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Achieving Quality Teaching in Developing Countries.

Identifying factors that influence the delivery of quality teaching in primary schools in rural Cambodia.

A research project presented in partial fulfilment of the requirements for the degree of Master of International Development.

Institute of Development Studies

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Manawatu, New Zealand

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Abstract

At a global level the Education for All focus has shifted from years of schooling to the quality of education being attained. The delivery of quality education is dependent upon quality teaching. While there is no clear definition of quality teaching there are recognised characteristics which lend themselves to quality teaching and therefore are used as proxies to identify what constitutes a quality teacher. Of importance to this study is the fact these same recognised characteristics of what constitutes quality teaching and a quality teacher are reflected in the Ministry of Education, Youth and Sport in Cambodia (MoEYS) goals and teachers in Cambodia clearly identify with these characteristics.

Drawing on a case study of Cambodia this research examines the influences that work upon a teacher to either positively influence the delivery of quality teaching or to negatively influence the same.

While influences which positively and negatively impact quality teaching are wide ranging, some are definitely more influential than others. Hence there is a clear recognition of the importance of the provision of basic resources for education. The delivery of quality teaching requires basic physical infrastructure and resources such as teacher training, adequate teacher salaries and teaching materials. Without these basic resources a teacher is destined to fail in the delivery of quality teaching. This is particularly relevant in a developing country where the teachers are more likely to be working at a pre-professional level in terms of teaching skills, dependent upon teaching materials and reliant on basic classroom management skills. This is the case in Cambodia. Before any other influences become significant these fundamental needs must be met. There is also an important link between the health of both teachers and children and the delivery of quality teaching. Basic health needs must be met if the delivery of quality teaching is not to be undermined.

Acknowledgements

This thesis would never have been completed if it wasn't for the patience and wisdom of Dr Rochelle Stewart-Withers. I have needed a lot of her time and attention and I am very grateful. The guidance of Dr Regina Scheyvens throughout this project and also in fielding all manner of questions is much appreciated. The whole Development Studies team at Massey University has had a role to play.

I would like to acknowledge the Ministry of Education, Youth and Sport (MoEYS) in Cambodia. This project could not have happened without the cooperation and engagement of the staff of MoEYS and, through MoEYS, the teachers and School Directors in Cambodia. Thank you.

I also wish to recognise the teams that have been a part of achieving this research. These are the Cambodian team of The Cambodia Charitable Trust being our Country Manager, Ouch Soeun, and our staff of Nget Samboeun, Im Kanovuth, Nget Srey Mom, Meas Samnang and Ouch Soeun Vibol. Without these wonderful people this research would not have been possible, let alone all the other amazing things we are achieving together in Cambodia.

I also wish to thank the New Zealand team of the Cambodia Charitable Trust that helped me conduct the survey. Marie Grills and Jane Muller have been with me every step of the way and have spent many hours helping to understand the education system in Cambodia and prepare the survey accordingly. Claire Edwards, Tegan Arnold, Sue Oakley and Julie Symes were all instrumental in getting the research completed. The collection of data would have been impossible without their assistance. Their patience in sitting through 17 translations of the same survey is commendable.

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Abbreviations

CCT – The Cambodia Charitable trust (www.cctnz.org.nz)

EFA – Education for All

MOEYS – Ministry of Education, Youth and Sport in Cambodia

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Chapter One: Introduction

1.1 Background to this research

Since the 1990s we have seen the recognition of the importance of education as a driver towards economic growth and human development. As a result there has been an unprecedented call for universal education. The initial focus was quantity education, i.e. the number of years in education or girls enrolled in school, as opposed to provision of education which was top quality. The focus was very much about more, rather than better. As of late there has been a growing recognition of the idea that education must be of sufficient quality if it is to contribute towards economic growth and human development; access to good education is also argued to be a human right (UNICEF 1999).

This idea of education as a human right and the contribution education makes to development will now be discussed.

1.1.1 The value of education: The Right to Education for All (EFA):

In the words of Kofi Annan, "Education is a human right with immense power to transform. On its foundation rest the cornerstones of freedom, democracy and sustainable human development" (UNICEF 1999, 4). As noted above not only is education a human right, it is a necessary investment in the economic development of a country (Glewwe 2014), and the promotion of sustained human development (World Bank 2004). In a purely economic sense, human capital is measured by analysing the relationship between income, productivity, economic growth and the quality of schooling of individuals (Hanushek 2003; Bruns, Filmer & Patrinos 2011). However as Glewwe (2014) states, education is not just a matter of private returns. Education has social returns, with improvements in the functioning of civil society and increased democracy (Glewwe 2014, Asokumar & Kumar 2011).

Furthermore Asokumar & Kumar (2011) discuss the dual contribution of education, reminding us that education is "treasured" for both its intrinsic value, as it enhances the lives of individuals, and its functional value in contributing to the development of the human capital of a nation. Consequently they promote education as a "powerful tool for reducing poverty, unemployment and inequality, improving health and nutrition" (Asokumar & Kumar 2011, 48).

The important role education plays in the development of a country and its people culturally and economically was therefore at the heart of the United Nations report 'The State of the World's Children' in 1999 (UNICEF 1999). The report reviewed the rights of children to an education and identified that the denial of education to over 130 million children, mostly in developing countries, was "a violation of rights and a loss of potential and productivity that the world can no longer tolerate" (UNICEF 1999).

In response to this report the Millennium Development Goals (MDGs) (UN Millennium Project, 2002) were formed and with respect to education MDG2 focuses achieving Primary Education for All. As the initial focus on achieving the goal was access to education, the measurement of progress was very quantitative. The primary mechanism for assessing the rate of access to primary school education for children sought to measure the enrolment in primary school. However, there was growing recognition that attending school and completing primary school was not enough. There is a need for the education provided to also be quality education, necessitating the delivery of quality teaching (Courtney 2007, Chimombo 2005). This issue of quantity as opposed to quality will be discussed further.

1.1.2 Quantity education versus quality education

The World Education for All (EFA) Conference in Jomtien, Thailand in 1990, called for EFA within a decade (UNESCO 2004). Rates of enrolment were used as the indicator to establish whether the goal had been reached. In 2000 the MDGs reinforced this call for mass enrolment and increased the pressure to have every child enrolled at

school with MDG 2 – Universal Primary Education and MDG 3 – the Empowerment of Women and Girls through gender parity in education. As mentioned the indicators for the achievement of these goals are quantitative, requiring that every child be enrolled in primary school, and eventually secondary school, and that 50% of the students enrolled be girls.

In many developing countries the push for mass enrolment of children focussed on enrolling children and drew attention away from ensuring that the schools had the "capacity to retain the children once they were enrolled and to provide them with a positive and beneficial school experience" (Kim & Rouse 2011, 416). In the period between 1999 and 2007, the number of children out of school globally dropped from 105 million to 72 million (UNESCO 2008). However the financing of basic education did not grow fast enough to enable countries to meet the EFA goals, nor the MDGs. Much of the international aid provided for education focussed on higher education scholarships and not primary education (Steer & Wathne 2010). There was not sufficient financial support to enable the necessary resources in terms of infrastructure, staff, training and materials for the delivery of quality teaching. As enrolments climbed, already limited resources were stretched further (Kim & Rouse 2011).

Consequently, despite mass enrolment of children the fact that there were inadequate resources to meet the demand for education meant many children did not receive quality education. The increase in access to education was "achieved at the expense of the quality of education offered" (Chimombo 2005, 155). High repetition and dropout rates offset any gains made, and in the Cambodian context up to 50% of children failed to complete primary school (Kim & Rouse 2011). The resultant decline in educational quality has become one of the most serious problems facing developing countries (UNESCO 2010, Chapman et al. 1993). As a result the increased enrolment of children in school did not really lead to any increase in human capital (Khaniya & Williams 2004).

Recognising the limitations of focusing on enrolment alone, the Dakar Education For All Conference in 2000 sought to direct the focus on to quality education, rather than prioritising enrolments. Global standards and accountability were introduced (UNESCO 2004, Courtney 2007). As such the focus became one of student achievement and the quality of the schools (Glewwe 2014). Quality education was linked to learning outcomes and whether student achievement met defined minimum standards (World Bank 2002, Courtney 2007, Hanushek & WoBmann 2007). A distinction was made between schooling and quality education.

While this shift in direction was commendable, the drive for quality education is also dependent upon the delivery of quality teaching. This is true both for developing countries where resources are limited and developed countries where resources are plentiful. The difference is that in developing countries quality teaching is harder to achieve due to the lack of resources and human capital. As will be shown, this is certainly the case in Cambodia.

1.1.3 The challenge of achieving quality education in Cambodia

Despite this global focus on education, education is "beyond the reach of many" in Cambodia (Sok et al., 2010, 9) and the education of those who do manage to get to school is of a poor quality (Pearson 2011, Courtney 2007, Chimombo 2005). Because there is an explicit relationship between quality education and quality teaching if any gains are to be made regarding the quality of education being delivered a greater understanding of teaching quality is thus required. Specifically we need to understand what quality teaching is and what makes a quality teacher. We also must identify what the key factors which influence the delivery of quality teaching are and which factors enable, or inhibit, the delivery of quality teaching. There are also specific challenges which rural schools face (Mulkeen 2006) of particular relevance to Cambodia which will be discussed in more depth in Chapter Three.

In considering the existence and delivery of education, Cambodia is uniquely situated.

During the 1970s, Cambodia suffered the systematic destruction of its education

system under the Khmer Rouge (Kim & Rouse 2011), led by Pol Pot, in the process of the reversion of the country to an agrarian society (also see Hattori 2009). The murder of almost all educated people during Pol Pot's reign robbed Cambodia of a generation of its intellectuals and, as a result, its cultural diversity, social networks, development potential and economic future, plunging the country into poverty and setting its development back decades both economically and socially (Pearson 2011, Sok et al. 2010). This will be discussed further in Chapter Two.

The loss of these intellectuals robbed Cambodia of its leaders and role models. The loss of a significant proportion of a whole generation included the loss of parents, community leaders, cultural ambassadors and independent thinkers. More than 40 years later the loss of these human resources continues to affect Cambodia (Hattori 2009).

In an effort to stabilise and rebuild the country, emergency relief was provided in the 1980s. However financial support was at times withdrawn in response to political instability and it was not until the late 1990s that a more systematic approach was taken to rebuilding the education system (Hattori 2009, Tan 2007). Consequently, the reestablishment of education has been extremely slow and complex.

The resulting global focus on EFA impacted on Cambodia significantly (Courtney 2007) as it occurred just as the education system in Cambodia was being re-established. The demand for teachers and the urgency evident as re-establishment of the education system took place meant that individuals with a minimal level of education themselves were placed in the role of teachers (Kim & Rouse 2011, Sok et al. 2010). The need for newly qualified teachers also meant expediting the training of teachers, often with only basic teaching training occurring. Hence it is within this context that we need to view the current education system in Cambodia.

1.2 My personal interest in education in Cambodia

I have a vested interest in this research project because in 2008 I established The Cambodia Charitable Trust (CCT). The mission of CCT is to improve education outcomes and strengthen communities in Cambodia. CCT advocates that education is key to breaking the poverty cycle, keeping children safe from trafficking and is a basic human right denied to many children in developing countries, particularly girls. However, as noted in the literature, it is not just about providing more education. It is also about ensuring what is provided is quality education. Hence I have a personal interest in the delivery of quality teaching in an effort to achieve quality education. CCT aims to achieve quality 'Education for All' by supporting existing government schools and the Provincial Teachers Training Colleges in the Kampot and Takeo Provinces.

CCT's support is provided on multiple levels. Firstly, CCT looks to support ways in which barriers to children being able to access education are removed, for example by providing school uniforms and stationery, and bikes which make the journey to school possible.

The second aspect seeks to improve teacher capacity and the ability of the teacher to teach through the provision of teaching materials, teaching workshops and supporting the training of teacher trainees. CCT provides a range of support to the teachers including wage subsidies and, as mentioned, the provision of teaching materials and workshops for learning. It also funds classroom improvements; for example, providing whiteboards, desks and chairs, repairing of concrete floors, painting walls and setting up library corners. In addition CCT enables school improvements and infrastructure to be built; for example, provision of toilets and drinking water, playgrounds, vegetable gardens, preschool classes, textbooks and library books.

The third area of focus for CCT is to provide scholarships to children, predominantly girls, who are particularly at risk thus ensuring they can attend primary and secondary

school. This is underpinned by the notion that increasing the education levels of poor children, and in particular rural girls, will open up formal employment opportunities and place them less at risk of being exploited (Sachs 2005).

Having now presented the background and my personal interest in this research the section to follow outlines the main research aim and research questions and gives a brief overview in terms of how the research was to be undertaken.

1.3 Research aim.

The aim of this research is to identify what factors influence the delivery of quality teaching in primary schools in rural Cambodia.

1.4 Research questions

In undertaking this research I will answer the following three questions:

Question 1: What are the characteristics of a quality teacher?

Question 2: What factors have a positive influence on the ability of a teacher to deliver quality teaching?

Question 3: What factors have a negative influence on the ability of a teacher to deliver quality teaching?

1.5 Approach to undertaking the research.

In undertaking the literature review this work draws on journal articles and empirical research relating to quality education, the role of quality teaching as a requisite part of delivering quality education and the factors that influence the delivery of quality teaching. I also consider the relevance of these factors in developing countries and with particular reference to Cambodia.

With respect to drawing on primary data this research utilises data which was collected as part of a wider study. In 2014 the Cambodia Charitable Trust (CCT) conducted research to identify the factors that had the most influence on the delivery of quality teaching from the teachers' perspective, with particular focus on teachers working in rural schools. These teachers face different challenges than those who work in urban areas (Mulkeen 2006). This is discussed further in Chapter Three.

As a result, this research draws on the survey responses of 170 primary school teachers in rural Cambodia where they are asked to consider the characteristics of a quality teacher and identify the most influential factors on the delivery of quality teaching.

1.6 Overview of this report.

Chapter One provided the background to this research. The drive towards EFA was introduced and the importance of education both intrinsically and in a development context was highlighted. The concept that education provides returns for a developing country both economically and socially was advanced. I introduced a summary of the recent history of Cambodia and discussed the impact of this in relation to the importance of education in Cambodia. My personal interest in education in Cambodia was disclosed and the work of the CCT was presented. Finally I presented the research aim and questions.

Chapter Two further unpacks the particular challenges to delivering education in Cambodia. I expand further on the history of Cambodia since the 1960s and explain the legacy of the Khmer Rouge and its destruction of the education system in Cambodia. The call for EFA is presented in more detail and the impact that this global push for EFA had on the education system in Cambodia is discussed. The concept of quality of education is introduced and the difficulties in measuring quality are discussed. The current state of education in Cambodia is presented, as are the reforms being introduced by Cambodian Ministry of Education Youth and Sport (MOEYS).

In Chapter Three I conduct a review of literature relating to the importance of quality in the provision of education and the search for innovative ways to achieve quality in education. I examine the proposition that quality teaching is an integral part of quality education and I explore the concept of quality teaching both internationally and in the Cambodian context. I draw together common threads from international and Cambodian discourse. The various influences that impact on quality teaching at the delivery level are examined and discussed with a particular reference to the view of MoEYS.

In Chapter Four I introduce the methodology used in conducting this research and explain the survey and interview process. I introduce the schools that chose to take part in the survey and the school directors who elected to discuss matters through an informal interview are listed. My experience in the initial conduct of the survey is discussed where the teachers' answers provide insufficient differentiation between the various factors, marking all factors as being very important, and the adaptions made to enable me to obtain data that enabled differentiation and ranking of factors are discussed.

Following on from the completion of the survey and interviews introduced in Chapter Four, Chapter Five examines the results of the survey and interviews. The highest ranking characteristics of a quality teacher are examined and all characteristics are listed with their respective percentage of rankings. I see a common theme emerging where the top characteristic of a quality teacher is their ability to understand the needs of their students. Following from that, the factors with the most positive influence on the delivery of quality teaching are ranked, as are the factors with the most negative influence. These rankings are examined with a view to understanding how these factors have become the highest ranked factors which have the most influence on the delivery of quality teaching.

Chapter Six contains my concluding points and reflections on the wider implications of the research. I put forward my views on the importance of resourcing education

and my view that the other various influences on quality teaching are really only relevant once sufficient core resources are provided. These are adequate school buildings and basic infrastructure, a quality teacher training programme, teaching resources and a salary which recognises that teachers are professionals, providing sufficient income to allow them to work solely as a teacher with sufficient time and energy to prepare lesson plans and undertake professional development. The remaining influences pale to insignificance if these basic inputs are not provided. Some recommendations for policy and practice are put forward for consideration. Finally, I propose further research that should be undertaken including gender-disaggregated answers, comparing supported and unsupported schools, surveys of the experience and views of the students and their families, the differing perspectives of primary and secondary teachers and the impact of the children's health.

Chapter Two: Cambodia and Formal Education

2.1 Introducing this chapter.

The 20th Century was one of extreme conflict for Cambodia. As will be shown, this conflict has had a serious impact on human development. Furthermore, as mentioned in the introduction to this report, this conflict has impacted not only the education system in its entirety, particularly people's ability to gain access to education, but had enormous and long lasting consequences for the teaching profession and teacher training, and therefore quality teaching (Hattori 2009).

This section will provide a brief overview of recent conflict in Cambodia, the destructive force of the Khmer Rouge and the devastation of the education system. It will go on to introduce the steps towards the resumption of education and the challenges facing the development of a quality education system in Cambodia.

2.2. The Khmer Rouge's destruction of the education system

Initially part of Indochina, Cambodia gained independence from the French in 1953. However, peace was relatively short lived. Less than 15 years after independence, in the late 1960s, Cambodia was bombed during the Vietnam War to disrupt the movement of the Viet Kong throughout the country. Triggered in part by the activities taking place in Vietnam, Cambodian Government forces fought against royalist forces between 1970 and 1975 (Kim & Rouse 2011, Tan 2007).

In 1975 the Khmer Rouge, led by Pol Pot, took control of the country. Millions were killed or worked to death in the four years under the Khmer Rouge to 1979. In an effort to achieve Pol Pot's goal of a form of extreme peasant communism, the Khmer Rouge set about purifying the country of capitalism and other Western influences. As part of the process of turning the country into a purely agrarian society, the Khmer Rouge set out to destroy religion, family and education. Parental authority became

the right of the organisation "Angkar". The banking system was shut down and all commerce banned. Money was forbidden. Education and all other social services ceased. Foreigners were expelled and embassies were closed. Newspapers and television channels were shut down, radios destroyed and all forms of postal or communication services were banned. Hospitals were closed and all patients forcibly evicted. The country's borders were closed. Professionals were sought out and killed (Kim & Rouse 2011, Tan 2007, Hattori 2009). Urban and educated people were specifically targeted, particularly teachers. An estimated 75% of teachers, 67% of primary and secondary students and 96% of university students were killed (Kim & Rouse 2011, Pearson 2011, Sok et al. 2010).

In 1979 the country was "liberated" by the Vietnamese. By then the infrastructure of the country had been destroyed. With reference to education, only approximately 200 people who could teach grade 5 (age 11) and above were alive (Kim & Rouse 2011). Individuals who had attended primary school were selected as teachers, many of whom had completed only a few years education themselves and had no teacher training. As noted by Sok et al. (2010) many existing teachers from that period were "rugged survivors who have had minimal, some no, pedagogical training" (p. 7).

2.3 The resumption of formal education in the wake of the Khmer Rouge

Even though much of the country was liberated, fighting continued between the Khmer Rouge and Government soldiers until amnesty was declared in 1993. Hence, education continued to be disrupted due to these political struggles (Tan 2007, Hattori 2009) and in rural areas due to mortar bombings. Although education in a very limited form had resumed, the result of the abovementioned conflict meant there were still very few experienced teachers and the schools continued to be badly damaged or destroyed. Today over 70% of primary teachers have only lower secondary education or less (Kim & Rouse 2011).

The push for mass enrolment under the EFA policy in 1990 coincided with Cambodian people settling back into their own provinces and villages. Enrolment at schools

swelled. The biggest increase in enrolment rates occurred in the first decade of the EFA campaign as this period coincided with the period immediately following the demise of the Khmer Rouge (Kim & Rouse 2011). (See Table 1: Enrolment rates in primary schools in Cambodia). From a primary school student roll of 1,371,694 in 1991 the number of children had doubled to 2,705,453 by 2001. During this same period while the number of teachers also increased by 34% from 40,631 to 54,519 it was not enough. The ratio of teachers to students dropped from one teacher per 34 students to one teacher per 50 students. Moreover while the number of schools increased by 15%, the average number of children per school climbed from 294 per school to 494 per school. The Cambodian education system was severely under resourced and severely under pressure.

Year	Primary	Primary	Number of	Ratio	Average
	schools	students	Teachers	students to	number of
				teachers	children per
					school
1981-82	3521	1538839	31844	48	437
1991-92	4665	1371694	40631	34	294
2001-02	5468	2705453	54519	50	494
2011-12	6849	2142464	56344	38	313

Table 1: Enrolment rates in primary schools in Cambodia

Source: Ministry of Education Youth and Sport (MOEYS 2014)

Despite an increase in the number of teachers and schools since 2001, to the present day overcrowded classrooms, textbook shortages, an overtaxed teaching workforce, and declining levels of instructional quality remains (Tan 2007, Nonoyama-Tarumi & Bredenberg 2008). School Directors have limited managerial or leadership skills, teaching capacity is low, the budget is limited and there is a lack of school facilities (Kim & Rouse 2011, Courtney 2007a). Despite high enrolment rates, success in school also remains low with dropout rates at almost 50%, meaning only half of the students who are enrolled go on to complete primary school (Kim & Rouse 2011).

2.4 Present day education in Cambodia.

Many Cambodians are actively seeking an education but the education system is desperately under resourced and heavily overloaded (Tan 2007, Nonoyama-Tarumi & Bredenberg 2008). The challenges facing children in achieving quality education are hence enormous. According to the Human Development Report (UNDP 2014), 46.8% of the population of Cambodia live in multidimensional poverty, with 18.6% living below \$1.25 US a day. At least 85% of the poor are concentrated in rural areas. Families do not have the resources required for their children to attend school and so they send them to work, with child labour rates at 36.1% (UNDP 2014).

The Cambodian Government recognises that education plays a very important role in growing the country's economy and achieving the country's strategic development plans for integration into regional and international economies (Tan 2007, Kim & Rouse 2011). It is also seen as a critical component for reducing poverty (Chen et al. 2007). Responsively, the Cambodian government has prepared a realistic pro-poor national education plan, the Education for All (EFA) National Policy 2003-2015.

Despite the government's efforts the implementation of this plan still falls below the targets (Asia-South Pacific Education Watch 2007). Dropout levels have at best remained static and in some provinces have even increased. Current primary school dropout rates on average over the country have reduced to 34% but are still too high (UNDP 2014). This average distorts the position in some areas where this drop out rate exceeds 34%. Moreover, grade promotion rates are lower than hoped for and repetition rates which lead to children dropping out have been increasing. These trends are also linked to an increase in enrolment at a time when capacity, particularly in the area of teacher numbers, has remained largely static (Tan 2007, Nonoyama-Tarumi & Bredenberg 2008). The current pupil-teacher ratio is one to 46 (UNDP 2014). Given the aforementioned it would seem many children enter the system destined to fail.

2.5 Educational reform in Cambodia.

While education reform has dramatically increased participation rates among children with enrolment rates climbing significantly (Kim & Rouse 2011), efficiency and qualitative indicators show further work needs to be done to achieve quality education. This is challenging policy makers (Dhaliwal & Tulloch 2012).

There have been some structural changes. The Cluster school system was introduced as a way to coordinate central government support, strengthen school management, manage scarce school resources, increase the capacity of local staff and enhance teaching and learning (Hattori 2009, Tan 2007). To some extent this has worked (Pellini 2005, Phin 2014). MoEYS has stated it also intends to revise the school curriculum, introduce more effective remedial classes, and impose regular student assessment and standards monitoring, recruit trainees and provide them incentives to work in remote areas. It will also introduce merit-driven support programmes (Tan 2007, Tan & Ng 2012, Phin 2014).

To rebuild the education system in Cambodia also requires an investment in the infrastructure of the schools to provide drinking water, toilets, desks and chairs. The schools need resources including library books, text books, teaching materials and consumable materials. Basic institutional structure is in desperate need and critical for the delivery of quality teaching (Glewwe 2014). Having a fully functioning school is a basic necessity, with quality roofs, walls, desks, chairs, and teaching materials (Glewwe et al. 2014b). Teachers need to learn teaching techniques and have access to teaching materials. Teachers' Training Colleges need consumable materials and improved living conditions for the trainees. Teachers need to earn a living wage as teachers. The demands on resources are enormous.

MOEYS aims to increase the quality and efficiency of education by increasing quality teaching. It proposes to increase teacher remuneration and to improve the provision of teaching materials, teacher development and service efficiency. It is hoped this will

abolish the informal payment system, which is a barrier to education and creates an environment that enables exploitation (Asia-South Pacific Education Watch 2007).

Despite the fact that teachers play a significant role in keeping the children at school MOEYS policies do not focus on the actual role of the teacher in delivering quality education. Most of the government's proposals relate to increased inputs. As a result the teacher's role has been somewhat side-lined by the focus of achieving EFA (Kim & Rouse 2011). There are genuine problems with the qualifications of many Cambodian teachers that must be addressed as the teachers are the most critical component to achieving quality education (Hanushek & WoBmann 2007). Positive results could come from emphasising the teacher's role in achieving the wider goals of the education system and society by being a quality teacher. Whilst teachers recognise that being a competent teacher is critical to student learning and the delivery of a quality education, they have little confidence in their ability to deliver quality teaching and require in-service training and support to enable them to do so (Phin 2014).

There has been a limited engagement of teachers in the discussions relating to improving the delivery of quality education. There is an increasing call for the involvement and active participation of teachers in furthering the EFA goals (Kim & Rouse 2011). With reference to Cambodia, MOEYS policies may suffer if the delivery is not aligned and scarce resources may be wasted. It is therefore critical to engage the teachers so as to ensure that policy changes are taken on board and increasing inputs do not fail at the point of delivery.

Teachers in Cambodia need help to develop their capacity. To understand the current capacity of the teachers in Cambodia I draw upon Hargreaves' analysis of the development of teacher professionalism, which is argued as passing through four age phases (Hargreaves 2000). Although these phases are not universal they are relatively common.

Figure 1: Hargreaves Four ages of teacher professionalism and professional learning

Pre-professional

age

Teachers struggle alone in classroom with few textbooks or resources and little reward or recognition. Teaching and learning depends on reference to resources. Methodology includes recitation or lecturing, note-taking, question and answer and seatwork. Funnelling of the classroom talk through the teacher controls conversations and keeps them structured. The class is treated as a whole student rather than being oriented to the needs of individual students. There is a concern with order and control. Didactic teaching methods are used. It is subject-centred.



Age of the autonomous professional

Status and standing of teachers improves. Teacher education becomes embedded in university education, and teaching moves to an all graduate profession. Teachers enjoy autonomy over the curriculum and decision-making. Educational innovation encourages teachers to take on new approaches to student-centred learning. Teachers are given licensed autonomy; they are encouraged to exercise initiative and discretion. Teacher individualism and lack of feedback leads still to isolation and loss of confidence.



Age of the college professional

Teachers turn to other teachers for a sense of direction and mutual support. The role of the teachers expands to include consultation and collaborative planning. Facing accelerating educational reform teachers pool resources and develop collective responses towards intensified demands on their practice. Teamwork is necessary and the coordination of knowledge is necessary to keep pace with change. The knowledge base on teaching strategies expands. The teacher has more social work responsibilities, has to engage in behavioural management and multicultural diversity in classrooms.



Post-professional or postmodern age

Currently still developing. Could result in a broader, more flexible, open approach which is democratically inclusive of groups outside teaching and their concerns. May alternatively result in teachers being subjected to detailed measurement and control under narrowly conceived competence frameworks. Globalisation impacts on education weakening state autonomy and increasing competition in a now global labour market. Electronic and digital communications provide instantaneous and unlimited access to information. Schools are measured in economic terms. Centralised curricula is possible.

The professionalism of the teachers in Cambodia based on Hargreaves' Four Ages of Teacher Professionalism and Professional Learning (Hargreaves 2000) indicates that Cambodian teachers are at the first stage being the pre-professional age. The Cambodian Government aims to advance the profession to the autonomous professional, being the second of the four identified stages (Tan & Ng 2012). The state of the teaching profession in Cambodia is understandable considering the lack of structural support, limited interaction and feedback among teachers, and teacher individualism (Tan & Ng 2012). These assumptions are tested in the survey conducted as part of this report. The results will be discussed in Chapter Five.

2.6 Conclusion

Whilst the education system in Cambodia was significantly damaged as a result of the Khmer Rouge, progress has been made. The education system is now functioning, however the demand for education exceeds the resources available to ensure that education is of sufficient quality.

Several reforms have been introduced to improve the quality of education in Cambodia. Some of these reforms are structural and have enabled resources

to be used more efficiently. Others are policy based. MoEYS is working to develop a quality education system and an inherent component of quality education is quality teachers. With limited resources it is important to effectively engage teachers in the drive towards quality education and focus on what resources are required to enable teachers to deliver quality teaching.

There are also specific challenges which face teachers in rural communities. This research focuses on those rural teachers by examining their view of the characteristics of a quality teacher and the factors which influence the delivery of quality teaching. These are discussed further in the next Chapter.

I will now review the literature with respect to the measurement of quality education, the characteristics of a quality teacher and the influences on the delivery of quality teaching.

Chapter Three: Literature review - Conceptualising the quality education Cambodia nexus.

3.1 Introducing this chapter

One of the main issues with delivering quality education and identifying where to invest time, energy and resources relates firstly to how quality education is conceptualised and measured. This next section looks to explore some of the critiques surrounding the aforementioned. Whilst quality education is very difficult to measure we can identify some components of quality education. I explain that recognising these components provides an appreciation of the various factors which co-exist and an opportunity to understand where the biggest gains in quality can be made.

The impact of the ability of the teacher delivering the education programme is introduced as one of the single biggest impacts on the achievement of quality education. The delivery of quality education is dependent upon quality teaching. This requires the examination of the characteristics of a quality teacher, both from an international perspective and from a Cambodian perspective. From this examination I draw together a number of characteristics of a quality teacher that are commonly recognised. I conclude by referring again back to the Cambodian context by discussing the characteristics identified also by the MoEYS and I conclude that these are consistent with international commentator's views.

In drawing on literature regarding the core factors that influence the delivery of quality teaching I discuss the application of those factors in the Cambodian context. These factors can have both positive and negative influences on the delivery of quality teaching. From this discussion I draw out essential characteristics of a quality teacher and a list of factors influencing the delivery of quality teaching. These factors formed the basis of the survey of primary school teacher's in rural Cambodia.

3.2 The measurement of quality education

Education can only drive sustainable economic development and contribute towards societal development if it is to an appropriate level of quality. Quality is linked to learning outcomes (World Bank 2002, Courtney 2007). What students actually learn (the quality of education) rather than how many years of schooling they complete (the quantity of education) is the relevant measure. A lift in the level of the educational standards in a developing country is one of the prime opportunities to provide economic growth (Glewwe 2014) and improve social returns (Asokumar & Kumar 2011). Developing countries must strive for educational quality to drive development and strengthen civil society.

Quality in education has been primarily measured in terms of output for resource inputs on a production basis. That approach dictates that education quality is defined in terms of inputs delivering outcomes (Cheng & Tam 1997). Education production theory has been used to study educational achievement in developing countries, and to understand the relationship between inputs and outputs of a production process (Hanushek 1997). This theory assumes that an increase in inputs would improve the quality of education (Hanushek & WoBmann 2007, Cheng & Tam 1997) and that most education decisions can be made on the basis of a cost-benefit analysis (Dhaliwal et al. 2014). Based on this production approach, proxy indicators have been used to measure quality education. These indicators included class sizes and qualifications of teachers. Research in the past has focussed on the need for more inputs to improve quality of education (Hanushek & WoBmann 2007, Hanushek 2003).

However, the relationship between student outcomes in terms of educational quality and the inputs into education is more complicated than production theory can allow for. As educational quality is multidimensional in nature the failure of educational quality cannot be explained by lack of resources alone. Some failure occurs at the service delivery level and as a result, the delivery of quality education is much more complicated than a production process (Bruns, Filmer & Patrinos 2011). Consequently there has been a move away from "input" or production theory (Hanushek 2003) and

a growing recognition that quality is very difficult to measure (Courtney 2007). "Simply putting more resources into schools – pure spending, reduced class sizes, increased teacher training, and the like – will not reliably lead to improvements in student outcomes" (Hanushek & WoBmann 2007, 3).

The ongoing research into the determinants of quality and how to define quality has led to debates about policy and the acknowledgement that quality is virtually impossible to dictate through policy (Looney 2011, Leu & Price-Rom 2006, Cornelius-White 2007, Hanushek & WoBmann 2007). Ambiguities about policy have formed as the result of ongoing debate about the determinants of quality education (Hanushek 2003).

Research has focussed on different attributes that represent the outcomes of educational quality in an attempt to identify proxies for the measurement of educational quality. Some of these attributes include assessing cognitive skills learned by students; whether pupils are improving their knowledge, skills and abilities; whether pupils are widening their experience and growing socially morally or not; the ability to work with others; the ability to problem solve; readiness to accept responsibility and to work with the public. All are good characteristics valued in school leavers. However, assessment tools do not test for such skills (Asokumar & Kumar 2011). In addition, some research suggests quality indicators differ for internal and external stakeholders; existing students and front line staff as opposed to employers, government bodies, prospective students and professional bodies (Chen et al. 2007).

Child rights groups have called for standards to ensure that all schools work in the best interests of the children with a goal to achieving quality education (Leu & Price-Rom 2006). UNICEF has produced the Child Friendly Schools Policy based on a multi-dimensional concept of quality. Under this policy quality education means focusing on the needs of the children and requires the provision of safe schools that are staffed with trained teachers who are resourced with teaching materials in an environment

conducive to learning (UNICEF 2009). MOEYS has adopted the Child Friendly School Policy. This provides a standard to aim for, with EFA being central to the policy.

Using this multi-dimensional view of quality education it is recognised that there are a number of influences on the delivery of quality education. The difficulty has been twofold; establishing a clear measure of quality and identifying which of the various influences have the most impact in order to focus efforts on addressing those influences.

3.3 Examining which factors have the greatest impact on quality.

Policy makers are now seeking clear evidence to provide guidance as to which programmes deliver impacts to poor communities and there is a commitment to more effective public service delivery (Dhaliwal & Tulloch 2012, Dhaliwal et al. 2012). As a consequence, reforms are subjected to rigorous evaluations of their impacts and cost effectiveness as different programmes produce varying results despite being targeted at the same policy outcome.

With a limited ability to change inputs, developing countries are increasingly looking for innovative strategies to improve educational quality. With fiscal constraints on developing countries educational planners seek nonmonetary, low cost incentives to improve educational quality at little or no cost to their governments (Chapman et al. 1993, Cornelius-White 2007). Rather than focusing on physical inputs such as classrooms, teachers, and textbooks, where these inputs cannot be increased, policy makers look for incentives that lead to better instruction and learning (Hanushek & Woessmann 2007). The various influences on the delivery of quality teaching must be appreciated to identify whether any of those influences can be altered without additional monetary investment. In addition, resources can be wasted if the delivery is not effective (Leu & Price-Rom 2006). In looking for innovative ways to improve education quality the most influential factors in relation to delivery of quality teaching need to be identified.

One strategy is to use incentives, but this is often ineffective as will be discussed in Chapter Three. Other strategies relate to increasing the efficiency of teacher training and reducing the cost to the state to train teachers. These strategies include reducing the length of teacher training, recruiting teacher trainees who have already achieved a higher education and increased in-service professional development (Mulkeen 2006, Verspoor 2004).

The quality of the teacher has a powerful impact on student outcomes (Hanushek & WoBmann 2007). The cost of training and employing teachers is often one of the largest public expenditure items in the budgets of less developed countries. With expanding enrolments and increasing pressure to achieve quality education, developing countries are struggling to pay teachers, expand the teaching workforce and adequately resource those teachers (UNESCO 2004). At the same time education systems are expected to be more accountable for results.

The UNESCO ESA global monitoring report reiterates "what goes on in the classroom, and the impact of the teacher and teaching, has been identified in numerous studies as the crucial variable for improving learning outcomes. The way teachers teach is of critical concern in any reform designed to improve quality" (UNESCO 2004, 152). The report identifies five areas that are critical to teacher quality. These are finding the right recruits, teacher training, ongoing professional development, teacher salary and conditions of service (UNESCO 2004, 152).

With reference to teacher performance and quality, the standard of education achieved by students differs greatly with teacher performance identified as being the single most influential factor in producing the greatest variation in results (Coleman 1996). The effect of teachers' ability on students' achievements are both additive and cumulative (Sanders 1998, Sanders & Rivers 1996). In some instances the difference is as much as one whole grade level (Hanushek 1992). Effective teachers benefit both high achieving and low achieving students (Croninger et al 2005). Teachers who communicate lower expectations for their students, on the other hand, have a

negative impact on student achievement (Bransford et al, 1999; Rubie-Davis et al 2006; Rubie-Davis, 2007).

However, finding a definition of quality teaching is a challenge (Croninger et al, 2005, Hanushek & Rivkin 2006). A clear set of standards and competences needs to be established for any system of evaluation to link to agreed standards (Looney 2011). Pedagogical content knowledge is a crucial determinant of student success (Rivkin et al 1998, Hanushek 1997). Unfortunately, pedagogical content knowledge is very difficult to measure as it can only be measured within the classroom environment. Classroom observations are difficult to rely on as they involve judgements made in specific contexts which vary widely between other classroom experiences (Looney 2011).

There have been attempts to define quality using many variables, including structural quality (management and resource allocation), process quality (educational processes) and results quality (pupil's learning, knowledge, skills and attitudes) (Courtney 2007). In some instances teacher quality has been defined by measurable factors such as numbers of years of experience and level of certification (Akiba et al 2007).

As a result, the main strategy employed in qualitative studies is to use teacher background measures as proxies for teacher quality, such as test scores, years of teaching, and years of college education. The common finding of these studies is that teacher quality is significant in determining the educational outcomes of students and teachers who show they care about student's learning and set challenging goals for learning are particularly effective (Hanushek 1997, Ngo 2013).

The performance of the teacher in the classroom is critical as is the teaching environment, the teachers' view of the standard they are aiming for and the teachers' understanding of the role they play (Kim & Rouse 2011). There is an assumption behind existing educational policy that teachers understand the critical role they play in the delivery of quality education without those teachers being engaged in any of

the discussions relating to the importance of equality education and the overarching goals of EFA. The assumption that teachers know what is expected of them, and why, does not give the teachers room to engage with their role and their responsibilities in the delivery of quality teaching (Kim & Rouse 2011).

In the context of developing countries there is a lack of research as to what teachers consider to be quality teaching. There is also a lack of appreciation of the challenges faced by teachers in the delivery of quality teaching to their students beyond the formation of delivery policy. Policy is only one factor. In Cambodia written policies are sometimes not evidenced in actual delivery. There is no engagement of teachers or promotion of the role they play in addressing the social, economic and political challenges in Cambodia (Kim & Rouse 2011). The teachers have no voice. The lack of education and ability of these teachers has constantly been identified as an issue, but conversely their participation in setting policy is non-existent.

In the Cambodian context this is especially important. The teachers are paid very low wages, have significant doubts as to their ability and have very limited support structures. As noted prior, many have had little education themselves (Kim & Rouse 2011). To compound matters, even if teachers do apply themselves and achieve quality teaching, the lack of accountability in schools and the difficulty in ensuring transparency makes it very difficult to ensure promotion based on merit (Tan 2007). This further compounds the teachers' sense of futility, disengagement and lack of recognition (Cambodian Independent Teachers Association (CITA) 2011).

Quality teaching is not limited to a high academic standard of teaching; it is about the flexibility of teaching to meet the needs of the students, the inclusion of the students in their teaching and fairness in what is provided by the schools. In a cyclical relationship, children are more likely to attend school if they feel they will receive a quality education, meaning quality teaching is part of achieving universal primary education (Kim & Rouse 2011). It is therefore very important to identify and nurture the characteristics of a quality teacher.

Accepting that teacher quality is hard to define it is therefore critical to develop an understanding of what it means, as teacher quality stands out as a significant predictor of student achievement.

3.4 The characteristics of a quality teacher

International literature promotes teachers as being the most important element in determining educational quality (Kim & Rouse 2011, Cornelius-White 2007, Leu & Price-Rom 2006, Looney 2011). With teaching quality as the goal, there needs to be clear standards of competency in order to evaluate the standard of teaching being achieved by teachers in an environment where the criteria and standards are not unanimous (Kim & Rouse 2011). Reflecting this dynamic environment, standards of competency are difficult to set. As an alternative, research has focussed on the characteristics of a quality teacher as an indicator of quality teaching.

The goal of improving educational quality is dependent on the teacher to create "a collaborative, motivated, and effective teaching and learning community" (Leu 2005; 22). The key factors are more than the teachers' teaching skills, but extend to include the individual teacher's professional attitudes, motivation and the energy they invest in teaching. There are many interacting factors that, together, create quality of learning (Leu 2005, Looney 2011).

Certain qualities or behaviours have been clearly associated with and act as key indicators for teaching quality (Looney 2011) predicting also effectiveness (Croninger et al 2005). Nuthall (2004) discusses the abundant literature describing the characteristics of excellent teachers derived from classroom observation, reputation or student achievement scores. These are summarised in Table 2.

To identify the characteristics sought in Cambodia we can unpack the MOEYS examinations conducted on 24th November 2013. These examinations explored with current teachers aspects of quality education and quality teaching. The examinations were the first of their kind since 1997 and as a result mark a significant moment in

the development of education in Cambodia, and in terms of increasing the professionalism of teaching. A full translation of the questions and model answers is attached as Appendix A.

These exams divide teachers into A and B grade teachers, impacting directly on the salary band the teacher is in and also career advancement opportunities. The exams were also the first formal steps towards addressing issues such as the quality of education and teaching, and a first step in actually engaging with the teachers to discuss these issues.

In both Tenure Type A and Type B exams there is a clear focus on quality teaching. Both exams contained questions that relate directly to the concepts of quality teaching and the characteristics required of a teacher to deliver quality education. MOEYS model answers are compared to the international research in Table 2 below.

Table 2. Characteristics of a Quality Teacher

Subject Knowledge			
MOEYS (2013)	Leu (2004b & 2005)	Looney (2011)	Nuthall (2004)
Accurate knowledge	Sufficient knowledge	Have good	Pedagogical
and know how.	of subject matter to	knowledge of the	content
Specialist, pedagogical	teach with	subject – areas and	knowledge.
and technological	confidence,	competencies that	
knowledge in relation	understanding the	they are teaching .	
to education of any	curriculum and its		
foreign language.	purposes,		
	particularly when		
	reforms and new		
	paradigms of		
	teaching and		
	learning are		
	introduced.		

Methodology			
MOEYS (2013)	Leu (2004b & 2005)	Looney (2011)	Nuthall (2004)
Good method and	Knowledge and skills	A broad repertoire	Uses of a variety of
plan for leading	in a range of	of teaching	models of teaching
teaching activities.	appropriate and	methods and	and learning.
Make lesson plans	varied teaching	strategies to meet	
and determine	methodologies.	the diverse	
specific objectives of		students' needs.	
lessons.			
Know how to use			
teaching materials in			
line with pedagogical			
standards.			
	l	l	
Communication			
Communication MOEYS (2013)	Leu (2004b & 2005)	Looney (2011)	Nuthall (2004)
	Leu (2004b & 2005) Knowledge of the	Looney (2011) Are intellectually	Nuthall (2004) Knowing how to
MOEYS (2013)		, , ,	
MOEYS (2013) Good communication	Knowledge of the	Are intellectually	Knowing how to
MOEYS (2013) Good communication with students and	Knowledge of the language of	Are intellectually able with good	Knowing how to identify, present
MOEYS (2013) Good communication with students and colleagues in the	Knowledge of the language of instruction. The	Are intellectually able with good	Knowing how to identify, present and explain key
MOEYS (2013) Good communication with students and colleagues in the entities, communities	Knowledge of the language of instruction. The ability to	Are intellectually able with good	Knowing how to identify, present and explain key
MOEYS (2013) Good communication with students and colleagues in the entities, communities and relevant	Knowledge of the language of instruction. The ability to communicate	Are intellectually able with good	Knowing how to identify, present and explain key
MOEYS (2013) Good communication with students and colleagues in the entities, communities and relevant stakeholders. Fairly	Knowledge of the language of instruction. The ability to communicate effectively and with	Are intellectually able with good	Knowing how to identify, present and explain key
MOEYS (2013) Good communication with students and colleagues in the entities, communities and relevant stakeholders. Fairly and transparently	Knowledge of the language of instruction. The ability to communicate effectively and with	Are intellectually able with good	Knowing how to identify, present and explain key
MOEYS (2013) Good communication with students and colleagues in the entities, communities and relevant stakeholders. Fairly and transparently communicates with	Knowledge of the language of instruction. The ability to communicate effectively and with	Are intellectually able with good	Knowing how to identify, present and explain key
MOEYS (2013) Good communication with students and colleagues in the entities, communities and relevant stakeholders. Fairly and transparently communicates with students, colleagues	Knowledge of the language of instruction. The ability to communicate effectively and with	Are intellectually able with good	Knowing how to identify, present and explain key
MOEYS (2013) Good communication with students and colleagues in the entities, communities and relevant stakeholders. Fairly and transparently communicates with students, colleagues and other members of	Knowledge of the language of instruction. The ability to communicate effectively and with	Are intellectually able with good	Knowing how to identify, present and explain key
MOEYS (2013) Good communication with students and colleagues in the entities, communities and relevant stakeholders. Fairly and transparently communicates with students, colleagues and other members of	Knowledge of the language of instruction. The ability to communicate effectively and with	Are intellectually able with good	Knowing how to identify, present and explain key
MOEYS (2013) Good communication with students and colleagues in the entities, communities and relevant stakeholders. Fairly and transparently communicates with students, colleagues and other members of	Knowledge of the language of instruction. The ability to communicate effectively and with	Are intellectually able with good	Knowing how to identify, present and explain key

Understanding the Stud	lents Needs		
MOEYS (2013)	Leu (2004b & 2005)	Looney (2011)	Nuthall (2004)
Be aware of student's	Knowledge of,	Develop positive	Passionate and
special learning	sensitivity to, and	relationships with	commitment to
method and	interest in young	students, recognise	doing the very best
understand student's	learner, interest in	the crucial role of	for their students.
difficulties, pay	students as	motivation and	
attention to the	individuals, sense of	emotions in	
different abilities of	caring and	learning. Ability to	
students and praise	responsibility for	understand the	
their intelligent	helping them learn	students'	
growth and	and become good	perspective,	
development.	people, and a sense	feelings, cultural	
	of compassion.	background,	
		challenges and	
		needs.	
Positive Relationships			
MOEYS (2013)	Leu (2004b & 2005)	Looney (2011)	Nuthall (2004)
Provide students with	Ability to work with	Works	Has a collaborative
encouragement.	others and to build	collaboratively with	working style with
Participate on a	good relationships	peers to develop a	other teachers to
regular basis in	within the school	positive skill	plan, observe, and
community work as a	and the community.	climate, to improve	discuss each
bridge to build good		overall skill	other's work.
relationships between		performance, and	
school/ community		to engage in	
and community/		mutual support	
teachers.		and professional	
		learning.	

Self-Assessment			
MOEYS (2013)	Leu (2004b & 2005)	Looney (2011)	Nuthall (2004)
Is self-evaluating and	Ability to modify	Are skilled	Constant
conducts research on	teacher – learning	assessors, use	questioning of,
the teaching	approaches as a	assessment	reflecting on, and
profession on a	result of reflection.	"formatively" to	modifying their
regular basis. Regular	The ability to reflect	monitor students	own practise.
self-study and	on teaching practise	and provide timely	
research of new	and children's	and specific	
knowledge for	responses.	feedback on what	
capacity		they need to do to	
development, self-		improve	
assessment,		performance and	
acknowledge their		meet learning	
own shortcomings		goals. They adapt	
and able to make		teaching to meet	
improvements.		better identified	
		learning needs.	
Learning Environment			
MOEYS (2013)	Leu (2004b & 2005)	Looney (2011)	Nuthall (2004)
Create a joyous	Ability to create and	Good knowledge of	Love of children
atmosphere for	sustain an effective	typical learner	enacted in warm,
students (freedom,	learning	misconceptions	caring environment
equality, democracy).	environment	and patterns for	
Provide instructions,	general	progression in the	
education, and advice	professionalism,	subjects they are	
to students to actively	good morale, and	teaching .	
participate in learning	dedication to the	Have strong	
processes. Managing	goals of teaching.	classroom	
disciplines, order and	Ability to	management skills,	
educating student	communicate	including clarity	
personalities. Create a	enthusiasm for	and presentation of	

pleasant learning	learning to students.	ideas, well-	
environment for		structured lessons	
students, properly		and appropriate	
using teaching		pacing.	
materials and tools in			
accordance with			
learning objectives.			
Professionalism			
MOEYS (2013)	Leu (2004b & 2005)	Looney (2011)	Nuthall (2004)
High professional	Good character,	N/A	N/A
ethics, high	sense of ethics and		
professional	personal discipline		
consciousness. Be			
strict and soft. Act as			
a good role model for			
students. Help			
improve and evaluate			
study activities.			
Professional			
consciousness and			
good personality. Pay			
great attention to			
students and do all			
the tasks in the			
interests of students			
and the nation and			
show mutual sincere			
respect, indicate/			
model positive			
behaviour.			

Hence, the model answers provided by MOEYS are closely aligned with the characteristics identified by Leu, Looney and Nuthall, showing the universality of these characteristics. MOEYS has clearly indicated that the view of the Cambodian Government closely resembles contemporary thinking in relation to the importance of quality teaching, the characteristics of a quality teacher and the influences on the delivery of quality teaching. This enables those same indicators and characteristics identified by MOEYS, Leu, Looney and Nuthall to be used in the survey.

The characteristics of a quality teacher recognised in Table 2 break down into several areas. These are:

- Subject knowledge
- Methodology
- Communication
- Understanding the students' needs
- Positive relationships
- Self-assessment
- Learning environment, and
- Professionalism

As there is a strong overlap between the view of MoEYS and the international commentary on the requisite characteristics of a quality teacher, it is therefore appropriate to use these characteristics to survey the teachers in rural Cambodian primary schools about their view of which characteristics they most identify with.

Now I turn to understanding the influences that impact upon the delivery of quality teaching. This enables us to identify whether any interventions could impact on such influences hence assisting the teachers in their task.

3.5 Influences on the delivery of quality teaching: Reflections on Cambodia

3.5.1 Introduction

The focus of this research is to identify the factors which influence the delivery of quality teaching in the context of rural primary schools in Cambodia. The context is critical as the factors that influence the delivery of quality teaching are country and environment specific and their relative impact varies between contexts. Furthermore, the factors do not remain static and the relative importance and the manner in which those factors influence, and can be themselves be influenced, constantly changes.

There has been some attempt in the research to measure quality in terms of the students experience and the relative importance of factors influencing quality from the student's point of view (Tsindou, Gerogiannis & Fitsilis 2010, Chen et al. 2007) but limited research into the teachers experience or view of quality education (Phin 2014). In keeping with various calls for the gathering of data of best practices from within classrooms that can be shared (O'Sullivan 2005), this is the approach that underpins this research. The sections to follow very much flesh out the issues drawing on what is experienced and what is occurring in Cambodia.

3.5.2 Teachers feeling valued and supported

The most important influences are not necessarily monetary ones but can be the job satisfaction of the teacher or their self-esteem. In addition to the qualities of the teacher, the environment within which they are teaching is also influential on the delivery of quality teaching. Teachers need a positive and supportive environment. They are part of a social network, both with their students and within the school community. Teacher performance is influenced by factors such as the teacher's self-esteem, their relationships with the families and with other teachers, their sense of isolation and the lack of engagement in planning and decision-making.

As teachers are at the heart of the delivery of quality teaching (Kim & Rouse 2011, Cornelius-White 2007) and the most important component to determining quality of

education (Leu & Price-Rom 2006, Looney 2010), ongoing, relevant professional development activities are necessary for a teaching force to be effective (Verspoor 2004). Adequate time and resources are needed for programmes in which teachers have a say in the content of any training activity and which new skills can be learned, practised, reflected upon, and improved over time. An iterative teacher learning process of this kind involving all teachers takes place most effectively at the school level or in clusters of nearby schools working together (Leu 2004a).

Teacher engagement is crucial as any government can plan for education reform but needs to obtain the buy in and support of teachers to achieve its educational goals as it is the teachers who implement change (Tan & Ng 2012). Regrettably the teachers in Cambodia have been seen to be variables for educational policies to manipulate rather than being critical to the success of those policies. Research shows that where countries have a large percentage of lowly educated teachers steps are often made at a policy level to bypass them. This exacerbates the problem (Kim & Rouse 2011).

A study undertaken in 2011 by the Cambodian Independent Teachers Association found that teachers in Cambodia are not happy in what they do (CITA 2011). They do not feel appreciated or important. Teachers have a low level of involvement in decision-making and are not sufficiently involved in policy decisions relating to educational quality (CITA 2012).

There is little demonstration of an understanding of the importance of the teacher's role in achieving EFA and quality education (CITA 2012). Teachers need to be involved in the implementation programmes at their school. Their lack of engagement has led to disassociation and a lack of accountability on the part of teachers. Teachers need to be aware of their central role in the achievement of the national educational goals (Kim & Rouse 2011). The lack of consultation of teachers means the teachers have an uncommitted attitude and a lack of engagement in the overarching goals of the government (Kim & Rouse 2011, CITA 2012, Lee 2006).

The low pay, lack of care in when they are paid and apparent disrespect about their welfare means teachers feel generally undervalued and unimportant (CITA 2011). This frustration, hopelessness and grief of teachers needs to be addressed. "Teaching is an emotional practice because emotions are at the heart of teaching" (Tan & Ng 2012, 131). There is no guarantee of promotion based on effort and ability. Poor performing teachers are just as likely to be promoted to management positions as teachers that are performing well due to the closed selection process, lack of involvement of teachers in the process and a hierarchical society promoting ageism (CITA 2011).

There is a lack of accountability on the part of the School Directors with school spending rarely being publicised. This is an influence on job satisfaction (Lee 2006). As well as the difficulties with accountability of the School Directors many teachers face challenges that relate to the lack of teacher support and limited interaction and feedback provided between teachers. There is no sense of collegiality as teachers are working autonomously. There are no incentives or opportunities to collaborate with other teachers to improve teaching skills. Meetings are imposed on teachers by senior management rather than in response to requests from the teachers. The strict hierarchical structure within schools, which is apparent at these meetings, discourages discussion or questions from junior teachers (Tan & Ng 2012).

In summary, positive results could come from emphasising the teacher's role in achieving the wider goals of the education system and society (Kim & Rouse 2011, Lee 2006, Leu & Price-Rom 2006). In the Cambodian context there has been limited engagement of teachers in the delivery of quality education and no promotion of the active role of teachers and the necessary teacher participation in furthering EFA (Kim & Rouse 2011, Bruns, Filmer & Patrinos 2011). Teachers need to be placed centrally in any incentives to improve teacher quality and need to be represented in any policy decisions and need to be given more autonomy and participation in the school policy making and implementation (Leu & Price-Rom 2006).

3.5.3 The impact of salary

In Cambodia many teachers live in poverty and suffer very poor working conditions. A trainee's income during training is \$2.50 US per month. The conditions at the teachers training college are rudimentary, crowded and at times unsanitary.

Newly qualified teachers earn \$80 a month. Their salary is paid several months after they commence work and as a result many are forced to borrow money to survive. The rate of \$80 a month means teachers cannot provide sufficient food for their needs each month. Teachers in urban areas fare worse than their counterparts in rural areas due to the higher cost of living in the city (CITA 2011).

In Cambodia only young people from relatively poor families tend to apply to become teachers. Many teacher trainees become teachers because other options are not open to them. Their family cannot afford to send them to University. They may not have any particular desire to be a teacher or the necessary personality or skills (CITA 2011).

With reference to the developing context, one of the most significant factors in the delivery of quality education is the teacher's salary (CITA 2012, Lee 2006). "Based on my experiences working with the teachers for more than twenty years, I have found that the main factor which influences the delivery of quality education the most is the Teacher salary" (Ouch 2013). Low salary impacts on teaching quality in a number of ways. The salary is not enough for the teacher to support themselves, let alone a family. The teacher must supplement their income through other means or by obtaining a second job. This means less time for the preparation of lesson plans and the general fatigue of the teacher, both of which have a direct negative impact on the quality of teaching delivered by the teacher.

In Cambodia, the salary of a teacher does not increase with experience. Consequently many experienced teachers end up leaving teaching for other jobs. This deprives the

profession of experienced and skilled teachers and undermines the development of the profession further.

3.5.4 The use of incentives

A conceptual framework developed by Kemmerer (1990) has been used to measure the relationship between incentives and job satisfaction in developing countries, using job satisfaction as a proxy for the delivery of quality education (Chapman et al. 1993). The Kemmerer framework has been extended in the context of developing countries to include measures such as community support, recognition and approval as these are significant influences on educational quality and teacher performance (Chapman et al 1993).

Seeking innovative ways to improve the quality of teaching often leads to considering incentives as a way to modify teacher behaviour (Leu 2004a). However incentive systems are challenged by the difficulty in linking incentives to desired behaviours, a lack of consensus as to what behaviours increase teaching quality and the difficulties in measuring impact and teacher performance (Chapman et al 1993, Lavy 2007). The search for appropriate incentives is an on-going one, reflecting the differing needs of students, the dynamic environment in which education is delivered and the cultural differences between countries. Another complicating issue is that humans are adaptive creatures and as a result incentives become expectations. This reduces the impact of those incentives.

Most incentives that affect learning outcomes are institutional in nature and include choice and competition, school autonomy and school accountability. These incentives give the parents and students a direct voice in their local school and can improve service delivery. Countries with greater local decision making authority and greater accountability have better learning outcomes (Bruns, Filmer & Patrinos 2011). However in developing countries there is limited, or no, choice of schools and little power vested in the communities to bring about change or influence the service of the schools. Most parents are illiterate and have no effective voice or understanding

of the characteristics of quality teaching. In this environment these types of incentives are not an option.

Incentives are often measured only in terms of teacher subsidy payments but this form of subsidy alone does not transform performance. One reason may be that the level of incentive is not sufficient to make any significant change in the circumstances of the teacher. Any supplement to the teachers' income needs to be enough to allow the teacher to give up their second job (Kim & Rouse 2011).

3.5.5 Challenges for rural schools

As noted in the global literature, developing countries education resources are most often scarce and infrastructure is poor. Management of resources is haphazard and there is competition for those resources. In addition, schools that are more remote are less visible, resulting in less transparency and accountability towards those schools. Resources destined for those areas may be waylaid or diverted for more visible areas impacting on rural schools more than urban schools.

It is difficult to attract teachers to rural schools. There is a perception that there are more opportunities for advancement in urban schools, the quality of life in rural areas is lower and there are greater perceived health risks in the rural environment with less access to health care (Mulkeen 2006). However it is critical that quality teachers be placed in rural schools as the children in those communities are the most vulnerable (Phin 2014). While all of the above-mentioned speaks to developing countries as a whole these issues are also very applicable to Cambodia.

Children living in rural areas of Cambodia are considered more difficult to educate. This is due to the combination of the lack of parental encouragement to attend school and more demands for their time. Even when children do attend school the level of teaching quality is often lower in rural schools (Phin 2014).

Teachers in rural areas often have less support, fewer opportunities for ongoing professional development, and greater difficulty in accessing books and materials (Mulkeen 2006). At the same time these teachers are working with children from vulnerable communities. The vast majority of the Cambodian population living in poverty come from rural Cambodia.

3.5.6 Informal fees and the teacher community relationship

Excellence at the school level means more than an individual excellent teacher or even a collection of excellent teachers. A strong school community and strong school leadership are of overriding importance in bringing teachers together as a community of learning at the school level (Leu 2005, Fredericksson 2004, Leu 2004B).

The low salary paid to teachers' means the teachers' have to supplement their income by charging students for after school tutorials, or in some cases, to charge the children for classes that should be free. These informal fees become a barrier to EFA (Asia-South Pacific Education Watch 2007). Despite the target to eradicate all such informal payment systems under EFA, the rate of payments is increasing rather than decreasing. This poses problems for dedicated teachers as the education system not only tolerates this practice, it, to a large degree, relies upon it. In Cambodia, families have to spend almost 9% of their annual income per child paying informal education fees (CITA 2011, Asia-South Pacific Education Watch 2007). The charging of these informal fees and the low salaries received by teachers creates an environment that enables exploitation (Asia-South Pacific Education Watch 2007). Children who are unable to pay for extra tuition have to repeat years at school or drop out.

The charging of informal fees by teachers damages the relationship between the family and the teacher. This relationship is a major factor influencing quality of education (Cornelius-White 2007). Quality improves when parents contribute to the school environment whether at home or through involvement with the school. The wider community interest and involvement with the school is an important factor in both the teachers work experience and the educational performance of the students

(Phin 2014, Bray 1988). This involvement can be by way of contributing to school activities, attending school events or home-based activities with their children (Nguon 2011).

To combat informal fees one option is to pay subsidies or provide incentives as previously discussed. However, incentives need to be viewed in a broader context to include all direct and indirect monetary and nonmonetary benefits offered to teachers (Chapman et al 1993). These include providing professional support and looking for ways to improve the status of the teacher within the community. Teachers who have strong community relationships and positive community status report higher job satisfaction and are more motivated thus effective (Leu 2004). They establish positive relationships with students which improves the quality of teaching (Cornelius-White 2007).

3.5.7 Socio-economic status of family

The ability of the family to be involved and support their child's education relies on the family's socioeconomic status (Phin 2014). Research shows that the child and family background indicators are significantly associated with achievement levels. The family's relative wealth is measured through indicators such as the number of siblings, the number of books in the home, student absences (usually as a result of having to work) and the family income. As these indicators of wealth improve the grades of the children improve, showing the interrelationship between the wealth and welfare of the family and the educational achievements of the children. The ability of the child to attend school and take advantage of the instruction provided will show an improvement in performance (Marshall et al 2012, Nguon 2011, Phin 2014).

As family wealth improves children are able to attend after school tutorials. Research is mixed as to the results of this. Some research concludes additional tutelage improves the child's test scores (Marshall et al 2012) but other research finds additional tutelage does not have a significant lift in education. This is because the

tutoring is carried out by the same teachers and is merely an extension of their teaching day using the same materials and the same curriculum (Nguon 2011).

Although surveys have repeatedly found that one of the main reasons children do not attend school is because they are actively working, there has been no education policy tackling this problem in many developing countries. Child labour competes with schooling but whether the child's work impacts on their schooling depends on how many hours the children are working. In some cases working a few hours a day can actually have a positive impact on schooling, by lifting the overall wellbeing of the family and providing more resources. However, work which causes the child to be absent from school or too tired at school to concentrate impacts on the quality of education they will receive (Phoumin 2006).

3.5.8 Classroom management

The attendance of the children at school is important but how well they are being taught when they are at school is critical. Classroom management is an indicator of the teacher's ability to engage with children, manage behaviours and use interactive and child friendly teaching techniques. In-classroom variables, such as the number of times children approach the chalkboard, the praise they receive from their teacher and the student's participation in class, shows an improvement in performance (Marshall et al 2012).

Classroom observations in Cambodia during 2001 and 2002 showed poor classroom management with teachers teaching from textbooks and children copying from the board. Pupils were occasionally placed in groups but did not know how to work in groups. For 20-25% of the in-class time, children were waiting for the teachers to mark work in books. Lost learning time was aggravated by insufficient instruction time. Teacher training was insufficient as the pedagogy required to train the teachers was not taught to the trainers and therefore not passed on to the teachers. The training process often meant teachers misunderstood concepts and did not understand how to use the blackboard or textbooks correctly (Courtney 2007).

3.5.9 Teacher training

The lack of teacher training has a direct impact on the lack of quality instruction in the classroom. A positive policy environment and adequate support for growth are essential in creating and sustaining teacher qualities (Fredericksson 2004, Mulkeen 2006). Teachers need to be provided with the knowledge of the curriculum and the appropriate techniques to teach the subject. In service training is very important (Courtney 2007) and investment in teacher development produce the highest payoff in terms of student retention, student promotion, and student learning (Tan & Ng 2012).

The teacher-training period in Cambodia is considered inadequate. Teacher training only takes two years. Teachers do not have much time to learn and practice teaching (Ouch 2013). Many teachers are not aware of the MoEYS Education Strategic Plan and many of those who were aware of it were mistaken in what it contained (CITA 2012).

International research has shown that well-qualified and experienced teachers achieve better results from their students, resulting in a better student performance than other less qualified and experienced teachers. Cambodia is recognised as having too few teachers and those teachers have received too little in the form of training. This is not just limited to the ability to teach. It is also poor training of classroom management, teaching techniques and the curriculum itself (Kim & Rouse 2011).

3.5.10 Teaching resources

The teacher's ability to teach is one factor; the resources they have to teach with is another. Limited budgets and poor management of resources have a direct impact on the working conditions of teachers. In Cambodia textbooks which are to be provided for every child and teacher are often not delivered. The funds required to run the school are often not paid to rural schools. Schools that are very remote are often cut off, unsupported and unable to function (CITA 2011, Tan & Ng 2012). Most teachers do not have teaching materials to use when they are teaching. They have to teach in

abstract terms "for example, when they teach about the provinces in Cambodia the teacher must just tell the students the name of each province, and state it where it is located. The student can memorise only but they cannot fully understand because they don't have a map or diagram to look at" (Ouch 2013).

In developing countries corruption prevents the allocated resources reaching the teachers and teachers see corruption as one of the biggest impediments to delivering quality teaching (CITA 2012). As well as not receiving the resources required to teach, teacher's salaries are often cut as a result of corruption leaving them further disheartened and vulnerable, dependent upon second jobs or extracting money from their students through the 'informal fees' previously mentioned (CITA 2011).

3.5.11 Health of the children and the teacher

There is very limited access to health or dental care in rural Cambodia. At the same time there is little in the way of community awareness or education about the causes of ill-health and the importance of prevention.

Child absence leads to children preforming poorly at school. Poor performance results in the child repeating grades. A high repetition rate is a significant predicator to a high dropout rate. The frequent absence of children from school impacts on the quality of the teaching (Kim 2011). Even children present at school but too tired, sick or undernourished to concentrate impact on the quality of teaching (Phoumin 2006).

The same applies for the absence of teachers through ill health. However when a teacher fails to attend a class the impact is more widespread as it impacts on the entire classroom of students. This impacts on rural schools more where the teachers experience is that that rural schools are dirtier, there is more disease and less access to healthcare, sanitation and clean water (Phin 2004, Mulkeen 2006).

3.5.12 The school environment

Teachers need properly constructed and equipped classrooms to teach in. There must be adequate access and facilities for children, including those with disabilities. The children need desks and chairs, the teacher needs a blackboard and teaching materials. Without the basics to teach it is virtually impossible to deliver quality teaching (Glewwe 2014).

Although not directly related to quality teaching, my personal experience is that the lack of toilets at a school leads to an increased dropout rate especially for girls as they go through puberty. (More directly associated with teaching quality is the fact that without sanitation disease can spread easily throughout a school. This links back to the prior comments regarding the teachers and children's health Glewwe 2014).

The same applies to drinking water. Without clean drinking water disease can spread very quickly, particularly in the hot months when diarrhoea is prevalent. Hand washing facilities are also extremely important. Beyond infrastructure relating to health and sanitation, schools also need playground areas to enable the children to develop their physical health and motor skills.

3.6 View of the Ministry of Education, Youth and Sport

The MOEYS teacher examinations conducted in November 2013 included questions relating to the influences on the delivery of quality teaching. The MoEYS also identified the same issues as are evident in the literature. These model answers closely align with the influences thus identified. In brief, these influences are categorised as:

- the quality of the curriculum (textbooks and study hours as per international standard and in response to the demand for regional labour market),
- training quality (training quality teachers, enhancing all types of exams, enhance education quality) This is reflected in section 3.5.9,
- teacher quality (content of teaching, teaching and learning processes),

- learner quality (good health and adequate nutrition, regular attendance, willingness to study, developing youth capacity). This is reflected in section 3.5.7 and 3.5.11,
- quality of teaching materials (adequate and modern materials for learning and teaching). This is reflected in section 3.5.10,
- school building quality (adequately constructed and equipped with abundant furnishings). This is reflected in section 3.5.12,
- study environment quality (quality, comfort, safety, gender equality and protection with gardens and biodiversity garden, playground, sport field and enough supply of resources and study materials as well as attention from teachers, classroom with appropriate size and number of students that can be managed by teachers). This is reflected in section 3.5.10 and 3.5.12; and
- financial management enhancement (providing a reasonable salary to the teachers) . This is reflected in section 3.5.3.

3.7 Chapter summary

Even though it is difficult to define or measure, researchers highlight the importance of quality education. The impact of the ability of the teacher delivering the education programme is critical to the achievement of quality education. The characteristics of a quality teacher highlighted in the research are recognised by MoEYS. These characteristics will be discussed further in Chapter Five: Research Findings. There are various influences on the delivery of quality teaching which impact on the delivery of quality teaching both positively and negatively. These influences interact, change over time and are situation specific. The view of the teachers as to which factors are the most significant will be discussed in Chapter Five.

Chapter Four: Fieldwork and collecting the data.

4.1 Introducing the chapter

Development Studies research often lends itself to a qualitative approach to researching as we look to explore, understand, explain and find in-depth meaning, with particular data collection methods often aligning themselves more with qualitative methodologies. However as noted by Stewart-Withers et al. (2014) qualitative and quantitative methods should not be seen as mutually exclusive approaches to learning, as each can complement the other, depending on what is being asked (also see Brockington and Sullivan 2003:7). In the case of this research, a mixed method approach to data collection, combining survey data and semi-structured interviews, was used. In using a mixed methods approach the intention was to "enrich understanding and add rigour" (Stewart-Withers et al. 2014, 66).

Moreover because the teachers were being asked for their views for the first time ever and were given an outlet to make their concerns and issues known, anonymously, knowing also that the survey answers would be collated and given to the MoEYS staff, this was a unique opportunity for teachers to have their voice heard. Thus the research also has an element of action to it and/or potential for transformation. That is, the intention was to commence the dialogue in the short term by providing a space for teachers to think through questions such as what is quality teaching, and what is the importance of this, what characteristics lend themselves to being a quality teacher, and what either supports this to happen or gets in the way of this happening. With respect to the longer term the intention is to bring about change by informing teaching practice and education policy.

As mentioned in the introductory chapter, this project draws on a survey undertaken by the Cambodia Charitable Trust where 170 rural primary school teachers were asked: what did they consider the characteristics of a quality teacher to be, and what factors influenced negatively or positively a teacher's ability to deliver quality teaching.

4.2 Ethics

Doing ethical research in a foreign setting is about building mutually beneficial relationships with people you meet in the field and about acting in a sensitive and respectful manner. There is also a moral imperative which should inform Development Studies research and not only should it do 'no harm', but it should seek 'empowerment' (Banks & Scheyvens 2014). An in-house ethics application was submitted to my supervisor and an interview with two other members of the Development Studies department occurred Wednesday 11th June 2014. The interview was to discuss various ethical principles such as informed consent, privacy and confidentiality and conflict of interest. This issue of conflict of interest was especially fleshed out due to my relationship with CCT. After also completing the screening questionnaire the research was considered low-risk and as such a full ethics approval was not required. The MUHEC Low Risk Application Form was processed and MUEHC was also in agreement as to the low-risk nature of the project.

In accordance with the ethical guidelines for research, participation in this study was voluntary, survey answers were anonymous and participants could decline to answer any question or withdraw, and were to be given access to a summary of the project findings when it was concluded. With respects to those who participated in the interviews, alongside the above mentioned points, rather than anonymity they were assured that they were providing information on the understanding that their names would not be used and they could ask for the recorder to be turned off at any time during the interview.

4.3 Selecting the schools and the participants

In order to obtain honest feedback it was decided to work with schools where CCT had already developed strong relationships and was trusted. This enabled easy access and the buy in of the teachers at those schools. MoEYS was approached for its consent to the survey and a request that MoEYS select the remaining 6 unsupported

schools. However, the request was made that these schools be geographically close to the CCT supported schools to reduce travel time.

The schools are situated in the Kampot and Takeo Provinces, South of Phnom Penh. The schools are situated in mostly rural areas although two schools are near a main road. The following map shows the two provinces involved. The schools are situated near the boundary between these two provinces.

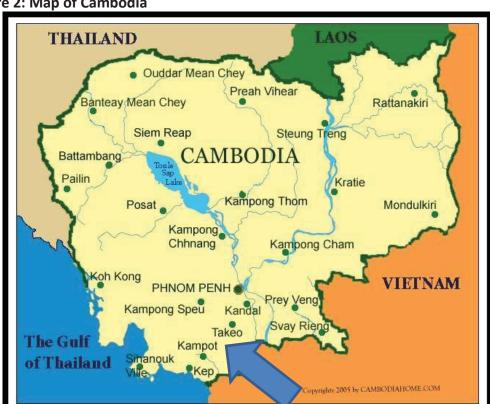


Figure 2: Map of Cambodia

4.4 Data collection methods.

4.4.1 Surveys

As mentioned two approaches to collecting data were used. The survey was thus designed to establish initially whether the teachers identified with the characteristics of a quality teacher presented in the research. It also went on to establish which factors had the most influence, positive and negative, on being able to deliver quality classroom teaching. The questions included in the survey therefore related to the impact of the various influences that had previously been identified through the

review of the literature on quality education and teaching. This included the views of MoEYS as expressed in the model examination answers.

Asking the teachers' to rank factors as to their degree of influence on quality teaching was done so as to overcome the reluctance of the Cambodian teachers to express an opinion. Research has identified the risk that direct questioning does not achieve much more than producing a shopping list (Coleman 1988, Chapman et al 1993), which concurs with my personal experience in Cambodia.

Teachers and some of the School Directors from thirteen Primary Schools took part in the survey; representing the seven Primary schools CCT supports and six unsupported primary schools. The School Director from one unsupported Primary School also completed the survey. Teachers from two Secondary Schools and the trainers from the Takeo Teachers Training College also took part but the results of their surveys do not form part of this research report.

Table 3 The teachers from the following Primary Schools chose to take part in the survey

Nikrotheaream Primary School
Monirang Sey Primary School
Ang Seyma Primary School
Ang Sleng Primary School
Ang Run Primary School
Kus Primary School
Neareay Primary School
Baknoem Primary School
Ang Svay Primary School
Krang Snay Primary School
Chhoeu Teal Chrum Primary School
Knach Romeas Primary School
Ang Chhum Primary School

Table 4 The Directors of the following schools elected to complete the survey rather than be interviewed

Ang Run Primary School
Baknoem Primary School
Monirang Sey Primary School
Neareay Primary School
Kus Primary School
Chhoeu Teal Chrum Primary School
Knach Romeas Primary School
Taten Primary School

Each question had a list of characteristics (question 1) or factors (questions 2 and 3) and the teachers were asked to indicate whether they thought that characteristic/factor was not important, a little important, quite important or very important. On the first day I found that the teachers were taking a long time to consider each question but in the end were marking most of the characteristics/factors in each question as being very important. This produced data that was very difficult to draw any conclusions from. I needed to produce some kind of differentiation between the different influencing factors.

As a result, from day two onwards I asked the teachers to select from the factors that they had marked as being very important their top four factors. They completed each question as usual and then completed the additional task of narrowing their answers down to the four most important factors. It is with this data that I have elected to work. Consequently, I have had to exclude the survey answers from the teachers of the first school I visited, as those teachers were not asked to rank the top four factors.

With respect to the survey, not every question was answered whether by oversight or deliberately. The results of this research reflect only the completed survey questions. This survey is attached as Appendix B.

4.4.2 Semi structured interviews with School Directors.

In addition to the survey, a deeper, richer understanding was sought. The Directors of some schools were interviewed in semi-structured interviews following broadly along the lines of the research questions. The views of the School Directors are important, as they are responsible for the overall management of the school and the teaching staff. They are the persons most likely to manage relationships between the school and the community or government agencies. The interviews with the School Directors enabled clarification of some of the preliminary results from the teachers' surveys.

Table 5 The Directors from the following schools were interviewed

Nikrotheaream Primary School
Ang Seyma Primary School
Ang Sleng Primary School
Ang Svay Primary School
Krang Snay Primary School
Ang Chhum Primary School
Neareay Secondary School
Chhuk District Office of Education

4.5 Limitations to the study

There are some limitations in this methodology. Many of the teachers surveyed do not have any wider context to compare their experience against. They have limited ability to engage directly in making observations that extend beyond their immediate experience. However, the actual engagement of the teachers in considering concepts relating to quality teaching highlights the importance of quality teaching and their role in delivering quality teaching. The impact of the research will be felt most at the

teacher level through giving them a voice and engaging them in thinking about their role and their ability to deliver quality teaching.

Whilst it would be interesting to assess whether there was any difference in responses on a gender basis, I chose not to ask the participants to indicate their sex on the survey forms. In some of the smaller schools the gathering of personal data may have enabled the participant to be identified. No personal data was collected at all.

I have also had to carefully consider the potential difficulties in translation, particularly with words such as "influence". In my studies of the Khmer language, influence is used more in relation to authority than to persuasiveness or impact. Instead of using the Khmer word for influence the survey used "helps" in the place of 'positively influences' and "stops" in the place of 'negatively influences'. I designed the survey questions to avoid potential slanting of the questions or answers and have had to use limited language as a result. The English language contains words with a specific meaning or nuance. These are not easily translated to Khmer. Language presented a real challenge in designing the survey and the assistance of in country partners in the design, translation and explanation of the survey was critical. We worked closely with our Country Manager, Ouch Soeun, a man known and respected in the education community, who reviewed the survey forms when translated and, knowing the relevant education concepts, could explain the survey to the teachers.

4.6 Concluding points

Good research requires that the researcher puts time into conceptualising and planning how the fieldwork, data collection and analysis is to occur. After completing the literature review and examining the MoEYS model answers the characteristics and factors which were pertinent to this research were identified. Translating those characteristics and factors into a second language required careful consideration as to context and cultural differences. The involvement of the Khmer team on the ground in Cambodia was critical. Obtaining the engagement and cooperation of MoEYS was

also an integral part in identifying schools to take part in the survey and receiving the necessary approvals. The survey was in the form of a checklist and was designed to overcome issues identified in the research where instead of relevant feedback something similar to a shopping list might be provided. In preparing the survey the selection of schools where we could be accepted without suspicion or expectation was important as was the explanation to the teachers of the voluntary nature of the survey. The standardised form of the survey allowed for efficient and accurate data collection. The ability to modify the survey on the ground to adapt to issues that arose was also important.

Chapter Five: Research Findings

5.1 Introducing this chapter

The aim of this research was to identify the factors that influence the delivery of quality teaching at the primary school level in a developing country context, the focus being Cambodia. Three research questions were posed.

- i. What are the characteristics of a quality teacher?
- ii. What factors have a positive influence on the ability of a teacher to deliver quality teaching?
- iii. What factors have a negative influence on the ability of a teacher to deliver quality teaching?

The findings in relation to the research aim and each of the research questions will now be presented.

5.2 Question 1: The characteristics of a quality teacher

There is no definition of a quality teacher and no universal measurement that can be used to qualify teachers as quality teachers (Looney 2011, Leu 2004b). Consequently proxy indicators which can be utilised to identify what a quality teacher "looks like" are important. These indicators are understood to be the characteristics often displayed by teachers who are considered to be delivering quality teaching. An assumption can be made that if a teacher is displaying these particular characteristics then they are likely to be delivering quality teaching (Leu 2005, Looney 2011, Nuthall 2004).

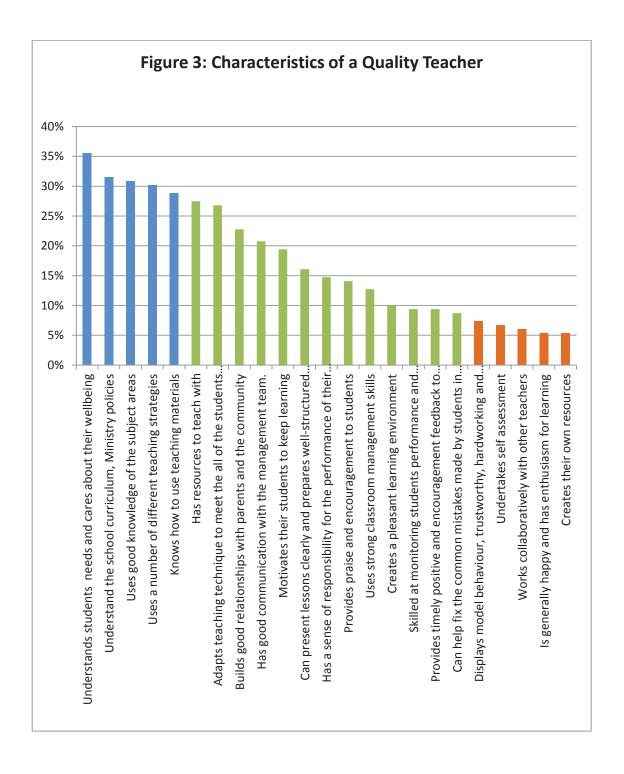
The teachers' views of <u>what</u> constitutes quality teaching as well as understanding the teachers' opinions of <u>how</u> a quality teacher behaves are critical. In asking this first research question a list of 23 characteristics was provided. These characteristics had

been identified as being representative of a quality teacher by education specialists internationally (Leu 2005, Looney 2011, Nuthall 2004) and had been identified by the MOEYS.

Given the differing cultural context it was also important to ensure these characteristics were seen to be important in the eyes of the teachers in Cambodia prior to any conclusions being drawn about indicators which represent the delivery of quality teaching in Cambodia. Therefore, question one examined the teachers' views and placed research sub-questions two and three in context.

The responses to Question One demonstrated that the teachers all recognised that these listed characteristics were required to be a quality teacher. This showed that the characteristics that had been identified by international researchers were culturally appropriate. The teachers' answers showed they identified with the MOEYS model answers. As a result we can assume that both MoEYS and the teachers consider the same characteristics as being relevant.

The teachers were asked to choose the top four characteristics of those that they ranked as being "very important". The results are shown in Figure 3.



To varying degrees, all of the listed characteristics are ranked in the 'top four', however some were clearly identified as being of more significance. I now examine the highest ranking factors in Table 6. The remaining characteristics are still important but fall between the highest recognised characteristics and those seen as least important. Each is worthy of further consideration and ongoing research to understand why the teachers have ranked these characteristics as they have, however that is for a later stage and not for this research paper.

Table 6: The five highest ranking characteristics of a quality teacher.

Characteristic	Number of	Percentage
	teachers placing in	of teachers
	top 4	surveyed
Understands students' needs and cares	53	36
about their wellbeing		
Understands the MOEYS curriculum and	47	31
Policies		
Uses good knowledge of the subject area	46	31
Uses a number of different teaching	45	30
strategies		
Knows how to use teaching materials	43	29

The first, highest-ranking characteristic relates to the teacher understanding the needs of the student and caring about the students' wellbeing. This is dependent upon the attitude and sense of responsibility of the teacher. This reflects the pastoral care role of a teacher, viewing the child as a whole and being aware of the needs of the child as an individual. It is significant that this is the highest-ranking characteristic. It is particularly relevant as the teachers surveyed are dealing with young primary school-aged children.

The next four factors relate to teacher training, technical skills or resources. These are all inputs in terms of the education production theory. The teachers need adequate training to be able to adapt their teaching techniques to suit the needs of the student. That implies that the teachers know different teaching techniques. They also need to understand their subject and know how to use teaching materials properly. These again relate to the training they receive and their skills as a teacher. They also

need to understand the Ministry curriculum and policies, including the Child Friendly School policy that encompasses the right to EFA.

Table 7: The lowest ranking characteristics of a quality teacher.

Characteristic	Number of teachers	Percentage of
	placing in top 4	teachers surveyed
Is generally happy and has enthusiasm	8	5
for learning		
Knows how to create their own	8	5
resources		
Works collaboratively with other	9	6
teachers		
Undertakes self-assessment	10	7
Displays model behaviour	11	7

The lowest equal ranked characteristic relates to the attitude of the teachers towards teaching and their behaviour associated with their work. This may indicate that teachers are busy earning an income and supplementing their teaching wage in order to support themselves and their families. They may not have the luxury of time to consider their general attitude and behaviour in terms of the delivery of quality teaching. The other lowest equal ranked characteristic is the teachers' ability to create resources. This could be because this skill is seen as being irrelevant when there are no materials to create teaching resources from and/or a lack of training in how to create resources from the minimal material they are provided with.

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The second lowest characteristic is the collaboration with other teachers. This is indicative of the lack of professionalism of teachers in Cambodia. It would indicate that the teachers work independently and do not support each other's development

or share knowledge. As noted in Chapter Three, with very limited resources there is potentially some competition between teachers. The Four Stages of Professional Development (Hargreaves 2000) finds Cambodian teachers are at Stage One with a considerable distance to go to be able to work as a profession, sharing knowledge and working collaboratively, Stage Three of Professional Development. The low importance accorded to this characteristic is understandable in this light and reflects this exact issue.

The teachers are less concerned about working as professionals, cooperating as a team and improving through self-assessment. This is shown in the third lowest raking characteristic 'undertakes self-assessment'. There would be little point in self-assessment unless you have access to training or resources to be able to improve your teaching skills. When you are struggling to be able to teach and don't have the materials to teach with your professional development, general happiness, enthusiasm and display of model behaviour are of less importance.

The final low ranking characteristic is 'displays model behaviour'. This again may be indicative of the teachers' perspective being that they are there to teach and do that job, and their responsibility ends at that point. Again this is reflective of the teaching profession working at the pre-professional stage.

The model answers to the MOEYS exam conducted in November 2013 relating to quality teaching are for the purposes of this research the most relevant, culturally appropriate and timely identification of MOEYS' view of the characteristics of a quality teacher. The survey answers allowed a direct comparison between MOEYS thinking and other educational research, and to further compare the MOEYS thinking to the responses of the teachers.

The following table shows the MOEYS characteristics identified in the model exam answers as against the characteristics in the survey and their relative ranking.

Table 8: – The characteristics of a quality teacher as against the MOEYS model answers

Understanding the needs of the student		
MOEYS (2013)	Survey answers	% top
Be aware of student's special learning	Understands the students	36
method and understand student's	feelings and needs, and cares	
difficulties, pay attention to the different	about their wellbeing	
abilities of students and praise their		
intelligent growth and development.	Is skilled at monitoring	9
	students' performance and	
	comprehension	
	Adapts their teaching	27
	technique to meet the all of	
	the students' needs	
Positive relationships		
MOEYS (2013)	Survey answers	% top
,	,	four
		Tour
Provide students with encouragement.	Motivates their students to	19
Provide students with encouragement. Participates on a regular basis in		
_		
Participates on a regular basis in	keep learning	19
Participates on a regular basis in community work as a bridge to build	keep learning Provides timely positive and encouragement feedback as	19
Participates on a regular basis in community work as a bridge to build good relationships between school and	keep learning Provides timely positive and encouragement feedback as	19
Participates on a regular basis in community work as a bridge to build good relationships between school and community and between the community	keep learning Provides timely positive and encouragement feedback as to students' progress	9
Participates on a regular basis in community work as a bridge to build good relationships between school and community and between the community	keep learning Provides timely positive and encouragement feedback as to students' progress Works collaboratively with	9
Participates on a regular basis in community work as a bridge to build good relationships between school and community and between the community	keep learning Provides timely positive and encouragement feedback as to students' progress Works collaboratively with other teachers	9 6
Participates on a regular basis in community work as a bridge to build good relationships between school and community and between the community	keep learning Provides timely positive and encouragement feedback as to students' progress Works collaboratively with other teachers Has good relationships with	9 6
Participates on a regular basis in community work as a bridge to build good relationships between school and community and between the community	keep learning Provides timely positive and encouragement feedback as to students' progress Works collaboratively with other teachers Has good relationships with parents and the community	9 6 23

Survey answers	% top
Uses a number of different	30
teaching strategies	
Uses strong classroom	13
management skills	
Knows how to present	16
lessons clearly and prepares	
well-structured lessons	
Knows how to use teaching	29
materials	
Survey answers	% top
Survey answers	% top
Survey answers Creates a pleasant learning	
,	four
Creates a pleasant learning	four
Creates a pleasant learning	four
Creates a pleasant learning environment	four 10
Creates a pleasant learning environment	four 10
Creates a pleasant learning environment	four 10
Creates a pleasant learning environment Has resources to teach with	four 10 27
Creates a pleasant learning environment Has resources to teach with	four 10 27
Creates a pleasant learning environment Has resources to teach with	four 10 27
	Uses a number of different teaching strategies Uses strong classroom management skills Knows how to present lessons clearly and prepares well-structured lessons Knows how to use teaching

Subject Knowledge		
MOEYS (2013)	Survey answers	% top
		four
Accurate knowledge and know how.	Uses good knowledge of the	31
Specialist, pedagogical and technological	subject areas	
knowledge in relation to education of	Can help fix the common	9
any foreign language.	mistakes made by students in	
	each subject.	
Communication		
MOEYS (2013)	Survey answers	% top
Good communication with students and	Duratidas austra and	
	Provides praise and	14
colleagues in the entities, communities	encouragement to students	
and relevant stakeholders.	Good communication with	21
Fairly and transparently communicate	the management team	21
with students, colleagues and other	the management team	
members in the community.		
Professionalism		
MOEYS (2013)	Survey answers	% top
		four
High professional ethics and	Is generally happy and has	5
consciousness. Be strict and soft. Good	enthusiasm for learning	
role model for students. Help improve		
and evaluate study activities.	Has a sense of responsibility	15
Professional consciousness and good	for the performance of their	
personality. Pay great attention to	students	
students. Do all the tasks in interests of		
students and nation. Show mutual	Displays model behaviour	7
sincere respect. Indicate/model positive		
behaviour.		

Self-Assessment		
MOEYS (2013)	Survey answers	% top
Is self-evaluating and conducts research on the teaching profession on a regular basis. Regular self-study and research of new knowledge for capacity development, self-assessment. Acknowledge shortcomings and make improvements.	Undertakes self-assessment	7

5.3 Question 2: Positive influences on the delivery of quality teaching.

As noted in the literature there are core factors that influence the delivery of quality teaching in the Cambodian context. Some factors have a positive influence on teacher quality. The various positive influences are shown in Figure 4. These include the family's relationship with the school and this relationship includes the parent's relationship with the teacher. The improved socioeconomic status of families means children are able to attend school, learn better and attend extra tutorials and as a result educational quality improves. The increase of inputs such as improvements to the school environment, increased teacher training, delivery of teaching materials and on-going professional development all have an impact on educational quality.

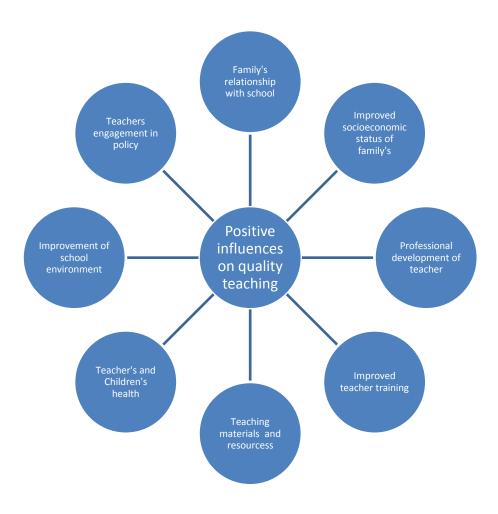
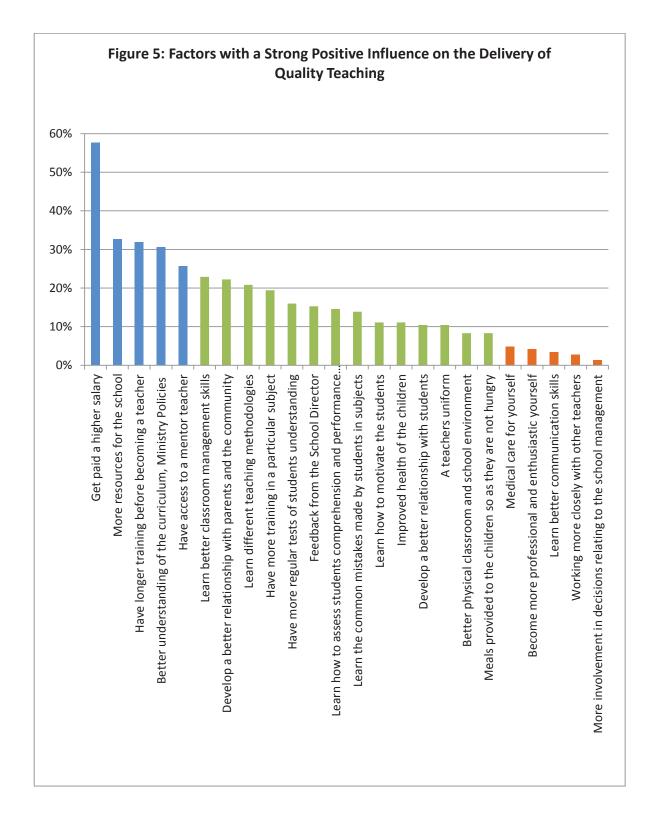


Figure 4: Positive influences on quality teaching.

In question 2 the teachers were given a list of 25 different factors and asked to identify the four that had the most positive impact on the delivery of quality teaching. The results varied but strong trends emerged. Receiving a living wage and more resourcing of the education system are clearly perceived as the biggest enablers for the delivery of quality teaching in the teachers' view. The highest-ranking factors related to inputs into education in the form of salary, training and consumables.

Figure 5 shows a table of the factors ranked from highest to lowest in terms of the degree of influence in the delivery of quality teaching.



These results are unsurprising. Considering the highest ranked characteristics of a quality teacher were using good knowledge of the subject area, understanding the MOEYS curriculum and Policies, adapting teaching technique to meet the needs of the students and knowing how to use teaching materials then, with the exception of the teacher salary, all of the factors with the most influence relate to these

characteristics. This is consistent with my experience where the teachers believe that they do not have the skills, training or resources to deliver quality teaching. They know what they need to be doing but need help to be able to reach the standards sought.

All of the top four are also shown in numerical order in Table 9. The outstanding impact of "getting paid a higher salary" is clear with that factor scoring 58% and the next most popular factor scoring 33%.

Table 9: Factors with a very strong positive influence on quality teaching.

Factor	% top 4
Get paid a higher salary	58
Have longer training before becoming a teacher	33
Better understanding of the curriculum and Ministry Policies	33
More resources for the school	32
Have access to a mentor teacher	26
Learn better classroom management skills	23
Develop a better relationship with parents and the community	22
Learn different teaching methodologies	21
Have more training in a particular subject	19
Have more regular tests of students understanding	16
Learn to assess students comprehension and performance better	15
Feedback from the School Director	15
Learn the common mistakes made by students in subjects	14
Learn how to motivate the students to achieve better results	11
Improved health of the children	11
A teachers uniform	10
Develop a better relationship with students	10
Better physical classroom and school environment	8
Meals provided to the children so as they are not hungry	8
Medical care for yourself	5

Become more professional and enthusiastic yourself	4
Learn better communication skills	3
More involvement in decisions relating to school management	1
Working more closely with other teachers	3

We now need to examine the highest and lowest ranking factors individually. The five factors that were rated as having the most impact are listed in Table 10.

Table 10 - The highest-ranking factors with the most positive impact on the delivery of quality teaching.

Top factors with the most positive	No. of teachers	Percentage of
influence on delivery of quality teaching	placing in top 4	teachers
		surveyed
Teacher getting a higher salary	83	58
Longer teacher training	47	33
More resources for the school	46	32
Better understanding of curriculum and Ministry policies	44	31
Access to a mentor teacher	37	26

The teachers clearly associate receiving a higher salary with being able to deliver quality teaching. Getting paid a higher salary is the single biggest factor identified as having the most positive impact on achieving teaching quality, with 83 teachers identifying an increase in salary as being in the top four factors with a positive influence on the delivery of quality teaching. The next highest scoring factor scored 47, which is a considerable reduction.

The identification of getting paid a higher salary as being hugely influential on the delivery of quality teaching reflects the fact that, in Cambodia, teachers are not paid enough in salary to support themselves. They must seek secondary employment. Maintaining a second job means there is little opportunity or time to develop as teachers. The teachers focus on delivering their teaching hours.

If the financial pressure on teachers and the resultant need for a second job were alleviated, teachers might have the time to prepare lesson plans, make teaching materials, attend professional development workshops or training, work collaboratively and take part in extracurricular activities. They would have more energy, health and enthusiasm for their job and learn to grow in their role as teachers.

The next four highest-ranking factors all relate to the resourcing of the school or the teacher through materials, training or ongoing development. This reflects the fact that many incumbent teachers have had minimal training and limited education themselves. This feedback would indicate that the input or production theory is relevant in these circumstances. Any education system requires the basic investment in training and resources. Where these are absent the quality of education is undermined due to the inability of the teacher to deliver quality teaching (Glewwe 2014).

The five factors that scored the lowest, in terms of influence on the delivery of quality teaching, are shown in Table 11.

Table 11 – The lowest ranking factors with the most influence on quality teaching

Lowest factors with the most positive influence	No. of teachers	Percentage of
on delivery of quality teaching	placing in top 4	teachers
		surveyed
More involvement in decisions relating to the	2	1
school management		
Working more closely with other teachers	4	3
Learn better communication skills	5	3
Become more professional and enthusiastic yourself	6	4
Medical care for yourself	7	5

These lowest ranking factors represent a range of issues. Some relate to professional development which in Cambodia is not generally available or even able to be considered by most teachers. They are busy making a living as their salary as a teacher is not enough for them to survive on. The factors such as "Become more professional and enthusiastic yourself" "Learn better communication skills" and "Working more closely with others" are linked to the perceived lack of professionalism of teachers as a body in Cambodia (Hargreaves 2000) and indicate that the profession is made up of teachers working as individuals rather than as a cooperative and cohesive professional unit. The low scoring of the factor relating to "More involvement in decisions relating to the school management" is also consistent with the general approach of the teachers. They attend school to do their job and cannot look beyond that. There is not the drive to be involved atn any greater level and certainly no history of being engaged at the policy level, so there is no experience of the benefits of being involved in management decisions.

Teachers are unable to see the value in being more professional. They may not even understand the concept. They are also not used to working collaboratively as the norm is to work independently of other teachers. They have not seen the advantage of working closely with others. Finally, communication skills are not particularly valued as being required of teachers.

The low score for medical care for the teacher is interesting. This contrasts with the answers to question 3, which are to follow, where the second highest scoring factor with a negative influence on the delivery of quality teaching is the teachers' health. This contrast is difficult to reconcile. On the one hand teachers are saying that the state of their health is a strongly negative factor on their ability to deliver quality teaching, however the provision of health care for them ranks very low on the factors that could positively influence their ability to deliver quality teaching.

5.4 Question 3: Negative influences on the delivery of quality teaching.

There are also influences that have a negative impact on the delivery of quality teaching. Some of these influences we can readily accept, whereas others may not have been initially apparent such as the remoteness of the school, or the low self-esteem of teachers and their lack of involvement in decision making.

Some influences are reflective of the low value placed on education which is reflected by a lack of inputs such as inadequate school infrastructure, low salary, a lack of teaching resources, large class sizes and poor teacher training. There is also a lack of collaboration between teachers and the absence of a sense of teaching being a profession. Teachers also work within a corrupt environment which is open to the exploitation of both the teachers and the students. This includes the lack of accountability of School Directors and the lack of advancement based on skill and achievement. Teachers are not involved in decision making. The poor health of the children is also a factor.

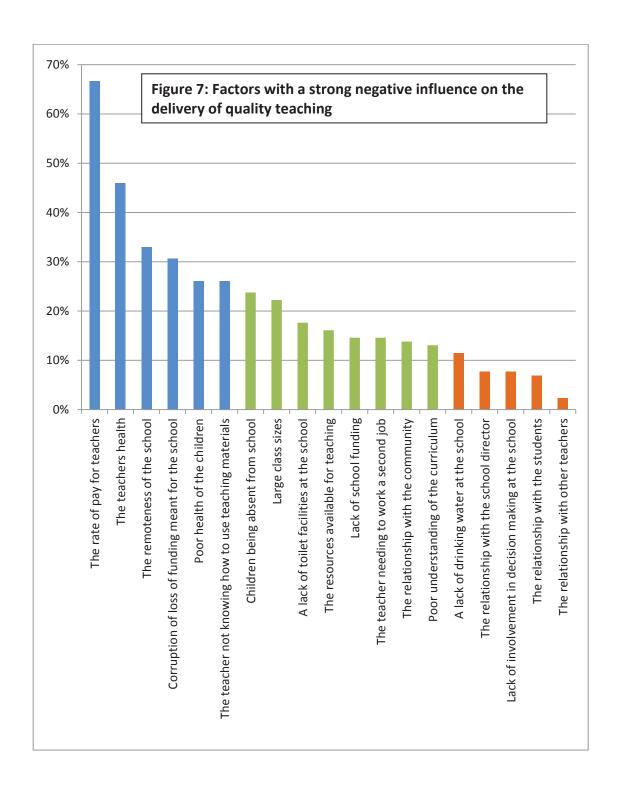
The influences which are barriers to quality education are shown in Figure 6.



Figure 6: Negative influences on quality teaching

As can be seen by these influences, the achievement of quality education depends upon the interaction between the family, the teacher and the school. Each is critical to the delivery of quality teaching and each are subject to influences and challenges.

In question three the teachers were given a list of different 19 factors and asked to choose the four most impactful factors they identified as having a strong negative influence on the delivery of quality teaching. These are shown in Figure 7. This produced a clear trend but with a slightly different outcome to question 2. Although the biggest single impact is the rate of pay of teachers which is the same as question 2, the remaining factors related to other issues being the teachers health, remoteness of the school, corruption, absenteeism and finally, as in question 2, the teachers lack of technical teaching ability.



All of the factors with a very strong negative influence on quality teaching can also be viewed in a Table 12. This table shows the relative ranking dropping significantly from 67% to 2%.

Table 12- Factors with a very strong negative influence on quality teaching

Factor	% top 4
The rate of pay for teachers	67
The teachers health	46
The remoteness of the school	33
Corruption of loss of funding meant for the school	31
The teacher not knowing how to use teaching materials	26
Poor health of the children	26
Children being absent from school	24
Large class sizes	22
A lack of toilet facilities at the school	18
The relationship with the community	18
The resources available for teaching	16
Lack of school funding	15
The teacher needing to work a second job	15
Poor understanding of the curriculum	13
A lack of drinking water at the school	11
Lack of involvement in decision making at the school	8
The relationship with the school director	8
The relationship with the students	7
The relationship with other teachers	2

The six factors that were seen as having the most negative influence on the delivery of quality teaching are listed in Table 12.

Table 13 – The factors ranked as having the most negative influence on delivery of quality teaching.

Factors with the most negative influence	No. of teachers	Percentage of
on delivery of quality teaching	placing in top 4	teachers
		surveyed
The rate of pay for teachers	87	67
The teacher's health	60	46
The remoteness of the school	43	33
Corruption and loss of funding for the school	40	31
Poor health of the children	34	26
Teacher not knowing how to use teaching materials	34	26

The low rate of teachers pay goes beyond the concept of pay equating to being professionally valued or pay recognising particular skills. It is far more basic than that. The pay received by teachers is not a living wage. They must have a second job to support themselves. This has a huge impact on a teacher's ability to prepare lesson plans, make resources or attend training. This directly impacts on the low level of professionalism seen in the teaching profession. Teaching clearly does not constitute a professional position where the teacher can focus on their work and not have to supplement their income.

Furthermore, the flow on effects of holding down two jobs includes fatigue and illness which both contribute to teacher absenteeism. Teachers, particularly in rural areas, are often working in physically demanding manual jobs to supplement their

income. The working day is long and the working conditions poor. The physical wellbeing of the teacher is compromised as a result. This naturally has an impact on the teacher's ability to deliver quality teaching.

This explains the fact that the second most significant factor identified by the teachers is their health (60%). This is ranked much lower than the rate of pay of teachers (87%), but is still very high. Poor health results in absenteeism and generally poor performance in the classroom. Many of the in-service teachers lived through the Pol Pot era where they were practically starved and overworked. The long term health effects of poor nutrition, physical exhaustion and lack of access to health care contribute to a workforce with general poor health. In addition to poor nutrition there is no dental health service and often a high sugar diet. Dental decay can result in systemic disease. In addition there is a lack of sanitation and little or no access to clean drinking water.

The third factor, which stops a teacher from delivering quality teaching, is the remoteness of the school. This is often evidenced by a lack of resources for the school, which can include the failure of the government to deliver the prescribed school textbooks and general school funding at the beginning of the year. Beyond the physical delivery of materials, remote schools are often staffed by teachers who have to travel some distance to get to school. This uses resources such as time and money for transportation or paying for accommodation in the communities in which they teach. It also means the teachers are not from the communities in which they work. The teachers can have very little understanding of the community that the school is part of and the teachers can have little or no contact with the families of their students.

Remote schools also tend to receive less overall support. Their communities are often very poor. With limited access to employment most families are likely to be subsistence farmers. There would be very little financial ability to provide materials for the children of the family to attend school and a high dependence on the labour provided by those children for the family's survival. The level of literacy would be very

low which means little input into the children' education from their parents is possible and potentially little value placed on education. The combination of these factors would make it very challenging to deliver quality teaching.

The remoteness of the school can also be linked to the fourth factor, which is corruption and loss of funding for the school. Although corruption is in no way limited to remote schools it is often more prevalent in those schools. The low educational base of the community would mean little or no involvement with formal education on the part of parents of the students (Phin 2014). The community would have little or no engagement with the school and the parents are unlikely to know what resources the school is entitled to. With limited accountability the resources that actually get to the school may not be applied for the purpose for which they were supplied.

Remote schools are also seen as being less desirable than an urban school. This is due to the perceived lack of available resources, however it goes beyond resourcing alone. Rural schools have poorer school facilities including poor quality or non-existent toilets and drinking water and a lack of infrastructure. The teachers also believe they will be exposed to more disease, that living conditions are worse than in urban areas and that there is no access to healthcare for themselves (Mulkeen 2006).

Two factors rank equally as the fifth most significant factor stopping a teacher from delivering quality teaching. The first fifth-equal factor is the poor health (and therefore absenteeism) of the children. Where children are required to work on the family farm, raise other siblings or care for their elderly relatives they miss a lot of school. The health of the children is often poor due to poor nutrition, no access to health or dental care and no sanitation or clean drinking water in the children's homes. Diarrhoea is common, as are ear infections due to dirty bathing water. In addition there is a prevalence of malaria and dengue fever in many parts of Cambodia. It stands to reason that if a child is regularly absent from school, for whatever reason, it is very difficult to deliver quality teaching. This results in a high repetition rate. Eventually a high repetition rate leads to a high dropout rate as

children give up on achieving a basic education and as the children become a more valuable production unit of the family.

The second fifth-equal factor is the teacher not knowing how to use teaching materials. This is back to basic teacher training. The lack of technical teaching skills is a huge issue in the inability of the teachers to deliver quality teaching. A teacher that does not know how to use teaching materials cannot, by definition, delivery quality teaching. This factor relates to the low investment in teacher training and ongoing teacher development in Cambodia.

Now I turn to analysing the lowest ranking negative factors.

Table 14 – The lowest ranking factors with a negative influence on delivery of quality teaching.

Factors with the least negative influence on	No. of	Percentage of
delivery of quality teaching	teachers	teachers
	placing in top	surveyed
	4	
A lack of drinking water at the school	15	11
Lack of involvement in decision making at the	10	8
school		
The relationship with the school director	10	8
The relationship with the students	9	7
The relationship with other teachers	3	2

The factors which were seen to have the least negative influence on the delivery of quality teaching related predominantly to the teachers' relationships whether

between them and the school director, the students or other teachers. This result requires some careful consideration.

One interpretation of the data is that it could be that the individual teachers themselves did not identify any issues they had personally in this respect. It does not necessarily mean that these relationships are not important. Of all of the survey these answers caused the most concern as the teachers indicated that as a positive influence these relationships are more influential than in a negative sense. Perhaps this answer, which seems to contradict the teachers seeing relationships as very important in the 'most positively influential' questions, indicates that the teachers interpreted this question as being about any issues they personally had in this respect, rather than as a general issue.

The correlation between these factors on a positive and negative basis should be more closely observed, leading to a concern that the translation of these factors from English to Khmer may have inadvertently asked the teachers to comment on their personal experience of these relationships rather than reflecting on them in a broader sense. This concern was raised after the second survey was undertaken as the teachers marked these relationships as being consistently low in terms of a negative influence. Efforts were made to ensure the teachers understood that they were being asked to answer the survey on the basis of potential influences on teachers generally, but comments were made that the teachers responded as they did because they did not feel they personally had any problems with their relationships.

5.5 Interview results

The interviews conducted loosely followed the survey questions but the Directors tended to focus on existing problems and negative influences. There was a little variation in the answers but most commonly, the highest negative influence on the delivery of quality teaching was the lack of resources and the lack of training of the teachers. Without exception, the School Directors said their teachers could not

deliver quality teaching due to a lack of resources. This is both in the form of training, consumables and teaching materials. The teachers have little to work with. They often have no textbooks, although that is being remedied over time, but they also need textbook orientation so as they know what the text-book contains and how to teach from it. They have no resources in the form of library books or reference materials. They have no consumables such as paper, pens, scissors, glue etc.

The teachers have had inadequate training and as a result are lacking different teaching techniques. They have difficulty delivering adapting their teaching to the varying needs of the children and would welcome in-service training and workshops. I have seen the effectiveness of workshops and the resultant lift in the quality of teaching.

The School Directors all mentioned the low salary being a major issue for all teachers. As their wage is not a living wage teachers' must obtain secondary employment. This prevents them from having time to prepare lesson plans, and can stop them from being able to attend classes. Teacher absenteeism is a problem, but the teacher cannot afford to turn away other work. The teachers' health suffers as a result and there is no access to health care.

The relationship between the teachers and the community was also considered important. The school is part of the community and as such requires the support of the community and the parents of the children in particular to function well. The children must be allowed to attend school and must be given time away from work to attend. In the rainy season many children are kept home to help their parents. The school year stops from July 31st until 30 September as a result. This means children only attend school for 10 months, from October until the end of July. The schools are open 6 days a week, but a school day is typically from 7 am until 11 am, only 4 hours of instruction. There are 27 public holidays in Cambodia and the schools close for 2 weeks in April. The children would receive a maximum of 9 months of instruction. As a result, any absence through illness or the need to work has a significant impact on the days the children are able to attend school.

5.6 Health and nutritional status of children

The absenteeism of children has a huge impact on their ability to learn, and the teachers identify this issue as a negative influence on their ability to deliver quality teaching. Although the intention of this research was not to explore the factors which influenced the students' ability to receive a quality education it is clear that further study needs to be undertaken to examine the impact that a child's health has on their ability to access a quality education. It is obvious that poor health has a high degree of direct influence on a child's progress at school and there is a clear relationship between health and education (Glewwe 2014, 4). However, if the intention of developing countries is to increase the quality of education achieved by their children then investment in primary health care is also required. For children to be able to absorb information and learn they require adequate food and , clean drinking water. To keep them healthy they need, sanitation and access to basic health care including immunisations and dental care.

Personal experience shows that where the basic sanitation is lacking in a school the children become sick and miss classes. When a family cannot grow sufficient food to feed the family adequately then the children are lethargic and unable to concentrate when they are at school. A basic investment in nutrition, health and health education is necessary and very much overdue in rural Cambodia. The achievement of other development goals will be seriously undermined unless these issues can be addressed.

5.7 Do teachers have a sense of being valued?

Research refers to the low self-esteem of teachers as an influence on the delivery of quality teaching (CITA 2011, CITA 2012). From outside observations I would have expected the teachers to feel unappreciated and disconnected due to their being underpaid and required to work in challenging conditions without resources, training or support.

Although not part of this report, the survey did ask the teachers how valued they felt. The teachers were asked whether they felt highly valued, moderately valued or not valued at all as a teacher. 63% of teachers feel "highly valued" and enjoy being teachers, and 35% feel "moderately valued" as a teacher. Only 12% felt not valued at all.

This response came as a surprise and indicates that the teachers' value system is something that requires a greater understanding. There are potentially deeper cultural issues that need to be appreciated. The respect felt for a teacher in Cambodia may relate to the cultural respect for 'the teacher as the second mother' that is often referred to in Cambodia. It may be quite independent to how those teachers' are actually treated.

Whilst the majority of teachers indicated that they feel valued, this sense of value could be eroded over time due to the long term poor treatment that the teachers actually face There is a positive base to build upon. This aspect of the education system deserves further exploration.

5.8 Chapter summary

The survey and semi structured interviews produced similar results and showed that the view of the teachers and the view of the School Directors were similar. The characteristics of a quality teacher related predominantly to the teacher being skilled and resourced sufficiently to be able to deliver quality teaching. This result was consistent again with the factors which had both the most positive and negative influences in the delivery of quality teaching, as the highest impact related to the training and resourcing of teachers.

The highest factor with the greatest positive and negative influence relates to the teacher's salary. The teachers are simply not paid enough to be able to work at teaching alone. They must find other work. This could be in part due to the double

shifts being run in schools in Cambodia. Children either attend morning of afternoon classes. A teacher is employed to teach 7 am until 11 am, and then, if the school is open in the afternoon, a new set of teachers is employed to work 1 pm until 5 pm. This has brought about the perception that teaching is a part time job, as it does not take up an entire day. However, the teachers cannot consider themselves fully employed as they must supplement their income to meet living costs. As result teachers are tired, physically exhausted and lack the time or energy to develop their teaching skills or lesson plans.

The teachers are clearly seeking better teacher training before being placed in service, and ask for resources and technical teaching skills to be able to deliver quality teaching. This aligns with my personal experience where the teachers have stated that they are not sure what to teach, unsure how to teach and have very little resources to teach with. The basic inputs of teacher training and teaching resources are severely lacking in most Cambodian schools and have a huge impact on the quality of teaching being delivered.

Chapter Six: Discussion and Conclusion

6.1 Introducing this chapter

This research sought to investigate the characteristics of a quality teacher. The key findings are that the characteristics identified by the teachers in Cambodia aligned with international thinking about the characteristics of a quality teacher. The teachers' views also aligned with the characteristics identified by MoEYS. In this chapter I discuss the key findings and reflect how these findings align with the literature.

Furthermore, this research sought to identify what factors influence the delivery of quality teaching, either positively or negatively. The survey results showed a clear pattern in terms of which factors were considered to be the most influential. The most important factors related to the fact that education must be resourced in order to be effective. This chapter includes a discussion of these factors and how these factors relate to wider literature.

From this I discuss some recommendations for policy and practice where I consider these will have an impact on the delivery of quality teaching and a lift in the quality of education in Cambodia.

In closing, I recognise the limitations in the research and the narrow scope of the research questions, and highlight areas which could have a further impact on the delivery of quality teaching but which are outside of the scope of this report.

6.2 The characteristics of a quality teacher.

Education is a human right and is desirable in itself (Annan 1999, Asokumar & Kumar 2011, UNICEF 1999). It also helps drive economic growth and develops social capital (Glewwe 2014, World Bank 2004). However, in order for education to contribute to human and economic development it must be of sufficient quality (Chimombo 2005, Kim & Rouse 2011, Courtney 2007, World Bank 2002, Hanushek and WoBmann 2007).

Whilst the production theory may have limitations in the developed world (Bruns, Filmer & Patrinos 2011) it clearly applies to developing countries (Cheng & Tam 1997, Hanushek 2007, Hanushek & Wobmann 2007). Developing countries have limited resources to invest in education and are therefore seeking the most effective and efficient ways to improve the quality of education beyond the basic resources (Tan 2007, Nonoyama-Tarumi & Brendenberg 2008, Phin 2014, Glewwe et al. 2014, Dhaliwal & Tulloch 2012, Dhaliwal et al. 2012, Hanushek and WoBmann 2007) . The most significant component of quality education is quality teaching (Hanushek 1992, Hanushek and WoBmann 2007, UNESCO 2004, Coleman 1996).

Although there was a clear preference for some characteristics over others, the teachers surveyed recognised each of the characteristics that were identified through research of international literature as being representative of a quality teacher (Looney 2011, Leu 2005, Nuthall 2004, MoEYS 2013). This shows that the teachers know what characteristics are required of them to be a quality teacher. Some characteristics were seen as being more important. These were, that the teacher:

- Understands the students' needs and cares about their wellbeing
- Understands the MoEYS curriculum and policies
- Uses good knowledge of the subject area
- Uses a number of different teaching strategies
- Knows how to use teaching materials

These characteristics very much align with current international thinking and the literature (Looney 2011, Leu 2005, Nuthall 2004). They also fit with MoEYS policies and guidelines (MoEYS 2013).

6.3 The factors with the greatest influence on the delivery of quality teaching.

Having completed this research and considered the various factors that influence the delivery of quality teaching it is clear that these factors are numerous and varied. They include relationships on a number of levels; between the teacher and students,

the community, other teachers and the school director. The self-esteem of teachers is one factor, as is the degree of involvement of teachers in decision making and the formation of policies. The health of the children and the socio-economic status of their families play an important role as does the health of the teacher (Kim & Rouse 2011, CITA 2011, Cornelius-White 2007, Leu & Price –Rom 2006).

The teachers were asked to consider the factors which had the most positive influence on the delivery of quality teaching and the most negative influence on the delivery of quality teaching.

The factors with the most negative influence on the delivery of quality teaching were:

- The rate of pay of teachers
- The teachers' health
- The remoteness of the school
- Corruption and loss of funding for the school
- Poor health of the children
- The teacher not knowing how to use teaching materials

These factors can be addressed by providing more adequate resources, improving the physical conditions at the schools (toilets and water), delivering a health programme and improving access to health care. Both the absenteeism of teachers and absenteeism of students have a huge impact on the delivery of quality teaching. This will be common to most developing countries. The link between health and education cannot be underestimated (Glewwe 2014).

Whilst the negative influences could be viewed as being more related to specific challenges faced by the teachers, the positive influences have a broader application. The factors which can positively influence the delivery of quality teaching represent what the teachers' feel they need to have to be able to deliver quality teaching.

The factors with the most positive influence on the delivery of quality teaching were:

- The teacher getting paid a higher salary
- Longer teacher training
- More resources for the school
- Better understanding of curriculum and MoEYS policies
- Access to a mentor teacher

These factors are consistent with the literature (Tan 2007, Nonoyama-Tarumi & Brendenberg 2008, Phin 2014, Glewwe et al. 2014). This experience is likely to be shared by teachers in all developing countries where resourcing is scarce and training is limited.

The results for positive and negative factors did not necessarily correlate. If there was an issue which was identified by the teachers as preventing them from delivering quality teaching then the solution to that problem could be expected to rank as highly in terms of being a positive influence. For example one factor which was seen by many teachers as having a very negative influence was the teachers' health. However, healthcare for the teacher was not then identified as being having a very high positive influence. The reason for this is unclear and would require further investigation but may be as simple as a lack of confidence on the part of the teachers in any form of healthcare. Their experience of health care in Cambodia would be minimal and probably at a very rudimental level.

However some factors were identified as needing to be addressed to both remove a negative influence and to provide a positive influence. These factors were the rate of pay of the teachers and teacher training, namely the teachers wanting access to a mentor teacher and recognising their lack of knowledge on the part of some teachers relating to use teaching materials.

These factors primarily relate to the resourcing of education. Resourcing education is the key to achieving quality teaching in Cambodia and throughout the rest of the world. Without basic resources teachers cannot deliver quality teaching (Tan 2007, Nonoyama-Tarumi & Brendenberg 2008, Phin 2014, Glewwe et al. 2014). It is interesting to note that these positive influences strongly align with the some of the areas identified by UNESCO ((2004) as being critical to teacher quality. These included teacher training, ongoing professional development, teacher salary and conditions of service.

The teachers themselves must be resourced. The teachers know that the lack of training and lack of resources prevents them from doing their job well. The challenge for a teacher who has had limited training and little or nothing in the way of resources overwhelms any other influence. Without an investment in education the teachers cannot do what is expected of them. Personal experience shows that this is a critical issue. The schools in rural Cambodia are staffed by teachers with very limited teaching skills who are paid less than a living wage to do their job. The teachers are not treated as a skilled profession. They are not trained, supported, developed or paid to do the work necessary to deliver quality teaching. Those teachers themselves state that they do not know how to teach. They are looking for further training and development of technical skills.

The teachers do not have teaching materials. They also know that if they were given the materials they needed to teach the children with, they would not know how to use those materials effectively. With better resources the teaching force is willing to deliver quality teaching..

Teachers also want a greater investment in their training. They are seeking greater teaching skills. To achieve this they seek access to a mentor teacher and longer teacher training. The teachers are keen to learn and are aware of their lack of teaching capacity and lack of technical knowledge. The most effective way to resource teachers is by increasing their overall skill base. This could be achieved cost effectively through mentor teachers who would reach out to in service teachers. This enables a large number of teachers to receive the benefit of technical workshops. The curriculum and training methods used in teachers training colleges will assist the

trainees currently in training. Given the teachers are open to further training a direct investment in education is justified.

The primary focus needs to be on the training and resourcing of the teachers (Tan 2007, Nonoyama-Tarumi & Brendenberg 2008, Phin 2014, Glewwe et al. 2014, Glewwe 2014). The production theory applies in the context of a developing country (Cheng & Tam 1997, Hanushek 2007, Hanushek & Wobmann 2007) particularly where the teaching profession is at the pre-professional stage relying on basic didactic teaching techniques (Hargreaves 2000). The teachers' responses show that they know what is required of them and what they need to be able to do the job.

The teachers' identification of characteristics of a quality teacher is consistent with international research and commentary. They know what a quality teacher looks like and clearly identify with the characteristics of quality teachers (Looney 2011, Leu 2005, Nuthall 2004). This provides a good base to develop a set of professional development goals for teachers but the training and resources must be provided to achieve this.

The link between providing the teachers a living wage, training and resources and the delivery of quality teaching is very clear (CITA 2011, CITA 2012). With the low salary teachers receive they cannot support themselves or their families without a second job, giving them no time or energy to prepare lesson plans or improve their teaching techniques. This is a barrier to the development of teaching in Cambodia as a profession. Teachers do not have the time or opportunity to collaborate with other teachers. They work in survival mode and as an isolated unit. For teaching to progress in Cambodia teachers must be assisted to develop to the point where they consider themselves as part of a profession, working together to achieve a common goal and striving for excellence. This maturing of teaching into a profession requires some policy direction and encouragement from MOEYS. The first step is for the teachers to be paid an adequate wage to enable them to concentrate on their roles as teachers. Performance needs to be recognised and excellence rewarded (Tan 2007, Tan & Ng 2012, Phin 2014).

The teachers will not have time or the energy to consider any more abstract issues regarding their role in delivering quality teaching as long as they are preoccupied by their inability to earn a living wage as a teacher. There are no significant issues relating to low self-esteem or lack of motivation on the teachers' part, although continued pressure to deliver without the necessary support may eventually lead to this.

All other potential positive influences become irrelevant if the basic resourcing of teachers is absent (Glewwe et al. 2014). The teachers need to be trained to teach and need to understand the curriculum and MoEYS policies (Phin 2014). They need to know different teaching methodologies and how to use teaching resources. They need to be given text books and resources, adequate classrooms and functioning schools in order to be able to start to deliver quality teaching. Most importantly the teachers need to be paid a living wage so as they can attend school with sufficient time and energy to be able to be a quality teacher and display the characteristics internationally recognised and sought by MoEYS in Cambodia (CITA 2011, CITA 2012 Courtney 2007).

Whilst we can examine the other influences to find the key to the delivery of quality teaching, this research shows that the most necessary inputs are the basic ones. Unless those inputs are provided all other influences become irrelevant. Little impact will be felt by supporting relationships between teachers and their students or the community if the teacher has not received teacher training of sufficient quality to enable them to actually teach. The ability of a teacher to teach, to have access to and know how to use teaching resources, to be able to exercise varying teaching techniques and be paid a living wage so as they have the time to plan classes and be fit and healthy enough to deliver quality teaching are critical to the delivery of quality teaching.

In the context of developing countries the basic production theory of inputs producing education as an output is crude but appropriate. The teachers do not have

the luxury of considering their own sense of fulfilment or value, they do not have the skills to work cooperatively with other teachers or undertake self-assessment if the basic resources are not provided. Where resources are not sufficient to provide a living wage, adequate training and teaching resources, then all other factors become of limited consequence.

6.4 Recommendations for policy and practice

This section contains my suggestions as to policies and practices which will contribute to the development of quality teaching in both Cambodia and other developing countries.

6.4.1 Resourcing education

As argued by Glewwe (2014) achieving quality education requires the appropriate provision of financial support and resourcing. Policies, which seek the delivery of quality education, must be followed by an increased education budget. Schools cannot deliver quality education without the appropriate level of financial support. Schools require the provision of adequate teaching materials and resources including library books and a trained librarian, up to date textbooks, teaching resources and a relevant curriculum.

6.4.2 Developing towards teachers as professionals

The teachers tasked with the delivery of quality teaching need better basic training and the opportunity for on-going teacher training once they are in service including access to a mentor. Policies which promote the development of teachers as professionals help the achievement of quality teaching. These would encourage collaboration between teachers, the sharing of resources and the dissemination of teaching skills. These policies should include the provision of monthly workshops to enable teachers to work together and to disseminate teaching skills through sharing experiences. Using the stages outlined by Hargreaves (Hargreaves 2000) would help

the teachers recognise the behaviours associated with the pre-professional stage and would enable the teachers to understand not only where they currently are along the teaching professionalism spectrum but also what behaviours they need to model in order to develop as a profession.

As has been emphasised, an important policy would be to ensure the teachers are paid a living wage. An adequate income, well as achieving the primary goal of enabling teachers to focus on teaching, would have the effect of recognising teachers as a skilled professional group. The recognition of ability and promotion according to ability would also encourage the development of a teaching profession. This requires a policy of rewarding performance and ability with salary increases and ensuring the external assessment of ability beyond the School Director rewarding on the basis of his or her relationship with the teachers or simply their seniority.

6.4.3 Determine a measure of quality teaching and set goals

In order to increase teaching quality policies need to focus on what educational and teaching quality means in the context of Cambodia and to develop a set of standards that a competent teacher is expected to meet. These should include an assessment of each teacher's current abilities and suggested steps to improve the teacher's current performance. Quality guidelines would provide targets that teachers can aspire to.

In order to be able to provide meaningful teacher assessments and develop relevant teaching goals, the role of the inspectorate staff of MoEYS is critical. MOEYS inspectorate staff will need to first be trained. They need to understand the stages relating to the development of the teaching profession. They need to have the necessary skills to be able to identify the teaching techniques being used and teacher characteristics being displayed in order to accurately identify what any given teacher needs to do in order to improve their capacity. This means an investment in the inspectorate staff of MoEYS is requiredy. One way to do this would be to expose inspectorate staff to different teaching environments where the teaching profession is further developed than in Cambodia.

An integral part of the development of teachers in their capacity to deliver quality teaching is the provision of timely and constructive feedback to teachers as part of their ongoing development. As a teacher matures as a professional there is also the need for development of an appreciation of the value of self-assessment. Whilst this is a characteristics identified by MoEYS as representative of a quality teacher the teachers did not rank this as being very important. This may be a reflection of the fact that the teachers are working in the pre-professional age as identified by Hargreaves (2000) where teachers are working in an isolated manner using didactic methods without collaborating or self-assessment.

As a necessary part of striving for quality teaching there needs to be a way to discipline poor performing teachers. Teachers that underperform and are absent from school need to be managed and, if necessary, relieved of their duties. Teacher absenteeism has a huge negative impact on the achievement of any country's education goals.

6.4.4 Link health to education

Education policies must recognise the link between health and education. There is an existing health curriculum but there are no resources provided to actively teach health care. Policies must provide materials and adequate training to enable the health curriculum to be delivered effectively. The schools must be resourced to improve sanitation, provide clean water at schools and supply hygiene materials, including toothbrushes.

Policies need to be designed to deliver health care to the schools. This would involve providing mobile school nurses who visit the schools and review the health of the children. These health nurses could oversee and develop the delivery of the school health curriculum.

6.5 Recommendations for further research

Having completed this research there are some areas where I feel further research is warranted. This would enable a greater understanding of the teachers' responses and a critical analysis of where any differences lie. Further research would also allow a more thorough examination of the various influences on the teachers' delivery of quality teaching and a deeper appreciation of how the various influences work.

6.5.1 Gender disaggregated answers

I did not divide the survey answers into male and female teachers' responses because the indication of gender on the answer sheets could have made identification possible in schools with smaller staff numbers. This would, however, be an interesting comparison.

6.5.2 The differing experiences in supported and unsupported schools

Teachers from thirteen primary schools took part in the survey, being the teachers in the seven primary schools CCT supports and the teachers from six unsupported primary schools. All answered were combined and no weighting given to either group pf schools. In further research a comparison between teachers that had received the benefit of support and those that had worked in a completely unsupported environment would be interesting to see if there was any difference in thinking. The identification of the characteristics of a quality teacher or the factors that influence the delivery of quality teaching could vary depending on the previous experience of those teachers and the degree to which they feel they are supported or have a voice.

6.5.3 Factors which influence students' achieving a quality education

We did not interview parents or students. There are ethical considerations in interviewing children but the challenges faced by children in being able to attain a quality education are of significant interest. Key issues would relate to their ability to access education, any gender bias in the opportunities available to boys and girls, personal safety to and from school, health and availability of food, attitude of parents to education, impact of literacy level of parents on the families attitude to education, the impact of poverty, duties around the home and the gender balance in those duties. Further research in these areas is warranted.

6.5.4 The different perspectives of Primary and Secondary teachers

While this report relates to primary school teachers' surveys, 19 secondary school teachers from 2 secondary schools also completed the survey. The responses indicated differing attitudes towards the characteristics of a quality teacher between primary and secondary teachers. This possibly related to the wider pastoral care required of a primary school teacher as opposed to the more specialist subject based approach taken by secondary school teachers. The differing attitudes would make an interesting research topic. I believe the view of the teachers as to their degree of care for the wellbeing of the children they teach would differ greatly.

6.5.5 The relationship between positive and negative influences

Whilst the teachers have identified factors that have both positive and negative influences on the delivery of quality teaching, the relationship influences is not clear. Where one influence is seen as highly significant by a majority of teachers, that sam factor is not ranked as highly on an inverse basis. The example given of the health of the teacher as opposed to providing healthcare for the teacher is an example of this.

6.6 Closing comments

Education is a human right. Investing in education makes good economic sense. It contributes to human capital and is intrinsically valued.

The teaching profession in developing countries is likely to be at the first stage of preprofessional development. The teachers have limited capacity. As a result they are working as individual units, sometimes isolated and unable to receive support or feedback. They often lack confidence in their own abilities. Teachers are likely to be highly dependent upon resources that enable them to manage their classrooms and teach to a set curriculum. They will be using a didactic approach, with teaching being subject-centred.

At this stage of professional development, basic investments in education are critical. Beyond the necessary investment in buildings, toilets and water, teachers in developing countries cannot deliver quality teaching without increased inputs into teacher training, access to mentor teachers, a living wage and teaching resources. The production theory is more applicable to a developing country.

Although there are many factors which act as influencers in the delivery of quality teaching, in a developing country context the factors that relate to the provision of these basic resources have the most impact. Many of the other factors are seen by the teachers are having less relevance to their situation. Their call for a living wage, improved training and the supply of adequate resources needs to be heeded if education is to have any chance of improving in developing countries.

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Appendices

MoEYS Model Exam Answers

(Copied as translated without correction)

Competition Tests for Change of Tenure Type B

Exam Session: November 24, 2013

Answers

(Three marks): 1. Reasons why teachers need to have high professional ethics because:

- Having code of ethics is to regulate the behaviors and conducts of their members in proper accordance with a standard recognized and valued by the general public;
- Building up human life foundation is the second mother;
- Good communication (within the community) giving up personal benefits for the sake of humankind;
- Development of capacity and work;
- Complying with the law in accordance with the work standard: teacher is a role model, an educator and a trainer of human resources to bring about a good living morals, honesty, dignity and modest behavior for the nation;
- The code of ethics links teachers with the function as educator who has professional consciousness (abiding by the role, virtue and individual value as a person who is recognized and trusted by the society);
- A builder of spirit and knowledge of humankind and an engineer of soul;
- Being both a scientist and an artist;
- Honouring the individual rights, helping provide protection and addressing social issues;
- Self-evaluating and conducting research on teaching profession on a regular basis;

 Therefore, when teachers have high professional ethics, this would lead them to self-awareness and awareness of their duties and responsibility for their roles and duties.

(Four marks): 2. Factors contributing to promotion of education quality in Cambodia include:

- Study curriculum quality: textbooks and study hours of national and international standard as per the demand of regional labor market as determined in each region;
- ❖ Training quality: training quality teachers, enhancing all types of exams (principles of law, transparency, justice, the result is acceptable). Reform to enhance education quality and

capacity from nursery education, primary education, secondary education, technical school, to higher education linking between state-run and private universities according to the labor market;

- **★ Teacher quality:** content of teaching, teaching and learning processes, study result, learner quality, knowledge of foreign languages, scientific, technological and IT researches;
- Learner quality: enjoying good health and adequate nutrition; learners enjoying good physical and mental health may consequently produce good study result. Adequate food is the most important factor for brain development towards its normal functioning; regular school attendance, willingness to study and spiritual and material supports from families for education, giving enough time for learners; developing youth capacity and skill to acquire labor market during the upcoming 2015 ASEAN integration;
- Quality of teaching materials: adequate and modern [materials] for learning and teaching such as principal textbooks and teaching auxiliary documents shall have high quality and efficiency;
- School building quality: buildings are adequately constructed based on pedagogical standard and equipped with abundant furniture serving the teaching; (Initials)
- ❖ Study environment quality: study environment with quality, comfort, safety, gender equality and protection with gardens and biodiversity garden, playground, sport field and enough supply of resources and study materials as well as attention from teachers (encouragement and good instructions) classroom with appropriate size and number of students that can be managed by teachers;
- **Financial management enhancement:** providing high salary to teachers;

(Three marks): 3. To become a teacher and to have quality education, it is necessary to:

- Have high professional consciousness, be strict and soft;
- Accurate knowledge and know-how;
- Have creative thought;
- Regular self-study and research of new knowledge for capacity development;
- Good method and plan for leading teaching activities;
- Make lesson plans and determine specific objectives of lesson;
- Know how to use teaching materials in line with pedagogical standard;
- Provide students with encouragement (rewards in terms of both words and materials);
- Create joyous atmosphere to students (freedom, equality, democracy);

- Provide instructions, education, advices to students to actively participate in learning [processes], managing disciplines, order and educating student personalities;
- Act as a good role model for students, help improve and evaluate study activities;
- Self-assessment (acknowledge their own shortcomings and make improvement);
- Have good communication with students and colleagues in the entities, communities and relevant stakeholders;
- Be aware of student's special learning method and understand student's difficulties.

Ministry of Education, Youth and Sports

Competition for change to tenure type A

Questions

- 1. The Ministry of Education, Youth and Sports has determined (1) vision (2) mission (3) present objectives (4) long-term objectives and (5) education strategic plan 2009-2013, what important points has it given high priority to? Explain in detail each point. (4.50 point)
- 2. What important factors does **quality of education** depend on? Raise those main factors with examples. (1.50 point)
- 3. Based on your experience in education and as a teacher, raise the main points a qualified and effective **teacher** shall implement. (4 points)

Answer:

1. The Ministry of Education, Youth and Sports has determined (1) vision (2) mission (3) present objectives (4) long-term objectives and (5) education strategic plan 2009-2013, giving high priority to the following important points: (4.50 points)

(1.1) Vision:

Build and develop human resources of great quality and virtue in all fields to build the Cambodian society to be a developed one with its basis on knowledge and know-how. (0.25 point)

(1.2) Mission:

Lead, control and develop the education, youth and sports sector of the Kingdom of Cambodia to meet Cambodia's socio-economic, social and cultural needs and regional and global development. (0.25 point)

(1.3) Present objectives:

Ensure that all Cambodian youths and children have equal opportunities to have access to quality education in accordance with the constitution and the Royal Government's commitment to the UN Convention on the Rights of the Child, to wit, the principles of non-discrimination against social and marital status, geographical location, race, religion, language, gender and physical fitness. The ministry hopes that after students finish their studies, they will acquire knowledge in accordance with proper standards as well as being able to compete on regional and global markets and become the core driving force for social and economic development of the nation. (0.50 point)

(1.4) Long-term objectives:

Develop Cambodian youth in all fields and instill the spirit of patriotism, national pride, good morality and great virtue as well as optimism for the nation and its citizens in every Cambodian youth. (0.50 point)

(1.5) Education strategic plan 2009-2013:

(1.5.1) Ensure access to equitable and quality education services

- Build more schools for all levels of education such as primary school, junior high school and high school, to wit, the head of the Royal Government has set out the policy of building school infrastructure throughout the country, getting schools closer to people's homes. (0.25 point)
- Particularly focus on basic education to achieve the national scheme of education for all in 2015. (0.25 point)
- Motivate and encourage expansion of early childhood education programs in all forms.
 (0.25 point)
- Expand non-formal education work, vocational technical education, extending opportunities for access to secondary and higher education services through ongoing implementation of the principle of better partnership between the Royal Government, development partners, the private sector, NGOs, communities and students' parents. (0.25 point)

(1.5.2) Promote quality and effective education services

- Improve teachers' capacity in all forms with respect to learning and teaching methodologies in all levels of education. (0.25 point)
- Subsequently improve and modernize study curricula and textbooks as well as making an effort to provide study textbooks to all students. (0.25 point)
- Promote and implement decentralization of some work to the sub-national level, providing operating budget to all schools and all levels of education across the country as well as prepare clear-cut measures to ensure the effectiveness of education-related budget expenditure. (0.25 point)
- Enhance enforcement of the Law on Education, Teachers' Professional Ethics and Good Governance. (0.25 point)

(1.5.3) Develop education establishments and officials' capacity for decentralization

- Promote improvement of the work structure for drawing up adequate laws and standard documents. (0.25 point)
- Provide vocational skill training to education staff at all levels. (0.25 point)
- Continue to focus on public financial management and internal audit system. (0.25 point)
- Develop planning, monitoring and evaluation systems and promote institutional and capacity development to manage these systems. (0.25 point)

2. The quality of education rests on three main factors: (1.50 points)

(2.1) Quality of professors:

They are required to have specialist, pedagogical and technological knowledge related to education of any foreign language, have professional consciousness and good personality. (0.50 point)

(2.2) Quality of curricula:

It is required to analyze the general aspect, focusing on location, environs, number of students, students' tendency and reactions as well as analyzing various needs, centering on interviews with students, students' parents or guardians, communities, competent authorities and completion of questionnaires as well as comparative study of curricula of other countries in the region and around the globe. (0.50 point)

(2.3) Quality of physical materials:

The quality of principal textbooks, with ongoing improvement and modernization of textbooks as well as continued enhancement of the quality of documentation centers, libraries, teaching materials, various tools and technological materials to serve the work of education, research and experimentation. (0.50 point)

The main points a qualified and effective teacher shall implement include: (4 points)

(3.1) Help give students instructions about and indicate the process of their studies

- The primary work of a teacher is to promote students' learning, to wit, a teacher shall help give instructions and indicate the process of studies to students. (0.25 point)
- Prepare plan and provide learning experience to their students with a clear meaning and content. (0.25 point)
- Create a pleasant learning environment for students, properly using teaching materials and tools in accordance with the lesson objectives. (0.25 point)
 (Initials)
- Pay attention to different abilities of students and shall praise their intelligent growth and development. (0.25 point)

(3.2) Provide students with consultation and instructions

- Consultation and instruction are not the sole responsibility of the school consultant, but teachers share the responsibility because teachers have close relationship with students and know them much more than anyone else, that is, know about their genuine impression, needs, difficulties, habits, behavior, belief and aspirations. (0.25 point)
- Closely work with the school consultant to further study techniques of individual and group problem solving. (0.25 point)
- Better understand provisions, instructions and standard documents related to education work. (0.25 point)
- Have good communication with the management team, staff and teachers to obtain comprehensive information from students. (0.25 point)

(3.3) Help support extracurricular tasks

 Attentively help students' work and their extracurricular tasks because extracurricular activities can help develop their social knowledge and understanding. (0.25 point)

- Further study and understand various principles to help urge them do their work or extracurricular tasks effectively and as per the school's requirements. (0.25 point)
- Cooperate with students' parents or guardians to urge them to help further push their children to do the tasks given by the school. (0.25 point)
- Participate on a regular basis in community work as a bridge to build good relationship between the school and community and between the community and teachers. (0.25 point) (3.4) Be responsible for teaching profession
- Pay great attention to students and shall do all tasks in the interests of students and the nation and shall show mutual sincere respect. (0.25 point)
- Devote time and shall actively participate in the teaching profession with high responsibility. (0.25 point)
- Indicate model and positive behavior and shall have harmonious relationship with students and communities. (0.25 point)
- Fairly and transparently communicate with students, colleagues and other members in communities. (0.25 point)

Primary School Teachers Survey Questions

You have a very important job as a teacher and we thank you for your open and honest responses. We work together to help the children of Cambodia and your community.

1. How important are these characteristics in a quality teacher?

(Tick one box ranging from not important to very important)

Behaviour	Not	A bit	Quite	Very
	important	important	important	important
Uses good knowledge of the subject areas				
Uses a number of different teaching strategies				
Motivates their students to keep learning				
Understands the students feelings, challenges and				
needs and cares about their wellbeing				
Uses strong classroom management skills				
Knows how to present lessons clearly and				
prepares well-structured lessons				
Can help fix the common mistakes made by				
students in each subject				
Is skilled at monitoring students performance and				
comprehension				
Provides timely positive and encouragement				
feedback as to students progress				
Adapts their teaching technique to meet the all of				
the students needs				
Works collaboratively with other teachers				
Provides praise and encouragement to students				
Creates a pleasant learning environment				
Is generally happy and has enthusiasm for				
learning				
Has a sense of responsibility for the performance				
of their students				
Builds good relationships with parents and the				
community				

Understand the school curriculum, Ministry		
policies and Child Friendly School Policy		
Creates their own resources		
Has resources to teach with		
Knows how to use teaching materials		
Has good communication with the management		
team.		
Displays model behaviour, is trustworthy and		
hardworking and is professional		
Undertakes self assessment		

2. What helps a teacher deliver quality teaching?

Change	No help	A little	Some	Much
		help	help	help
Have longer training before becoming a teacher				
Have more training in a particular subject				
Develop a better relationship with students				
Develop a better relationship with parents and				
the community				
More resources for the school				
Better physical classroom and school				
environment				
Learn how to motivate the students to achieve				
better results				
Learn better communication skills				
Learn better classroom management skills				
Learn the common mistakes made by students in				
subjects				
Learn how to assess students comprehension				
and performance better				
Have more regular tests of students				
understanding				
Learn different teaching methodologies				
Become more professional and enthusiastic				
yourself				
Have access to a mentor teacher				
Get paid a higher salary				
Better understanding of the curriculum, Ministry				
Policies and the Child Friendly Schools Policy				
A teachers uniform				
Feedback from the School Director				
More involvement in decisions relating to the				

school management		
Working more closely with other teachers		
Improved health of the children		
Medical care for yourself		
Meals provided to the children so as they are not hungry		

3. What stops a teacher delivering quality teaching?

No	Some	A lot of	A big
influence	influence	influence	influence

Poor health of the children		
Children being absent from school		
The teacher needing to work a second job		
The teacher not knowing how to use teaching materials		
The rate of pay for teachers		
The teachers health		

Often
Sometimes
Never
5. How useful is the feedback from the school director?
Very useful
Sometimes useful
Never useful
6. How much support do you feel the parents of your students give you?
A lot of support
Some support
No support
7. How well do teachers at your school collaborate with each other?
Very well
Moderately well
Not at all well
8. How valued do you feel as a teacher?
Highly valued
Moderately valued
Not at all valued
9. What do you think the children of this school need to have a better education and better life?
10. What would help you to be a better teacher?
11. What is your reaction to this survey?

How often does the school director give you feedback?

4.

Reaction	No	A little	Yes some	Very much
It made me think more about being a				
quality teacher				
It made me want to become a better				
quality teacher				
I have realised I am an important part				
of the success of the students				
I am happy to be involved in more				
surveys				
I feel valued as a teacher being				
involved in this survey				