputy Director of Education; Mr. Bah:

"We have a big problem with teachers that provide private tutoring. It takes their time and effort away from their actual teaching, and it forces families to pay extra for lessons that children should just be receiving in school. The teachers do it to earn more money, but it is a financial burden for many families" (Mr. Bah, Deputy Director of Education, Tonkolili district).

This statement confirms the fact that underpayment of teachers drives them to intentionally decrease the level of the actual teaching in order to force parents to pay for private tutoring adding to the financial burden of families.

It is apparent that several issues are working against the goal of free basic education for all children complicating and prolonging the process; meanwhile causing strains for parents and poor education for the students. These problems are concurrent to several other financial issues that the government has to manage such as meeting the costs of the construction and reconstruction of schools after the civil war and meeting the costs of the fast expanding education system which all add to a critical and fragile financial situation in the education sector.

## 4.5 Discussion of Empirical Results

So far, it is clear that a number of challenges interfere with the process of improving quality in basic education in Sierra Leone. The under appreciation of the teaching profession results in teachers being underpaid and under qualified which affect their motivation and commitment to their jobs negatively. This causes a lack of teachers, especially teachers with sufficient qualifications. Another factor contributing to this threat to quality education is the lack of books available to students. There is a large problem with the quantity and quality of school materials partly due to the fast expanding enrollment rates. The problem is worsened by school management keeping books and materials from students or selling them on the black market. The quality of the materials is an issue of concern as it does not encourage student development and independence.

When books and teachers are insufficient the methods of teaching are most likely to be as well. This is furthermore proved by the data. It is clear that the methods do not enhance quality in any way in the observed schools as the dominating practices are teacher monologue and auditory methods. Most teachers were confirmed to have no lesson plans which again contribute to a learning environment characterized by uncertainty and low quality. This means that students are unable to achieve their full potentials both academically and personally which contributes to the feeling in the students that there is not much to hope for in the future. This is seen in many young people having an attitude of indifference and being uninspired when it comes to education and learning.

The final conclusion from the findings is that problems associated with finances highly influence quality in the system. It is documented that unofficial school fees is a widespread phenomenon. Together with an increase in the prices of uniforms, books, bags, and other necessities for school the parents of school aged children have difficulties paying for education making the risk of them taking their children out of school very real, even though basic education is supposed to be free for all.

Figure 6a: Hierarchical structure of the system (inefficiency)

- Managerial inefficiency • **State**
- Internal problems • **School**
- Poor student outcomes • **People**

Source: Author's own figure

When examining the findings concerning the different challenges I see a pattern where problems are created in or belong to authoritative bodies of the system, but the effects
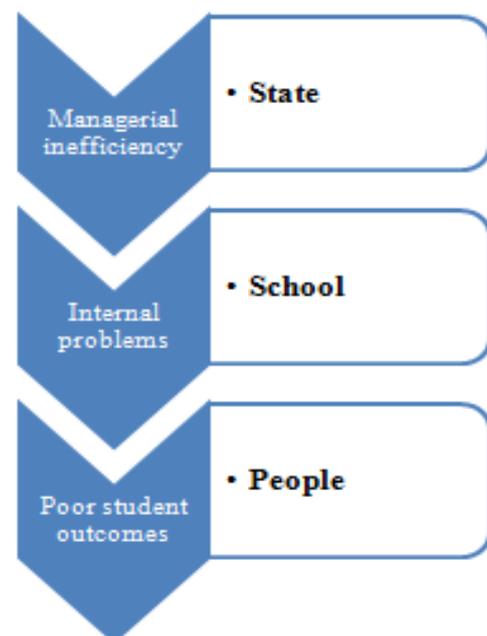
are primarily seen in the micro level of society where they make most damage. Figure 6a illustrates this hierarchical structure of the system and the problems within it. In order to fully grasp the extent of the observed problems the next paragraphs examine the challenges from three different societal perspectives; the state, the school, and the people.

4.5.1 State (Macro)

The state represents the government with the Ministry of Education as the decision-making agency and district education councils as the acting agencies. When looking at education from this point of view it is already established that several initiatives in the form of policies, reforms, acts, and action plans have been taken; the most prominent being the EFA Action Plan. Despite these initiatives it is furthermore established that severe challenges need to be met in order to establish a system that provides students with quality education and meaningful, valuable learning. Now, it is interesting to examine the reasons why there has not been much action in the area of quality. In quantitative measures results are seen as enrollment and numbers of schools have increased (MEST 2012), but the data reveal that qualitative results are yet to be realized. Based on the findings I previously suggested that the teaching profession is underappreciated by the state in terms of both attention and finances, but it is difficult to say what causes this to happen. The question is if it is an expression of plain indifference on the part of the Ministry or if it indicates more profound problems such as insufficient knowledge on how to turn theory into practice and corruption and dishonesty in the system.

From a rights-based perspective it is the responsibility of the state to establish a system of quality education that equips students with the necessary tools to grow both academically and personally. This is, however, an immense task, due to the many different facets of the problem. The ones examined in this study are only part of the task. In 2008 all control and supervision of primary and secondary schools, including functions such as the recruitment and payment of teachers, the provision of textbooks and teaching materials, and the rehabilitation and construction of schools was turned over to the district education councils, giving them much influence on education in the country (MEST 2007: 11). Despite this decentralization strategy the central government is still the highest institution of education which means that even though much responsibility is at district level, decisions about funds and structural changes are made above the district councils. Therefore, when district councils do not receive necessary means to manage the task due to internal problems, it can be interpreted as a way to push the responsibility onto the next level in the structure. It is

evident from the empirical discussion above that there are serious challenges in urgent need to be managed. These are all the responsibility of the government or district councils; however no matter how urgent, the reasons for hitherto insufficiency in the area of quality need to be addressed first in order to supply sustainable solutions. Therefore, the role of the state is to make sure that the basic conditions for a better system are present by addressing any internal structural, managerial, and systemic challenges that hinder the process of improving quality in education.

4.5.2 School (Meso)

The school represents school management and education staff including teachers and librarians. Managerial inefficiency is unfortunately a problem at meso level as well. School management reports to the district education office making it the nearest link to officials. For that reason it is crucial that information from school management is correct. The data show that this is not the case, though. There is evidence of inflation of school registers making it seem as though there are more students and teachers in the schools than is the actual case. This is done in order to receive more money, which could go to the school, but more likely goes into the private pockets of school management. School management is moreover responsible for equipping the students with books provided by the education office, however often the students do not have access to the books because they are not allowed or because the books have been sold. The internal managerial issues of bad practice, egoism, and corruption are thus obvious at this level in the system as well. The challenge is therefore to eliminate these internal problems at all levels in the system. In the long run no one benefits from this kind of behavior as it undermines the entire system making quality education an impossible outcome.

One group that experiences the consequences of the systemic problems is the teachers. Based on the findings of the study it is concluded that teachers are suffering under the lack of commitment from the state level that the teaching profession experiences. This means that education staff has not received adequate education or training to manage quality education for students, both in terms of general training and in terms of the opportunity of further studies. The data show that teachers are motivated to improve their skills if only they have the opportunity to do so. This motivation can however be questioned based on the fact that most teachers are underpaid. Adequate salary is, besides from the obvious foundation of living, a way to recognize a job well done. When teachers have to take second or third jobs in order to support their families, they do not feel appreciated for what they do. Therefore it is clear that teacher commitment and motivation decrease as they are not

adequately rewarded for their work. Furthermore, the potential commitment to support offers of skill development and further studies are closely connected to the aspect of pay as well. If teachers are not paid enough to provide for their families or if the in house training does not equal a raise in salary the commitment to such an initiative may not be as vast as first expressed. The teaching profession is therefore subject to the consequences of bad management in the system while at the same time contributing to the inefficient system by e.g. deliberately decreasing the value of teaching to force students into paying for private tutoring (annex 1: 100).

4.5.3 People (Micro)

At the bottom of the hierarchy we see the students and their families who are the ones that truly suffer from a system of inefficiency and inadequacy. The most disturbing facts about students in this study are how many students receive unsatisfactory results at the final exams and the attitude of indifference towards education. As previously explained, this is the outcome of deficient and inadequate teaching methods, teaching materials, and teaching staff and a general system that is incapable of solving the problems.

It is crucial for the future of the students that neither they nor their parents lose faith in the education system. If people lose faith they see no reason for going to school. The combination of the financial burden and irrelevant content in education can eventually be what drives parents to drop education for their children. In Sierra Leone there is a strong culture of every member of the family contributing to the household, by e.g. earning money, doing laundry, selling food and goods at the market, or taking care of smaller siblings, animals, and crops. This culture is well integrated into the primary education system where all classes end between 1 and 2 pm in order for the children to have time to help out at home in the afternoon. This structure works fine, as long as there is acceptance from home that the children are at school in the morning. Since an encouraging home environment with acceptance and approval and room to do homework is crucial to the learning outcome of education a situation where there is no emotional support from home can be paramount in the child's academic and personal development.

The parents, however, do not have the sole responsibility in such a situation, as an improved education system with teaching methods and content which enhance quality and meaningful learning would prevent the situation to occur in the first place as parents are able to see the effects that education has on their children.

An example of how encouraging teaching gives the students a sense of purpose, I observed in Alysious Fornah, teacher at Magburaka Secondary School for Boys (MSSB) and MECC; he states:

"I love teaching. It is important for me that the students learn. I always try to encourage them to know more and strive to be the best. I hope I can contribute to a better future for this country by being a good teacher" (Alysious Fornah, teacher at MECC and MSSB).

His approach to teaching is using alternative methods by involving the students which seem to have a positive effect; feedback from one of his students:

"When he teaches I understand. He never yells or talks down to people if they do not know; instead he helps them to understand. He is a very good teacher" (Student at MECC).

This demonstrates that focus on the students and methods characterized by input-based learning, differentiation, acknowledgement of the students, and student centered learning create a better learning environment which inspires students to expand their knowledge. On the other hand, when this is not the case, the students become uninspired and uninterested as seen earlier thus improving the methods and skills of the teachers are essential in order to empower students through education and give them a positive view of the future.

From this brief discussion of the empirical results from the perspectives of three levels in the system a picture emerges of a system characterized by an attitude of egoism and lack of consideration for the future and the common good. Managerial inefficiency, lack of information and communication, and lack of general organization and monitoring caused by corruption and unqualified staff channel through the entire system resulting in poor exam results, high dropout rates, low completion rates, and students that do know not what use their education has. Sierra Leone then ends up with young people without qualifications and without a drive to make a difference. Figure 7a shows how problems cause the entire system to undermine itself as no one in the next generation has the competences to improve society at state level. So even though the system is constructed as a

Figure 7a: Interdependency of the system (inefficiency)
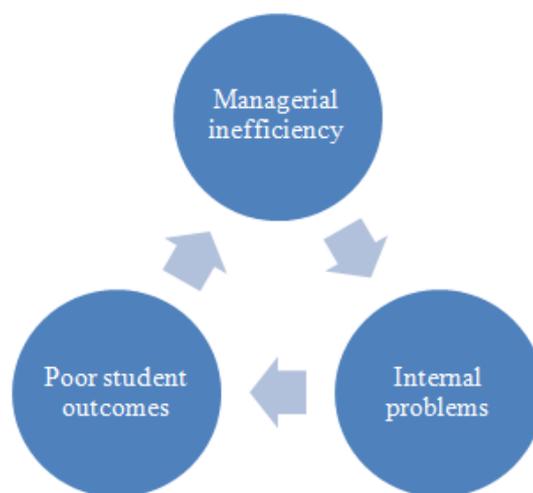
Source: Author's own figure

hierarchical structure with problems at the top channeling down the structure to eventually show at the bottom, the poor outcomes contribute to the problems at the top as the system is interdependent.

Introduction	• Significance of the study • Aim of the research • Problem formulation • Historical and educational backgrounds
Methodology	• Ontological considerations • Epistemological considerations
Method	• Research design, approach, and strategy • Empirical framework • Theoretical framework • Conceptual framework
Discussion	• Presentation and discussion of empirical data • Discussion of empirical results
Analysis	• Two recurring motifs • Quality • Development
Course of action	• Suggestions for solutions
Conclusion	

5.0 ANALYSIS

In order to establish a course of action, explanations to the problems must be identified. I first present two main areas of concern within the Sierra Leonean education system which have emerged from the examination and discussion of empirical data; two recurring motifs. Second, I analyze the data taking theoretical and definitional aspects into consideration, and finally I propose recommendations on how to improve quality of education to an extent that will make it a contributing factor to development in the country.

5.1 Two Recurring Motifs

Many aspects of the education system have emerged during the study. From the discussion above I identify two motifs that appear to be the main areas in which the solutions to the problems can be found. These are; bad practice and lack of commitment and are presented in turn in the following.

5.1.1 Bad Practice

During the study it became clear that bad practice or even sometimes malpractice in the governance, planning, and management of education is a comprehensive problem. Government officials as well as school managements have an attitude of dealing with education in a way that show a tendency of thinking mostly about problems that concern themselves. On state level I observed an attitude of indifference towards the problems of education and towards the teaching profession, and the lack of any form of initiative in turning words into action. This attitude influences the teachers and their commitment to their profession. This was very clear in the way that underpayment and delayed salary affected reliability, loyalty, and dedication in the teachers. From a school management perspective; keeping materials from students, reselling materials, charging unofficial school fees, and inflating school registers all contribute to the list of unacceptable behaviors which ultimately hurt the students and jeopardize their futures. Only thinking about what concerns oneself results in corruption, malpractice, unsound attitudes, and untenable solutions in the long run. Herein exists an additional significant problem in the lack of accountability mechanisms that are to investigate and eliminate leakages in the system.

5.1.2 Lack of Commitment

Dishonest behavior and bad practice result in a system that is incapable of providing students with the necessary skills and tools they need to advance and develop on an academic as well as on a personal level. This leads me to the second area of concern; uninspired students with little sense of the purpose of their education. The data show that the attitude in young teenagers towards education

is one of indifference and meaninglessness. Several times I observed students being late for school, sleeping in class, cutting classes, and not taking advantage of free after school programs. When they were confronted with the question of why they were not in school, they would either just laugh and shrug or answer that they did not want to go. Either way it was clear that they did not care about putting any effort into their education and the actions observed spoke volumes. Even though students are told that education is the way forward, it does not have any effect if they do not see the relevance or feel a sense of purpose. I previously concluded that this is a symptom of a demotivating system; not merely lazy teenagers. This unfortunate behavior of lack of effort and commitment is the result of inefficiency of state and district level management.

As these two motifs are now identified, I move on to the analysis of quality and development in Sierra Leone using the data of the study and the theoretical and definitional concepts of quality in education and development. The aim is to thoroughly investigate if a connection between data and theory exists in order to propose empirically as well as theoretically grounded solutions for improvement.

5.2 Quality

First, I look into the concept of quality in education which is defined as education that enables learners to achieve their full potential, and generates cognitive, creative, and personal development within the learner. To be able to achieve this the educational system must provide access for all learners, it must be safe, protective, and gender-sensitive, it must consider the context and culture in which it exists, it must provide trained teachers using active pedagogies, provide relevant content that includes historical and contemporary factors, and it must promote values of responsible citizenship. It is evident that the education taking place in schools in Tonkolili district does not live up to this. Lack of teachers, insufficient amounts of books, uninspiring teaching methods, and large financial expenses, just to mention some of the challenges, obstruct any form of quality in education.

A key component in the definition of quality education is the ability to generate cognitive development within the learner. The attitude of indifference towards education observed in students and young people during the study is a clear indication that the teaching these students receive does not generate any realization or cognitive development within them. It is obvious from the observations that the education does not empower the students in any way as they often do not see the point in going to school. As suggested in the empirical discussion this attitude is a symptom of

the actual problem of poor teaching methods, materials, and information in general. If the personal as well as academic development is minimal the students will not achieve their full potential and most likely not acquire values and attitudes of responsible citizenship. According to the definition of quality the purpose of education is to engage students in critical, reflective, and metacognitive processes which lead to self-discovery. Low completion rates and poor exam results combined with the observed attitude of indifference prove that this is not the case for the schools and students being a part of this study.

The fact that students do not show signs of personal empowerment proves that the system is deficient in providing one or more of the circumstances required to obtain quality. These are, as stated above; access for all learners, a safe, protective, and gender-sensitive environment, consideration of context and culture, and provision of qualified teachers and relevant content that includes historical and contemporary factors.

If I begin with the last part of the definition about context, culture, and qualified teachers and content, data reveal that these are definitely areas in which the schools in the study prove inadequate. The dominating teaching methods I observed revolved around the teacher as a transmitter of knowledge and the students as receivers. Tables 4 and 5 illustrate auditory methods and teacher monologue as dominating approaches to teaching. Table 6 illustrates that the extent of input based teaching is very low at the poorest schools and the well-funded schools only use inputs from students to some extent. The teachers are to a large degree without training or education which further contributes to unimaginative teaching methods. Considering this from a learning theoretic perspective these methods reflect a traditional, western approach to teaching which was abandoned decades ago in western societies as it was proved to not generate any meaningful learning and development within the learner. This is unfortunately the same picture we see in this study which is why the teacher centered approach is confirmed to be an insufficient method to provide quality education in a Sierra Leonean context. I argued in chapter 3.7 that a modern approach to teaching can only work in Sierra Leone if combined with traditional views of education. This is concurrent with what the definition states as consideration of context and culture, and provision of relevant content that includes historical and contemporary aspects.

One aspect of traditional education based on indigenous knowledge in Sierra Leone is focus on practice. I want to highlight this aspect since one of the main critiques of Sierra Leonean education and curricula is irrelevance of the content in education (Wright 1994: 183-184; Nishimuko 2007:

21; Tikly & Barrett 2011: 10). The results of the study support the importance of relevant and meaningful curricula and methods because of the observed attitude of indifference which grow within students who feel alienated and distanced from school practices. Therefore, linking theory to practice in teaching could be a useful strategy. This does not mean teaching students to e.g. hunt or fish as it did in traditional society, but instead integrating examples from everyday life and lived experiences into the classroom, giving students the freedom to do assignments based on real problems by e.g. cooperating with local businesses, and learning about issues and themes relevant to local history and culture. Another important way to make content more relevant, is to change the language in schools. The official language of education is English which is a second language for Sierra Leoneans (Nishimuko 2007: 21). Not arguing that students should not learn English; they can have a specific language class for that, but all other subjects could be taught in the native language of the region to adapt the teaching to the students and thereby increase relevance and understanding. Furthermore, structure and method in education should resemble structure and method in society and be incorporated into teaching. This means that work in school could focus on doing work in groups or pairs working towards a common goal as this is the known structure for addressing tasks in e.g. the family or the community. Furthermore, focus on the process instead of merely the result, which is also advocated by the student centered approach, and using creative and alternative resources in school work are ways of incorporating known methods from society.

Based on scholars' arguments, I have previously suggested that irrelevant content of curricula and unrelated methods are results of a long line of the impact of external actors; first British colonialism, later international development agencies and aid donors, who have set the agenda for the education system in the country. If traditional knowledge is incorporated into a present system it would probably cause students, teachers, and government officials to feel familiar with system and content and students can to a higher degree use the skills they learn in school which will give them the sense of purpose which is desperately needed.

Returning to the definition of quality in education, the other circumstances that will ensure development within the learner are access to education and a safe, protective, and gender-sensitive environment. The issue of schools being safe, protective, and gender-sensitive was not the focus of this study. Even though observations were made to support the fact that schools in several ways do not provide this kind of environment I cannot make a thorough analysis based on only momentary observations. Access to education, however, is highly relevant regarding the empirical results about

financial issues. The data reveal that several schools charge unofficial fees for tuition, exams, report cards and much more, cf. table 8. This puts a heavy financial burden onto parents of school aged children. The moral burden is, if possible, even heavier, as it places parents within the dilemma of whether or not to send their children to school or choosing between the children. This means that even though education is officially free for all, the unofficial charges deny access for children from poor families which confirm the fact that even though all children are allowed in school and even obligated by law, access is not free for all.

In conclusion, it is evident that education in the observed schools cannot be defined as quality education. In order to provide education that generates learner development more focus must be put on meaning and relevance in both contents and methods.

5.3 Development

In this chapter, I look into the concept of development in relation to quality in education. The relationship between the two was discussed from a theoretical point of view in chapter 3.8.3 where I present two theoretical perspectives focusing on economic development and human development, respectively. Both perspectives acknowledge quality in education as a key contributor to development. This chapter aims to examine the data by taking the theoretical aspects into consideration.

Despite Sierra Leone's commitment to the EFA initiative, which focuses on both quantity and quality in education, the tendency since the end of the civil war has been directing resources at quantitative improvements at the expense of quality. Looking at data for development, Sierra Leone had in the 2003 HDR the lowest HDI ranking of all countries at number 175 (UNDP 2003: 240). In HDR 2013 the country ranked 177 out of 185 countries (UNDP 2013: 146). World Bank data show that GNI per capita measured in US dollars has gone up from 300 in 2003 to 583.8 in 2012 (World Bank 2013b). These data reflect an increase in economic development since the end of the civil war; however no development can be measured in the HDI. These data are therefore not reflecting any considerable decrease in poverty and underdevelopment as Sierra Leone remains one of the poorest countries in the world; to compare, the GNI per capita in United States in 2012 was 50,120 US dollars (World Bank 2013c). There is thus no connection between quantitative educational initiatives and national development in the case of Sierra Leone. The same lack of development after increasing quantity in education is seen in other developing countries as well (Vegas & Petrow 2008; Hanushek 2013). Sierra Leone must therefore shift the focus in the education sector to quality

improvement which is what theoretical approaches advocate as well. It is however difficult when increasing quality in education means considerable changes in structure, method, and content as seen in previous chapters. Additionally, international goals such as the MDGs advocate as much quantity as they do quality which makes it easy to indulge in achieving quantitative goals as they are more tangible and easy to obtain.

Looking at quality and development from a rights based perspective Sierra Leone is clearly committed to this approach; at least in theory. In practice, data from the study prove that even though the rights based approach is the one accepted by the government it is not applied in reality. The district council meeting about CFS shows commitment in management (annex I: 104-105). Nevertheless, practice shows that implementation in the schools lack as they use outdated methods, irrelevant content, and teacher centered approaches to teaching. This is a clear demonstration of not seeing things through and making sure that what is decided at one level is communicated on to the next. Teachers have obviously not been equipped with the necessary tools to practice the methods advocated by UN in the CFS model. Again, I want to emphasize the issue of understanding the purpose; the common teacher who is to implement this paradigm may have difficulties putting theory into practice as the theory is not linked to anything recognizable. Instead a universal answer to improving quality is introduced and accepted on macro level of the system, but not explained in detail to the people who are to actually make the improvements.

The rights based approach furthermore claims that the state is responsible for ensuring basic rights, thus it must have strong capacity. Results, however, reveal that this is not the case for the Sierra Leonean state which, at least when it comes to education, is characterized by bad practices, managerial insufficiency, and lack of general organization and monitoring caused by dishonest behavior of unqualified staff channeling through the entire system. This proves that the state is still too weak to take on the responsibility of guaranteeing quality education as a human right. Thus, the state must address internal issues before having any hope of facilitating change in the education system.

Chapter 3.8.3 demonstrates the theoretical link between quality in education and development, however, as we have seen in chapter 5.2 quality is minimal in Sierra Leonean schools at the moment. I therefore conclude that education in Sierra Leone in its present state does not contribute to development in the country. The factors hindering quality in education and ultimately national development must be addressed which is the focus of the next chapter.

Introduction	• Significance of the study • Aim of the research • Problem formulation • Historical and educational backgrounds
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Method	• Research design, approach, and strategy • Empirical framework • Theoretical framework • Conceptual framework
Discussion	• Presentation and discussion of empirical data • Discussion of empirical results
Analysis	• Two recurring motifs • Quality • Development
Course of action	• Suggestions for solutions
Conclusion	

6.0 Course of Action

It is clear that the educational system, as it is now, does not and cannot contribute to development in the country, neither economic development nor human development. Sierra Leone needs to change the educational system for it to have any chance of enabling students to achieve their full potentials and contribute to national development.

Figure 6b: Hierarchical structure of the system (improvements)

Source: Author's own figure

In chapter 4.5 I introduced figure 6a illustrating the hierarchical structure of the system where problems on state level channel down through the structure effecting and blocking quality in education on micro level of society. This hierarchical structure requires that changes and improvements, too, are made at the top of the structure in order for them to have an effect down through the entire structure and finally show themselves in good student outcomes. This is illustrated in figure 6b.

Furthermore, I previously introduced figure 7a illustrating how the entire system is undermined by bad practice on state level as the system is interdependent. This means that if improvements are made in the top these will instead strengthen the entire system by resulting in quality education and consequently better students and thus more qualified members of society. This is illustrated in figure 7b.

Figure 7b: Interdependency of the system (improvements)
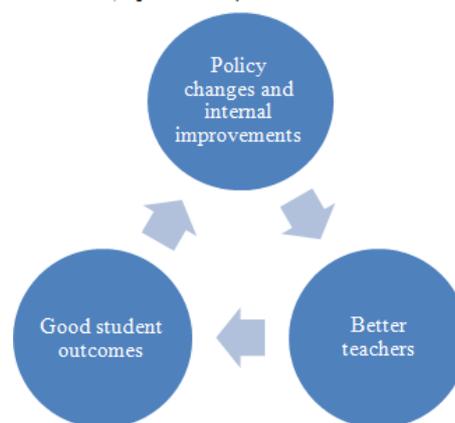
Source: Author's own figure

In the following paragraph I examine the issues that need to be addressed and propose suggestions to possible solutions.

6.1 Suggestions for Solutions

There are no simple approaches to improving quality in education. Providing more resources to schools has proven to be generally ineffective (Hanushek 2013: 8). When trying to improve quality, a policy maker's first instinct is to expand resources, but research shows that resource policies alone are unlikely to lead to the desired outcomes (Hanushek 2011: 33). This is also the case for Sierra Leone; increasing quantity has not resulted in an automatic improvement in quality. This study found profound problems in management of the system affecting all other levels. This needs to be

addressed before any change can succeed. Furthermore, I found that uninspired teachers and students are results of alienation from content and methods of education. Nothing relates to the identity of Sierra Leoneans which is why they do not see the purpose. In the following paragraphs I suggest three areas in which change and improvement are needed, explain why this is the case, and propose solutions to how it is done.

6.1.1 Address Internal Problems in Management at Government and District Levels

The first issues that must be addressed are issues related to internal practices of the educational system. It is crucial that the state addresses managerial problems before it can be responsible for reforming the education system. At both ministerial and district level the evidence show that there is an attitude of arrogance and egoism among managers as well as employees as they do not take responsibility in their jobs. There is a lack of initiative and a lack of commitment to fulfill the promises that are made. Dishonest behavior and corruption add to the equation which results in an ineffective system where promises and commitments are made, but never implemented and completed. Internal structures, therefore, need to be strengthened by; improving the attitude and feeling of responsibility, eradicating corruption, removing incompetent and dishonest members of staff, and establishing goals that are realizable for the country.

Before proposing suggestions to how this can be done, it is important to understand why these types of behaviors occur. Beugré and Offodile (2001) suggest in their study on organizational effectiveness in sub-Saharan Africa that culture and cultural patterns are greatly responsible for ineffectiveness in African organizational structures. An example is how deep respect for elders and authorities manifests itself as acceptance of power differences. In organizational structures this can lead to toleration of injustice when persons with authority exploit their positions in power by e.g. accepting corruption. Nepotism is practiced in e.g. employment and promotion processes when family members or tribesmen of managers are hired; from a cultural perspective it is a person's obligation to take care of immediate and extended family and not considered favoritism (Beugré & Offodile 2001: 539). This culturally based behavior results in a power structure characterized by management authority, hierarchy, top down communication, and a high level of bureaucracy which eventually causes the observed behavior of thinking mostly about oneself and not about organizational objectives. This attitude from managers can lead to employee indolence preventing effectiveness in the structure (Beugré & Offodile 2001: 542).

As culture and management are this closely related, culture must be considered when proposing solutions as well. Management techniques clearly need to be altered in order for the system to be effective. According to Beugré and Offodile (2001) managers must figure out which aspects in their culture contribute to better management practices and which aspects that represent a threat (Beugré & Offodile 2001: 543). Aspects from indigenous knowledge systems such as solidarity and communalism, as previously mentioned, contribute to the notion of putting the community before the individual which is an essential part of eradicating the attitude of egoism and arrogance in the system. Internal structures of flexibility and respect are therefore essential to an effective system; however, tools such as performance-based pay system and employee participation in decision making processes can furthermore create a new mentality of responsibility in employees (Beugré & Offodile 2001: 544-545). The government of Sierra Leone turned over much responsibility of education to district education councils in 2008. This decentralization strategy is a good way to reduce the power distance between decision makers and the people, and it increases the possibilities for bottom up communication in the structure. Enhancing decentralization even more by introducing school boards, the Sierra Leonean education system could benefit from transparency and thus decreased corruption as local education stakeholders gain more influence. This could furthermore entail a level of automatic monitoring due to public access and insight into formal activities. This public monitoring supplemented with increased upward reporting would strengthen the educational system. If dishonest behavior in the system is decreased and monitoring is increased, there would be a possibility of eliminating unofficial school fees which encumber many poor families in Sierra Leone.

6.1.2 Reform the Education System in Content and Methods

As I have explained previously, the educational system in Sierra Leone is largely based on an inherited, British model. This has caused content and method to be highly irrelevant for students in an African country. British colonial rule obstructed any development of traditional knowledge systems which has resulted in methods and curricula that do not correspond with culture, norms, or any pre-colonial history. Furthermore, the dependence of aid donors since the country's independence in 1961 contributes to the fact that the Sierra Leonean education system has not been able to develop in its own pace and on its own terms. Therefore, with this long line of external actors setting the agenda for the Sierra Leonean system without integrating culture, values, and norms of the country, it is not surprising that the country's education suffers. Historical incidents

are however not something to exclude from the content of curricula as both colonial rule and war are part of the country as it is today.

The solution is to make education relevant. Ensuring relevance in content and methods is crucial for quality. Quality is about ensuring the right circumstances that will foster cognitive development and personal growth within the learner. This happens only if the learner sees a purpose with the education. If it is grounded in traditional norms and values and reflects community as a structure it would be a more integrated part of society.

Throughout the thesis I have proposed solutions to making education in Sierra Leone more relevant based on different scholars researching this particular challenge to quality in African education (Kanu 2007; Wright 1994; Banya 1993). With the risk of repeating myself I sum up the suggested solutions next, though much further explanation is not provided.

Educational reconstruction in Sierra Leone must be a combination of then and now, recognizing both indigenous traditions and modern systems and requirements. It is important to connect African knowledge and values to knowledge and values entailed in modern education (Kanu 2007: 78). Therefore both content of curricula and teaching methods need to be addressed. First, content is explained: It is important to integrate culture, history, values, and norms of Sierra Leone into the teaching. This can be done by e.g. spending more time teaching about local history and culture. National authors could regularly be used in literature, as could traditional art, drama, and poetry. All in all, adapting the contents of curricula to the country by including national heritage would ensure relevance and learn students about contemporary society. This is done through relevant methods of teaching which I explain next. First of all, teaching methods need to be updated. In this thesis I advocate for the student centered approach which is widely accepted in western societies. This approach must however be altered and combined with indigenous methods to fit the context. One way to incorporate a method from student centered learning into the context and by that make the teaching more relevant is by linking theory to practice. Concrete examples are; making student assignments based on cases in everyday life and lived experiences; something the students can relate to, and let the older students define problems to use in school themselves by cooperating with local businesses or institutions. Another way to link theory and practice is to introduce subjects such as; farming management, business innovation for small businesses, computer and IT, and child care and pedagogy so students can see a direct link between what they learn in school and how they can use it in future jobs. Furthermore, it is central that methods in school resemble structures and

methods in society. This means that students spend more time working together in groups as this is the preferred way to solve tasks in the family or in the community, ergo this is what they know and how they are supposed to work in the future outside of school. Students thereby feel a greater sense of relevance. One last aspect of increasing relevance in education is language. The use of a second language in school needlessly distances students from content as they waste energy concentrating on understanding the teacher's words instead of concentrating on meaning. Using local languages, moreover, strengthens the identity and culture of particular groups.

In order for both content and methods to improve the government needs to make policy changes so the official rules for procedures are updated. However, merely talking about it does not ensure any quality in the system, policy changes must be implemented as well. This is where an improvement of the teaching profession comes in.

6.1.3 Improve the Teaching Profession

Teacher effectiveness is the main determinant of high achievement (Hanushek 2011: 34) which is why building the teaching profession is key to sustaining learning for the future. The number of teachers must be improved as well as their qualifications. Furthermore, a system of timely and adequate salary must be in place to ensure teacher commitment and motivation. It is important that teachers feel appreciated in order for them to be loyal which is mainly done through making sure they are adequately rewarded and they are offered courses for further skills improvement. Including teacher representatives in decision making processes in e.g. school boards, as suggested above, can furthermore contribute to higher motivation.

If teachers are supposed to be the link between management and student outcomes by implementing policies they need to be better equipped for this job. This means improving education for teachers. In the future, an educated teacher must be equipped with content knowledge and with knowledge of teaching methods that promote learning and development within students. Teaching methods needs to be revisited and teachers must be trained in interactive and activity based methods.

These initiatives, however, require that the teaching profession is financially prioritized by the government and means are invested in the improvement of teachers. The question is if this is possible. I propose that the government take advantage of the decentralized system and call upon district education offices to establish relationships with different NGOs working with education in the different areas. If education and further training could be "outsourced" to NGOs the teaching

profession could be improved without significant expenses. Moreover, if this was facilitated by the district councils it would be possible to organize the initiatives and make sure that all teachers would be offered some kind of education. Informants of the study, furthermore, point out that they see this as the only way of further educating teachers. Alysious states:

"The only opportunity for teachers to develop their skills is if they are lucky enough to be employed at a school which cooperates with an NGO that offers teacher training" (Alysious Fornah, teacher at MECC and MSSB).

Head librarian Thomas Kargbo elaborates by explaining that:

"One of the major challenges is the unqualified teachers. Without any improvement of existing teachers better teachers will not come until a new generation of teachers is educated. And improving the teachers we have now is difficult because an offer such as this would have to come from the government and be free of charge" (Thomas Kargbo, head librarian at Magburaka town library).

With the emphasis on the difficulty of free, government initiatives, Thomas too highlights the opportunity of looking elsewhere for someone to manage the task which is supported by another librarian, Abdul Mansarey who is convinced that joined forces in society will improve primary and secondary education (Annex I: 103).

I experienced NGO initiatives in teacher training during my stay in the country even though they were not organized or initiated by the district council. One example of improving the skills of teachers was seen in a teacher training program provided by project REACT and the Danish NGO, IBIS where focus was on improving the professional capacity of teachers in the surrounding area by training them in student centered techniques and classroom differences (Annex II: 121).

In conclusion, it is clear that inclusion of culture and traditional knowledge and more focus on decentralization are central aspects in improving both the structural problems of the system and the issues related to irrelevance of content and methods. The current structure puts the responsibility of reforming education in Sierra Leone onto state level which is why internal, managerial inefficiency and dishonest behavior need to be addressed first. Good governance is central for improvement of quality in education.

Introduction	• Significance of the study
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	• Problem formulation
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| Methodology | • Ontological considerations |
| | • Epistemological considerations |

Method	• Research design, approach, and strategy
	• Empirical framework
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| | • Discussion of empirical results |

Analysis	• Two recurring motifs
	• Quality
	• Development

| Course of action | • Suggestions for solutions |

| Conclusion | |

7.0 Conclusion

In this thesis, the level of quality in education in Tonkolili district is examined in order to determine whether or not it is able to contribute to development in the country. I have conducted an analysis of the challenges to quality in education based on empirical findings, and theoretical and conceptual characterizations. From the analytical results I propose suggestions to how Sierra Leone can improve quality in basic education in a way that contributes to development.

The history of Sierra Leone including colonization and civil war is proven to have effected education in the country tremendously; especially the quality of education, as colonization and war has left the country to struggle with poor and undeveloped economic and social infrastructure. Despite the fact that quality education is widely accepted as a means to development, I conclude that Sierra Leone has primarily focused on improving quantity of education by abolishing tuition fees and constructing hundreds of schools resulting in a rapid increase in enrollment rates. Quality in education has though suffered from this mere focus on quantity. Challenges to quality in education are identified as; lack of qualified teaching staff, lack of relevant, quality teaching materials, insufficient teaching methods, and financial issues mainly characterized by unofficial tuition fees. Though these challenges require attention I consider them as symptoms of more severe problems.

I identify internal inefficiency in the educational system to be the first of two obstructing factors to quality in education. This inefficiency is the result of corruption, indolence, attitudes of arrogance and egoism, unqualified staff, and lack of general management. This inefficiency causes problems that channel through the entire system causing all levels of management to be characterized by bad practices. Consequently, teachers lack commitment, loyalty, and motivation because of the under appreciation of their profession and students are left with unqualified, unmotivated teachers.

The second obstructing factor is the irrelevance of contents of curricula and unrelated methods that characterize education. This is the result of a long line of external impacts; first British colonialism, later international development agencies and aid donors, who have set the agenda for the education system in the country without integrating traditional culture, values, and norms. Sierra Leone is therefore caught in a position where education has not developed much since the introduction of European structure, methods, and content during colonialism.

These two factors hinder academic and personal development within students which prove that education in its present form is not generating any meaningful learning and quality in education is thus minimal. Without a quality generating system I conclude that education does not contribute to development in Sierra Leone.

In order to address the issues of concern I propose three suggestions to course of action; 1) addressing internal problems in management at government and district levels, 2) reforming the education system in content and methods, and 3) improving the teaching profession. In the first, I propose a decentralization strategy in order to change the patterns of management. Furthermore, management must consider how culture limits a more flexible structure. At the same time management must locate the cultural elements which can eradicate bad practice and dishonest behavior by focusing on the common good. In the second, I propose policy changes of education through introduction of modern teaching methods adapted to culture and indigenous knowledge of the country. This way both content and methods are relevant to lived experiences of students and teachers and they can see the purpose of going to school. In the third, I propose including NGOs in the training of teachers in order to limit the expenses of the state. A decentralized system would simplify this process.

All things considered, I conclude that the education system in Sierra Leone can benefit from inclusion of culture and traditional knowledge in all levels of the system. This way the system becomes grounded in the national context which is conditional for quality in education. The main task for Sierra Leone is now to adapt education to the real world of the students instead of adapting students to the education. All stakeholders of education, including external actors in the international donor community, must therefore recognize the importance of context in quality education in order to avoid useless universalization of quality in education.

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9.0 Annexes

Annex I: Empirical Encounters

Annex I presents the empirical data of the study. The data are presented without much commentary as they are discussed and analyzed in chapter 4 of the thesis. Fieldwork in Sierra Leone is the basis for the collection of primary data which consist of field notes, notes from meetings, informal conversations, and observations. The raw data in these field notes are organized and converted into the readable, narrative descriptions seen in this annex. The qualitative findings are collected in unstructured interviews/conversations and observations. Through these forms of data collection access was obtained to direct quotations from people about their experiences, opinions, feelings, and knowledge and detailed descriptions of people's activities, behaviors, actions, and interpersonal interactions. All data are presented from the point of view of the researcher as they rely solely on the observations, interactions, and relations made by the researcher in the study period August 2012 − January 2013. Data from research made by project REACT are furthermore included as the researcher has participated in the collection, processing, and analysis of the data. These data are, however, not individual work by the researcher. The participation in the study by project REACT supplied the researcher with the opportunity of further data collection in the form of observations, conversations, discussions, and questioning.

A detailed description of the study and the researcher's role and work is presented in chapter 3.

The empirical data are categorized according to identified challenges in the Sierra Leonean education system.

Challenges

In the subsequent paragraphs four challenges to quality basic education are presented defined on the basis of researcher's observations and knowledge from different education stakeholders. These concern; teaching staff, teaching materials, teaching methods, and financial issues. The data are combinations of observations and interactions of the researcher and results from the study of project REACT.

Teaching Staff

Many primary schools in the rural areas around Magburaka are community schools supported by the community. For that reason the money to run the schools is very little or inexistent which makes attracting qualified staff an extremely difficult task. Many schools do not have enough teachers to teach all the children cf. table 1. It was confirmed by several head teachers from different schools that the teachers they do have often work for a very low salary or even for free. The results are that teachers without education or training are hired and one teacher has to teach several classes at the same time. Project REACT's evaluation study examines 12 primary schools in Tonkolili district. The study divides the 12 schools into; six *collaboration schools* which means that project REACT has worked with them in the past, provided materials, training teachers etc.; four *comparison schools* which are comparable in location, size, and conditions to the collaboration schools, but have not received any help from NGOs, and two *well-funded schools* with relatively sound financial situations due to better funding and central locations.

The data in table 1 are collected at these 12 primary schools. The schools are listed by number and name; number 1 to 6 are collaboration schools (Malongba, Maraka, Masanga, Matham, Mathora, Ro-Mangoro), number 7 to 10 are comparison schools (Mabom, Magbas, Magbom, Mamankemoi), and number 11 and 12 are well-funded schools (Missionary Church Association (MCA) primary school, Tonkolili District Council (TDC) primary school). From the data it is clear that out of the 12 schools studied only one (TDC primary school) had enough teachers for all classes at the same time on the day of the visit. The remaining 11 schools had an insufficient number of teachers to teach all classes which was solved by the teacher(s) teaching several classes simultaneously, either in the same room or in different rooms where the teacher moved from room to room leaving the students unattended. Furthermore, only five of the 12 schools (Masanga, Mathora, Mabom, MCA, and TDC) had enough teachers in total to teach all classes which means that problems such as crowded classrooms, high temperatures, loud noise level, and insufficient number of chairs and desks are common on an everyday basis at seven out of the 12 schools observed. This challenging teaching and learning environment was in particular a restraint at three schools; Magbas, Magbom, and Mamankemoi, which only had one or two teachers employed for six classes.

Table 1: Numbers of teachers and classes at 12 primary schools

Schools	Teachers present	Classes present	Teachers in total	Classes in total	Students in total
1. Malongba	2	6	4	6	187
2. Maraka	2	5	3	6	154
3. Masanga	2	6	6	6	176
4. Matham	2	4	4	6	124
5. Mathora	1	3	3	3	68
6. Ro-Mangoro	2	6	5	6	186
7. Mabom	3	6	6	6	147
8. Magbas	1	6	2	6	106
9. Magbom	2	6	2	6	135
10. Mamankemoi	1	6	1	6	132
11. Missionary Church Association (MCA) primary school	4	6	6	6	215
12. Tonkolili District Council (TDC) primary school	6	6	6	6	183

Source: Research data from observations 2012

Calculating an average teacher-student ratio for the 12 schools using the numbers of teachers employed in total, the ratio is 1:38; however using the numbers of teachers present on the day of the observation the ratio is significantly higher at 1:65. The school with the highest ratio on the day of the observation was Mamankemoi with a ratio of 1:132, and the school with the lowest ratio on the day of the observation was TDC primary school with a ratio of 1:31.

Teaching Materials

Moving on to observations about teaching materials, it is clear that a general challenge in the Sierra Leonean education system is the lack of school materials. Often schools do not have enough copies to supply all students with textbooks which means that the students have to share. This is not optimal for learning. Another serious challenge when it comes to school materials is the stealing of textbooks and selling them on the black market in the streets (Jabbi 2007: 12).

The government of Sierra Leone provides school materials free of charge to as many schools as possible, however the demand continues to be bigger than the supply. Another problem with school materials is the fact that schools do not use the books they have been given. On several occasions it was observed that books were kept in a cabinet because the school was afraid that the children would break the books or the teachers simply did not know how to use them. The latter is strongly connected to the matter of unqualified teachers. A few visited schools where it was observed that the children did not have books, the explanation was that the books were in another inaccessible building or in the village so it was not possible to show them upon request. Given that most observed schools were eager to show the books they had; even the ones that did not use them, the assumption that the books at these schools had been sold was strong.

Table 3: Percentage of students with books
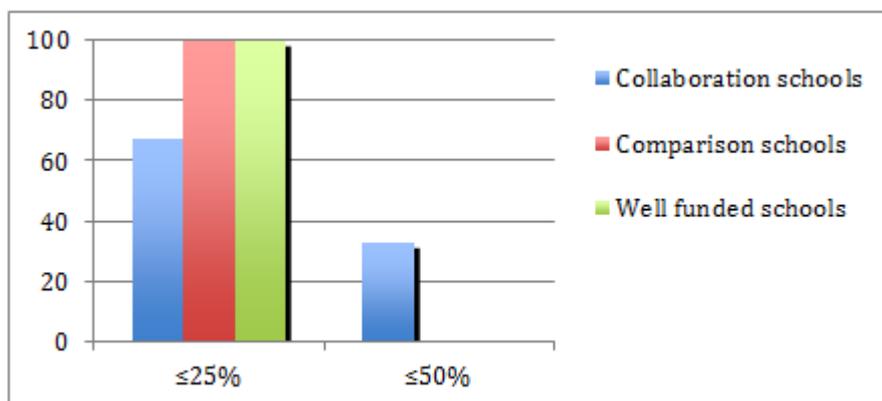
Source: Project REACT 2012

Research from project REACT, illustrated in table 3, shows that in only 33 percent of the collaboration schools, which were six out of the 12 observed schools, the percentage of students with books was between 25 and 50 percent. This means that in 10 out of 12 schools the percentage of students with books was 25 percent or less. These results demonstrate that the book to student ratio is very poor. This serves to document that a widespread lack of school books in Tonkolili district exists.

Considering the content of the books it does not encourage to a creative and child centered learning process. Take for example an English textbook. It is a textbook without any questions to elaborate or make the students think "out of the box". For the youngest students in class one and two the books resembled picture books with close to no challenges for the students.

The challenges of lack of staff and lack of materials were observed in detail in two school inspections, described in the following.

Two Instructive School Inspections, 10 December 2012

Participating in the school inspections were Deputy Director of Education; Mr. Bah, the district engineer, and the researcher. The inspections were of two primary schools in Tonkolili district.

The first school observed was simple, but functional. Inspections were made of classrooms, toilet facilities, water supply and more. It was observed that one of the two teachers present at the school was teaching classes four, five, and six at the same time. The different classes were in different rooms and he was moving back and forth between the different classes to keep them occupied leaving two classes to work on their own when he was in the third class.

The teacher explained: *"this is not unusual. The school does not have enough teachers to teach all the classes at the same time, and most of the teachers are only here part time, so they can keep other jobs on the side since the pay for being a teacher is not sufficient to provide for their families"* (Male teacher at primary school in Tonkolili district).

The result of this insufficient number of teachers was that most of the time this school had one teacher for class one, two, and three, and another for class, four, five, and six; and all children had to be taught at the same time. The teacher had accepted this working condition though expressed concern for the amount of teaching the students actually receive.

The second school was smaller, but better equipped than the first one. Here only four classes were present on that day, and they each had a teacher. One of them was the head teacher who expressed concern about the commitment of the teachers. Even though there were enough teachers employed to teach all the classes he often experienced that they simply did not show up for work. This, just as at the first school, was due to other obligations such as another job or family. Furthermore, he was asked about school materials as the children in the classrooms did not have books, and he quickly and proudly showed another room where many books where piled up on the floor and in an old cabinet. He was of the opinion that it was sufficient for the teacher to have one and if the children were allowed to use the books they would break them. Mr. Bah was fairly dissatisfied with this as he is in charge of distributing government approved and funded books in the district and the books therefore originally came from his office. This was clearly not the purpose of the books and he

firmly told the head teacher who promised that the children would have access to the books from now on and hence benefit from them.

These two school inspections offered a meaningful insight into the state of conditions in real circumstances, and they showed examples of actual consequences of the lack of teachers and materials. In the next chapter, observations of teaching methods are presented.

Teaching Methods

It is general for all observed schools that teachers employ the method of repetition. At some schools the tendency is greater than others and in some subjects such as English the teachers are more likely to make use of the method than in other subjects. But the general rule is that they all do it. In practice, this means that the teacher stands by the blackboard listing e.g. the English words for different animals and the children shout the words back to the teacher in unison. The same is the case for many schools in the subject of mathematics. The children do nothing but repeat memorized calculations, in practice students shout out; one plus one equals two, one plus two equals three, and so on.

Different methods such as; input-based learning, differentiation, acknowledging the students, and student centered learning were rarely employed by teachers in the poorest schools and only to some extent by teachers at well-funded schools.

Table 4 demonstrates that the dominating teaching method in the observed schools is auditory teaching. Moreover, tactile teaching was practiced only in classes at the collaboration schools which were the only schools using all four teaching methods; auditory, visual, tactile and kinaesthetic. Teachers from classes in well-funded schools used two (auditory and kinaesthetic) and teachers from comparison schools used three different methods (auditory, visual, and kinaesthetic).

Table 4: Teachers' use of different teaching methods
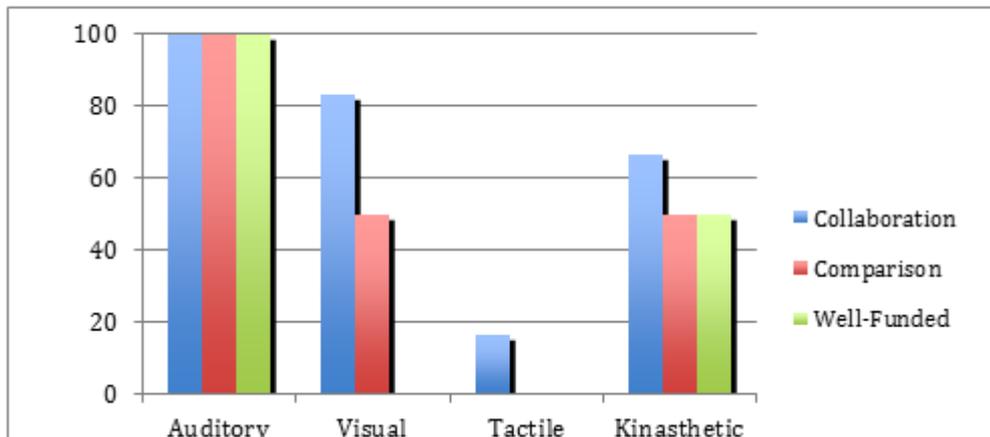
Source: Project REACT 2012

Another aspect assessed in the research was the use of class time. The observation noted, as illustrated in table 5, that teacher monologue was clearly dominant in all schools. Teachers at the well-funded schools used the most time on other types of activities in their teaching such as class discussion and group work compared to the other schools.

Table 5: Use of class time
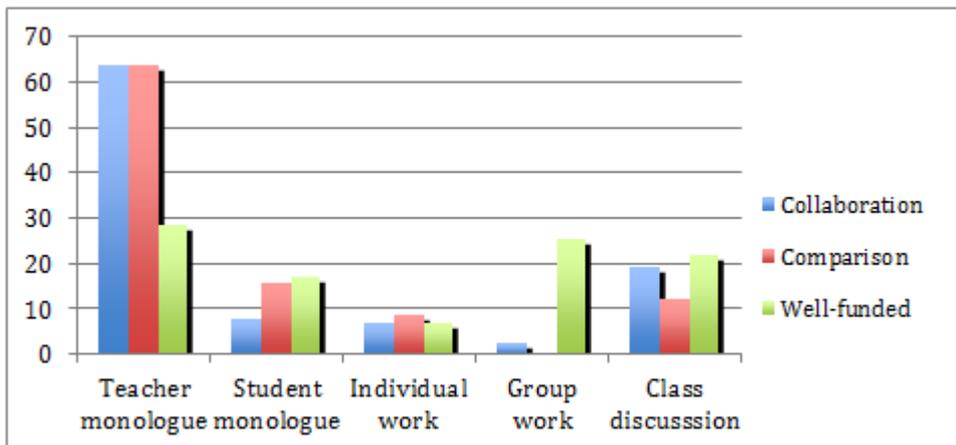
Source: Project REACT 2012

Furthermore, the data also show how the lessons were structured and to what extent the lessons were based on inputs from the students during the class; i.e. input-based teaching, assessed on a scale from no to a large extent; cf. table 6. The results are that teachers at well-funded schools used input-based teaching to some extent, but no teachers fully used this method of teaching. The well-funded schools demonstrated the best and the comparison schools the worst results.
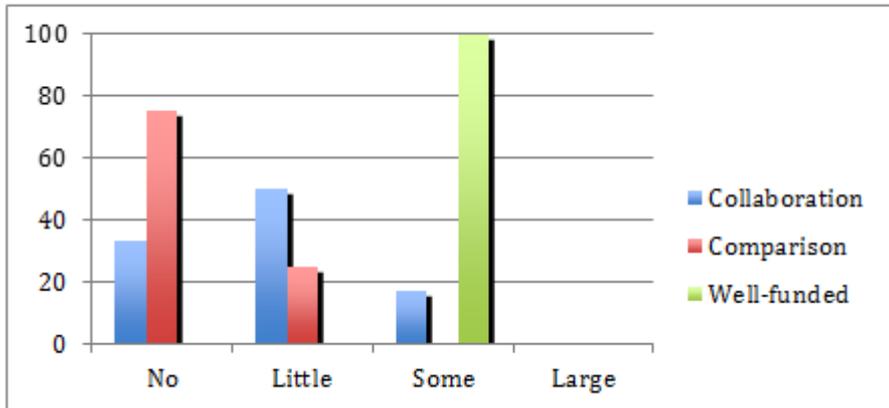
Source: Project REACT 2012

The final data concerning teaching methods from REACT, illustrated in table 7, show that lesson plans, as a part of the teacher's preparation and teaching, are lacking or not being used in the poorest schools. The well-funded schools demonstrated the best results; all questioned teachers had lesson plans which they followed.

Table 7: Percentage of teachers that used a lesson plan
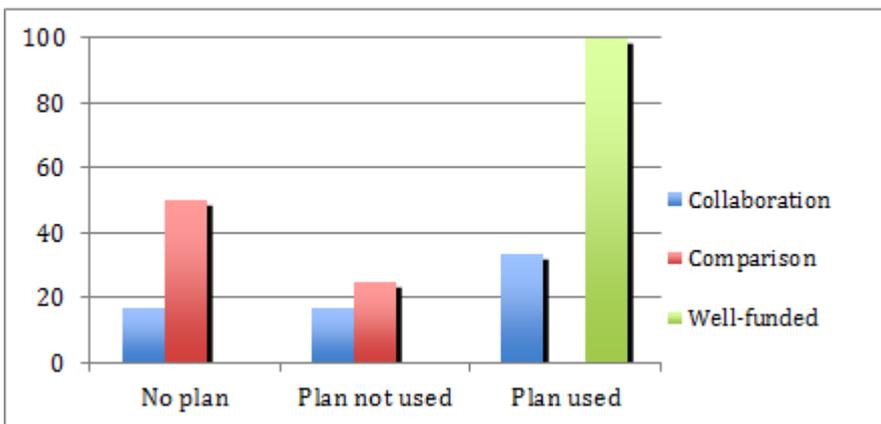
Source: Project REACT 2012

Contributing to the poor methods of teaching are the physical conditions of the schools. Often there are over 50 children in a room and at several schools there were not enough chairs and desks for all the students. Some schools were nothing but a roof of leaves or the shady area under a tree. These conditions cause the students to sit very close or on top of each other resulting in a high noise level and decrease in student concentration.

Example of a Qualified Teacher: Alysious Fornah

Alysious Fornah is teacher at Magburaka Education and Computer Centre (MECC) and at the Magburaka Secondary School for Boys (MSSB). He is educated with a Higher National Diploma (HND) and trained in an international NGO which employs modern teaching methods and techniques. Alysious was one of the observed teachers who did not apply the usual teaching methods such as rote learning and repetition, but instead involved the students in the lesson, encouraged student questions, and focused on individual and group work in class. About his job as a teacher Alysious states:

"I love teaching. It is important for me that the students learn. I always try to encourage them to know more and strive to be the best. I hope I can contribute to a better future for this country by being a good teacher" (Alysious Fornah, teacher at MECC and MSSB)

Furthermore, Alysious stresses that he too always can learn more. According to him, he learns something new every day, especially by working in an international NGO which uses different methods and sees things in a different way. However, he points out that not all have this opportunity to develop their skills and he sees it as a problem that teachers are not being offered any further training once they are hired as teachers. He expresses his concern:

"The only opportunity for teachers to develop their skills is if they are lucky enough to be employed at a school which cooperates with an NGO that offers teacher training" (Alysious Fornah, teacher at MECC and MSSB).

This desire for Alysious to always learn more and be the best for his students is probably one of the reasons he is as popular as he is. One student says about Alysious:

"When he teaches, I understand. He never yells or talks down to people if they do not know; instead he helps them to understand. He is a very good teacher" (Student at MECC).

This was unfortunately the only example of a teacher using alternative teaching methods observed during the study. As a possible consequence of these ineffective methods an attitude of indifference towards education among young students was observed during the research. This phenomenon is described in the following.

Attitude towards Education

The attitude of young people towards learning and education was surprising. A tendency of indifference and lack of interest and inspiration when it came to learning and studying was observed in several of the teachings in the visited schools. This was mainly observed among the older children and young teenagers. Many had the attitude of rather wanting to be somewhere else e.g. listening to music or talking to friends. This was of course not the case for all students, but the attitude definitely existed. The next encounter with a local librarian confirmed this.

A Conversation with a Librarian

The local library has an obvious interest in improving education. Therefore the staff of the library takes turns in their own time to visit secondary schools on a regular basis informing the students about the library and other available offers in the area and about why it is critical for them to focus on education in order to get ahead.

One of the female librarians, Princess Sesay, is very committed to the cause of informing students about the importance of education for their future. She shared her frustration about young students and their lack of interest in school. Princess was very indignant and agitated about this issue. Her experience was that children in school did not pay attention to the teacher and sometimes did not even show up for class. According to her, girls were actually worse than boys because they do not know what they are supposed to do with their education.

"I often see children hanging around in the streets, listening to music or talking to their friends when they are supposed to be in school. If they are not going to school because they have to help out at home, maybe I would understand. But I talk to many children because of my work and my interest in the subject, and I feel that many young people just do not care and do not have any sense of reality when it comes to their future" (Princess Sesay, librarian at Magburaka town library)

It is obvious in everything Princess does that she is very passionate about education as the only way for children to learn, to stay out of any kind of trouble, and to become informed and committed citizens of the community.

This ends the presentation of observations made in the matter of teaching methods. The next short chapter describes the last challenge to quality in education; financial issues.

Financial Issues

In 2000 free primary education was introduced to all primary schools in Sierra Leone. Despite this initiative, unofficial fees are still common in the Sierra Leonean education system. Teachers at several schools confirmed the fact that the school charges fees for enrollment, books, report cards, and sport activities from students and their parents. Parents expressed much frustration in the matter; the father of one family stated:

"This new system is no better than the old one where we were required to pay tuition fees for the children. The fees are still there" (Male, father of four school aged children).

Another significant problem regarding financial issues was described by Deputy Director of Education; Mr. Bah:

"We have a big problem with teachers that provide private tutoring. It takes their time and effort away from their actual teaching, and it forces families to pay extra for lessons that children should just be receiving in school. The teachers do it to earn more money, but it is a financial burden for many families" (Mr. Bah, Deputy Director of Education, Tonkolili district).

Several students confirmed the fact that they or someone they know received private tutoring in their spare time from their school teacher.

This ends the presentation of the observed challenges to quality in basic education in Tonkolili district, Sierra Leone. In the following, actors and activities concerned with the improvement of quality are presented based on observations of education activities and encounters with education stakeholders.

Actors in the Field of Education

Meeting with the Chairman of Head Teachers' Council, 7 November 2012

By request from the Deputy Director of Education, Mr. Bah, the chairman of the head teachers' council in Tonkolili district, Mr. Sankoh, attended a meeting at Magburaka Education and Computer Centre on November 7 2012. This meeting was about offering computer courses to the members of the head teachers' council with the objective to develop their skill sets. The meeting itself about time, duration of the course, price, and content was very straightforward and an agreement for the above was quickly reached. However, what was interesting was the fact that Mr.

Sankoh clearly expressed a will to learn; both him and the rest of the members of the council. Directly, he only represents the head teachers, but each of the head teachers represents their respective schools and the teachers employed. For that reason, he is expected to know the general opinion among the teachers which he expressed as a profound will to learn and improve their skills and qualifications. The enthusiasm he showed for the computer course showed that the teachers care about education; especially the further education of themselves that would make them better teachers. He expressed this by stating:

"*The teachers are very motivated to always learn more and improve their skills, but there is nowhere they can go to receive training and skill development*" (Chairman of the Head Teachers' Council in Tonkolili district).

Teacher Training at Magburaka Education and Computer Centre (Summer 2012)

Another example of teachers' willingness to educate themselves is from Magburaka Education and Computer Centre. In the period July - September a beginners' computer course for secondary school teachers in the area was facilitated during the summer break. The differences in ability and age of the course participants were very large, but what all the participants had in common was the eagerness to learn a new skill. Certainly, the world of computers is very "in" which also could have contributed to the enthusiasm; yet, the motivation to learn seemed very sincere. Follow-up conversations with three of the course participants revealed joy from having taken part in the course. One of the teachers stated with regret that he was not able to use the specific tools he had learned in the course when teaching his own students because they did not have electricity or computers at his school. However, to the question of what use his new skills had for him, he answered:

"*I have grown as a teacher because I see some things differently now than I did before. I encourage my students to always be willing to learn new things; whether it is a new subject, computers, or ways of living*" (Male teacher at Pampana junior secondary school in Tonkolili district).

Library Staff – information and statements collected during the entire study August 2012 – January 2013

The library staff at the local library in Magburaka is a very dedicated group when it comes to improving the community. They focus on many aspects of education by offering homework

assistance, access to free books, a save learning environment, and several outreach initiatives. These include visiting schools in the area, telling the students about emerging issues such as child labor, illnesses, pregnancy, and the elections and democracy. Additionally, the library staff informs students about the importance of education, of staying in school and prioritizing school and school work, and encourage to taking advantage of educational offers in the community.

In the following three of the most important forces regarding advocating education in the local community are presented.

Thomas Kargbo

Thomas Kargbo is the head librarian at the Magburaka library. He is the man in charge at the library and the one who coordinates the official initiatives from the library. Mostly, this consists of arranging meetings with different schools and dates for school visits. According to him, meeting the students face to face is the best approach of reaching them in a country such as Sierra Leone where newspapers, emails, and other means of communication are close to non-existent. Thomas strongly believes in improving the system one student at the time, one school at the time. Even though there are thousands of schools in the country, he considers himself an advocate for better education, and believes that his words about committing oneself to school will make a difference. When asked about the most limiting challenge to improving primary education he answered:

"One of the major challenges is the unqualified teachers. Without any improvement of existing teachers better teachers will not come until a new generation of teachers is educated. And improving the teachers we have now is difficult because an offer such as this would have to come from the government and be free of charge" (Thomas Kargbo, head librarian at Magburaka town library)

Abdul Mansarey

Another of the librarians at the local library is Abdul Mansarey. Abdul is one of the most active in the field of education when it comes to visiting schools in the area telling the students about the benefits of education and the after school offers in the area that could improve their educational level. Abdul is well educated; saving up to finishing his university degree, and very interested in developing the community and the country. In general, he is very concerned with societal matters; everything from politics to language differences to the civil war.

One of his great passions is improving the community in every way possible. He is very committed to his job as a librarian and he does his best to make the most of it. He and the other staff members at the library use their spare time to reach out to the community and advocate for the possibilities and opportunities that come with education. Abdul believes that the way to development is through improving education. He stated:

"I trust that an educated population is the best way to create a working, sustainable system without corruption. Education solves many problems such as poverty, the lack of democracy, exploitation of children; especially girls, and corruption" (Abdul Mansarey, librarian at Magburaka town library)

In the community, Abdul is convinced that joined forces will improve primary and secondary education:

"All actors in the field of education must approach students both in and outside of school and encourage them to attend school and attend extracurricular activities that will strengthen their education such as free tutoring, computer courses, reading books in the library and joining study groups" (Abdul Mansarey, librarian at Magburaka town library).

Abdul is a man with great visions, and obviously he is very optimistic in his view of the future, but the fact that such a man exists; and hopefully many others such as him, indicates who might be the driving forces when it comes to improving education.

Princess Sesay

The last librarian, I want to highlight, is Princess Sesay. She has the same enthusiasm for education as Abdul. In general, she is extremely passionate about helping children and young people understand the world they are a part of and encouraging them to become good, participating members of society. Education is her main interest and she too considers education the catalyst for development. However, she states:

"In a poor country such as Sierra Leone, we do not have the luxury of only paying attention to one thing [education]. That is why I also tell the children about health issues and hygiene, politics and democracy, and society" (Princess Sesay, librarian at Magburaka town library).

When Princess speaks in front of students it is obvious that she is very passionate about reaching them and making them understand that what she is saying is important. She uses different

communication techniques such as; asking questions, speaking in a loud and clear voice, using examples from real life situations, and using repetition. She appeals both to the students' intellect and feelings by the use of logos and pathos, and the students pay much attention and are very attracted to her speech.

The last observation presented from the study is of a meeting about UNICEF's initiative to improving quality in education; Child Friendly Schools.

Meeting about Child Friendly Schools, Tonkolili district Education Office, Magburaka, 16 January 2013

A meeting for all education stakeholders in the area was arranged by the education office and UNICEF. UNICEF was represented by a local representative who gave the keynote address at the meeting. Child Friendly Schools (CFS) is an education model developed by UNICEF which was the reason for them being represented. 100-150 people participated; the deputy director of education, the inspector of schools, the paramount chief, chairman and representatives from the district council, representatives from different institutions and NGOs, and numerous head masters and head teachers from the surrounding schools.

In the meeting the criteria for child friendly schools were highlighted as; a trained and qualified head teacher, at least two qualified teachers, materials for qualified learning, acceptable toilet facilities, safe drinking water, and safe recreational grounds for school and play. All in all, it was established that it is essential to have a safe environment in order for learning to occur. It was agreed that in order to ensure these safe structures a number of partners in the field of development such as; UNICEF, the Ministry of Education, and NGOs must come together. Another aspect of safe learning environment is the matter of a safe home environment for the children. It is crucial that they have support from home which means that the family must support the child mentally. This is however difficult for families who struggle financially. If the child hears at home that the fact that he or she goes to school is a financial burden on the family, the child is more likely to feel guilty about it. This was discussed to a great extent at the meeting and it was even discussed if this issue needed to be attended to before even concentrating on schools. One suggestion was that development partners could address the issues of school and home simultaneously. Suggestions for solutions were; financial help to families, focus on the home in school, and involvement of parents and other family members in the child's schooling.

Next, the main issues for bringing quality into basic education were discussed. At the top of the list are committed, trained, and qualified teachers who are dedicated to teaching. They must be professionals with an education with time and commitment to do the job. Another essential criterion is the implementation of new teaching methods. This can of course not be done without qualified teachers so the two are mutually inclusive. All things considered, the importance of teachers doing their jobs in a manner that fosters learning and individual development in the child is undeniable.

No final decisions were made in the meeting, however the objective of the meeting was to create awareness about CFS and discuss different possibilities and limitations to the implementation of the model. The outcome of the meeting was increased understanding of the concept of CFS within the participating members.

This hereby ends the presentation of empirical encounters in this study.

Project REACT

Evaluation Report

An evaluation study of our activities in Sierra Leone from 2009-2012

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02-05-2013

Abstract

This report describes the results of an evaluation study of REACT's activities in Sierra Leone from 2009 to 2012. Empirical data was connected at an evaluation trip sponsored by the Lauritzen Foundation during the fall of 2012.

Introduction

In 2009 REACT founded the Masanga Education Centre (MEC). The centre was built in order to educate the people and support the existing educational institutions in and surrounding the small village of Masanga in rural Sierra Leone.

In Masanga we operated a number of programs:

- Library: We built a library with a vast amount of books and novels on various topics available to the locals to read at the facilities or borrow and bring to their homes.
- Adult education: We provided lessons in English and Math for the employees of Masanga Hospital and towards the end of the program also the people close to Masanga not working there.
- Material lending: We let materials to the schools 16 placed within Kholifa Rowalla Chiefdom in Tonkolili District. These materials mainly consisted of books, but also slates, chalk, balls, plasticine (Lego) and other relevant materials were included.
- Teacher training: In collaboration with Ibis we conducted teacher training seminars with selected teachers from the same schools (Kholifa Rowalla Chiefdom). Here they were taught emerging issues and the learner-centered teaching approach.
- IT-education: At a small-scale level we provided IT courses for few employees at the hospital with our limited amount of computers. Besides this, the computers were free to use during library opening hours.
- Life skills: Our last program was the most unstructured program. This allowed for us to follow up on and support local ideas. This materialized itself into various initiatives such as: women's workshops, a traders union and a local football club.

These functioned at the centre until the summer of 2012. Here our contract with Masanga Hospital, allowing us to use one of their buildings while educating their personnel, ended. In preparation we had piloted a new project in the neighbouring, but many times bigger, city of Magburaka. The new project took stock on our observation that what genuinely sparked the imagination and curiosity of the locals was the IT-education program. This prompted us to try out a pilot project focusing on IT-courses on a larger scale. The pilot itself was an immense success with the local IT demand

surpassing our expectations. We therefore decided to make the centre permanent. At the time of writing in rented facilities, but with time in a building we construct ourselves. The construction has begun.

This new development, however, should not cause us to forget about lessons learned and experiences gained during our time in Masanga.

On the 12th of October, 2012 five members of the REACT group of heads boarded an airplane headed for Sierra Leone. Ahead they had 14 days of intense data-collecting that were to result in this very evaluation report.

During their stay in the country they conducted an array of activities. They held meetings with 17 external stakeholders (former, present or possible future collaborators) related to the project, they conducted 42 interviews with locals, employees and former program beneficiaries; they conducted 13 focus groups with primary school students and present employees and did structured observation studies at 12 different primary schools. These data form the bedrock of this report and its findings. We are grateful to the help from the Lauritzen Foundation, which made this possible.
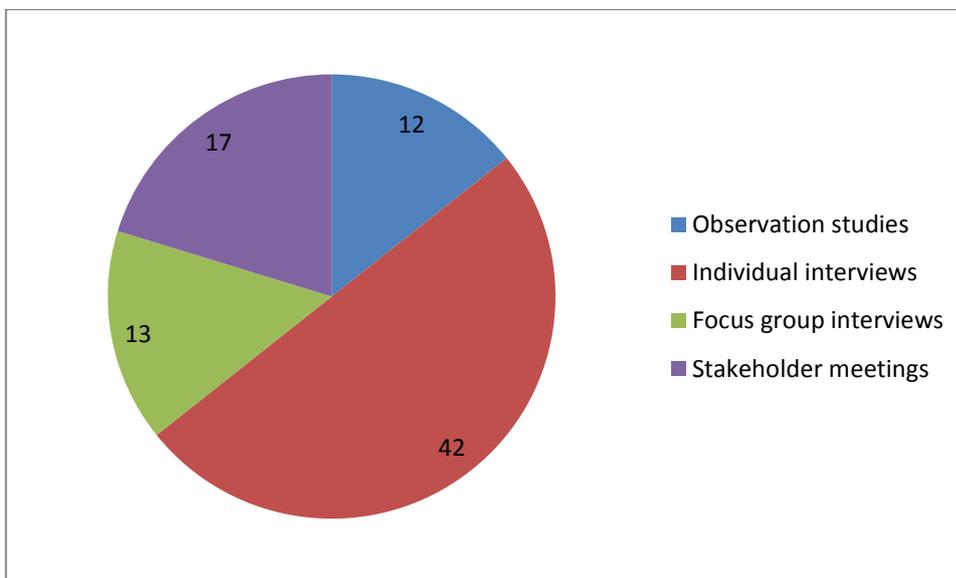
Figure 1: Evaluation trip activities

The report is divided into two primary sections.

The first section will focus on the work carried out in Masanga in the period between the years 2009-2012. Here the activities taking place at the physical education centre as well as outreach activities will be evaluated. Furthermore the section will reflect on, how our work was looked upon by the villagers.

In the second section we turn our gaze towards the city of Magburaka and the Magburaka Education and Computer Centre (MECC). Here we will focus on the IT courses, we have provided for local recipients. The effect of the courses will be traced and we will reflect upon how our project has been welcomed by the local community.

Afterwards attention will be given to how the employees of REACT perceive their role. By doing this we hope to answer questions such as: what does it mean to work under often changing management teams, how do the employees feel by working for a Danish NGO, Danish-based project leaders, etc.

In a concluding chapter the report will seek to sum up on best practices, lessons learned, recommendations and so forth.

Methodological approach

Wide arrays of research methods were utilized in order to achieve a comprehensive and in-depth understanding of the effects and perception of our programmes.

- Structured interviews with inhabitants of Masanga by local employee
- Semi-structured interviews with former employees in Masanga
- Semi-structured interviews with former adult education students
- Observation studies at collaboration and comparison schools
- Semi-structured interviews with teachers and students at collaboration schools
- Focus group interview with present employees

- Tracer study interviews with former IT-class students in Magburaka
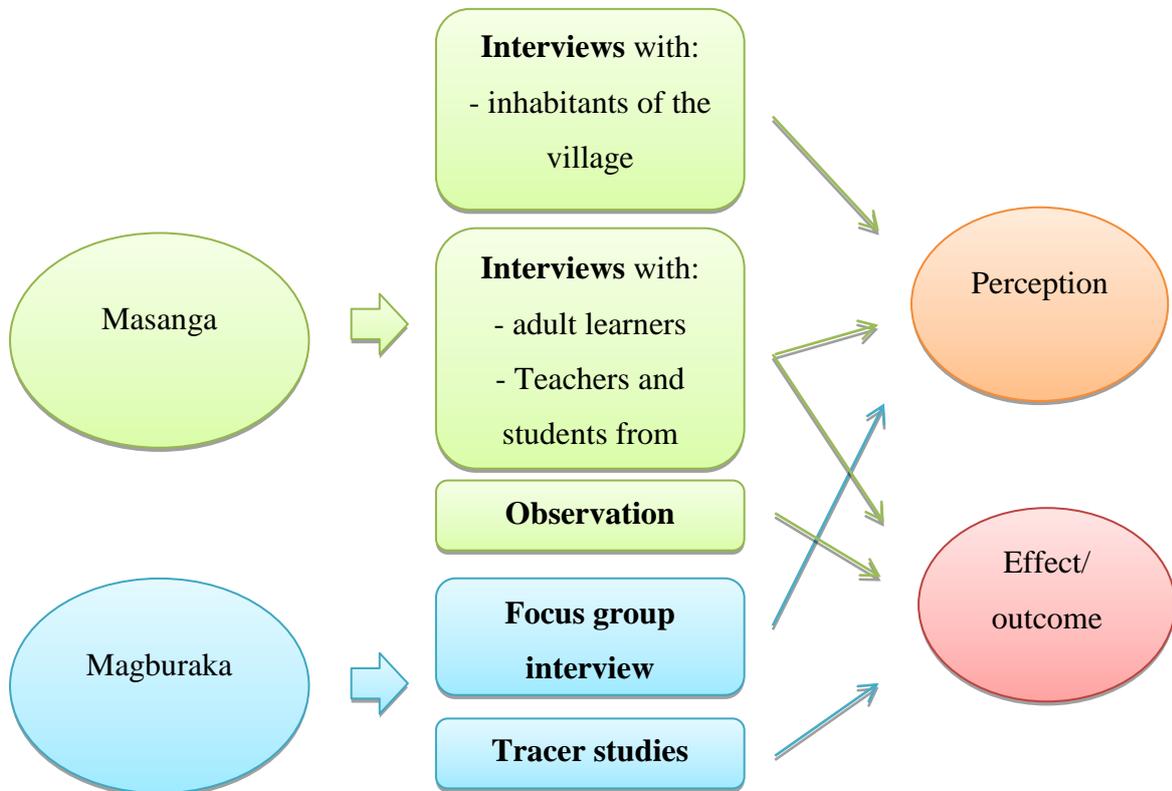

Figure 2: Evaluation methods

The following illustration depicts how the different methods interacted in order to give insights related to perception and effects of programs alike.

Our evaluation study sought to gain knowledge on programs stemming from two distinct localities. The first being the education centre in Masanga and the second being our later developed education and computer centre in Magburaka.

Concerning the programs REACT operated in Masanga we conducted a number of interviews to gain knowledge on the perception the locals have of our work. To this effect a present employee of the Magburaka centre conducted 18 individual structured interviews with a seemingly relatively representative sample of the inhabitants of Masanga. Questions concerned their views on and experiences with the centre in Masanga. We furthermore conducted semi-structured interviews with 5 former employees of the centre to get their opinion on, how they experienced their occupation.

A range of semi-structured interviews were carried out aiming at simultaneously achieving a better understanding of the perception and effect of our different programs. We interviewed five former adult education learners to get a better understanding of what they learned during the classes and how they experienced being part of the program. We also interviewed teachers and students at our collaboration schools as well as similar schools, which enabled us to compare their answers in order to see, if our work had affected how they reflected on different subjects related to teaching methodology and emerging issues.

Focus groups with students.

Finally we conducted observation studies at these schools to witness whether these possible differences in reflections concerning teaching and emerging issues also translated into the concrete teaching situations.

These observation studies were conducted by two observers who followed two distinct but supplementary structured observation guides. These observation guides were developed by REACT and IBIS in collaboration with a professor in didactics and had been pilot tested at the local schools before the evaluation trip. They measure a long list of indicators of the quality of teaching and didactical approach.

A baseline survey had not been carried out when the first sequence of lending was initiated, which hampered our possibility to conduct a natural experimental study.

This led us to make use of a *posttest project and comparison groups design*[8], which is a stronger evaluation design than 75 % of project evaluations by CARE international employ[9]. The design is in the present evaluation study further strengthened by incorporating mixed-method approaches into the design e.g. interviewing teachers and students.

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[8] Bamberger, R. & M. (2006). *RealWorld Evaluations. Working under Budget, Time, Data, and Political Constrains*. Sage Publications: Thousand Oaks.
[9] Ibid., p. 203.

The post-test project and comparison groups design relies on a comparison between the project group (the schools REACT have collaborated with (in the following referred to as 'collaboration schools')) and similar control group (a group of schools, which have not received materials or teacher training from REACT 'comparison schools') whereby an approximate estimate of project impact can be obtained. The later schools are expected to teach at the level that the collaboration schools would have taught at, if REACT had not collaborated with them. The comparison is made

Learner-centred teaching approach

Collaboration schools

Effect

Comparison schools

Project start   Observation studies   **Time**
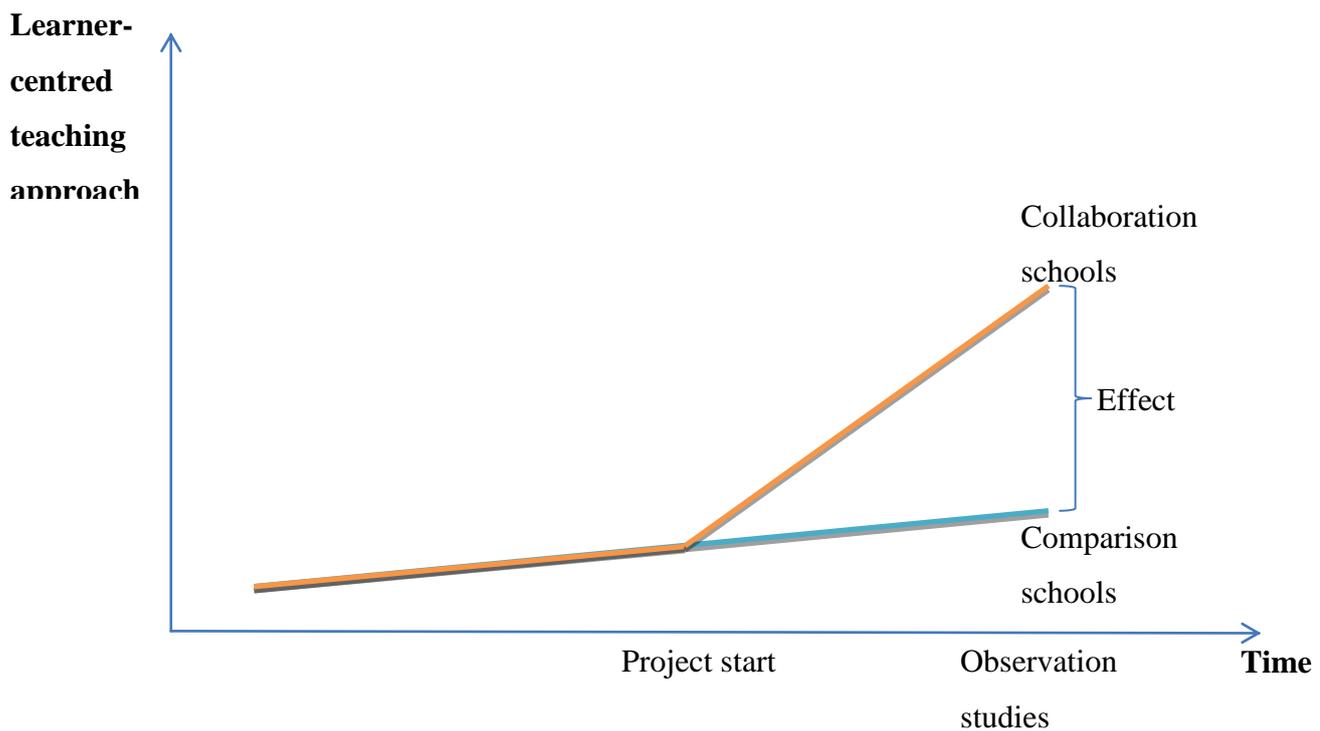
at a time, where the project is expected to have had a measurable effect on the project group. The following is an illustration of the logic behind the design:

Concerning the centre in Magburaka we sought to measure three things. First of all we interviewed the same 18 villagers of Masanga in order to understand if people some distance from Magburaka knew about the computer centre and how they viewed the activities there. Secondly, we completed a focus group interview with six present employees to enquire how they felt and thought about working for REACT. Finally, we conducted tracer studies with former computer class students to examine to which degree and to what purpose they used their acquired computer skills.

Methodological weaknesses

The most important methodological weakness of this report is the lack of independence by the researchers. All of which are volounteers from the organization under study. This methodological weakness has, however, been minimized by to a large degree including structured observation studies and unbiased interview guides. Still it should be kept in mind. The choice not to use an external evaluator is based on a wish to maximize the amount of money the organization are able to use on the actual programs and ultimately the recipients.

Certain methodological weaknesses should be taken into account concerning the observation studies. These include the differences in subject being taught, the observer effect and the challenge of choosing comparison schools.

The difference in subject matter being taught at the time of observation may make the comparisons between the schools less methodologically sound. While observers made every effort to assess classes equally and intended to observe the same subject matter at all schools, the schools did not follow their teaching schedules, so this was ultimately not possible. The differences in subject matter could lead to variations in some of the indicators measured and may thus have some impact on the conclusions of this report.

The observer effect also represents a possible methodological weakness. The presence of observers may have influenced class dynamics, for example possibly making students more attentive or affecting teaching styles.

A last methodological weakness is present in the post-test project and comparison group design in which comparison schools were used to represent situation of cooperation schools if REACT had not collaborated with them. However, it is clear that no two schools are exactly alike, so while these comparison schools are very similar to the cooperation schools, subtle differences are inevitable. Because of this, the comparison between the two groups of schools does not offer the exact differences between the actual baseline of the cooperation schools and their current performance, but instead offers a strong approximation of these differences. This should be taken into account when reading the evaluation.

Masanga

We established ourselves in Masanga during 2009. Here we made a big effort to establish strong ties to the various local stakeholders and traditional power holders in order to ensure a smooth transition into the local society. An effort was also made to get a sense of the wishes and wants of the local people before designing our various programmes. The programmes will be evaluated in the following chapter.

This evaluation is based on the interviews with 18 randomly chosen individuals on the main-street of Masanga. 6 women and 12 males ranging from the age of 22 – 90 participated. Of the interviewed, 9 had some level of educational background ranging from students and teachers to nurses and doctors, while the other 9 were ranging in occupation from tailor, petty trader, miner and farmer. This should pose a somewhat representative sample of the Masanga population with the males and the educated slightly overrepresented though.

The informants were asked questions as to the knowledge, perception and outcome of the programmes. The four programmes in question are; *Adult Education, Women's Workshop, Trader's Union* and *the Football club*. Each programme description has a background-section where the history and original intentions of the programme are illustrated.

Masanga Education Centre in general

Background**:** The primary function of MEC was providing free education (adult and IT education) and supporting the local community with improved access to information (library and life skills programs), while supporting existing educational institutions in their daily work (material lending and teacher training).

Nearly all of the interviewed knew of the building housing the programme as either 'Masanga Education Centre' (66 %) or 'Masanga Library' (27 %). This makes sense since the building used to house the old community library which was re-established and heavily developed by REACT.

We asked the villagers, which kind of activities they believed the centre had hosted. The data shows a general cohesive community impression regarding the functions of the centre, with the three dominating functions being research/study, computer training and 'education'. This was followed by functions as library and workshop/conference-hall as seen in the figure bellow.
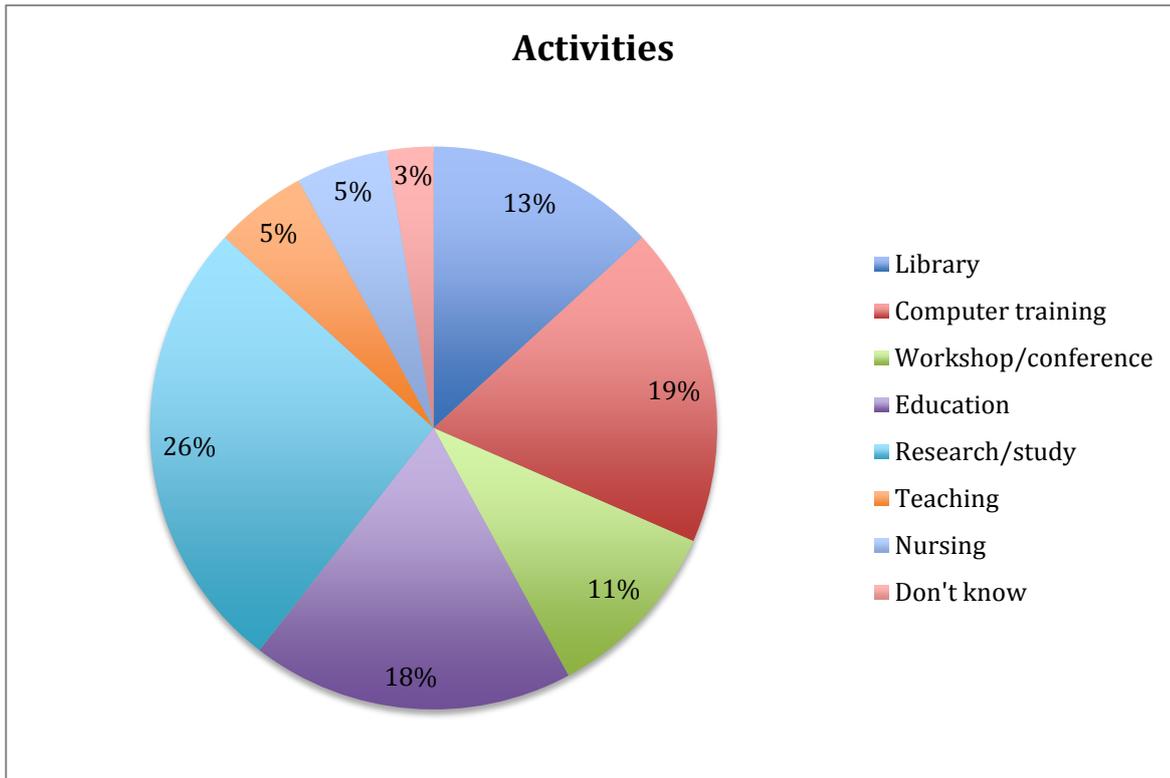
Figure 3: Knowledge of activities at MEC

It is worth noticing that a fifth of the villagers connected the centre with computer training even though this was a relatively small component during our time in Masanga, were we only had few computers available.

We also asked how many who had participated in one or more of our activities:

- 89 % of the villagers had participated in activities at MEC.

We also asked, how the ones, who had visited the centre had used it. The main purposes of visiting had been research/studying, library, computer training and educational purposes. The data is illustrated in the figure below.
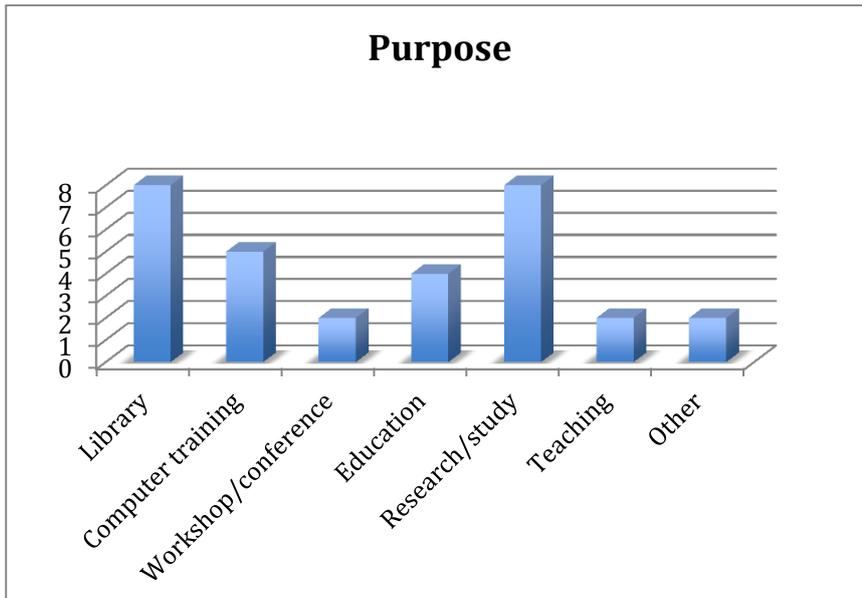
Figure 4: Visitors' purpose of using MEC

- 8 out of the 18 interviewed had made use of the centre facilitating book lending. The majority had borrowed books with educational/busyness related topics but books with leisure related titles had also been borrowed. The reading location had mainly been in MEC.

- 5 of the 18 interviewed had used the computers installed in the centre.

- When asked who was managing the centre 4 replied REACT and 4 replied Mr. Ibrahim Kamara (manager of the centre). The remaining 10 interviewed had either a false or no idea of management such as Mr. Fortune or Peter Bo.

The general community opinion of MEC was very positive. They liked it and wanted the centre to improve with more donations and better management.

In terms of growth the centre seemed to have reached a point of stagnation resulting in usage mainly by students and nurses. The community as a whole, while enjoying the centre's facilities, would like it to expand and be more including.

Adult Education

Background: REACT took over the programme from Friends of Masanga as a compulsory component. It was in collaboration with the hospital and getting people to show up became an

immediate problem. REACT restructured the programme with a new curriculum but still had trouble with turn-ups.

The Adult Education programme gave the participants a basic knowledge and understanding of written language and math. The programme was widely known among the interviewed. Two thirds of the villagers knew of the programme when asked.

As for perception of the programme amongst the locals, it was met with great enthusiasm. Many of the interviewed not only favoured the more technical skills acquired by the participants, but they also mentioned the overall gain in happiness and life quality from acquiring these skills.

As Mr. Ibrahim Kamara, a 30-year old building- and construction worker, puts it:

"They [the participants] feel good because they now know how to read and write".
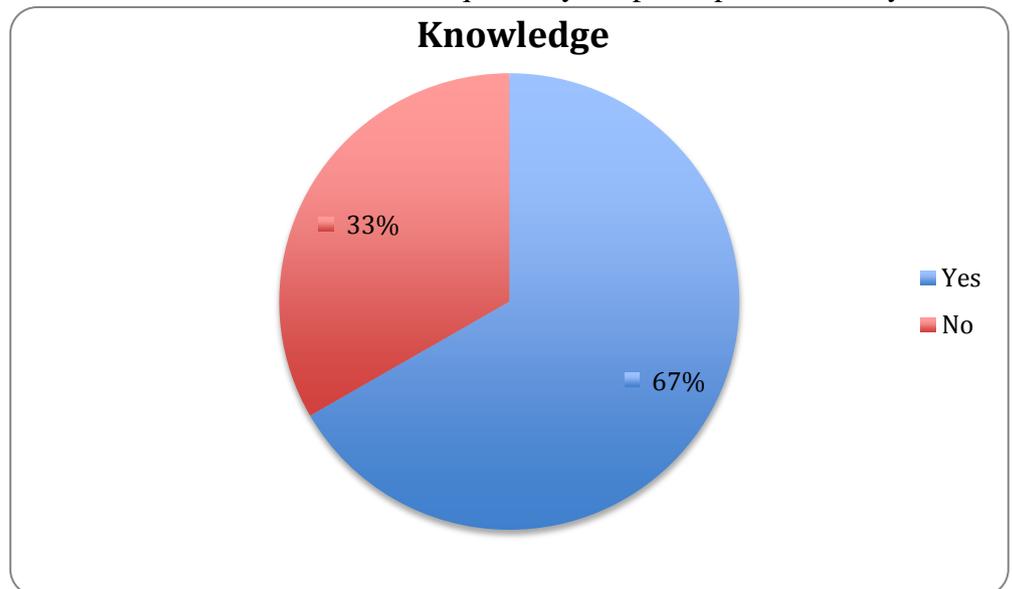
Figure 5: Knowledge of adult education program

Of the 12 in knowledge of the programme, half had a purely technical impression of the outcome, while the other half also emphasised the personal development aspect.

The participants had according to the interviewed gained skills in reading, writing and numeracy – an overall improvement of knowledge.

There was a general problem in turn-ups. Even though attending the classes was mandatory, no real sanctioning took place. Furthermore, the majority of the participants were uneducated but employed; hence the education didn't provide any immediate sum of money or rise in salary. The students saw their jobs as '*safe ground*', providing the money needed for daily living. The view on

classes like math and English was more diffuse and wasn't seen as something providing a future means of living.

"I had my certificate so I did not want to go more to school. I liked both math and English. Some of the other students were too busy working that they did not have time to go to school." (Aminata)

This attitude was also something that the adult teacher at that time recognizes as being a major challenge when trying to motivate his students:

> *"We had some challenges with the motivation of the students. They could do their work without the education so they did not feel they needed it. The issue was the money. I told the administration about this problem in the beginning, and that they should motivate their workers. The people feel it is of no use to them. Here we do not force the people to work so they have to be motivated. Now people are mining gold and come back at 6 – they only think about the money. Even though it may be necessary to educate the illiterate, they are not motivated."* (Mark, adult education teacher)

The satisfaction about the programme cannot be questioned, but questions still stand as to the outcome in terms of knowledge gained by the participants. Future educational activities should seek to get a more thorough understanding of the motivation among the students.

Life skills programs

During our time in Masanga REACT established a number of life skills programs. The raison d'être behind the program was to establish a program frame that allowed for local initiatives to be supported. These programs were developed from local wishes and wants, and were meant to have a more or less permanent nature.

Women's' Workshop

Background: The programme started as a local initiative from the women of Masanga themselves. The idea was originally intended for facilitating the women's ideas and workshops.

The Women's Workshop was known to half of the locals. Two women (out of x) had participated in the programme. The community opinion was overall positive; granting the women knowledge for greater economic independence from the men. The women gained skills in managing business from

home and how to deal with marriage and their husbands. One woman expressed her perception of the outcomes with the following:

> *"It improved the unit of the women in the community. And when we were at the meetings we learned a lot. "*

A local man also felt the women had benefitted:

"The community thinks that it will help the women, and they learn how to manage their business and their home."

The programme was met with critique from a single interviewed stating, that they had learned nothing from the teacher. It would seem, however, that the overall picture of the Women's Workshop in the community is good. More workshops are requested. The actual outcome of the education is hard to determine based on the interviews.

Trader's Union

Background: The programme was based on the local needs and wants. It was a short-term programme equipping local traders with simple business-related skills enabling them to being agents of change.

One third of the interviewed knew about the Trader's Union. One had attended the programme and felt he learned how better to manage his business. There was a general ignorance among the interviewed as to what was taught and learned in the programme.

The local community was positive in regards to the initiative, but evidently slight confusion had occurred over the maintenance of the programme. The overall outcome seems to be relatively small.

The Football Club

Background: REACT helped to establish a football club in Masanga which train and play matches against neighbouring villages. The locals are now in charge of the team themselves.

The Football Club, based on the evaluation results, had an impact on the community feeling as a whole. The people of Masanga take great pride in the local team and thus the provision of new facilities was greatly appreciated. One interviewee expressed a great deal of optimism regarding the club:

"The community likes it and wants the football club to be the best in the country."(Woman, 22 of age)

In sum

Masanga Education Centre became an institutionalized part of living in Masanga village. Virtually everyone knows the centre and nine out of ten villagers have participated in activities at the centre during the few years of operation. Despite the widespread illiteracy an impressive 44 % of the villagers have used the library to borrow one or more books and everybody agrees that the centre have been a benefit to the community:

"The people in Masanga are very happy for the centre and the library. They like it and they want it to improve."

There was a general positive feedback from the interviewed as to the outcome of the programmes. It would seem like a positive outcome has been made in terms of education, women's awareness and community feeling.

Throughout Adult Education, Women's Workshop and Trader's Union, a certain amount of frustration could be drawn from the feedback. This seems to come from different expectations to the programmes from the people of Masanga on one hand and React on the other. The Women's Workshop would be an example hereof. Sadly it is also clear, that some confusion exist as to why many of the activities at the centre seized to exist, when REACT handed the building back to the hospital:

"At first it was going good, but now it is only for students and nurses. We thought it would grow, but now it stopped."

The centre did succeed to bring about educational activities with a very wide target audience that are now missed.

Outreach programmes: material lending and teacher training

Introduction

In Sierra Leone a majority of the schools suffer from a severe lack of school materials. Many donors have tried to remedy the situation; often by donating books to the schools. This method has, however, proved somewhat ineffective as many books have been sold at the black market and no longer benefit the young learners intended.

With this knowledge REACT launched a material lending program aimed at lending various forms of school materials to 16 local schools (all within Lellenken section) in 'material packages'. These packages rotate between the schools. This ensures that the materials will not be sold at the black market, as this can lead to a demand of compensation and the threat to be excluded from the program. Less than 5 books have been misplaced during the years of operation. Workshops have furthermore been held at the receiving schools in order to ensure a smooth introduction of the materials into the class room and a high degree of teacher knowledge concerning different methods of utilizing the materials.

This program have provided a big amount of synergy with the teacher training program. REACT partnered up with IBIS[10] to implement this program aiming to:

1. Improve the professional capacity of 45 teachers in the Kholifa Rowalla Chiefdom, especially in regards to Child Centered Teaching Techniques and Emerging Issues,
2. Improve the knowledge of Emerging Issues among 480 upper primary students leading to greater empowerment, civic responsibility, and healthier lives,
3. Support improved management of the 16 primary schools through School Management Committee Training,
4. Improve quality education and child friendly education by training teachers at the 16 primary schools in the Teachers Code of Conduct
5. Involve District-level District Education Office and District Council staff in all aspects of the project in order to increase their visibility and influence in the section as well as increasing government action to improve conditions in section schools.
6. Influence education policies & debates in favour of achieving Education for All, quality education, and child-friendly education.

This evaluation will, in particular, focus on aim 1, 2 and 4 measuring the effect of achieving a higher level of child centered classroom teaching. In order to provide high quality teacher training

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[10] Memorandum of Understanding between REACT and IBIS.

workshops REACT and IBIS developed a wide range of teaching and course materials. These have since been published by IBIS.

The evaluation included observation of 12 different schools and focused on many different topics. The schools evaluated included six schools that REACT collaborates with (Malongba, Maraka, Masanga, Matham, Mathora and Ro-Mangoro schools), four schools that have comparable conditions to those REACT collaborates with (Mabom, Magbas, Magbom st. and Mamankemoi schools) and two schools with much better conditions due to better funding and central location (MCA and TDC schools). The schools are respectively referred to as 'collaboration schools,' 'comparison schools' and 'well-funded schools.' The topics covered in the evaluation are broad and include access to materials, teaching methods and student participation, among other things. These topics are presented in sub-sections below, and an informative overview of topics covered is available in the table of contents.

1. Access to Materials

Teachers' Access to Books

Unfortunately, data on teachers' use of books is lacking from two collaboration schools, making it difficult to draw any concrete conclusions. However, it is positive to note that at the point of observation, teachers in collaboration schools had books one third of the time, while neither of the teachers at the better-funded schools had books.
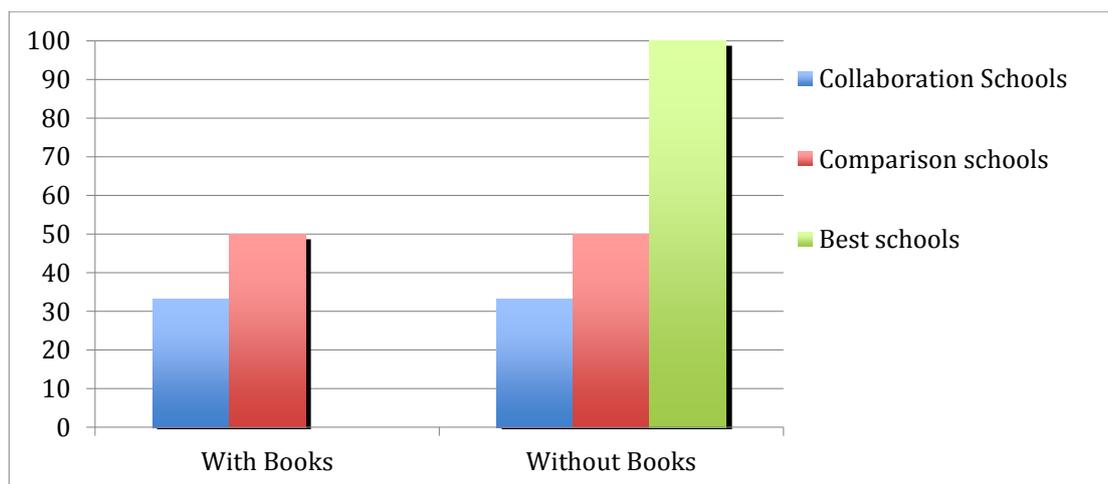

Figure 6: Percentage of teachers with books

Students' Access to Books

Regarding the number of students with books, the collaboration schools had the best book to student ratio of all the schools:
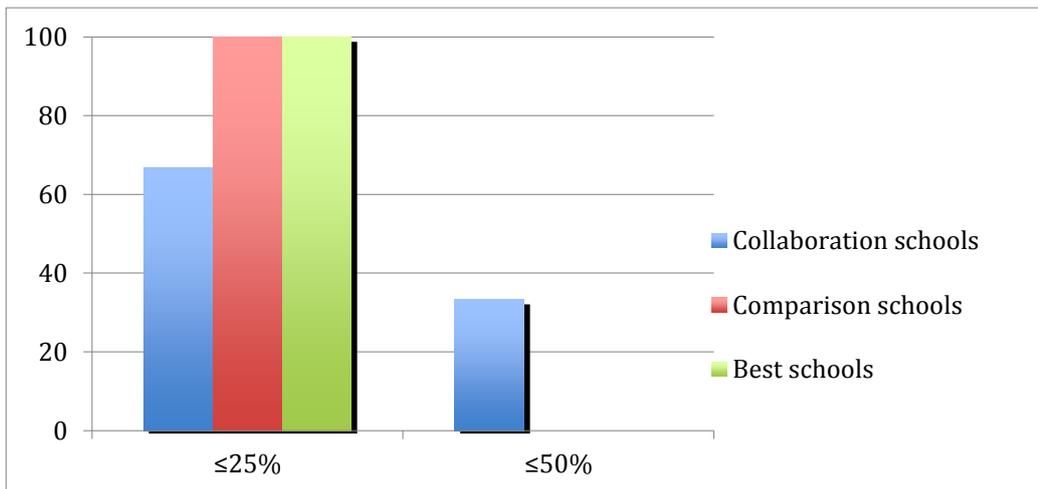

Figure 7: Percentage of students with books

Of all the classes surveyed, the only ones where over 25% of students had books were in REACT's collaboration schools. In all classes at other schools, less than 25% of students had books. This serves to document that there exist a widespread lack of school books in Tonkolili District, making the material lending program extremely important for the collaboration schools and very relevant to expand in scope.

Students' Access to Materials

Students' access to general educational materials (ex. exercise books, rulers, pens, etc.) was best in the well-funded schools, closely followed by the collaboration schools. On a scale of 'no,' 'little,' 'some,' or 'large' access to materials, both classes from the well-funded schools surveyed had 'some' access to materials. In the collaboration schools, a 67% majority had 'some' access to materials, while the remaining 33% had 'little' access. Of the 4 classes from comparison schools, all were at a different level on the scale of access. This could indicate more consistency in as well as a generally higher level of access to materials in collaboration schools than in comparison schools.

2. Trends in Questions and Responses

Number of Teacher Questions

Of all classes observed, teachers in those from collaboration schools asked, on average, the fewest questions (most asked between 10 and 20 questions). Teachers from classes in comparison schools asked the most questions, while those in well-funded schools fell somewhere in the middle.
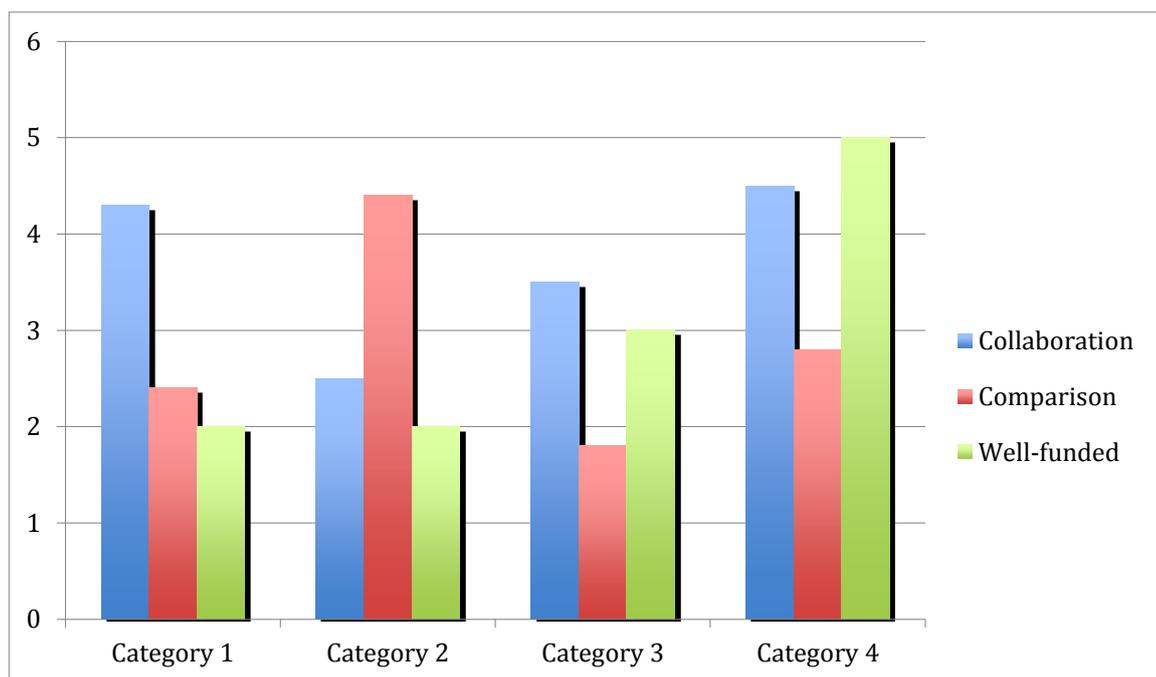

Figure 8: Number of teacher questions

This may be due to the subject matter being taught, however. All classes observed from observation schools were receiving math instruction, while the classes in well-funded schools were being taught language and writing and classes in collaboration schools were working on diverse subjects. This may make it difficult to compare number of questions asked since some subjects, for example math, may naturally lead to more questions from the teachers than other subjects.

Types of Teacher Questions

The observation also noted what types of questions teachers asked, including rhetorical questions, yes-or-no questions and questions that required students to reflect, referred to here as 'reflective questions.' Teachers from classes at collaboration schools asked, on average, the most different

kinds of questions, and all of them asked reflective questions. Teachers at well-funded schools asked only reflective questions, and teachers at comparison schools asked mostly yes-or-no questions.
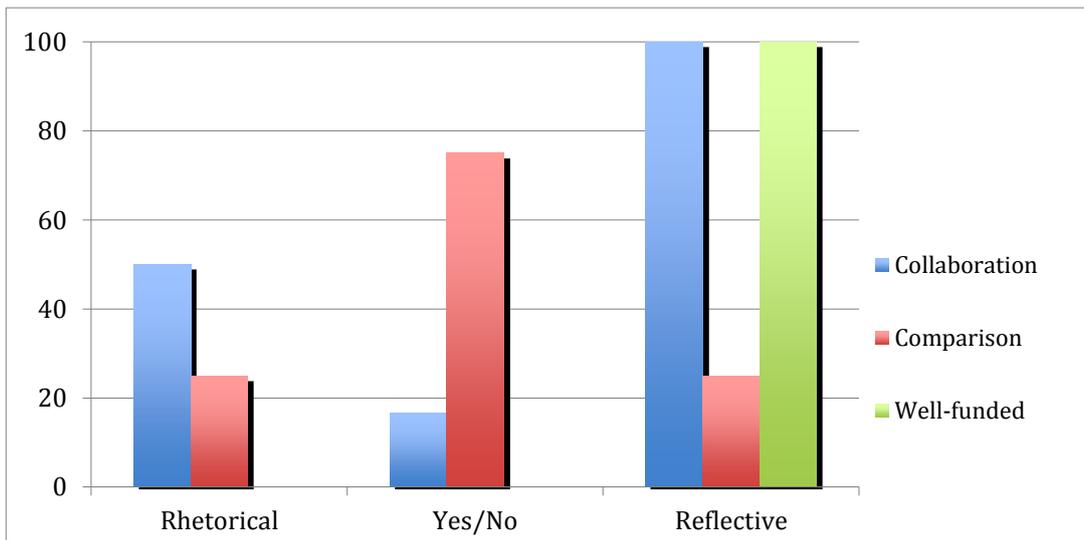

Figure 9: Type of teacher questions

While these results are positive, they may be influenced by differences in subject matter instead of reflecting meaningful differences in teaching methods.

Answer Diversity

Also observed was the diversity of students answering teachers' questions in order to determine if there were a select few students that answered the teachers' questions or if a more diverse group or even all of the students participated in answering questions. Compared to the collaboration schools, the diversity of students answering questions seems to be roughly the same in comparison schools, but slightly higher in the well-funded schools.

Number of Student Questions

In all classes observed across all types of schools, students asked less than 10 questions during the class. While there are therefore no interesting differences between the different schools, the notable lack of student questions could itself be an important point for future improvement.

3. Teachers´ preparation

The evaluation looked at teachers´ preparation for the lessons in all of the observation schools and focused on the lesson plans and timetables.

Lesson plans

 As the results of observation represent (chart below), more than one third of teachers from collaboration schools had and used their lesson plans, which is positive because teachers from the comparison schools generally lacked or did not use lesson plans. The well-funded schools demonstrated the best results, all questioned teacher had lesson plans and they covered what the plans prescribe.
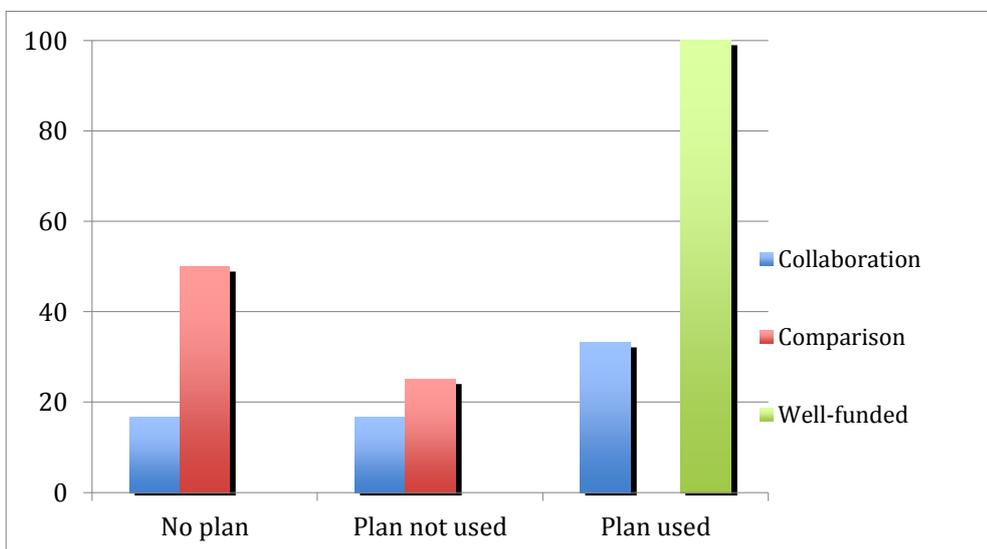
Figure 10: Percentage of teachers that used a lesson plan

Timetables

Furthermore, as data on teachers´ use of class timetable (chart below) indicates, the collaboration schools are in-between, more than one second of the questioned teachers had timetables, but did not use it, and one third of the teachers had and used them. Teachers from the best schools demonstrated the best results and teachers from the comparison schools seem to be in the worst situation, they mostly had not and did not use timetables.
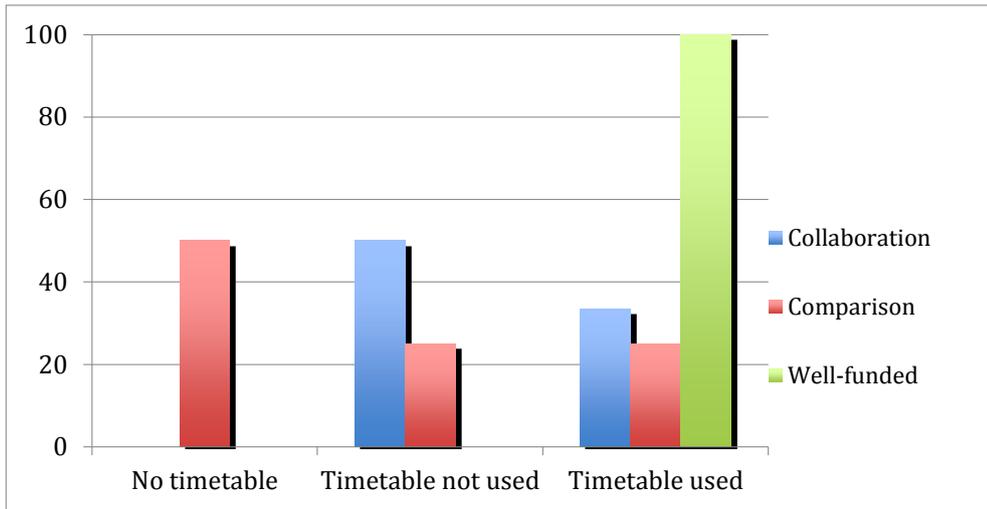
Figure 11: Percentage of teachers that used a timeplan

4. Teaching methods

The evaluation also looked at teaching methods, such as: teaching aids, structuring of the lesson, differentiation, disciplining, acknowledgment and homework.

Teaching aids

The observation noted, which of the following perceptions (audiotive (listening/ears), visual (seeing/eyes), tactile (touching/hands) or kinaesthetic (doing/body) were stimulated during the lesson in all of the schools. As the chart below indicates, in all the observed schools audiotive teaching perception dominate.

Moreover, the tactile perception was practiced only in classes at the collaboration schools and these schools were the one which used all: audiotive, visual, tactile and kinaesthetic perceptions. Unfortunately, teachers from classes at the well-funded schools mostly used two (audiotive and kineasthetic) and from classes in the comparison schools three (audiotive, visual and kinaesthetic) of them.
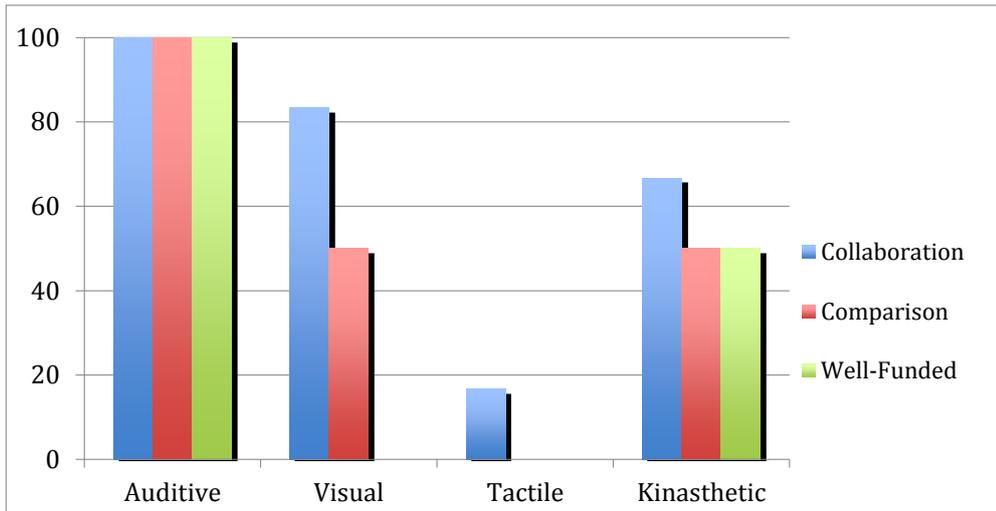
Figure 12: Teachers' use of different teaching methods

Structuring of the lesson (input-based teaching)

The observation studies also took account of the extent to which the lesson is based upon the inputs that the teacher gets from the pupils during the class in all the schools. Regarding the data, the collaboration schools were in between, here the lessons based upon the inputs that the teacher gets from the pupils were from no to some extent. The well-funded schools demonstrated the best and the comparison schools the worst results.
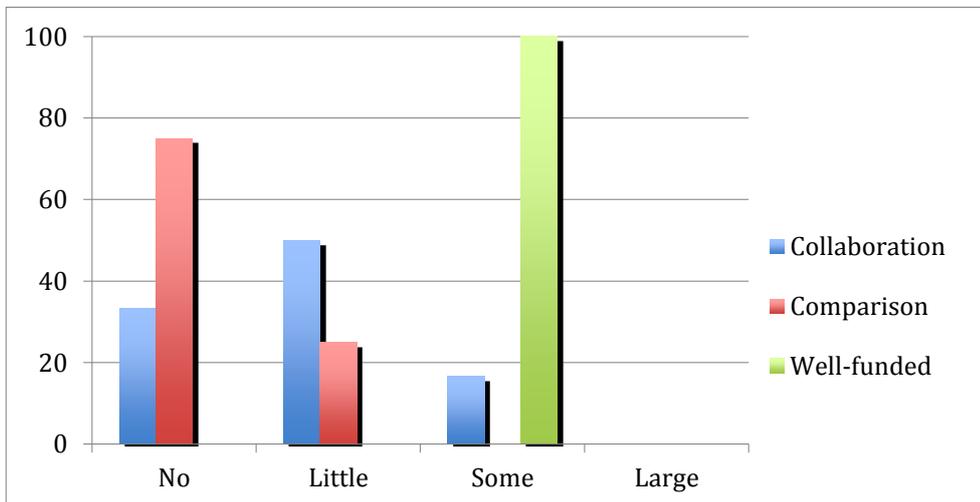

Figure 13: Extent of input-based teaching

Differentiation

Differentiation (taking the different learning level and potential of the pupils into consideration during the lesson) is much more widespread at the collaboration than the comparison schools. Whereas no comparison schools use 'some' differentiation this holds true for every third collaboration school.
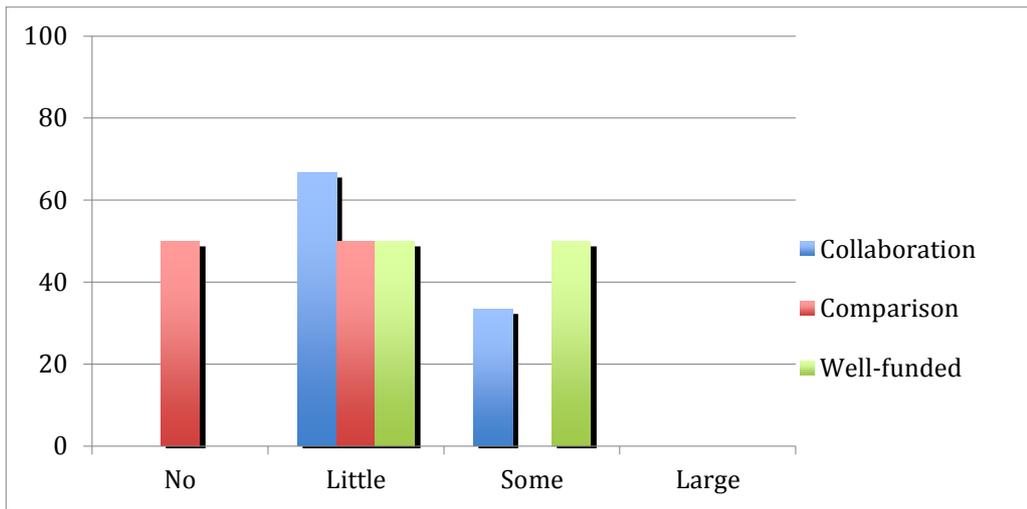

Figure 14: Differentiation of students during class

Teachers' Disciplining

In all classes observed across all types of schools, almost none of the teachers yell at or discipline students who interrupt or otherwise disturb the class.

Teachers' acknowledgement

In all classes observed, teachers from collaboration schools generally acknowledged good student performance very little. Teachers in comparison schools acknowledged students' performance slightly more, while those in well-funded schools acknowledged good performance the most.
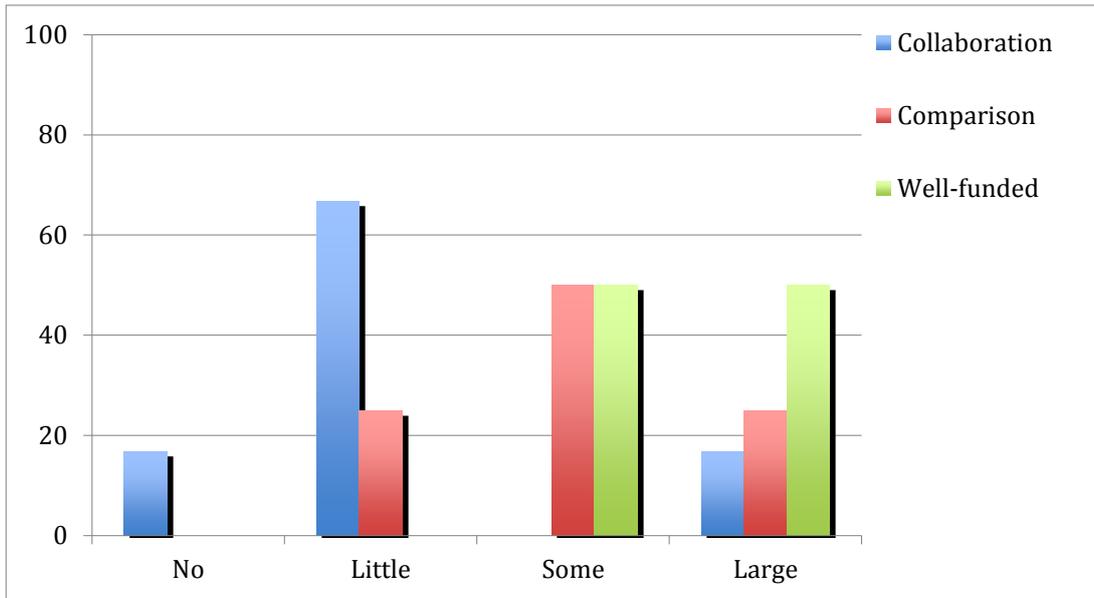
Figure 15: Teachers' acknowledgement of students

5. Teachers' Confidence and Knowledge

Teachers' Confidence

Teachers' confidence was measured on a scale of 'no,' 'little,' 'some,' or 'large' confidence and was observed to be highest at collaboration schools. When all of the observations are taken together, collaboration teachers had slightly more than 'some' confidence, while teachers at all other schools, both well-funded and comparison, were consistently considered to have 'some' confidence.

Teachers' Knowledge of Subject

Teachers' knowledge or grasp of the subject they were teaching was also assessed. This was done on a four-point scale of 'no,' 'little,' 'some,' or 'large' knowledge of their subject. The observation showed that at collaboration schools, teachers were assessed as having a slightly higher level of knowledge regarding their subject when compared to both other types of schools, with four out of six being judged as having a 'large' knowledge of their subject. Comparison schools and well-funded schools were assessed as being fairly equal, with most teachers being assessed as having 'some' knowledge of their material.

6. Class participation

Concentration

In all classes observed across all types of schools, students' concentration after 20 minutes of teaching was best in the collaboration schools, with most classes having 100% of students still attentive. In the comparison and well-funded schools, half of the classes retained more than 75% of all students' attention, while the other half also had 100% of students' attention.
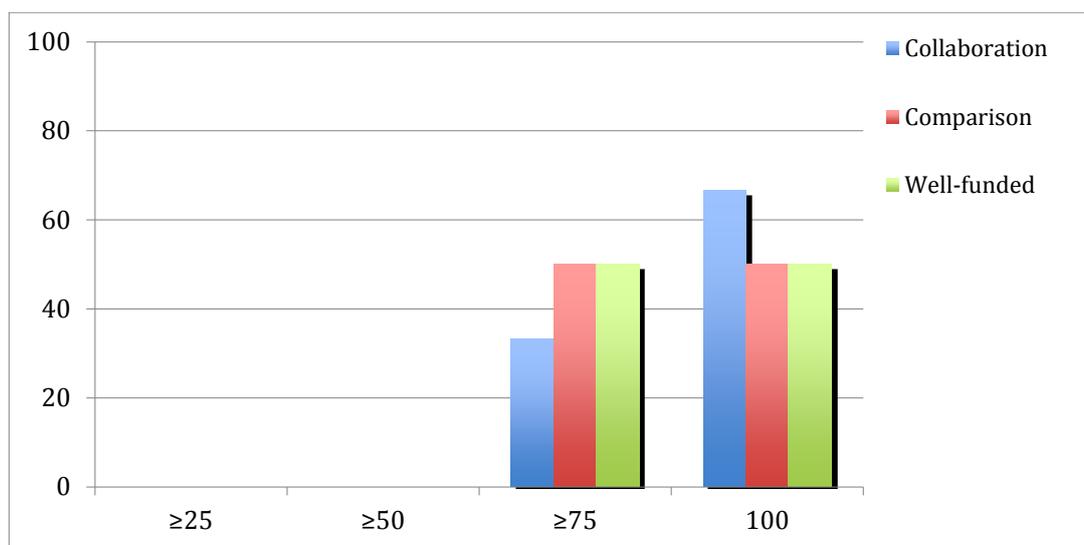
Figure 16: Students' concentration after 20 minutes of teaching

Local language usage

Of all classes observed, teachers rarely or never used local languages to explain elements of their lessons, except for in one comparison school, where a local language was used extensively.

Use of class time

The observation also noted how class time was used, specifically measuring the time used on monologue from the teacher, monologue from students, individual work, group work, and class discussion. Teacher monologue was clearly dominant in all schools, though teachers at the well-funded schools used the most time on other types of these activities in their teaching. Teachers from collaboration schools seemed to be in-between, using less time on activities other than teacher monologue than well-funded schools, but more time on them than comparison schools. In relation

to comparison schools, they also used more time on group work and class discussion, which is very positive since these activities are important for engaging students.
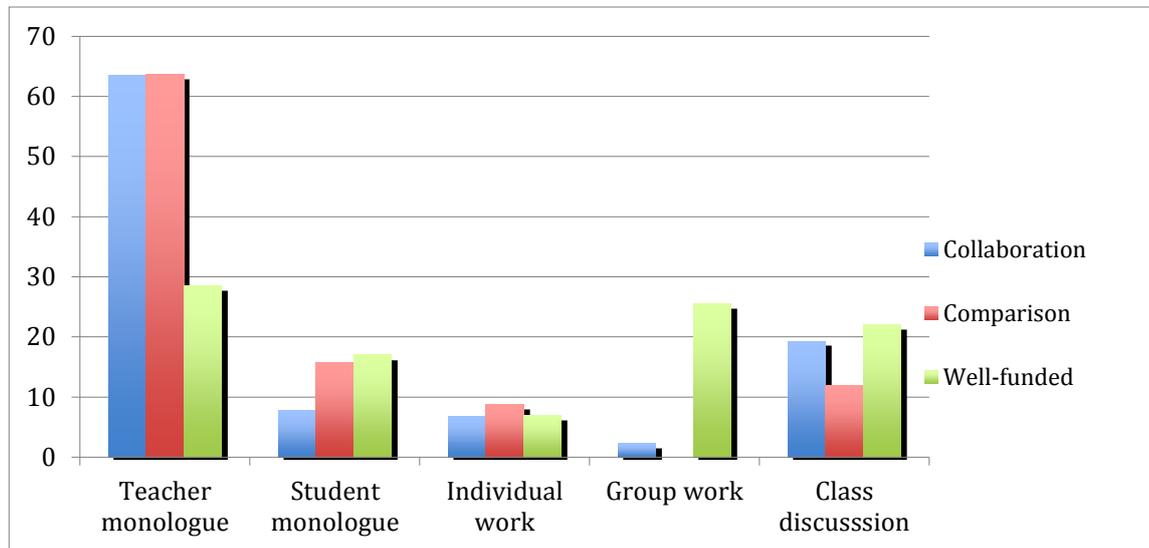

Figure 17: Use of class time

In sum

A number of conclusions can be reached on the basis of this comprehensive empirical material. Firstly, the strengths of the program will be listed after which challenges will be addressed.

Strengths

Overall, all of the visited schools suffer from a general lack of materials. The overwhelming majority of schools had a student to book ratio below 1:4, which pose a big barrier for the students in order to reach a high level of literacy.

A main strength of REACT's material lending program is the good level of access to materials they have provided for collaboration schools when weighed against comparison schools. This is paramount to the young readers. The program is very important for the schools and many schools could benefit if the program were expanded in scope.

The collaboration schools showed real progress on a number of indicators of teaching quality compared to the comparison schools:

- The teacher include the students by asking more questions
- 75 % points increase in teachers asking reflective questions

- 33 % points more teachers used a lesson plan (none at the comparison schools)
- Polymethodological approach to teaching:
  - 33 % points more teachers used visual teaching methods
  - 17 % points more teachers used tactile teaching methods (new element introduced)
  - 17 % points more teachers used kinaesthetic teaching methods
- Introduction of group work as teaching method
- 7 % points increase in class discussion as teaching method
- 50 % points increase in teachers using *differentiation* of students during class
- 43 % points more teachers take student inputs into account during class
- 17 % points increase in total student attention after 20 minutes of teaching

Teachers in collaboration schools were furthermore assessed as having greater confidence and knowledge than teachers in other schools. Ultimately, they were better able to hold students' attention than teachers at the other schools by employing a range of teaching methods making the learner the centre of teaching instead of the teacher.

Challenges

There remain challenges for teachers at collaboration schools, and thus space for improvement for REACT. The main challenges noted in the observation include the low number of student questions when compared to the number of teachers' questions as well as teachers' lack of acknowledgement of students' accomplishments. While the low number of student questions is the same across all schools, it represents an important point for improvement. In addition, teachers' lack of acknowledgement of students' improvements or accomplishments is also a critical aspect to be further developed.

Lessons learned

The evaluation of MEC activities suggests that the following points could be good goals for future improvements:

- Integrating a stronger element of group work: The evaluation showed that there was group work in at least one of the collaboration school classes visited, though there remains a large gap between collaboration schools and well-funded schools in this regard. Since group work can simultaneously help students develop their communication and teamwork skills, while also developing their understanding of the subject matter, it represents a valuable classroom tool that should be encouraged.
- Enhancing teachers' acknowledgement of students' performance: The current low level of teachers' acknowledgement of good student performance is also a point to be focused on in

the future. Enhancing this will hopefully enhance students' sense of accomplishment and lead to increased student engagement.

- Pay more attention to students during class: Overall, teachers could also pay more attention to students during class. This includes asking more reflective questions that require answers from the students, cutting down on the amount of time used on teacher monologues, and acknowledging students good performance, among other things. By focusing on the students, teachers may be able to get them more interested and involved and ultimately improve educational outcomes.

So how did we do in Masanga?

Overall, REACT has contributed positively to the standard of education and the access to knowledge in and in the immediate surroundings of Masanga village…

Some primary lessons can be drawn from the evaluation over the Masanga programmes.

1. Be clear in communication: REACT has not been successful in communicating when, how and why their activities have moved to Magburaka.
2. Continuously ensure consistent mutual expectations between REACT and users of activities.
3. Ensure in-depth knowledge of motivation (why do they participate, what do they hope to gain) among the users of activities in order to maximize the outcome.
4. Ensure consistency across different teams of interns in relation to strategic prioritization of different programs.
5. Formulate outcome goals and success indicators connected to different programs in order to strengthen on-going monitoring and evaluation.

Magburaka

In 2011 REACT established the Magburaka Education and Computer Centre (MECC). Here computer courses and internet facilities are offered to the local people. This decisions was made based on on-going oral evaluations stating, that the demands for and benefits from IT-education was massive. IT indeed constituted an element of our work that caught the imagination of the recipients. That made us pilot a computer-facilities based learning centre in Magburaka, to explore whether demand was as widespread as we imagined. What we learned was; that it was even bigger than we had anticipated – this made us decide to make the centre permanent!

The strategic vision behind the centre is connected to four critical success factors:

1. REACT works to make MECC economically sustainable as a social enterprise.

2. REACT works to create organizational sustainability within the project by focusing intently and continuously on capacity building.

3. Activities at MECC must be rooted in a deep knowledge of Sierra Leonean society and expand life opportunities for the recipients.

4. REACT maintain a respectful collaboration with local partners and stakeholders and we seek to inspire by example.

REACT will run the centre for a period of ten years at most after which ownership of the centre will be given to the local society, and the local library will continue to manage the activities.

What is the word on the street(s of Masanga)?

To enquire into the knowledge of the new centre, we chose to ask the villagers of Masanga whether and what they knew about the centre. Masanga is located 15 kilometres from Magburaka. Our expectations were that mainly the youth had heard about the centre. Reality was slightly different though:

o 83 % of the villagers of Masanga know about the Magburaka Education and Computer Centre

And not only do they know about the centre. They praise it and believe it to be the best computer centre in the entire Tonkolili District:

"I heard that it is the best computer centre in Tonkolili district" (Male, 57)

"They have enough computers. The best computer centre in Tonkolili district" (Male, 34)

The vast majority of villagers do not know who manage the centre. Two people did, however, identify REACT as the managing NGO and one pointed to our daily operator, Alysious Fornah, as the manager.

What effect do our courses have?

Introduction

The survey was carried out among eleven former students who have participated in at least one course of the open-for-all IT-courses at MECC. The age of the informants were from 17 and 52 years. Only one of the informants was a woman, which reflect the remarkably lower number of women enrolling into IT-courses at MECC (a survey from October 2011 shows that 20% of the IT-

course students were female). The occupation of the informants varied from students over librarian and a policeman, two a shop owner and an engineer, an unemployed and finally one who works at one of the other Internet cafés in Magburaka, Cross Tech. This sample of occupation represents the average variation among students. (According to the survey made in October 2011 are about 55% students and 24% employed in either the private or public sector).

Most of the informants have taken the beginners course, which they generally have been very satisfied with.

Most informant have heard about the centre from people they know, so it seem like a good reputation is crucial in order to secure new costumers, although some informants also refer to PR in radio and posters.

During the evaluation tour a group of 16 former MECC students choose to start a supportive, voluntary-based association called MECCOSA (Magburaka Education and Computer Centre Old Student's Association). The main objective of MECCOSA is to create awareness of the centre among the population of Magburaka and to help former MECC students to get employed. The formation of MECCOSA shows the good will that MECC already have attained among the Magburakians.

Teachers

The informants have had either Momoh Kargbo, Ibrahim Kamara or Magnus Mahori as their teacher. The informants who have had Momoh or Ibrahim have been very satisfied by their teaching, whereas the experiences with Magnus are more mixed. The students who have been satisfied with the teaching have the following comments:

> *"His teaching was perfect. He improved my knowledge. I liked his way of teaching. He is fluent in English and knows the computer very well."* (Male, 42)

> *"He taught perfectly and correct, He had good teaching methods."* (Male, 22)

> *"He is good. I'm able to do better now."* (Male, 28)

> *"It was not bad – I love the way he teaches. He presents his material in a pleasant way. It was very encouraging."* (Male, 52)

"He was good in explaining and made good hand outs. He was not arrogant to me."
(Male, 32)

From these quotations it becomes evident, that the characteristics of a good teacher in the view of the informants are a teacher who first and foremost knows has an in-depth knowledge on the subject he teaches. Also it is valued that the teacher manages to encourage his/her students e.g. through good teaching methods and not is acting arrogant towards the students. Finally are more material aspects of the teaching such as useful hand-outs also appreciated.

Students who have been dissatisfied with the teaching have the following comments

"He doesn't know how to motivate students. He talks very harshly to students and he gave me a bad mark, which did not reflect my skills." (Male, 18)

"The lecturer doesn't treat me well. Even though I'm the best in class I didn't get a better result than the other in my class. (…) I've heard that you people normally give best grades to the best student, so I decided to work hard." (Male, 17)

Just as a good teacher is characterised by being able to motivate his/her students, a bad teacher is characterised by not being able to motivate his/her students. Also he/she has to give marks that reflect the skills of the individual.

Course content

Generally speaking the participants of the beginner's course are satisfied with whatever they learn about computers:

"Everything was interesting. I loved the course." (Male, 52)

"The most important thing I learned was to operate a computer." (Male, 22)

More specifically the informants are happy they learned Word and how to operate in Microsoft generally. A few are commenting on the use of Ubuntu through the courses, and they stress that Microsoft is the prevailing operating system in Sierra Leone.

Generally the informants are satisfied with the output of the course. The satisfaction is linked to the fact that they felt that they have gained actual understanding of the use of computer through good

teaching, which showed to be of higher quality than other prevailing alternatives such as the local computer centre, Cosstech:

> *"Yes, the lessons were matures and satisfactory. He made it clearer to me than they did at Cosstech."* (Male, 32)

Those few who haven't been satisfied have just gotten inspired to improve their skills and dreams about taking the advanced course:

> *"I did not at all achieve the skills I expected beforehand – I need to take the advanced course."* (Male, 42)

After finishing a IT-course at MECC

About half of the informants have used their attained computer skills after finishing an IT-course at MECC. Most of those who have used their computer skills are able to do so, because they have either their own computer or access to a computer at work. One of the informants got a job at the election commission as a direct effect of the skills he gained through a MECC course:

> *"Yes, because I got a job in the election commission because I've got the certificate."* (Male, 28)

Another informant has bought a computer after passing MECC's beginners course and now use excel to do the accounting of his shop-business.

The other half that haven't used their skills have not done so, because they don't have access to a computer. To keep and improve the attained skills it is necessary that MECC students get the possibility to practice their skills after finishing a course. Therefor a suggestion is to consider offering students who pass the exam some free practice hours at the centre or to give them at discount for the advanced or Internet Explorer course. Also React should consider the risk of giving people who attend the course false hopes of their future. Through the evaluation trip in Magburaka I met a man who had paid two courses (beginners and advanced) for his son a year ago. He came to me and asked why it could be that his son still haven't got a job, even though he used a great part of his savings to let his son become computer literate.

Future activities at MECC

If the informant were to take another course at MECC they would like to gain more knowledge about the programs offered in the Microsoft Office package e.g. Word, Excel, Power Point, Access, and Publisher. A single informant would like to learn about the Internet.

When directly asked the informants have some specific wishes for the future development of MECC. This being:

- Better ventilation in class room, as it gets very hot in the classroom during the lecture.
- More computers
- Professional teachers
- Get recognised by the Ministry of Education
- Offer diploma degree courses
- To offer courses in composing music and films on a computer

From these recommendations it should be noted, that better ventilation and more computers will hopefully be reality in the new building. Additionally, the process of getting MECC's courses recognised by the Ministry of education, have already started.

Recommendations

- Proper teacher-student interaction: Ensure that teachers treat students respectfully and give grades according to their skills.
- Alignment of expectations: Avoid giving students false hopes for the future by taking an IT-course at MECC.
- Obtain in-depth knowledge of computer skills demands in Sierra Leonean society, and design courses accordingly.
- Offer tailor-made courses that suit the needs of the target groups that can benefit extraordinarily.
- Continue cooperating with MECCOSA to sustain the good reputation of the centre.
- Get official certification by the Ministry of Education

Our Employees

During the evaluation trip individual interviews were completed with seven former employees all attached to Masanga Education Centre and a focus group interview with six present employees from Magburaka Education and Computer Centre.

The employees from Masanga had typically been with REACT for a period of between two to three years. The interviews expose the fact that communication to the employees has not always been crystal clear.

One of the former employees thus explains how a mistake must have happened since she has become aware, that her pension is not available for her until her age of retirement. She does not understand why. Few employees are quite sure about what exactly REACT is and how it operates:

"REACT work as partner to MEC." (Paul)

> *"I don't know how decisions are made in React."* (Mabinty)

Whereas others have a better understanding:

> *"React in DK is at non-governmental organization. They say it's a café. It's a non-profit organization."* (Mabinty)

> *In Denmark they plan, in SL they implement.* (Henry)

One of the issues is the coming and going of interns. It is underlined, that the interns to a high degree work in the same direction and all have a high focus on time and punctuality. Still, some employees express a frustration in regards to the continuous establishing of mutual understanding and relationships with the interns:

"It has been hard at times. It takes time to understand each other. And it takes time to get to know them." (Ashanti)

> *There was a lack of a system. It is better to work with just one.* (Abdul)

However, the change in interns is also seen from a more positive angle:

"...I could learn different stuff from the different interns, because they came with various backgrounds. Anders Emil and Janus taught me a lot about teaching." (Ashanti)

Another issue is in terms of responsivity – Does the employee feel a satisfying communication link to the interns and REACT as an organization?
Based on the focus group interview, the staff meetings are highly appreciated and the employees feel that their words and thoughts matter. Some suggest a direct line to Denmark:

> "*Sometimes it would have been nice to have a direct line.*" (Henry)

> "*They* [REACT DK] *would also have been better informed about how we work and what we do*". (Paul)

This could suggest that a process of discarding essential information takes place when information is transferred from the employee to Denmark and back.

There is a very positive feedback in terms of the employees' work and capacity building. The employees are proud of the organization they work for. They gain skills in regards to communication, IT and education:

> *Yes. I now have experience working with computers and am now a certified librarian. I am proud to have worked with REACT. I have good experience working as a librarian. It has been hard to survive after I lost my parents, but REACT has made it easier to sustain myself and the young ones.* (Abdul)

This gives them higher ambitions for the future, and they feel that the experience working for REACT will increase their chances of finding a future job.

Observation Guide A

This observation guide is produced to capture certain elements of the teaching methodology applied in the primary schools of Lallenken Section, Kholifa Rowalla Chiefdom, Tonkolili District. Numerous observation studies are to be conducted as an element of a baseline study done in collaboration between two partnering NGOs, namely REACT and IBIS.

The observations should be conducted by two persons, who will be responsible for looking at different elements of the teaching observed. This guide is for one of the persons – Person A. A similar guide albeit with different questions has been produced for Person B. Person A should bring a timer to the classroom in order to satisfyingly fill out the following questions.

It is strongly recommended for the observer to read the observation guide through before starting the observation.

The observation can be carried out by a sole observer. In this case it is recommended for the person in question to make use of observation guide A during the lesson and fill out observation guide B immediately following the lesson.

Factual questions about the observed class.

Please fill in the following.

- Name of school?

- Level of class?

- Subject observed?

- No. of pupils present?

Total: Boys: Girls:

Question 1: *Books usage*.

How is the book situation in class?

(tick one of the following)

- The teacher doesn't use any books during the lesson ☐
- The teacher has a book and uses it in the classroom situation ☐

(tick one of the following – pupil-book ratio)

- 0-25 % of the students have a book ☐
- 26-50 % of the students have a book ☐
- 51-75 % of the students have a book ☐
- 76-100 % of the students have a book ☐

Question 2: *Questions by teacher*.

How many questions were asked by the teacher?

- 0-10 ☐
- 11-20 ☐
- 21-30 ☐
- > 31 ☐

Question 3: *Questions by students*.

How many questions were asked by the students?

- 0-10 ☐
- 11-20 ☐
- 21-30 ☐
- > 31 ☐

Question 4: *Types of questions.*

Which types of questions are typically asked during the observed lesson?

- Rhetorical questions ☐
- Yes or no questions ☐
- Questions that prompt students to reflect independently ☐

Question 5: *Students answering.*

How many of the students answer the questions?

- Nobody answers the questions ☐
- The same few answer all of the questions ☐
- A diverse group of students answers ☐
- More or less all of the students are answering ☐

Question 6: *Participation.*

Approximately how many percent of the pupils give relevant inputs during the following activities:

- Teacher lecturing?
- Student presentation?
- Class discussion?
- Individual work?

Question 7: *Concentration after **20 minutes of teaching.***

After 20 minutes of the lesson, take a look at the students. How many percent of the students would you characterise as paying attention?

- 0 - 25% ☐
- 26 – 50% ☐
- 51 – 75% ☐

- 76 – 100% ☐

Question 8: *Other observations.*

Did you make any other interesting observations during the lesson, which could be useful to take notice of?