What are the current educational challenges that prevent the increase of early grade literacy achievement for Guatemalan students from 3 to 8 years old?

Wilmer Felipe Pulido Vargas

Student ID: 6684787

What are the current educational challenges that prevent the increase of

early grade literacy achievement for Guatemalan students from 3 to 8 years old?

Table of Contents

Table of Contents Continued

Acknowledgements

I would like to extend my gratitude and appreciation to the many different people, who have encouraged and supported me in their different ways, and have helped me to through out my research.

Dr. Geranda Notten, for making this research possible. Her patience, support, guidance, and advice throughout the research paper, as well as her time and effort in proof reading the many drafts, are greatly appreciated. Without her guidance, I would not only be able to fine-tune the topic, nor would I have been able to put this paper together. Thank you Dr. Notten.

Dr. Darren Hedley, for encouraging me to undertake this research topic and for his support, wisdom and guidance. The further I conducted research on this topic, the more questions arouse in my mind and peeked my interest in wanting to become an agent of change in field of education. This experience has been an interesting and a rewarding one.

Save the Children (savethechildren.org) staff in Latin America and in Washington D.C., for their assistance in providing me with data and resources.

Lise Archambault, librarian, for her guidance and assistance at the Morisset Library of the University of Ottawa, and for using her personal time to find sources and books at different libraries in Ottawa in order to assist me to complete my research.

Last but not least, I would like to thank my dear wife Sahba and our children Shoghi & Bayan who have spent their existence up to now, only knowing me doing my masters degree and writing my research paper in from of my computer every day, especially within the last 6 months.

ABSTRACT

The designation of the 1990s as the 'World Decade for Cultural Development' has focused worldwide attention more directly on an ever-widening educational crisis. It is usually accepted that the most immediate global concern, is the condition of illiteracy that affects the lives of nearly one billion people accounting for 13.8% of the global population. When literacy is defined as more than merely reading and writing simple sentences, the scope of the problem increases substantially, involving nations at all stages of development. When children cannot read, it limits their ability to learn other subjects thereby hampering their participation in the larger society and the economy. Inevitably, those principally affected are groups that are already disadvantaged: the poor, rural populations (mostly indigenous people), and especially women.

The magnitude of the literacy challenge, however, requires political determination and cooperation to greatly surpass past achievements. The enormous human and financial resources required to meet this challenge can be released only through profound changes in the organization of human affairs, a reprioritization within ministerial sectors, and the acknowledgement of the transformative role that literacy plays in both individual lives and social organizations.

The aim of this research is to identify the main challenges in Guatemala's education system to achieving higher early grade literacy among its student population and that of indigenous students in particular. The methodology for this research encompasses a literature review comprised of English and Spanish sources (Spanish is the official language in Guatemala), relying primarily on academic publications and reports from international educational organizations.

Roughly 60% of Guatemala's population aged 15 to 24 has completed at least six years of primary education, making it the lowest average among the other eighteen Latin American countries. Those with the lowest levels of education have the highest risk of poverty. Indigenous people comprise about 40-60% of Guatemala's population and they are disproportionately at risk of poverty and underachievement in literacy. Early grade literacy particularly applies to children between ages 3 and 8 years of age.

Since the indigenous children are the majority in the classrooms, policies and interventions must be designed to satisfy and excel the needs of this population, in order to increase enrolment, literacy achievements, and transform the entire education system of Guatemala in the direction that will lead to a holistic approach where literacy is intertwined with the development of society.

The challenges Guatemala faces in literacy are enormous – ranging from emergent literacy programs and primary education systems, which produce partially literate children, to adult literacy training programs. The challenge then is to provide quality education that will lead to prosperous, healthy, and successful populations; the development of cognitive and non-cognitive skills for early grade students; the improvement of student learning; and the extension of kindergarten and primary educational services.

INTRODUCTION

Context

Learning to read is a fundamental skill that serves as the foundation for an individual's future learning and development, and collectively, for a country's social and economic development. According to the United Nations Educational, Scientific, and Cultural Organization 'UNESCO' (2010), "illiteracy and poverty constitute a mutually reinforcing vicious cycle that is difficult to break. Access to literacy competence opens up essential learning opportunities, thus contributing to economic development" (p. 2). When children cannot read, it limits their ability to learn other subjects such as math or science, and over a lifetime, it hampers their participation in the larger society and the economy. Research shows that learning outcomes are correlated to a country's economic growth. For example, "a 10 percent increase in the share of students reaching basic literacy translates into a 0.3 percentage point higher annual growth rate for that country" (Fact Sheet USAID (2013) Literacy Program – p. 1).

Poverty alleviation is a main goal of international development. Many avenues lead to accomplishing this goal. Education, health care, water and sanitation, social assistance, and economic security are but a few of these avenues. A strong educational system is the cornerstone of any country's growth and prosperity. Therefore, reducing illiteracy contributes towards achieving the goal of alleviating poverty. It is a ladder out of poverty not only for individuals but also ultimately for the country.

According to the United Nations report *Global Issues – Education for All - 2010*, "one extra year of schooling increases a person's earnings by up to 10%. Over 171 million people could be lifted out of poverty if all students in low-income countries completed school with basic reading skills".

The aim of this research is to identify the main challenges in Guatemala's education system to achieving higher early grade literacy among its student population and that of indigenous students in particular. Literacy is a problem in Guatemala where "60% of

Guatemala's population aged 15 to 24 has completed at least six years of primary education," the lowest average among the other eighteen Latin American countries. The numbers are even more concerning with regards to the rural population where as little as 40% of the population has reached sixth grade. Low reading achievement is particularly prevalent among primary students in rural and low-income regions, and those from indigenous communities and populations in which the main language of instruction is a second language (Spanish). Literacy will solve the problems of poverty and development, summarize the real challenge of having every individual of the community fully integrate with their family and fulfill their true potential in contributing to society. Nobel laureate Jim Heckman in his paper "… invest in the very young" (2000), explored public policies toward skill formation, and concluded that "one can make a bigger difference and have more of an impact with younger children because the social skills they learn in the very early years set a pattern for acquiring life skills later" (p. 2). Therefore, it is justified to focus on early grade literacy than literacy. Indigenous people comprise about 40-60% of Guatemala's population and they are disproportionately at risk of poverty and underachievement in literacy (World Bank 201, UNHRC Refugee Agency 2008, CQ Global Researcher, International Work Group for Indigenous Affairs IWGIA 2014). It is worthwhile to mention that the majority of sources from USA and Canada, place the percentage of indigenous peoples close to 40% of the total population, and sources from the rest of the world, including from Guatemala, place indigenous people close to 60% of the total population. 38% of the indigenous peoples in Guatemala, living in rural areas are paid less than $1 a day. These figures are connected to the low level of education, where those with the lowest levels of education have the highest risk of poverty. To fully grasp the nature, elements, and factors towards a quality of education for the indigenous children any assessment of Guatemala's education system also requires taking an aboriginal perspective. My research seeks to provide an overview of the current educational challenges to increasing early grade literacy (primary goal), specifically noting the most critical challenges which the government of Guatemala should direct their attention and resources (secondary goal) to.

Each year in Guatemala, there are approximately between 700 to 825 thousands children in grade 1, of which between 40-60% are indigenous children, and approximately

30% of them have already been in kindergarten for at least a year of education (MINEDUC 2014). The government of Guatemala must guarantee to all of these children access to a quality of education in addition to the creation of the right environment to develop a holistic approach to become literate persons. This task has to be done accordance with the United Nations Human Rights, UN Declaration on Rights of Indigenous Peoples (the majority of children are indigenous), while taking into consideration the needs to extend the bilingual intercultural education, support the equality of the genders, and promote a sense of belonging to the community.

The challenges Guatemala faces in literacy are enormous - ranging from emergent literacy programs and primary education systems, which produce partially literate children, to adult literacy training programs. Guatemala Human Rights Commission - USA 2008 describe the alarming situation in Guatemala as follows: "Although Article 47 of the Constitution of Guatemala stipulates that students are required by law to attend school until the age of 15, an estimated two million children do not." One obstacle to the prevention of school dropouts is that the educational sector is one of the least funded sectors of the government (3.2% of the Gross Domestic Product- GDP – Ministry of Education of Guatemala Ministry of Education of Guatemala (MINEDUC 2013). In addition to funding, more systematic and effective approaches to increase literacy outcomes are required to meet a growing population.

In Guatemala, the goal of supplying education to most of the population is nearly achieved with the rate of grade 1 enrollment equaling between 92% and 98% (The Millennium Development Goals Report - 2011). In an article about shaping education policy, Mitchell et al (2011), note that changes in the governance of kindergarten to grade12 (K-12) education will have an impact on school operations and their effectiveness. They offer the following conclusion: "Perhaps the greatest challenge and the most urgent unfinished business is developing the capacity to ensure that all children have ready access to a quality education that serves the noble, academic, social, and civic purposes that have been attached to the public schools" (p. 50). The challenge then is to provide quality education that will lead to prosperous, healthy, and successful populations; the development of cognitive and non-cognitive skills for early grade students; the

improvement of student learning; and the extension of kindergarten and primary educational services.

Type of Paper & Methodology

This research aims to identify the key bottlenecks to improving early grade literacy in Guatemala's education system. Early grade literacy particularly applies to children between ages 3 and 8, attending grades 1 to 3 of primary school. The methodology for this research encompasses a literature review comprised of English and Spanish sources (Spanish is the official language in Guatemala). Relying primarily on academic publications and reports from international educational organizations, this paper first focuses on the concept of literacy, factors that contribute to increase literacy outcomes, and the role of the government to set up the right environment for the education of indigenous students (Chapter 2). Subsequently, this paper provides a background on Guatemala's key historical, social, cultural, economic, and human development aspects relevant to the understanding of Guatemala's education system, its education policies and the literacy outcomes it produces (Chapter 3). The second part of this chapter also comprises an analysis of educational outcomes in Guatemala and a description of its education system. This chapter primarily relies on country specific information provided by the Guatemalan government and international organizations such as the World Bank, UNDP and UNESCO. Chapter 4 analyzes Guatemala's education policies and the functioning of its education system in more depth. Using a mix of government and private information sources, the chapter aims at identifying likely obstacles to improving early literacy outcomes among Guatemala's children, including its aboriginal population. The conclusion builds on this problem analysis by discussing possible next steps for research and Guatemala's education policy makers as well as what the research limitations are.

Collecting evidence on these subjects is challenging and information gaps are inevitable. A limitation of this study is the omission of the important work occurring through community-based institutions of early grade education. Statistics and reports usually do not offer the context in which literacy developments and achievements evolve. Therefore, this paper alludes to some references of the work of the indigenous institutions and the Ministry of Education of Guatemala. Where available, government information is

complemented with information found from private and international organizations. It will be important in future works to review the impacts of the interventions and policies implemented by the Ministry of Education of Guatemala and the international community for the purpose of studying the benefits provided from their favorable practices.

Justification

Lack of a strong, long-term national education plan affects the continuity of any educational plan. Every four years, whenever a new executive government is installed, the education plans and politics change. Each political party delivers a new plan and dismisses all the previous ones. Lessons learned from the previous implemented plans are hard to assess, as the access to evidence or tools is difficult because there is no process of dissemination. Moreover, the Ministry of Education of Guatemala does not have a record of all the reading interventions completed since the peace accord was signed in 1996, after having ended 36 years of civil war. In some cases a limited capacity to implement education plans exists, given the administrative processes that must take place to execute them.

In order to provide a context for the challenges present in Guatemala, it will be necessary to provide the historical perspective on education in Guatemala since colonial times, and specially the conditions of indigenous children. Poppema (2009) in her article 'Guatemala, The Peace Accords and Education' arrived at the following conclusion: "The history of education in Guatemala shows strong inter connectedness with changes in the broader society" (p. 386). Guatemala has gone through many dramatic events since colonial times and most recently a civil war that started in 1960 and finished on December 29, 1996 with the signing of the *Agreement on a Firm and Lasting Peace*. The most affected and larger segment of Guatemala is the indigenous peoples whose access to education has basically been intentionally denied. Poppema (2009) notes "the exploitation of the indigenous peoples has been part and parcel of the societal make-up of Guatemala since colonial times" (p. 387). This is reflected in every aspect of life in Guatemala and it shows the consequences of negative and low literacy outcomes for this affected segment of the population. Therefore, this research will explore aboriginal learning in order to

diagnose the challenges that this growing part of Guatemala's population is currently facing.

Poppema (2009) provides a description of the different stages that Guatemala, especially indigenous people, has gone through since the civil war. She notes:

> "Rural areas were hardest hit as schools came under direct attack, teachers and pupils were killed, communities were terrorized and teachers refused to take jobs in rural schools. By 1985, the educational system was in ruins and general enrolment rates barely reached 65% in primary education and 17% in secondary education. The literacy rate of 45% was the lowest of Latin America except for Haiti. Most of the rural schools would not even comprise the whole primary cycle and as a consequence less than 25% of the schoolchildren would finalize six grades" (p. 387).

Giasson (2011) clearly states that a mother's level of education is a good indicator to predict the success of children in school. In order to bring justice, a fair educational system, and a prosperous environment for all indigenous children, Poppema (2009) argues that they are "entitled [the indigenous people] to their culture, to investigate and revitalise it, to live in harmony with it and to share it among the often isolated Maya communities, as well as making it part of the studies of their children and the national educational system" (p. 387).

A limitation on the success of educational policy with respect to early grade literacy in the best of circumstances, in the context of this research paper, depends on what happens during the important period between birth and age 3. Around the world this important stage in the development of the first cognitive and non-cognitive skills of the child is up to the parents. Therefore, the relevance of an educated parent is key in this stage where the State doesn't offer any kind of services, especially in Guatemala. Giasson (1995) reports an important feature of what must happen at the emergent literacy level of children between birth to age 3 in order to be successful in school: "Children who succeed are those who arrive at school convinced that not only will they overcome the mystery of reading but also that these mysteries are worth overcoming" (p. 152 – own translation). Giasson (1995) continues to point out another pressing point about the importance of the skills that must be developed by grade 1: "Many studies have proven that children who have reading difficulties at the end of their first grade will still be weak readers in their third or fourth

grade. Statistics on school dropouts in Québec reveal that 49.6% of children who failed their first grade do not finish their high school" (p. 148 – own translation). Furthermore, Giasson points out the importance of developing fluidity in reading, mainly at home with parents: "All the studies show that reading fluidity is developed by the exercise of reading, including exercises outside of school" (p. 1984 – own translation). Giasson continues in identifying a milestone in the development of literacy skills for children by the age of 8: "For the grade three or grade four reader, silent reading becomes faster than oral reading. At that age, the child can read silently with ease but has difficulty to read orally because it is a challenge for him to adjust the rhythm of reading to the movements of his eyes… There is, therefore, a time when it is not pertinent to insist on oral reading for the child" (p. 189 – own translation). Perhaps, the fact that a child is able to read faster silently makes it possible to enjoy reading at that particular age. Reading is all about finding meaning in what is being read; it is all about comprehension. Furthermore, aboriginal people believe that a holistic approach (individual learning and its relationship with nature, environment, and society) will truly encompass all the facets of learning for an individual, including literacy (UNESCO 2002). In the following chapter, the different concepts of literacy will be carried out in more depth. This holistic approach that will be implemented in the present paper as the focus of this research is on indigenous children.

Significance of Study

Finding the right combinations of educational interventions, especially during the critical age of children between 3 and 8 years old, will achieve higher literacy outcomes, and a more prosperous future involving their indigenous children. As Vogler at el. (2008) point out crucial findings for children by the age of 8 in their report on 'Early Childhood Transitions': "Children face many important changes in the first eight years of life, including different learning centers, social groups, roles and expectations. Their ability to adapt to such a dynamic and evolving environment directly affects their sense of identity and status within their community over the short and long term" (p. v). Giasson (2011) warns the crucial importance for governments to apply the right interventions and policies toward the increase of literacy achievements by grade 3: "Studies prove that interventions done to children after grade 3 were less efficient" (p. 26). Children's capabilities are

fundamentally dependent on the education that they receive. The lack of a quality education affects the ability of children to achieve true progress. Today's system fails to address literacy outcomes and their connection with socio economic constraints. Efforts have been made since the signing of the Peace Accords in 1996. However, there is still a great need for improvement to prepare Guatemala's future generations. This research will identify the challenges that prevent children in Guatemala (3 to 8 years of age) from increasing their early grade literacy achievement and, according to Gleason and Ratner (2009), from enhancing "the transition into adulthood, preparing the child for eventual mastery of the rich variety of complex modes of oral and written language he or she will continue to encounter" (p. 424). This studies' explicit focus on aboriginal children, which are a significant percentage of the child population, contributes to better understanding why the current education systems hampers literacy outcomes among this disadvantaged group.

CHAPTER II

Literacy, the ability to read and the right to education, has been recognized as a fundamental human right in the Universal Declaration of Human Rights of 1948. With this view, basic education should be universal and compulsory, boys and girls should be treated as equals and follow the same curriculum and, if circumstances make it impossible for a family to educate both a boy and a girl, the girl's education should take precedence. Girls will become future mothers and in turn be the first teachers/educators of their own children. This approach promotes the meaningful acquisition and application of literacy in laying the basis for positive social transformation, justice, and for future personal and collective security.

Kennedy et al (2012) present some of the benefits of literacy for the individual: "...importance of literacy in empowering the individual to develop reflection, critique and empathy, leading to a sense of self-efficacy, identity and full participation in society" (p. 10). Also, there are benefits at the community level: "...the development of a community of readers within schools, where social interactions around text encourage both the development of habits of mind and positive attitudes towards reading within the classroom learning ecology" (p. 10). It is clear that the relationship between individual development and community development are intertwined and very much dependent on one another.

It is necessary to define concepts such as basic education, literacy, indigenous learning, curriculum, and cultural transmission in a way that does not limit the horizons of the great majority of the children of the world in the acquisition of a few skills and the grasp of a few simple facts. The minimum requirements of education and literacy for early grade children between the ages of 3 to 8 years old need to be conceived in terms of the basic knowledge, qualities, skills, attitudes, and capacities that enable children to become conscious subjects of their own growth, and active participants in a systematic process of building prosperous societies.

Recognizing the urgent need for a broad discussion on literacy and indigenous learning, this chapter presents views arising from academia, and international organizations

such as UNESCO. Drawing on theoretical research, this chapter will also explore the diversity of literacy in matters of expression and communication, cultural identity, and socio-economic development, including its historical interpretation. Part 2 will explore the subject of indigenous learning, especially for children from birth to primary school education. In turn, Part 3 situates this plurality in the context of global commitments and strategies for increasing early grade literacy achievement for children between the age of 3 to 8 years old, focusing on evidence-based views of how public policy should influence early grade literacy. The conclusion of this chapter recapitulates some central concerns with factors that influence literacy achievements.

1. *What is early grade literacy?*

The significance of the term 'literacy' appears to have a diverse and plural existence, which reflects how society perceives reality and mirrors the level of culture. While lately the word 'literacy' is widely understood and used by the public, 'literacy' is presented in society as a skill that one has or has not. There are many concepts of 'literacy'; the view of some academics and experts in this field, and the view of the international community represented by UNESCO are offered in this research as a means to create and establish policies and interventions by governments and international organizations in which "literacy" is given an equal measure for full consideration.

Starting from the general to the specific, from the academia world to the international sphere, in their extensive report about *Literacy in Early Childhood and Primary Education (3-8 years)*, Kennedy et al (2012) offer a very general but yet precise definition of literacy: "Definitions of literacy should encompass the cognitive, affective, socio-cultural, cultural-historical, creative and aesthetic dimensions." (p.10) Olson and Torrance (2009) view literacy as a vehicle to pass culture from one generation to the other (p. 163). Consequently, the process in which there is a communion of culture where the indigenous children are the receptors is a continuous and uninterrupted progression of information that never ends. Giorgis and Glazer (2013) indicate, "the growth of literacy, including reading, writing, speaking, viewing, and listening, is a life-long process" (p. 116).

Given that the age range for the research paper is 3 to 8 years, the concept of emergent literacy is particularly compelling and meaningful. Save The Children (2014) defines emergent literacy as one that "encompasses the knowledge, skills, and attitudes that a child develops in relation to reading and writing throughout the early childhood period" (p. 2). In addition, Aistear (Sandvik et al., 2014) views emergent literacy as "the skills, knowledge and attitudes that are presumed to be developmental precursors to conventional forms of reading and writing" (p.30). It is important to take into account that according to Save the Children (2014) "emergent literacy includes such aspects as oral language (both speaking and listening), understanding that print can carry meaning, as well as basic alphabet knowledge, and early phonological awareness" (p. 2).

UNESCO gives a historical and an evolutionary perspective of literacy in the following terms: UNESCO (2004):

> "The 1960s and 1970s brought attention to the ways in which literacy is linked with socio-economic development, and the concept of "functional literacy" was born. Programmes for functional literacy – designed to promote reading and writing as well as arithmetical skills necessary for increased productivity – were the subjects of many national and international campaigns" (p. 9).

The literacy achievements of that time will respond accordingly to this internationally accepted view of literacy.

It is valuable to consider the ways literacy evolves and interrelates in a given social context. UNESCO (2004) points out these factors: "The concept of "functional literacy" marked a turning point in modern history of education. It allied education and especially literacy with social and economic development and expanded the understanding of literacy beyond the imparting of basic technical skills" (p. 9). This aspect of literacy is still very well accepted and is part of many government and international organizations' parlance of creating policies and interventions to justify their investment in carrying its populations toward becoming literate.

Furthermore, UNESCO (2004) expanded the concept of literacy to encompass almost every human endeavor: "A more analytical perspective came to distinguish literacy as a technical skill from literacy as a set of practices defined by social relations and cultural

processes – a view exploring the range of uses of literacy in the entire spectrum of daily life from the exercise of civil and political rights through matters of work, commerce and childcare to self-instruction, spiritual enlightenment and even recreation" (p. 10). This is the most complete concept of literacy that international organizations manage and apply. Consequently, literacy is considered as a sequence of events and actions that start from birth and finish with death. Therefore, UNESCO (2004) confirms this view in the following words: "Today, the international community no longer sees literacy as a mere stand-alone skill, but instead as a social practice contributing to broader purposes of lifelong learning" (p. 10).

The most complex and diverse tool for communicating and thinking is the power of language, both written and spoken. Language and literacy are skills that not only foster one another but also help each other to flourish and expand (Levey, 2014 p. 247). Bixler (2009) in her book *Negotiating Literacy Learning* confirms this point of view by stating, "vocabulary knowledge is strongly related to reading comprehension, academic achievement, and overall intellectual ability" (p. 43). The dynamics of language and literacy are also applicable to our view of ourselves. It is here that our thoughts really matter. It is where the concept of literacy adopted will determine the right measure of accomplishing our thought or ideas of literacy. Adding to this point, Kennedy et al (2012) expand this concept: "literacy includes the capacity to read, understand and critically appreciate various forms of communication including spoken language, printed text, broadcast media, and digital media" (p. 10). Therefore, literacy is a concept that changes with society as it advances and reflects on each culture around the world.

Literacy as a concept will continue to evolve and change as it adapts to the needs of the time. The end goal of conceptualizing literacy for the purpose of this research is to understand literacy and prevent a fragmented approach.

2. *What is literacy?*

UNESCO (2004) warns the international community about the scope and possible

results of literacy programs depending on the chosen concept of literacy:

> "The way literacy is defined influences the goals and strategies adopted and the programmes designed by policy-makers as well as the teaching and learning methodologies, curricula and materials employed by practitioners. Its definition also determines how progress or achievements in overcoming illiteracy are monitored and assessed" (p. 12).

Literacy as a concept has evolved in the same measure that the understanding and development of humankind's level of consciousness has unfolded; therefore, literacy has different meanings at different times. For example, the idea of literacy as it was in 1958 will be applied to current developments. The following concepts produced by UNESCO at different dates, reflect this reality: "... (1958) a literate person is one who can, with understanding, both read and write a short simple statement on his or her everyday life" (p.12). This old definition of literacy from 1958 is totally applicable to many poor and undeveloped countries around the world, including Guatemala. This also responds to the means and the possibilities for a person to become literate. Moving forward, we find the following meaning by UNESCO (2004): "...(1970) a functionally literate person is one who can engage in all those activities in which literacy is required for the effective functioning of his or her group and community and also for enabling him or her to continue to use reading, writing and calculation for his or her own and the community's development" (p.12). The progress of the meaning of literacy by 1970 will indicate the link between the skills developed by the individual and her function in the community. The added value of a person that can read and write is measured by its capacity to serve his or her own community. A literate person benefits his or her community. The more literate a person is, the more advanced her/his community is and can become.

At the beginning of this century, UNESCO (2004) added another dimension to the concept of literacy – arithmetic – which will assist an individual develop skills with numbers: "(2000) Literacy is the ability to read and write with understanding a simple statement related to one's daily life. It involves a continuum of reading and writing skills, and often includes also basic arithmetic skills (numeracy)" (p. 12). A few years later, UNESCO (2004) acknowledged the great diversity of concepts and meanings of literacy

around the world but also stated that whatever definition was chosen it does not cover all facets of literacy. No one definition provides an exclusive list of factors for literacy.

A proposed operational definition in particular for measurement purposes was formulated during an international expert meeting in June 2003 at UNESCO. It states: "Literacy is the ability to identify, understand, interpret, create, communicate and compute, using printed and written materials associated with varying contexts" (p.13). This new meaning of literacy is driven by the influence of technology and the Internet. This also responds to the fact that literacy is connected to the circumstances in which an individual learns. Literacy is a concept that will always evolve and reflect the level of education of the peoples of the world (considering many aspects of every situation and according to the available knowledge). UNESCO (2004) utilizes literacy to lay the foundation of holistic thinking: "Literacy involves a continuum of learning in enabling individuals to achieve their goals, to develop their knowledge and potential, and to participate fully in their community and wider society" (p. 13). This last dimension of literacy connects the individual with the larger society and makes the individual a world citizen where his or her level of literacy is intertwined with the advancement of humankind. For the purpose of this research, the chosen concept of literacy that genuinely represents the majority of the students in Guatemala, which are the indigenous children, is a concept where the holistic thinking is in the center of literacy. This concept is also aligned, as re-stated by MINEDUC (2014) in their website, that an indigenous model of learning has a holistic approach consisting of an individual as an active participant which interacts with nature, the environment, and society.

3. *What are the stages of literacy?*

Table 2.1 below provides an overview of the main stages of literacy as they appear in a child's development. Among the various stages of literacy, emergent literacy is the stage where the child is exposed for the first time to language, reading and writing, alphabet, numbers and text in general. Kennedy et al (2012) provide the following definition to this concept: "the skills, knowledge and attitudes that are presumed to be developmental precursors to conventional forms of reading and writing'...emergent literacy

as developing through 'play and hands-on experience' [where] children see and interact with print as they build an awareness of its functions and conventions" (p.11).

Table 2.1 - Stages of Literacy

STAGES	AGE	MILESTONE
Emergent Literacy	Birth	* exposed for the first time to language, reading and writing, alphabet, numbers and text in general [1]
Emergent Literacy	6 months	* have already begun to categorize the sound of their own language [2]
Emergent Literacy	11 months	* many babies understand 50 or more common words [2]
Emergent Literacy	3 or 4 years	* have acquired the major elements of the language spoken around them regardless of how complex the grammar [2]
Grammar	Kindergarten 4 years onward	* have amassed a vocabulary of about 8,000 words and almost all of the basic grammatical forms of language [2]
Word Reading	Kindergarten 4 years onward	* vocabulary knowledge is a core component [1] * the reader could be conceptualized as a 'builder' or 'fixer' of meaning, as an 'assembler', and as a 'responder' [1]
Reading Proficiency	Kindergarten 4 years onward	* develop mature syntax and vocabulary [2] * reading fluency is dependent on reading comprehension [1]
Reasoning and thought process	6 or 7 years	* rely more on sensory data than on logic to reach conclusions regarding physical objects * engage in reasoning [3] * engage in intuitive and associative thought, as well as the rational, and find enjoyment in imaginative thought and play [3]
Hand Writing	3 years onward	* handwriting, in particular cursive writing, is identified as being important in supporting well-structured written text and also affecting fluency of writing [1]
Writing	3 years onward	* early stages of emergent writing involve symbolic drawings arising from play and social interaction [1] * children are active and creative users of technology in their everyday lives, engaging as *'producers'* as they create new texts [1]

[1] Kennedy et al (2012)
[2] Gleason and Ratner (2009)
[3] Giorgis and Glazer (2013)

These stages represent only the reading, writing and comprehension dimensions of literacy. The other major elements of literacy chosen for this research, such as the development of the individual as an agent of positive change for her/his own development and in her/his community and society at large, are not covered. A more thorough research of other stages of literacy that could deal with the holistic approach is necessary to fully grasp the fulfillment of an individual in society, more especially, research using the indigenous holistic approach.

4. *What are the elements of literacy?*

Table 2.2 sets out the elements of literacy from infancy to kindergarten. These elements truly grasp the reading, writing, and comprehension aspect of literacy, leaving aside elements, such as learning hands-on, learning within nature and the environment as well as learning with the family and community that would satisfy a holistic approach of literacy. The National Council of Maya Education of Guatemala (2014) proposes the important and experiential dimension of literacy, and that of the development of the child being in harmony with her/his community. They include the relationship of new vocabulary with activities in the community as an expression of the culture and the level of development of the community. These two elements are necessary in order to satisfy the holistic and life-long approach of literacy.

Table 2.2 - Elements of Literacy (Infancy to Pre-kindergarten)

Element	Definition
Phonology	* prelinguistic babbling [1] * strong understanding of spoken language before written language is understood [1] * able to hear sound (phonemes), know the positions, and understand the role [1] * a child's level of phonemic awareness is an important determinant of their success or failures with reading. [2]
Semantic Development	* relate words to their referents and their meaning [1] * vocabularies reflecting daily lives [1] * metalinguistic awareness as they enter school year [1] * understand what words are and able to define them [1]
Morphology & Syntax	* know around fifty words [1] * progress to a stage of two-word combinations [1] * telegraphic utterances without articles, prepositions, inflections, or any other grammatical modifications [2] * morphological systems, such as the plural or past tense [1]
Pragmatics	* ability to use language appropriately in a multiplicity of social situations [1]

[1] Gleason and Ratner (2009)

[2] Bixler (2009)

5. *What is indigenous learning? Elements, stages, and factors.*

The majority of the authors chosen in this section focus their research on indigenous children. Most of the research is done in Canada and the USA. It is very unfortunate that there is not a significant amount of research done in Guatemala directed toward the achievement of literacy. This is a limitation for this research in view of the lack of information available in either Spanish or English regarding the literacy of children in Guatemala, especially for indigenous children.

Gleason and Ratner (2009) describe the conditions of millions of children around the world, especially the indigenous children:

"Many do not have extensive emergent literacy experiences at home. Many are in poor schools where reading and writing instruction is inadequate, where literate materials like books are scarce, and where rates of reading failure are high. Even

children who do learn to read and write well may have few opportunities to use their literacy skills in meaningful and satisfying ways" (p. 424).

Another reason affecting the learning conditions of indigenous populations is the fact that indigenous children around the world are usually living in the poverty belt of their respective country, with no access to minimum social services such as education, health care, and social security. Therefore, the design and implementation of literacy programs and their funding must consider this reality, and be conscious that literacy policies and interventions alone may not be enough in order to successfully teach literacy to indigenous children. A more comprehensive approach dealing with the economic conditions of indigenous communities may be required (Hall and Patrinos (2010) – Centre for Social Justice (2014)).

Turning to an important point of the research is that of the advantages of multilingualism with literacy. An aboriginal student may actually have an advantage in achieving higher literacy outcomes because they need to learn another language in addition to their native language, consequently, the aboriginal student will develop more skills that will lead them to excel in school. With the rich and ancestral culture of the indigenous peoples, Belinda et al., (2011) shares one of their conclusions in their book *Teacher Preparation for Bilingual Student Population* and states that "... the more languages one knows the more intelligent s/he is" (p. 213). Indigenous peoples, due to their diverse culture and tribes, have been exposed to learn different languages. This means that indigenous children, who can communicate in at least two languages, can also increase their literacy achievements, which reflect significant advancement in their cognitive development, and academic achievements. In addition to their ability to speak more than one language, indigenous peoples also possess multilingual knowledge, a skill that is deliberately transmitted to their children.

The teacher's role in educating indigenous children is a determining factor of a quality education for all in Guatemala. Belinda et al., (2011) further emphasize that teachers have the opportunity and responsibility to teach adequately to indigenous children: "As teachers, we have the moral responsibility and obligation to educate all children

regardless of class, culture, language, or gender" (p. 213). She offers strategies on building reciprocal relationships involving the families of indigenous children to assist in their school achievement: "We can reach out to parents and families using intercultural interpreters, learning about their cultures and languages, creating different ways to getting to know each other, and working together to build success" (p. 213). In order for teachers to acquire the traditional role as the transmitters of morality and values, as the builders of the children traits, and the custodians of the indigenous culture, a fundamental reassessment of the nature of human reality and human society within the context of indigenous children in Guatemala is needed.

Important conditions contributing to the greater likelihood that indigenous children can flourish and reach their potential as individuals are: a curriculum offered in their mother tongue by a teacher who can speak in their mother tongue, a decent school with its classroom facilities and meal programs. The factors described by Robinson (2008) create a very positive and adequate environment for indigenous children to study: "The key issue for practitioners is that children will learn their new language in the context of acceptance and affirmation of their home language and with opportunities provided to speak both" (p. 145). This means that the practitioners should be able to speak the mother tongue of the indigenous children. Appreciation and encouragement are two attitudes that the practitioner should apply in their everyday interaction with the indigenous children. Gleason and Ratner (2009) warn of a possible tendency for teachers favoring their own language over the mother tongue of the indigenous children: "Many bilingual children feel pressured to suppress their native language in favor of the dominant language, and many monolingual children have trouble learning a second language" (p. 424). This is very common practice, especially when teachers do not value the indigenous language and do not reinforce the importance of preserving and enriching the literacy level of the indigenous language.

Villegas et al., (2008) describe the 'essence' of indigenous learning in the following terms: "Indigenous education is, at its very essence, learning about life through participation and relationship to community, including not only people but plants, animals, and the whole of Nature" (p. 206). The type of education that modern or westernized

systems are imposing to indigenous people is in great part against the 'essence' of their education and value system. A successful approach to education calls for a profound integrated educational process and for a deeper understanding of the role of what indigenous peoples call 'caretakers of a world'. An integration of education and indigenous cultural based knowledge and values is essential to the advancement of a community and its way of life. As indigenous peoples would like to be involved in the direction of schools, "which includes the creation and implementation of culturally responsive curriculum, language revitalization, and governance situated in the hands of Elders and community members" (p. 206), policy makers should make an effort to consult and truly learn these natural and rich ways to teach indigenous children. A direct approach to start to encourage policy makers to create better conditions for the indigenous children is that they should consult with 'Elders' of the communities in order to grasp the root cause of the opportunities and challenges in the journey of learning for indigenous children.

Villegas et al (2008) describe the following crucial points of genuine indigenous learning, contributing to teaching literacy to children:

> "Teacher-Student ratio: A 'student' had many teachers, each teaching the child during different parts of the day or year; ...Skills Taught: Once a child shows an inclination, such as an interest in archery, storytelling, or sewing, that interest is nurtured by all concerned with his education; ... Parent Involvement: once a teacher is identified, parents do not interfere. ...Parents will become more involved only when they learn that their knowledge, regardless of the extent of their schooling, is valued and plays an important part in their child's education; ...Cultural Identity: we take advantage of both the historical and contemporary culture of an area; and Bilingual Education" (p. 278, 279, 280, 281, 282).

The implementation of these features along with "the qualities of empowerment, creativity, and increased capacity for learning" (p. 320), are the distinguishable elements of indigenous people's holistic approach as compared to any other educational system in the world.

The development of literacy is a very comprehensive and delicate process with many elements. UNESCO (2004) indicates and describes the most appropriate way to address literacy with indigenous children:

"Because all such [literacy] processes involve expressing and communicating cultural identity, the promotion of literacy must foster the capacity to express or communicate this identity in one's own terms and especially language(s). In a multilingual society, the plural notion of literacy entails designing multilingual policies and programmes for both the mother tongue and other languages as well as recognizing the complementary relationship between literacy and orality" (p. 14).

This implies that the teaching of literacy should be designed and executed in two parallel curriculums and environments: one in the mother tongue and the second one in the foreign language. UNESCO continues to allude the delicate and comprehensive teaching: "Rather than imposing a foreign literacy on an indigenous culture and so undermining existing modes of thought and social organization, literacy policies and programmes should respect these and build upon local knowledge and experience" (p. 14). Accomplishing this recommendation allows the creation of curricula based on the culture, language, and socio economic conditions of the children of a given area.

It is of paramount importance that the material presented in books is geared towards the teaching of literacy. Giorgis and Glazer (2013) explain the relation between culture and books and their crucial factor: "Many of these multicultural books introduce children to aspects of a culture in which the language is spoken.... Vocabulary items from other languages may be introduced in context, either with or without explanation" (p. 135). Indigenous children must have books in their mother tongue that show the profusion of features their culture offers. This affirmation of their indigenous way of life will in turn reinforce their identity.

In Canada where the holistic approach is practiced and implemented toward the establishment of a formal educational system, there is more information collected and available. Browne (2009), whose research was focused I on the teaching of English as a Second language in the USA points out some of the elements of the holistic approach to literacy chosen for this research such as the experiential and development with the community as a pathway to increase vocabulary and connectivity to real life: "Bilingual children do not need tightly structured or special writing experiences in order to develop as writers. Like all beginning writers they need opportunities to write independently for a real purpose and for a real audience and so should participate fully in the writing curriculum in the class" (p. 177). Indigenous children in this regard are in an advanced position

compared to the rest of the population in Guatemala due to the intrinsic value of having already a community that has developed a holistic thinking, able in at least two languages. Some characteristics that will assist indigenous children to experience success according to Phillips and Raham (2007) with their focused research on *Promising Practices in Aboriginal Education* in Canada are:

> "high expectations for student achievement, effective leadership & governance structures, multiple programs & supports for learners, exceptional language/cultural programs, welcoming climate for children & families, respect for Aboriginal culture and traditions, high percentage Aboriginal staff/quality development, assessment linked to instruction & planning, vigorous community partnerships & external alliances" (p. 15).

These common characteristics are the result of many years of practices from across Canada working with indigenous people. These findings should serve as guiding principles for Guatemala in order to promote success in working with indigenous peoples.

6. *What are the factors that contribute to increase early grade literacy?*

An important player in the acquisition of literacy in any context is the role and performance of the teacher. Bixler (2009) points out the different attitude and style of teaching that the practitioner must adopt in order to help children become more literate: "no instructional approach or program is successful without the teacher negotiating and adapting instruction to the needs, interests, and background of the diverse learners she or he encounters" (p. 1). Teachers also play a relevant role in facilitating the process of literacy and helping each student to unfold their capacities and potentialities as contributors of their culture.

Two important factors considered to be contributing towards the increase of early grade literacy are curriculum and teacher training, and activities beyond school. UNESCO (2004) explains the importance of the ownership of the literacy program: "developing broad-based ownership of literacy planning, implementation and monitoring, meaning thereby not only governments, non-governmental organizations and international agencies, but also other groups falling under the term "civil society" such as community organizations and families or even research institutions and the media" (p. 25).

Consequently, everyone is responsible for the success of the programs in the community, which will be the receptor of the results of the program implemented. Olson and Torrance (2009) point out that literacy programs that deposit the responsibility and success of the program on the shoulders of the students tend to be more successful: "... programs that focus on the learner's own agency and responsibility tend to be more successful that those that assign it directly and exclusively to the teacher" (p. 572).

Several factors contribute towards early grade literacy:

a. Reciprocal teaching: according to Bixler (2009), this specific approach to achieving early grade literacy is "an instructional approach for discussing a text by involving readers in four comprehension strategies: predicting, questioning, clarifying, and summarizing. During reciprocal teaching, the teacher and students take turns acting as the facilitator in guiding a discussion of the text through use of the four strategies" (p. 74).

b. Vocabulary Self-Collection Strategy (VSS): according to Bixler (2009), this strategy has been proven to increase early grade literacy by "allowing the children to choose the words they studied and discuss them with the class, significantly increased student motivation, interest, and word meaning retention" (p. 43). Another factor that teachers should be aware of is the fact that "not only do reading aloud to children and a child's own independent reading contribute to vocabulary growth through incidental learning, but conversation plays a large role in vocabulary development as well" (p. 43). Conversation should be intended toward the development of literacy skills; these practices should be rich in vocabulary and context requiring extra effort from the parent/teacher, as they have to use mature and sophisticated language.

c. Reading together with children: Giorgis and Glazer (2013) provide some strategies to the development of literacy by reading together with children. They state: "reading with infants and young children is a powerful way to enhance early language development. Through picture book sharing, caregivers [teachers, parents, and society] boost pre-reading skills, attention spans, word comprehension, and pleasure with books" (p. 116). Development of a community of readers within schools, where social interactions around the literature create the habit to read and to become part of their daily life can

improve the life of an individual. In their report on, '*Literacy in Early Childhood and Primary Education (3-8 years)*' Kennedy et al (2012) offer similar guidance on creating a habit to read: "Any book that helps a child to make a habit of reading, and that make reading their needs constant and deep, will be good for him."

Exposing children to different levels and complexities of language boosts his or her level of understanding and helps him or her to discover the capacity to deal and master the language. Giorgis and Glazer (2013) illustrate the process in which children can become more literate: "The prereaders in the high linguistic stages had heard more books each week, were read to by more people, and had heard more books at higher complexity levels than had those children at lower linguistic stages" (p. 117). This process requires parents, family, friends, school and the community at large contributing to the development of each child in their journey to become literate. Another strategy is the evidence that "hearing books read aloud increased children's competence in other language areas as well... children engaged in the text and visual analysis, formed links with other texts, connected text with their own lives, and playfully manipulated the story for their own creative purposes" (p. 117). These strategies are equally applicable to any language or the teaching of multiple languages at the same time.

d. Experimental mode: Many researchers have proven that when education is taught in the experimental mode, it is more effective and the subjects learned are more durable. Also children can relate what they have learned to a variety of subjects, and personal decisions. Giorgis and Glazer (2013) make apparent this important and very distinguishable factor in literacy: "It is essential that language be tied to experience and that it be presented in context if it is to have optimal meaning for children" (p. 117). This will require from the curriculum and the teacher more creativity and innovation.

e. Encourage extensive use of language: Giorgis and Glazer (2013) warn us about a bad habit and at the same time offer a very good solution that will enrich the literacy experience for children: "It seems logical that correcting children's speech would accelerate their grasp of adult language patterns. This is not the case, however. Only when children are ready to assimilate a new pattern will it have meaning for them. ...Efforts to encourage extensive use of language will prove far more productive than attempts to

correct children's grammar or their handwriting and spelling" (p. 117-118). This approach is more positive for the children and encourages the children to learn more and faster.

      f. <u>Early intervention</u>: Fletcher-Campbell et al., (2009) argue that "Early intervention is also promoted as a way of preventing 'Matthew effects' whereby the gap between poor readers and their peers widens as they move through school, because poor readers read less than their peers, which in turn holds back their language development, their general knowledge and even their IQ" (p. 237). The issue associated with this problem is when the poor readers are the majority in the classroom, which is the case in most schools in developing countries. Also Fletcher-Campbell et al., (2009) make a distinction in one of the features of poor readers: "Children who are slow to grasp ideas early in reading development are liable to remain slow to acquire other principles and may continue to need support" (p. 239). This issue is key in the creation of interventions. In addition, it is essential for teachers to be aware of this issue. This is another important factor to take into account when helping large populations of students: "Children who are poor readers after the first year in school will tend to fall further behind as they move through school, with reading and spelling ages on average one and a half to two years behind their chronological age in the last year of primary school" (p. 255). Also Fletcher-Campbell et al., (2009) point out possible causes for students at the age of 6 that become poor readers: "Children who find reading difficult at 6 have problems in developing and making use of strategies in reading that may persist. This may be due to child-related factors or to the home or school environment" (p. 256). Therefore, it is important to design detailed, comprehensive, and sophisticated programs tailored to this age and raise them to be good readers.

      Fletcher-Campbell et al., (2009) warn of the possible occurrence of failing interventions: "Although early interventions may impact on children's reading skill, teachers may still expect too little, the home environment may fail to nurture the child's learning, [and] the social context may remain unaffected by intervention which solely targets the child" (p. 256). Interventions should consider the context and environment in which children are immersed. A holistic approach in the designing of early interventions is required for the full accomplishment of increasing early grade literacy and the establishment of good literacy habits in every child.

g. Reading as a social practice: To complete the holistic approach of the concept of literacy adopted in this research, Olson and Torrance (2009) unfold the importance of reading as a social practice. This is a call to build a culture where everyone in the community can read and enjoy doing it. They state, "each textual community, the community of readers, and the writers who write for them evolve their own ways of understanding what they read and write. This is what makes reading a social practice rather than strictly an individual skill" (p. 569). Also the growth of the language takes place as a result of these interactions.

7. *Role of public policy on early grade literacy*

A growing consciousness of the requirements of providing quality education and increased literacy achievements has stimulated renewed efforts to respond to this widespread concern. The magnitude of these challenges to provide quality education and to increase literacy achievements, however, calls for effort greatly surpassing those in the past. It is evident that the enormous human and financial resources required to meet these challenges can be released only through profound changes in the organization of society affairs. But equally demanding is the need for a global redefinition of education and literacy that is detached and liberated from today's largely economic and materialistic context and acknowledges its transformational role in both individual lives and community organization.

Interventions to increase literacy achievements must take into account the inspiration and the environment of the children and work at the grassroots level in order for it to be effective. UNESCO (2004) emphasizes that "literacy cannot be sustained by short-term operations or by top-down and unisectoral actions primarily directed towards the acquisition of technical skills that do not give due consideration to the contexts and motivations of learners and follow up closely on accomplishments" (p. 8).

UNESCO (2004) points out the crucial importance of putting literacy at the forefront of policies and interventions that must take into account context and environment of the children and that every child should have access to quality education: "The extent to which these links may be enhanced depends on how literacy is addressed in local social and

economic circumstances and not restricted to established educational institutions and interventions" (p. 14).

Olson and Torrance (2009) clearly distinguish who is responsible for the education and literacy achievements: "The formation of educational policy is the responsibility of governments, not academics" (p. 567). Although academics are not directly responsible for literacy outcomes, they are definitely responsible indirectly for the results of literacy programs because academics are at the forefront of research and innovation. Prioritizing literacy in establishing policies and interventions, defining roles and responsibilities of all involved in the process, decentralizing literacy policies and interventions, and assigning appropriate financial resources to carry out the plans, should be the norm. Ultimately, it is the entire educational system that is responsible for the education of children, as Olson and Torrance (2009) have testified: "just as the teacher's responsibility is to provide the conditions that make it possible for the learner to meet his or her responsibilities for learning, so also do school authorities have the responsibility for providing the conditions that make it possible for the teacher to meet his or her responsibilities - and so on through the entire educational bureaucracy" (p. 573).

Olson and Torrance (2009) point out two defining elements of a literacy policy: "To turn the definition [literacy] into a policy, one must address two more specific questions: (1) how well, which is the questions of standards; and (2) read what, which is the question of content" (p. 567). The questions 'How well and read what' are in most cases inquiries that policy makers are still trying to answer. The only action achieved is an attempt to provide literacy programs. Unfortunate for the children of the world, literacy programs created and implemented by governments, in most cases around the world, have resulted in failed attempts in educational reforms. Olson and Torrance (2009) offer the following options to policy makers:

> "However, no one knows how to design a system to get all or most children to spell all or most words competently, yet that is the educational goal. Policy makers, therefore, have a choice to either (1) define precisely and narrowly goals of dubious value and ensure that all children achieve them, or (2) define goals more broadly and validly with the unwanted consequence that some children will fail to meet them" (p. 567).

With the first option, which is to define a precise and narrow goal, most governments and members of the international community have failed to accomplish it. As for the second option that is to define a more broad and valid goal, it has been made evident that governments become more sophisticated in creating policies that are so broad that no one can measure and assess its accomplishment.

Holistic thinking in the context of Guatemala's education system is an important and determinant factor given that more than half of the children are indigenous. The design of an educational system should be driven by and toward the indigenous peoples.

CHAPTER III

Guatemala overview

Guatemala, officially the Republic of Guatemala, is a country in Central America bordered by Belize to the northeast, the Pacific Ocean to the southwest, Mexico to the north and west, the Caribbean and Honduras to the east, and El Salvador to the southeast. According to the United Nations Development Program Website (UNDP 2014), "it is an area of 108,889 km2 (42,043 sq.), with 22 departments/states and 331 municipalities, making it the most populous state in Central America." A representative democracy, its capital is Nueva Guatemala de la Asunción, also known as Guatemala City.

Guatemala, a wild land as described by many poets, is a country of contrast with vast potential and many natural resources. It is one of the youngest countries in Latin America with a large aboriginal population. As with any country, Guatemala also has many challenges: high poverty rate – 56% of the population (Inter Press Service 2006); high illiteracy rates; crime; security; the world's highest homicide rates; and struggles with the indigenous people over land and mines.

This chapter is divided into nine parts: (1) history, (2) geography, (3) demographics and language, (4) religion, (5) governance, (6) economy, (7) human development, (8) literacy, and (9) education. This chapter describes the socio and economic realities of the country, and will illustrate the main challenges that the country faces, especially for indigenous people, and how these challenges are directly or indirectly related to literacy achievements.

1. *History*

The former Mayan civilization was a Mesoamerican civilization, which continued throughout the Post-Classic period until the arrival of the Spanish in the early 1500s. After independence from Spain in 1821, and suffering much political instability, it was a short-lived nation (1821-1841) comprised of the present-day countries of Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica. Encyclopedia Britannica (2013) describes

the civil war in Guatemala in the following terms: "Starting in 1954, Guatemalan governments faced formidable guerrilla opposition that sparked civil war [from 1960 to 1996, Guatemala underwent a civil war fought between the government and leftist rebels] that lasted for 36 years until peace accords were signed in 1996". In addition to the terrible consequences of the civil war for all Guatemalan peoples, the Encyclopedia Britannica (2013) gives special attention to the indigenous people stating that "the struggles of Guatemalan Indians during the war years were illuminated when Rigoberta Menchú, a Quiché Maya and an advocate for indigenous people throughout Latin America, was awarded the Nobel Peace Prize in 1992."

Poppema (2009) asserts that indigenous Maya people of Guatemala have been suffering since the colonial times and have been used and abused by a minority who have been ruling the country up to the present: "The Guatemalan educational system has been the most unequal system in the Latin American region ever since the 1950s. The indigenous Maya people, who constitute around half of the population, experienced the state mainly through repression, exploitative labour relationships and exclusion from education" (p. 1). Guatemala voted in favor of the UN Declaration on Rights of Indigenous Peoples in 2007.

2. *Geography*

Biodiversity Hotspots-Mesoamerica-Overview (2014) describes the wilderness of Guatemala and indicates its great potential: "Guatemala's abundance of biologically significant and unique ecosystems contributes to Mesoamerica's designation as a biodiversity hotspot". A biodiversity hotspot is a biogeographic region with a significant reservoir of biodiversity and is threatened with destruction. The environment issues in Guatemala, according to World Bank (2014) are deforestation in the Peten rainforest; soil erosion; and water pollution. Guatemala has many natural resources, the most important as identified by World Bank (2014) are: petroleum, nickel, rare woods, fish, chicle, and hydropower.

3. *Demographics and Language*

Guatemala is a multicultural and a multilingual country with a great diversity of ethnic groups and languages as stated earlier in this chapter. The United Nations Educational, Scientific and Cultural Organization (UNESCO) (2012) stated that "according to a National Population Census in 2002, around 40% of the population is indigenous, and the rest is considered Mestizo (mixed indigenous and Spanish) or descendants of migrants from Europe".   As of 2014, the population of indigenous peoples has increased forming more than 60% of the population (International Work Group for Indigenous Affairs IWGIA - 2014). The United National Refugee Agency UNHCR (2008) states, "The Mayans of Guatemala are the only indigenous culture that constitutes a majority of the population in a Central American republic. There are 21 different Maya groups in Guatemala making up an estimated 51 per cent of the national population". The indigenous population accounts for one-third to one-half of the total population of Guatemala (World Bank - Save The Children 2014). Among the various indigenous communities, the proportion of those groups that speaks its native languages ranges from 35% to 96% (Inter-American Bank, Save the Children 2014).

Guatemala is the most populous country in Central America with a population of over 15 million people. The country has the highest fertility rate and population growth in Latin America, and almost half of the population is under the age of 19, making it the youngest population in Latin America as indicated by the World Bank (2014). The UNESCO (2012) report shows that "approximately 51% of the population lives in non-urban zones. The indigenous populations in rural Guatemala are among those with the lowest income and the lowest levels of education and literacy". Since the Peace Accord, these statistics have not changed much, although a very strong international presence is working on many fronts including health and educational projects. The population growth rate is approximately 2% (UNESCO 2012). Every year there are close to 200.000 new students in grade 1 (MINEDUC 2014).

Foreign Affairs and International Trade Canada (DFAIT) (2009) share some insight about some important aspects of Guatemala's society: "Guatemalan society can be

characterized as a patriarchal society. Relations between men and women are unequal, even if, in the city, the journey toward equality is progressing little by little. In the country, women's status is still uncertain due to a strong presence of male chauvinism". Patriotism and sexism permeate every relationship at every level in society.

Guatemala is a country with many traditions, mostly based on indigenous beliefs that set up, since very early age, roles in family and in society. DFAIT (2009) indicates who holds the power in human relations and who are the most affected in Guatemala: "Class and ethnic relations tend to favor the Ladinos [non indigenous Guatemalans] socio-economic conditions to the detriment of the Mayas. The power of the dominant class affects all facets of Guatemalan society. As a result, there is an underlying conflict that affects work relations and is not uncommon to observe paternalistic or even racist attitudes towards the Mayas".

Guatemala is a country with a rich culture comprised of a diversity of languages. Spanish is the official language, but since the end of the civil war in December 1996 with the Peace Accord, twenty-three indigenous languages, mostly dialects of the Mayan linguistic family, have been recognized in the national constitution. The most widely spoken languages are: Ki'che', Kaqchikel, Kekchi, and Mam. According to Foreign Affairs and International Trade Canada DFAIT (2009), the percentage of ethnic groups in terms of the total population of Guatemala are the following: Mestizo and European - 59.4%, K'iche - 9.1%, Kaqchikel - 8.4%, Mam - 7.9%, Q'eqchi - 6.3%, other Mayan - 8.6%, and others - 0.3. Different sources (official or unofficial) provide different estimates of the population creating a relatively large margin of uncertainty (i.e. 40-60%). Most of the sources from the USA and Canada place the percentage of indigenous peoples to be closer to 40% of the population, whereas the rest of the world including sources from Guatemala, estimate the percentage of indigenous peoples to be closer to 60%. This large margin does not underplay the importance of indigenous focused education since in both estimates the indigenous peoples constitute a large portion of the population.

The World Factbook of the Central Intelligence Agency (CIA) United States of America (2011) has also identified the main languages in Guatemala as being "Spanish (official) 60%, Amerindian [indigenous people before the arrival of the Europeans to

America] languages 40%". UNESCO (2014) states that there is at least 51% of the population as Mayan, which speak one of the 22 languages. With over half of the population of the country speaking an indigenous language, the Ministry of Education of Guatemala (MINEDUC) is offering education in the main 4 indigenous languages at the kindergarten and primary school level. However, with lack of funding and resources, only small minorities of indigenous children have access to education in their mother tongue. According to a report released by the MINEDUC in 2007, "30% of indigenous children had access to kindergarten education, 36% to primary education, and 12% to secondary education" (own translation). These low numbers of children who don't have access to education in their mother tongue are mainly due to limited number of schools that can offer education in one of the four main indigenous languages in Guatemala.

4. *Religion*

The predominant religious practices in Guatemala are Roman Catholic, Protestant, and indigenous Mayan beliefs. According to Foreign Affairs and International Trade Canada DFAIT (2009), "Guatemala's official religion is Catholicism even if it is practiced by less than 50% of the country's population. The many different forms of Protestantism are closing the gap, reaching almost 40% of the population. The re-emergence of Mayan religions is a very recent phenomenon which is linked to the growing acceptance of the Mayan culture in all aspects of national life". It is important to point out that it is only recently that an open attitude towards Mayan culture, including their rites and traditions, is becoming accepted and officially welcomed by society at large.

5. *Governance*

Early in the 20th century, Guatemala had a mixture of democratic governments as well as a series of dictators.   Former army general Otto Pérez Molina of the right-wing Patriot Party (Partido Patriota, PP) was elected as president of Guatemala on January 14, 2012. He succeeded President Álvaro Colom of the center-left National Unity of Hope (Unidad Nacional de Esperanza, UNE) party.

Almost every president of Guatemala since the Peace Accords in 1996 have been

involved in some form of transgression relating to the administration of public funds. Accountability and transparency are two essential presidential characteristics that have been questioned and politicized to such a level that former presidents of Guatemala have been tried in the United States for illicit management of public funds, for accepting bribes, and for receiving international funds in order to support other governments with their agendas (Taft-Morales 2013). It was also the case for the former Guatemalan President Alfonso Portillo (President of Guatemala 2000-2004). According to the Bloomberg News (May 22, 2014) report that "Former Guatemalan President Alfonso Portillo was sentenced by a U.S. judge to almost 6 years in prison after admitting he took $2.5 million in bribes from Taiwan to continue diplomatic recognition of that nation".

The report produced by Worldwide Governance Indicators (WGI)'s website (2013) provides the following information about Guatemala in percentile ranking indicators, placing the country in a very low position compared to other Latin American countries: "Voice and Accountability (37%), Political Stability and Absence of Violence (25%), Government Effectiveness (28%), Regulatory Quality (47%), Rule of Law (15%), and Control of Corruption (30%)". Taft-Morales (2012) points out some alarming signs of low governance: "Guatemala has one of the lowest tax collection rates in Latin America (11.2% of gross domestic product (GDP) in 2011), and the private sector has fiercely resisted fiscal reform initiatives designed to provide the government with more resources to strengthen institutions and fight corruption". Furthermore, Taft-Morales (2013) states that in Guatemala's "fragmented political system, inconsistent political will, and weak judicial and security institutions remain serious obstacles to addressing the problems [land, mining, security, education, poverty, health] adequately" (p. 6).

6. *Economy*

By 2012, the Gross Domestic Product (GDP) of Guatemala was $50.3 billion, with a real growth rate of 3.1%. The GDP per capita was $5.200, and the GDP composition by sector was: agriculture with 13.5%, industry with 23.8%, and services with 63.2%. The unemployment rate in 2013 was calculated to be 4.2% (World Bank, 2014).

Employment in agriculture accounts for 38% of the labor force (World Bank 2014). Coffee, sugarcane, corn, bananas, and vegetables account for a few of the agricultural exports, and sugar, textiles and clothing, furniture, chemicals, petroleum, metals, rubber, and tourism as the industry exports. In the agricultural sector, the great majority of workers are indigenous people where productivity and salaries are the lowest.

Indigenous participation in the country's economy as a whole accounts for 61.7% of output, as opposed to 57.1% for the non-indigenous population (IWGIA 2014).

7. *Human development*

The UNDP in their 2013 Human Development Report indicate Guatemala's Human Development Index (HDI) progress and growth: "Guatemala's HDI value for 2012 is 0.581—in the medium human development category—positioning the country at 133 out of 187 countries and territories. Between 1980 and 2012, Guatemala's HDI value increased from 0.432 to 0.581, an increase of 34 percent or an average annual increase of about 0.9 percent" (p. 2). A detailed review of this progress can be viewed in Table 3.1 below. Guatemala's life expectancy at birth, as indicated by UNDP (2013), increased by 14.1 years due mainly to having access to hospitals and medicine; mean years of schooling increased by 1.7 years (for the most part due to government money transfers to mothers of poor families; most of them indigenous families, and the construction of new schools between 2008 and 2011: Ministry of Education of Guatemala 2014), and expected years of schooling increased by 4.7 years (as a result of the intervention of foreign governments and the United Nations with associated agencies: United Nations 2014). Guatemala's Gross National Income (GNI) per capita, which according to the World Bank (2014) "converted to international dollars using purchasing power", increased by about 10 percent between 1980 and 2012.

Todaro and Smith (2012) note that the Human Development Disparities within Guatemala are remarkable, where from any chosen village, only a handful of families live in comfort, and the vast majority cannot make ends meet. They note that "average income is one thing, but sometimes even in a middle-income country, many people live in poverty.

When the aggregate Human Development Index (HDI) for various countries was adjusted for income distribution, the relative rankings of many developing nations also change significantly" (p. 52). They further explain the findings in Guatemala as a result of their studies related to the *Human Development Disparities within Selected Countries*: "The HDI also ranges greatly for groups within countries [Figure 3.1]. The impact of social exclusion can be seen vividly in Guatemala, where the Q'eqchi ethnic group has an HDI rank similar to Cameroon, and the Poqomchi ranked below Zimbabwe" (p.52). If we take Guatemala's HDI, this figure is much higher than the ones reflected by the indigenous people identified by Todaro and Smith.

Figure 3.1: Human Development Disparities within Selected Countries
(Todaro & Smith, 2012, p. 53)
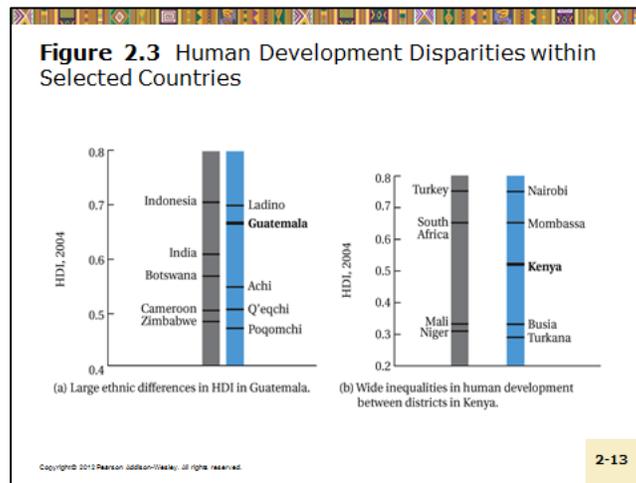
World Food Programme WFP (2014) confirms malnutrition as another alarming issue, especially for indigenous children in Guatemala: "The chronic malnutrition rate for children under 5 is 49.8 percent, the highest in the region and the fourth highest in the world. Guatemala is one of the 36 countries, which account for 90 percent of stunting in the world. Chronic under nutrition in indigenous areas is 69.5 percent". This is a problem that has a direct impact in children attending school and being able to excel. The indigenous

people are the most affected sector of the population having little or no access to resources or possibilities to earn a living.

UNESCO (2014) estimated that in Guatemala "24% live in extreme poverty (i.e. on less than US$2 per day)", a percentage much higher than the Latin American average of 15%. Currently, Guatemala occupies the 116th position in the World Human Development Index, ranking as the second lowest of its region. Out of the three dimensions measured by the HDI, education has the lowest rate: (.42) as opposed to health (.80) and income (.52). One of the main reasons that might explain the country's low education index is the low public financial investment on the sector; the total expenditure on education as a percentage of GDP equals 3.2%, which places Guatemala among the 40 countries with the lowest expenditures in the world. Figure 3.2 points out that 38% of indigenous peoples in Guatemala, living in rural areas are paid less than $1 a day. These figures are connected with the low level of education, where the lowest levels of education have the highest risk of poverty, as indicated in figure 3.3.

Figure 3.2: Guatemala's Population earning less than $1 a day (GDP per capita)
(UNDP Guatemala Human Development Report 2005)
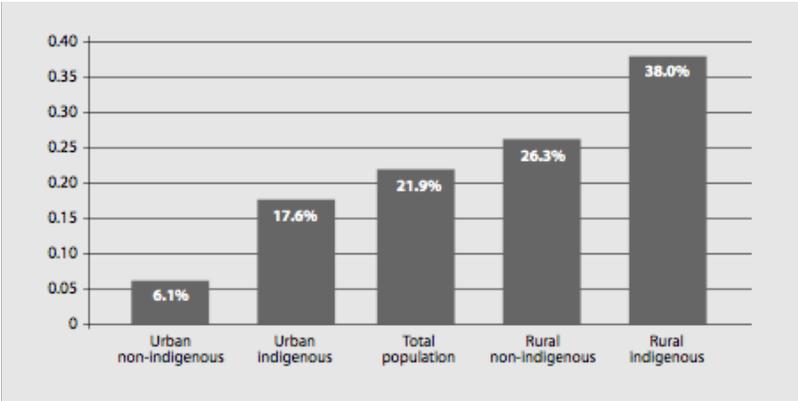
Source: UNDP Guatemala Human Development Report 2005

Figure 3.3: Education and poverty levels in Guatemala (%) (NMDG Report 2006)

Source: NMDG Report 2006
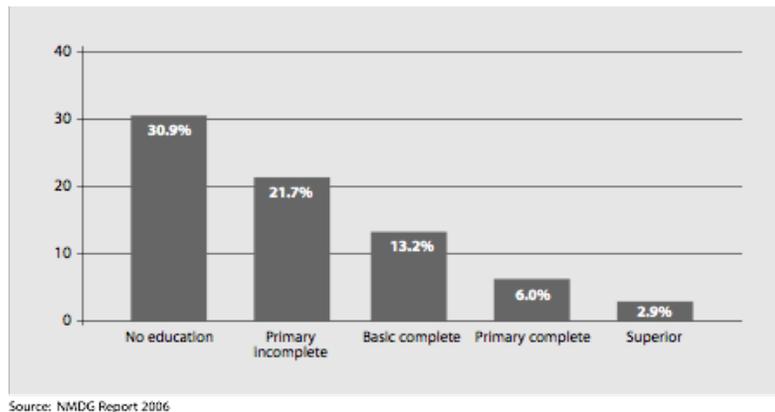
The World Bank (2011) in a report on *Crime and Violence in Central America: A Development Challenge* estimates that "crime and violence represent staggering economic costs for the country, equivalent to 7.7 percent of its GDP" (p. 6). The majority that are involved in crime and violence are children and youth who have dropped out from school because they are undernourished, living in extreme poverty, and are immersed in an illiterate environment (World Bank 2011). Young (2014) describes the short, medium and long-term consequences for the children and their family that are in these terrible conditions:

> "Children who are born poor, live in unsanitary conditions, receive little mental stimulation or nurturing (...). These children tend to do poorly in class, repeat grades, and drop out at high rates. In the workplace they are able to perform only unskilled jobs and earn the lowest wages. When they have children, a cycle of inherited poverty begins—and is repeated across generations."

In Guatemala, roughly 35 percent of the population is under 15 years of age. In addition, United National Development Program UNDP (2014) indicates: "70% of the population are less than 30 years old". Without a foundation of basic reading skills, these young people are at risk of becoming part of the "ni-ni" generation—an expression in Spanish that refers to those young people who neither work nor are in school. This demographic represents 25% of the under-25 population in some Latin American countries (World Bank 2013). These young people are both non-contributors to licit economic growth and are at increased risk for involvement in criminal and violent activity, drug trafficking, substance abuse, and, for young women, unplanned pregnancy. Guatemala

cannot afford to allow almost 40% of their student body population to likely become a part of the "ni-ni" generation.

Since the time of colonization (early 1700s), child labour has been a common practice in Guatemala especially for the indigenous populations. Boys, as early as 5 years old, go to the country to work and help provide for the family. Girls stay at home and help with housekeeping and support the new and younger additions to the family. Up until 2006, child labour in which a child is forced to work interfering with their childhood as well as with their ability to attend regular school was still very present and growing in Guatemalan society. According to the Central Intelligence Agency (CIA) of the United States of America (2006), child labour (children ages 5-14 boys and girls) accounted for a total number of 929,852, or 21 percent.

Since colonial times, the reality of having a small minority of the population ruling the economy over a great majority which in Guatemala's case is indigenous peoples, despite the presence of a very thin middle class population, has for the most part remained unchanged. World Bank (2014) describes Guatemala as a country of extremes and dichotomies in the following terms: "Guatemala is the biggest economy in Central America but is among Latin American countries with the highest levels of inequality, with poverty indicators —especially in rural and indigenous areas— among the highest in the region." In addition World Bank (2014) continues to describe the economy's dichotomy with: "Guatemala has one of the most unequal income distributions in the hemisphere". In a report written by the United Nations Development Program UNDP (2009), Guatemala is one of the most unequal countries in the world with the root cause being "Some 64 percent of the national income is in the hands of 20 percent of the population" (p. 10).

The role that social services play in increasing early grade literacy outcomes is an important factor to take into account. Basic services such as access to health, nutrition, and clean drinking water, can directly impact the attendance in schools. According to UNICEF (2011), Guatemala has been under several natural disasters making it even more difficult for children to have access to basic minimum health and nutrition standards. Building resilience in emergencies is an ongoing challenge in Guatemala, however the importance of

children to continue with their education should take precedence above any goal, as it will carry a greater impact on their community over a longer period of time.

Technology and innovation that can serve as an important tool for children to have access to educational toys, up to date school materials and books are very limited. Since 2010, UNICEF and the Ministry of Education have been working to use technology to help many children continue with their education, especially in rural areas.

8. *Literacy*

The national constitution states that the mandatory school age in Guatemala is 7 to 14 years old or completing the minimum requirement of grade 6th. The standard is very low when compared to developed countries where the mandatory school age goes to grade 12th or 16 years old.

The World Factbook CIA (2011) has defined a literate person as one who is "age 15 and over and can read and write". In Guatemala that youth demographic is shown with the following gender divide of: "total population: 75.9%: male: 81.2% and female: 71.1% (2011 est.)". World Food Programme (2014) lists that as of 2014: "Illiteracy is 31.1 percent in women 15 years of age and older and reaches 59 percent among indigenous women".

On the Integral Family Literacy program of UNESCO (2008) website, data shows that less than "60% of Guatemala's population aged 15 to 24 has completed at least six years of primary education", the lowest average among the other eighteen Latin American countries. The numbers are even more concerning with regards to the rural population where as little as 40% of the population has reached sixth grade. An important building block and indicator of quality education for Guatemala where educational intervention should have a positive impact, is in reading proficiency. As evidenced by various studies, including the 'Save the Children' (2012) studies and the yearly assessment by the Ministry of Education of Guatemala, reading levels at the primary grades across the region are extremely poor and mostly stagnant. Low reading achievement is particularly prevalent among primary students in rural and low-income regions, and those from indigenous communities and populations in which the main language of instruction is a second

language (Spanish). According to the most recent regional achievement test (2008 Second Regional Student Achievement Test, or SERCE), UNESCO (2008) indicates that "more than 30 percent of third graders and nearly 20 percent of sixth graders who are enrolled in school in Guatemala are functionally illiterate, scoring at the lowest two levels (levels 0 and 1) of 0 to 4 on the SERCE reading test" (p. 12). Guatemala demonstrates some of the lowest achievement rates in the Latin American region; UNESCO (2008) indicates that "with more than 50 percent of third graders scoring at the lowest reading level or below". Equally troubling is the relative lack of above-average readers (level 4), which ranges from only 1 percent to 8 percent in Guatemala. Data from the third regional test (TERCE) is expected to be release in 2014, though it is expected that the lowest scoring countries will not have made major gains. Such data are unfortunately not available for indigenous groups, data is collected nationwide without distinction of race, color, minority group, etc., but it is likely that indigenous groups are disproportionately represented among groups with low literacy and reading outcomes because they are the majority of the children in Guatemala.

The Ministry of Education of Guatemala (MINEDUC), has released data (Table 3.2 below), describing students tested from the years 2006 to 2010; for first, third, and sixth grades of primary school:

Table 3.2: National Achievements in Reading. First, Third, and Sixth Grade of Elementary School (MINEDUC 2012)

	2006	2007	2008	2009	2010
First Grade	41.5%	#	55.0%	45.7%	46.3%
Third Grade	39.0%	46.4%	54.5%	50.6%	48.7%
Sixth Grade	31.3%	59.0%	53.1%	51.8%	45.6%

Data not collected by the Ministry of Education of Guatemala.

The test applied by the Ministry of Education of Guatemala is the National Curriculum Base (NCB), which is designed towards the mastery of content, skills, and

abilities of each grade (1, 3, & 6). In the first grade 20,347 (9,933 girls and 10,414 boys) students were tested; in third grade 20,951 (10,342 girls and 10,609 boys) students were tested, in sixth grade 18,441 (9,059 girls and 9,352 boys) students were tested. All students evaluated are from the schools belonging to the official sector represented by the public schools. Private schools are not taken into consideration for this test. According to education encyclopedia of stateuniversity.com from the United States, "there are approximately 9,300 primary [private] schools, which are attended by 1.3 million students".

The most recent published evaluation results from MINEDUC dating back from 2010 are shown in Table 3.2. The table points how just under half of students of primary's first, third and sixth grade of elementary school students have mastered reading skills. I n third grade the results are similar, about 50% reach reading achievement. According to MINEDUC (2014), in 2010, students located in urban areas and those who are Ladinos (mix of heterogeneous population which expresses itself in the Spanish language as a maternal language) achieved the highest marks in comparison with those students who live in rural areas, are indigenous with their first language to be other than Spanish.

9. *Education*

In the cities, especially in the capital, Guatemala City, there are many private primary and secondary schools where foreign languages such as English, German, and French are taught and used along with Spanish. According to Connect Recruit Grow ICEF (2014), the main reason that German and French is widely taught at private schools is due to the fact that Germany, France, Belgium, and Austria recruit many students at the post-secondary level. These countries also donate and work extensively within the education and health projects, especially in rural areas, resulting in a higher demand for these languages. The root of motivation for these countries to integrate, donate and work in Guatemala is not merely to assist the children of Guatemala, but to teach their languages, transmit their culture, and recruit the best students for their own countries.

Table 3.3 below describes the level of completion of primary education in Guatemala. As of 2009, Guatemala is losing close to 10% of their students by the time they

complete primary school with a loss of 25% of their students by grade 5. The greater majority of children that are left out of the education system, for most as early as the age of puberty, become part of the ni-ni generation. Unfortunately, most of the children that are left of the education system are indigenous children because they form the larger portion of the population of Guatemala. Efforts in creating a platform to fulfill the universal human right that every child is to receive an education, has been neglected to the point that there is a high percentage of indigenous children completing school with low literacy achievements.

Table 3.3: Completion in Education (MINEDUC 2010)

School life expectancy ISCED 1-6 (years)	(2007) 10.6
Percentage of repeaters, primary (%)	11
Survival rate to grade 5 (%)	(2010) 75
Gross intake rate to last grade of primary (%)	88
Primary to secondary transition rate (%)	(2010) 89

With only 96% of students registered in grade 1, Guatemala has not reached one of the primary goals for the country - universal education. In total, there are approximately 15% of the children in Guatemala out of formal education by the age of 10 years old. Figure 3.4 below displays for the period of 1991-2011, states that by 2011, the net enrolment rate in primary education was 93%.

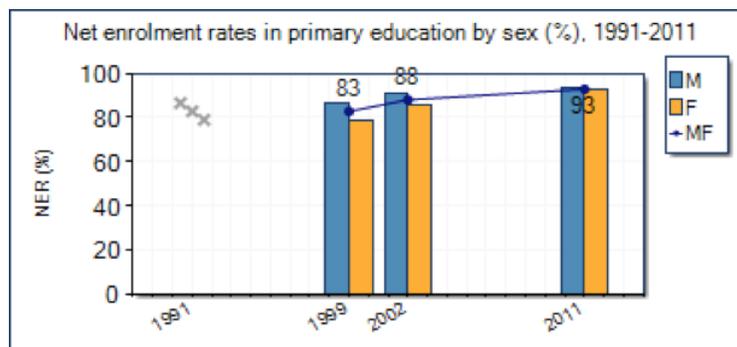**Figure 3.4: Primary Enrolment in Guatemala** (MINEDUC 2011)

Figure 3.5 below provides the "Progression and Completion in Primary Education" between 1999 and 2011. There has been an important shift in the number of girls enrolling and finishing primary education. While registration of children in the primary grades is reported as reaching levels in the mid-90th percentile, the number of children actually attending school on a regular basis and completing their primary education is significantly lower.

Figure 3.5: Progression and Completion in Primary Education (UNESCO 2013)
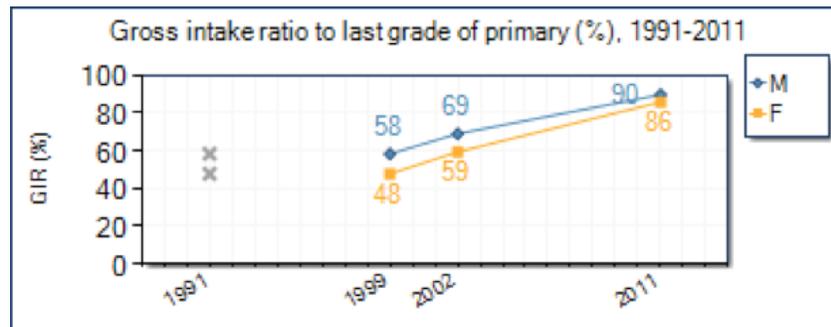
The government of Guatemala has been questioned by all the levels of Guatemala's society, as evidenced by the proliferation of TV programs, newspaper articles, teachers associations, parents, and students from every corner of the country, who have lost trust and faith for the government not prioritizing education, in the allocation of increased funding towards a normalization of the education system which includes addressing the issues relating to the lack of schools, especially in the rural areas where the majority of indigenous children live, poor salaries for teachers, and the scarcity of books in indigenous languages.

Improvements have been observed within the last fifteen years as the net enrolment in early grades has increased by 22% (peak enrolment rate in 2009 was 96%), which has enabled Guatemala to have almost universal access to primary schooling. However, UNESCO has stated in 2012 that "the education system still shows significant signs of inefficiency, where the survival rate to Grade 5 is 71%, resulting in only 61% of students graduating from primary school (Grades 1–6, 2007)". Retention is another challenge that must be addressed with the right educational interventions in order to keep the high enrolment rate consistent for grade 1. The longer the student stays at school, the higher the possibilities that they will master the skills necessary to become literate. It is highly likely

that indigenous population groups are mostly overrepresented among those children with low educational indicators. In the next chapter, the problem of not keeping records of indigenous performance in Guatemala will be discussed stressing the importance of creating solutions by overcoming the lack of data collected that reflect current conditions.

According to the Ministry of Education (2014), a bilingual program for primary students has been in place, with extra funding from the government since 2008, with the goal to make it available in all Indigenous communities. Since 2011, Constitutional amendments are being considered to recognize Ki'che', Kaqchikel, Kekchi, and Mam languages as official languages.

Guatemala's National Constitution and its education policies are aligned with the United Nations Convention on the Rights of the Child (CRC). The strategic plan of the government of Guatemala for the education sector, for the period of 2012-2016, is based in the following policies: coverage (guaranty access, retention and effective completion of education of children and youth without discrimination); quality management model (systematic strengthening mechanisms of effectiveness and transparency in the national education system); human resources, bilingual education, increased educational investment, equity (ensuring quality of education); and institutional strengthening and decentralization. Its goals are: Improve the performance in the classroom by empowering the communities [Mejorar la Gestión en el Aula empoderando a Las Comunidades], Strengthening the capacities of the teacher [Fortalecer las Capacidades de los maestros], Meet the needs of quality and enrolment [Responder a las necesidades de Cobertura y Calidad], Transparency and accountability, a change of culture [Rendir Cuentas, Un Cambio de Cultura] (2012 - own translation). These policies meet international standards in education, and place Guatemala on the right path. The advancement of the implementation of innovation and technology in education has been slow or non-existent, especially for the indigenous children that don't have access to the majority of services that other children in Guatemala have.

CHAPTER IV

The previous chapter has shown that there are significant and critical challenges that Guatemala currently faces in order to provide education to every child in Guatemala. So far the government of Guatemala presented the right intentions towards the increase of literacy achievements to the international community, but in practice, conditions within the education system have not changed much. The literacy and educational indicators analyzed in Chapter 3 clearly show that Guatemalan children are lagging behind in terms of literacy. Due to lack of disaggregated statistics for indigenous population groups one can only suspect that indigenous children are disproportionately represented among those lagging behind.

This chapter identifies and discusses key challenges to improving early grade literacy in Guatemala, and is structured as follows:

1. Quality of teaching
   - Quality of teachers
   - Quality of curriculum
2. Integrating Bilingualism and Multiculturalism in the National Curriculum Base (NCB)
3. Adequacy of physical infrastructure at schools
4. Engagement of parents
5. Access to pre-school and kindergarten education
6. Poverty affects primary school enrollment
7. Monitoring relevant literacy outcomes
8. Evidence-based decision-making
9. Continuity in education policy

1. *Quality of teaching*

Changing and increasing the levels of literacy of millions of children in Guatemala - the main aim of any school that offers education to students between 3 and 8 years old - is a very comprehensive task. There are many school systems in the world that perform with

high literacy outcomes, such as Hong Kong, Singapore, Shanghai, Switzerland, among others (Mourshed et al., 2010). To find out why some schools succeed where others do not, Mourshed et al., studied 25 of the world's school systems, including 10 of the top performers. The experience of these top school systems suggest that three things matter most:

1. Getting the right people to become teachers;
2. Developing them into effective instructors; and
3. Ensuring the system is available to deliver the best possible instruction for every child.

The quality of teaching thus depends on two (2) main fundamental points: (1) the quality of the teachers and (2) the quality of the curriculum.

Quality of teachers

In his research on *Achievement of indigenous students in Guatemala primary schools* (2007), McEwan et al., found that the most salient factor-affecting student learning was the quality of the instruction. Other factors were school quality, socioeconomic status, parent's level of education, and ethnic background.

According to data from the Ministry of Education, in 2010 there were 20,582 teachers working at the kindergarten level and 85,535 teachers at the primary level in the public sector. The different kinds of teachers working in Guatemala are as follows (MINEDUC 2014):

1. Inter-Cultural Primary School Education [Profesorado de Educación Primaria Intercultural] (own translation).
2. Inter-Cultural Kindergarten School Education [Profesorado de Educación Preprimaria Intercultural] (own translation).
3. Inter-Cultural Primary School Bilingual Education [Profesorado de Educación Primaria Bilingüe Intercultural] (own translation).

4. Inter-Cultural Kindergarten School Bilingual Education [Profesorado de Educación Preprimaria Bilingüe Intercultural] (own translation).

The quality of training provided to these teachers can vary considerably. 'Center of National Economic Research' (CIEN) - Guatemala (2011) describes teacher training as follows: "The initial training for teachers at the kindergarten and primary school in Guatemala is done at the high school level, in regular public and private schools." The student - teacher ratio in teacher training at national level is 25:1 (Ministry of Education of Guatemala 2013). A key element to boost literacy outcomes is to improve the quality of teachers. According to the CIEN (2011):

> "Evaluation done to prospective teachers in 2008 show that potential teachers know the course material only in a 57% for literature and 37% for mathematics. These tests showed the result for knowledge of the course material for literature and mathematics for grade six of primary school. This means that prospective teachers that applied that year, only known very little about the course material to teach" (own translation – p. 3).

CIEN (2011) provides a perspective on the features of the Latin American teachers and their initial training:

> "The majority of Latin American teachers are females and relatively young. In Nicaragua, 2002, around 56% of the teachers were younger than 34 years old. In El Salvador, 72% of the public sector primary school teachers were between 20 and 37 years old by 2004. When compared to European countries such as Sweden, Germany and Czech Republic, one third of the primary school teachers have 50 years old or more by 2003. These features of the Latin American teachers respond to the demographic structure of the region and the institutional/cultural arrangement that have given priority to the feminine gender in the practice of teaching" (p. 6).

This information is important to consider because if Guatemala would like to replicate some of the interventions conducted at the top school system with high literacy achievement found by McKinsey & Company (2007), it will most likely be ineffective. The context and reality of the teacher in Guatemala is quite different from Europe and from many countries in the Latin American region, with the exception of El Salvador and Nicaragua who share many similarities. CIEN 2011, also points out the initial training of some Latin American countries utilizing Table 4.1 below: it "can be observed that all the Latin American countries, with the exception of Nicaragua and Guatemala, have raised the

initial teaching training above the regular high schools, as the minimum requirements to get access to teaching training is 12 years of previous academic studies" (p. 7).

Table 4.1: Teachers Training Educational Level – To Teach Kindergarten and Primary School Education (Ferrer 2006)

University	College	Technical/Vocational School
El Salvador	El Salvador	Nicaragua
Cuba		Guatemala

The criterion then is to select teachers as follows according to CIEN 2011: "Students at the university level are selected by their academic performance and human qualities before they are accepted to the training institutions. The country selects the number of students that will match the demand for teachers" (p. 7). Even with this selection criterion, there is a mismatch of the number of students and teachers in Guatemala. There are not enough teachers that could satisfy the number of students, and at the same time, the government does not provide sufficient training institutions to meet the high demand.

It is of paramount importance that the Ministry of Education of Guatemala raises the initial teacher training to the university level. In most areas, teacher training is only offered at the college level. This action will automatically raise the standards of the applicants and therefore the quality of the new cohort of teachers will be much higher than what is seen in classrooms today. Raising the quality of teachers in Guatemala will have a direct positive impact in the rate of literacy outcomes of the children.

McEwan (2007) describes some of the challenges in recruiting and retaining quality teachers in rural areas where indigenous people live because of their remote locations; rural villages in Guatemala cannot recruit enough teachers. Furthermore, the teachers that are recruited often do not complete a full school year; those who do stay usually do not stay at the same school for more than two school years. Lack of teachers and low teacher retention

is likely due to the low pay of approximately $300 per month (MINEDUC 2003); which amounts to only around 40% of the cost of providing a family of five its minimum daily food requirements. In addition most teachers working in the rural areas come from the larger towns (MINEDUC 2014). This means that many of the rural teachers will face a daily commute of 1-2 hours each way, oftentimes using buses and walking as their primary means of transportation. Most teachers try to rent a room in the village where they work but in most cases this is not possible, having them to continue to live in their original towns. It is for these reasons that many teachers will first seek employment in the larger towns rather than the smaller, rural villages.

Quality of the curriculum

If we understand the curriculum implementation as a three-layer cake, the top layer would be the "intended curriculum", and the second layer would be the "implemented curriculum", which consists of the lessons the teacher teaches in the classroom. Between the two layers there is a gap consisting of a number of variables that hinder or modify the actions of teachers for the implementation of the National Curriculum Base (NCB), which is the Guatemala's definition for the curriculum approved and provided at all schools of the public and private sector. These variables can be listed as the lack of the preparation of teachers, poor planning, lack of time, lack of school supplies, many absences during the school calendar, lack of family support, lack of human resources, student overpopulation, among others. The last layer of the cake consists of the "curriculum acquired" and is the knowledge that the students demonstrate in the national standardized tests. The layer that separates the curriculum implemented and this layer also has many variables, each with associated factors that, in this case, belong to the student and prevent the student from demonstrating his or her knowledge during testing. In this case, some of the variables include child labor and repetition as well as the socioeconomic status, the culture, the nutrition variables, the access to information, the physical problems, the gender, and the ethnic characteristics of the student, among others. Flynn (2007), elaborates on this issue with the following statement: "Whatever might be presented in the university seminar as practice that reflects research-based models of how children develop literacy, it is always possible that what students see in the classroom provides a very different picture" (p. 138).

The reality that Guatemalan students face is the fact that literacy teaching in practice is quite different than what is taught at the learning centers that train people to become teachers. Flynn (2007) provides insight into the teacher's focus in teaching literacy:

> "teacher education might sometimes lose sight of the need to teach from research-based principles about how children develop literacy. We constantly receive centrally provided sets of materials that might give us exemplars of 'good lessons'. Yet what we really need to do is release our students from the idea that their own lessons will become good simply by sticking to a prescribed formula. They need to see how varied and interesting the practice of successful literacy teachers is…In this way the revised Framework for Literacy might become the trusted servant rather than stepping into the leading role occupied by its predecessor" (p. 145).

Ultimately the teacher must spend time to familiarize him or herself with children's literature, the technicalities of written and spoken Spanish and the children's mother tongue (if different than Spanish). He or she must also be up-to-date in terms of the research related to how children develop their skills in literacy and seek to learn how to nurture learning in a motivating classroom context.

In order to provide transparency and availability of curriculum, the complete national curriculum for kindergarten and primary school is made available on the website of the Ministry of Education of Guatemala. This is a very significant and valuable action taken by the government; unfortunately not all teachers and students are able to access to these materials because there is very limited and slow internet connection, if at all available, and even then printing machines are not available (Teachers of the Web 2006).

One way of raising the quality of the implemented curriculum is by means of regular performance evaluations. Performance evaluation can no longer simply rely on assessment tools based on number of days taught in a school year, but must also measure skills, knowledge, behaviours, and the attitudes of the teacher, and should evaluate different components of a teacher's performance at different times of the school year. Teacher's assessment needs to be part of an ongoing evaluation cycle (several times along the school year) intended to increase the quality of teaching as a means to increase literacy outcomes.

2. *Integrating Bilingualism and Multiculturalism in the national curriculum*

Guatemala does not have one literacy problem but rather several different problems. Gaps in early literacy, for example, vary depending on the group considered. Similarly, the factors underlying those early gaps vary; as do the ways those gaps evolve as children move through school. Solutions to literacy problems, therefore, will need to be tailored depending on which group is being targeted. Guatemala is a multicultural and a multilingual country, with a great diversity of ethnic groups. Although Spanish is the official language, not all Guatemalans speak it. According to a National Population Census in 2002, around 40% of the population is indigenous, and the rest is considered Mestizo (mixed indigenous and Spanish) or descendants of migrants from Europe.

The teaching in Guatemala is divided by some languages categories. Below are the different categories of languages according to MINEDUC (2014).

Official language of Guatemala: Spanish

L1 – Mother language

L2 - Español, Garífuna, Maya o Xinka

L3 – English, German, French or any other indigenous language (24 languages in total)

For aboriginal children in Guatemala, language seems to be the dominant influence in early literacy problems. According to UNESCO (2014), aboriginal girls are the most affected in terms of having access to and staying in school. This reality is the result of socio-economic policies, lack of public services, social security, the areas where aboriginal children live - rural with difficult access, some cultural traditions (girls should stay at home taking care of the family) and the idea of machismo.

The root cause of these deficiencies is the fact that the NCB is designed in Spanish (official language of Guatemala), therefore, indigenous students (Mayan descent - mainly living in the rural areas) whose first language is not Spanish, definitely will have a disadvantage compared with those students whose first language is Spanish. The other main factor is the fact that students in urban areas tend to attend classes more regularly with

more government supervision than those schools located in rural areas. Nevertheless, the end result is that students are suffering from an inadequate curriculum, which is not geared towards the need to each respective ethnic group, neither the different areas (rural and urban) of Guatemala (Meneses 2011 – p. 15, 16).

Subuyuj (2006) in her research, "El Bilinguismo y Los Trastornos Del Lenguaje en un Grupo de Ninos y Ninas de Edad Preescolar" [Bilingualism and Language Disorders in a group of Children in Kindergarten age] identified an important connection between the lack of a bilingual teacher for the indigenous children and the motivation for these children to continue school:

> "The research showed a link that exists between bilingual teaching and other problems related to low school performance when students do not understand exactly what has been taught in their classroom by a ladino (Spanish speaker teacher), problems of learning how to read and write in a language different that their mother tongue, social inhibition when the children feel fear or shame when they try to socialize with the others classmates, lack of stimulation and worry from the parents seen their children not being able to relate with others in the natural settings" (p. 6 - Own translation).

Subuyuj (2006) describes the paramount importance to change and adjust the National Curriculum Base to a curriculum more friendly and adjusted to the indigenous children current traditions and rules:

> "The end result of this research has served to show teachers of kindergarten level that the school system of Guatemala should take care of what aboriginal children truly need for their education and make the required changes at the curriculum level according to the features of the Mayan culture, so the students can develop a healthy personality and enjoy a quality of education so they can continue to develop their identity and the construction of a multiethnic, pluralist and multilingual country" (p. 6 - Own translation).

Subuyuj (2006) further describe the function and the challenges of the Spanish language for indigenous peoples, especially in the rural areas:

> "The Spanish language is categorized for the indigenous people as an important ally in order to assist them to integrate to the Guatemalan society, although indirectly has been an linguistic imposition. The education in the rural areas does not provide innovative methods for the learning of the Spanish language for indigenous girls and

boys, in order to develop the language with the same rhythm of the Ladinos children, taking advantage of all the resources available to all in the Spanish language" (p. 8 - Own translation).

All the government and non-governmental educational authorities and professionals have the obligation to encourage the indigenous communities to understand the importance to preserve their languages as part of the culture of Guatemala, sharing the knowledge with their children without transmitting low self-esteem and non-adaptation to school and social life. Guatemala is a multiethnic, plural and multilinguistic country, it is recommended to pluralize the research about these challenges in all the indigenous communities, with the goal to promote the bilingual teaching that will contribute to the well-rounded and integral education of the indigenous people.

3. *Adequacy of physical infrastructure of schools*

UNESCO (2014) provides more details about the actual reality of the conditions of classrooms in Guatemala. UNESCO points out that the urgency for increased funding toward building more schools and providing all the facilities needed in order to have a decent classroom for the students must include the following: "it is estimated that less than 15% of all classrooms nationwide meet minimum standards for classroom space, teaching materials, classroom equipment and furniture, and water/sanitation. In the rural villages of Guatemala, that percentage drops to 0%". UNESCO (2004) alerts us to pivotal attention needed to recognizing the importance of funding and the approach to increased literacy achievements:

> "the problem of literacy is once again threatened with being put aside, as limited resources available for education largely go into the expansion of the formal primary education system. While it is clear that meeting the goal of literacy for all requires greater political commitment and far more action supported by adequate human and financial resources, what is needed most of all are new approaches to literacy work at the local, national and international levels" (p. 5).

Location of the schools in Guatemala is becoming a bigger issue, as there are no roads, neither the means to get school supplies and books to these locations. Many schools, teachers and students cannot count on having access with the basic startup materials for a school year, due to the lack of books and school supplies. The most affected are the

indigenous children living in the rural areas (USAID 2007).

Another factor contributing to the low quality of teaching in the rural areas is the lack of resources and possibilities to teach a unified curriculum. The Guatemalan Ministry of Education has developed a K-12 curriculum (in Spanish) which can be downloaded from their website. However, many teachers lack access to the Internet or to printers, nor have they been provided by the Ministry of Education with curriculum guides or teaching materials to actually teach the curriculum in their classrooms.

4. *Engagement of parents*

Young (2014) brings the importance of early childhood education and its consequences for the rest of the life of the individual, and that parents should be aware that they are morally responsible for what happens to their children and society during this important period of their lives. Young points out three key ideas in understanding early childhood development: "The powerful role of family life and a child's early years in shaping adult capabilities are key. Family factors in the early years play a crucial role in creating differences in cognitive and noncognitive abilities." Young concludes that capabilities are not fixed at birth or solely genetically determined, but are causally affected by parents' investment in their children and that a "proper measurement of disadvantage is the quality of parenting, attachment, consistency, and supervision, and not income per se". Time and dedication are the main elements sought for children during this special time.

In the context of Guatemala, the Getting Ready project (an integrated, multi-systemic intervention that promotes school readiness through parent engagement for children from birth to age five – Knoche et al., 2010) should be from birth to age six because the majority of children attending school for the first time beginning in grade 1, at the age of 6-10 years old. Due to traditions, roles, and socio-economic context of aboriginal people, this program should be tailored to the needs of this population, especially in their mother tongue. Knoche et al., (2010) point out that

> "The Getting Ready intervention is an integrated, multi-systemic, ecologically based intervention that promotes school readiness through enhancing parent engagement for children from birth to age five. As a model of practice, Getting Ready promotes

professional behavior that supports parents' competence and confidence in their interactions with their children within the context of cultural and family practices and values. The model is focused on supporting the dyadic parent–child relationship, and an exchange of ideas and developmentally appropriate expectations for children between parents and early childhood professionals (ECPs)" (p. 300).

Save The Children Guatemala is implementing a program called "Taking little steps towards learning at home" [Pasitos de Aprendizaje en Casa] since 2011 in 8 municipalities in the 3 poorest departments of Guatemala. The main motivational aspect of the education of children to create this program is that "Education is a social process that starts at the moment of conception, educating boys and girls is not a job that is done at the schools, it is a job that starts in the womb of the mother and becomes more well-rounded in the child's first years of life at home. This action requires a quality of intervention by the parents and then the social actors that are in charge of the education of the country" (Save the Children Guatemala (2013)- own translation). This is a program that has touched many children in these 8 municipalities, with literacy outcomes higher than the public schools in the same departments; it will be a good idea to extend this program at a national level so that all the children and families could benefit from it.

5. *Access to pre-school and kindergarten education*

Based on two decades of research on early childhood education and development, Abreu-Lima et al. (2013), emphasize the links between the quality of childcare education and child developmental skills. They note "children who attend higher quality preschools tend to start school with higher levels of language, cognitive, and social skills and engage on more complex activities with peers" (p. 400).

For decades researchers have documented gaps in literacy or literacy-related skills that appear even before children begin school and in many instances widen thereafter. In 1998 a committee convened by the National Academy of Sciences produced a landmark volume on *Preventing Reading Difficulties in Young Children*. In that study done in the United States, committee chair Catherine Snow and co-editors Susan Burns and Peg Griffin (2012) described the demographics of reading difficulties, noting that: "children from poor families, black and Hispanic children, and children attending urban schools were all at

elevated risk of poor reading outcomes" (p. 36). Keep into account the demographics and the level of poverty in Guatemala, the poor reading outcomes present in Guatemala currently will correlate directly to the pressing points describe by Snow et al.

Given the importance of early childhood education, access to pre-school and kindergarten education is a key determinant of early literacy outcomes. According to the National Constitution of Guatemala and the government of Guatemala, it is obligatory for the government to provide free and mandatory education to all the children and youth. Article 17 of the National Constitution states specifically "it is obligation of the state to provide and facilitate education to its citizens without any discrimination." Table 4.2 below outlines the structure of preschool and kindergarten education in Guatemala. Although it is in the national constitution of Guatemala to offer education to all children since birth, unfortunately only a small percentage of children (approximately 30%) have access to a formal education (MINEDUC 2014). As an alternative, the Ministry of Education offers a 35-day mandatory program for all children in Guatemala in order to prepare them for grade 1. This would apply for the majority of children in Guatemala – approximately 70% who do not have access to any forms of formal education, whether public or private. Although this program is better than nothing, how much prepared can these children be with just 35 days?

Table 4.2: Structure of Pre-school and Kindergarten Education in Guatemala

Level	Cycle	Institution
Pre-school	From 0 to 3 years old	Childhood Education Center (PAIN), community homes, Social Well-being Center, Early Childhood Center, International Non-Governmental Organizations, among other institutions (most of them private).
Kindergarten	From 4 to 6 years old	Teachers of kindergarten school - Early Childhood Center (2 hours of education from Monday to Friday)

Source: MINEDUC 2014

In a jointly released paper by the Education for All Global Monitoring Report (GMR) and the UNESCO Institute for Statistics (UIS) (2014), shows that in Guatemala, there are three million children (21% of the population) between 0 to 6 years old. However, according to the MINEDUC (2014), the government is offering kindergarten education to only 53% of the child population. The government for the Pre-school level does not provide statistics, even though both preschool and kindergarten are obligatory in Guatemala. International organizations such as Save The Children Guatemala (2012) has indicated that only 20% of the population have access to Pre-school education, consisting of mostly Ladinos that live in the capital and can pay for private pre-school education.

6. *Poverty affects primary school enrollment*

Poverty has direct consequences on the possibilities for Guatemala's children to attend school, especially in rural areas where the indigenous people live. Many families don't send their children to school but instead send them to work, bringing the levels of enrolment very low in the country and creating more issues for the country. According to the International Fund for Agricultural Development (IFAD 2012),

> "The territorial variations in poverty across Guatemala are reflected, for example, in primary school enrolment. The country has an overall enrolment rate of 39 per cent, but in the urban centers it is 48 per cent, compared to 35 per cent in rural areas. In Quiché and Alta Verapaz, two of the poorest departments, the enrolment rate is just 20 per cent, while it is 65 per cent in Guatemala City, the capital" (p. 2).

Also IFAD (2012) provides information regarding the location of the 'poverty belt' in Guatemala:

> "While poverty is clearly a national problem in Guatemala, poverty rates are significantly higher in the 'poverty belt' of the western plateau and the northern region, comprising the departments of Huehuetenango and Quiché (north-western region); San Marcos, Quetzaltenango, Sololá and Totonicapán (south-western region); and Alta Verapaz and Baja Verapaz (northern region). These areas were severely affected by more than three decades of civil war up to the mid-1990s" (p. 3).

It is common practice for the indigenous people of Guatemala to send their children at an early age to work in the country and start to produce for the family. This has been a great challenge for the government to find ways to increase enrolment for indigenous

people and to remain in education until they achieve tertiary education. IFAD (2012) describes this aspect of life in Guatemala: "Agriculture plays an important part in the national economy, accounting for a fifth of GDP and employing about 40 percent of Guatemala's total labour force, according to the Food and Agriculture Organization. Indigenous and rural communities are primarily involved in smallholder family agriculture based on either subsistence or emerging market-oriented production" (p. 3). The majority of indigenous children not attending school are primarily working in the field for their families, or private companies.

The issue of child labour in Guatemala is an issue that is growing at a fast rate. Indigenous people, due to ignorance and poverty problems, prefer to send their children to work rather than to send them to school and help them to study for a better future. The United States Department of Labor (2012) further elaborates and reports on this issue: "Guatemala lacks government programs targeting sectors in which children are known to engage in exploitative labor, such as mining, quarrying, and construction. Children continue to engage in the worst forms of child labor, especially in hazardous activities in agriculture and manufacturing." The Inter-American Development Bank in conjunction with the government of Guatemala have created different programs to encourage families to send their children to school, such as 'My Family is Moving Forward program', which is a money transfer program that it is completed upon children's attendance report every two months. This program was implemented between 2008-2011 and has a direct consequence in the school's enrolment rate, increasing the percentage of children enrolment from 92% to 98%. (Ministry of Education of Guatemala - MINEDUC 2014).

7. *Monitoring relevant literacy outcomes*

Literacy assessment is very important for policy makers to create the right environment for children to increase literacy outcomes. Kennedy et al. (2012) make an important distinction between "assessment for learning (formative assessment) and assessment of learning (summative assessment)" (p. 20). They point out that the best assessment at the level of early grade school (kindergarten up to grade 3) is the assessment for learning, because they occur in an "authentic literacy contexts such as book reading, or early writing" (p. 20). Also, an important feature assessment for learning is the

"involvement of parents in gathering assessment information" (p. 20). This last element satisfies the holistic approach concept of literacy adopted in this research, which must include family and society. Therefore, the majority of literacy outcomes available through the Ministry of Education of Guatemala or any international organization such as Central Intelligence Agency (CIA) of the United States of America only capture the summative assessment, which is the assessment of learning. Thus, the available statistics on literacy outcomes only partly reflect the literacy concept adopted in this research, namely the ability to read, write, and comprehend a text by the student. There is no designed test that can measure to the fullest extent the holistic concept of literacy. In chapter 1, it was argued that such a holistic concept better reflects the function of literacy in society and that it is a more appropriate concept in indigenous societies.

8. *Evidence-based decision-making*

There have been serious deficits in primary grade reading skills in Guatemala and the lack of solid evidence to guide the design and implementation of effective reading programs. Over the past several decades, while reading achievement has stagnated across the LAC region (especially in Guatemala), both the science of learning to read, and data on effective early reading instruction and policies, have grown steadily at the global level. While contexts vary and evidence on reading is rarely exact, much is known today about what is required for effective early reading programs to be successful as well as cost effective –yet this information is not readily available in Spanish or across the LAC region. One survey of Latin American education decision-makers suggests that little consideration is given to evaluation evidence or cost effectiveness when making education policy decisions, at either the national or subnational levels (Schiefelbein -1999).

Regional Information and Evidence Sharing: Communication and exchange of high quality information among education stakeholders at the country and regional levels is limited in LAC, which in turn limits informed dialogue and consensus building. The 'Program for the Promotion of Education Reform' [Programa de Promocion de la Reforma Educativa] (PREAL) project, formerly funded by USAID, has contributed for many years to addressing this deficit in available information for education policy-making. LAC stakeholders have expressed interest in a platform that would facilitate regional sharing of

information on reading. Such a platform could share cost-effective approaches to improve reading and evidence from evaluations of interventions, become a place for discussion of challenges and lessons learned, and promote the development of communities of practice to catalyze and advance change. Such sharing could play an important role in helping to accelerate, consolidate, and sustain the variety of efforts underway today to improve reading outcomes throughout the LAC region and Guatemala.

Technical Assistance/Capacity Building: Many education stakeholders in LAC countries, including USAID's local counterparts, lack adequate technical and organizational capacity to fully benefit from evidence on what works to improve early grade reading. Organizations responsible for planning and implementing reading programs generally do not have easy access to reading experts, due to the costs and time involved in obtaining these services. Technical assistance and capacity building is needed to strengthen organizations' capacity to design, implement, measure and sustain reading interventions for long-term impact (USAID 2013).

Strengthening national and international efforts towards achieving universal literacy are closely linked with improving literacy monitoring and facilitating public debate on the views and practices of civil society related to literacy as well as integrating such debates in civil society movements and initiatives; documenting the experiences of civil society with literacy work, ranging from involvement in policy dialogue to conducting programmes with local communities and for people without access to literacy; promoting access to and sharing of information among members of civil society at all levels having to do with literacy, especially by harnessing ICTs (Information and Communications Technology); and supporting sub-national or national networks of non-governmental and civil society organizations working in the field of literacy (USAID 2013).

9. *Continuity in education policy*

Lack of a strong National Education Long Term Plan affects the continuity of any education plan. Every four years, whenever a new executive government is installed, the educational plans and politics change. Each political party comes with a new plan and dismisses all the previous ones that may have already been practically placed. In 2008, the

new president of Guatemala, Mr. Colom, signed an agreement with the Inter-American Bank to develop a money transfer plan called 'My family is moving forward' [Mi Familia Progresa] to the poor families in Guatemala with the intent to increase school enrolments. In addition to monthly medical exams, children must attend school in order to receive funds from the program. If families fulfill these responsibilities, they are given Q300 (US$37) per child, per month (MINEDUC 2008). According to results from the Ministry of Education statistics published in their website (2014), this plan increased school enrolment from 92% to 98% from 2008 to 2011. The new president of Guatemala, who came in power in 2013, almost cancelled this plan in its totality. According to Save The Children Guatemala (2014), cancelling this program with no reason given by the government has decreased school enrolment nationwide, especially in the 8 municipalities where Save The Children is currently working in.

Research based on Save the Children Guatemala (2014) and USAID (2013-2014), learning from the results of implemented policies and access to evidence or tools is hard to assess, as there is no attitude or process of knowledge dissemination. Moreover, the Ministry of Education of Guatemala does not have a record of all the reading interventions completed since the peace accord was signed in 1996. In some cases there is limited capacity to implement any learning at the Ministry level, as there are little administrative resources and methods to execute them.

CHAPTER V

Throughout Guatemala, the value of literacy, which empowers the individual to participate in affairs of the larger community and to articulate and share her/his own interest, is seen as a declining component of education. The achievement of literacy must be made compulsory and universal, building on the current reality of Guatemala and on universal principles; it must be focal and important to the needs of each community and contribute to the advancement of Guatemala.

The importance of increasing literacy outcomes will not only improve the economy of a country and its capacity to innovate and create new solutions to current challenges, but to also release capacities, skills and competencies, to inspire change that will allow the cultivation of self-esteem and motivation, and to become agents of change for their communities. Holistic thinking approach to the literacy concept adopted in this research paper should be able to advance the understanding that Guatemalan lives can make a positive change and should see themselves as part of their community and the world. Therefore, it is necessary to apply the holistic definition that will allow an expansion of its role in transforming both the individual and the community, freeing them from the strictly economic context perceived today. Basic literacy should be more than the acquisition of a few skills and a few simple facts, easily tracked by government officials that measure to show the international community that their own populations are literate. With holistic thinking, the child will acquire basic attitudes, qualities, skills, knowledge, and capacities that will enable them to become responsible and the objects of their own development, at the same time as becoming active members of their communities in a systematic process of building prosperous societies.

This research was focused in answering this question: What are the current challenges that prevent the increase of early-grade literacy achievement for Guatemalan students from 3 to 8 years old? Due to the fact that 40% - 60% of the population is indigenous, the research has focused its attention on the indigenous children, which in any given classroom they are the majority.

Evidence shown in this paper describes the great potential Guatemala has due to its agricultural, natural resources, and geo-political situation in Central America. Also of having the youngest and fastest growing population in Latin America - a unique condition that if this opportunity is lead in the right direction will have Guatemala become a very just and prosperous country. Nonetheless Guatemala is facing tremendous challenges that require every level of government to adopt a totally new approach that will truly meet the needs of the current and future generations of children, especially the indigenous children in rural areas, which are the most affected by the current policies and interventions.

It is clear that a dramatic increase in funding is required to build more schools, train more teachers, and offer a quality of education to all the children of Guatemala. At present, the government of Guatemala is dedicating close to two times more funds towards security and crime combined (7.7% of its GDP), than towards education (World Bank 2014). The only obvious remedy for the short, medium, and long term is to educate all the children, especially the 2 million that already have dropped out from school or have never intended to enroll. Reducing the budget for armament and highly sophisticated security systems and putting more funding into education is the evident path that Guatemala should follow.

Literacy based on holistic thinking in the case of Guatemala's education system, would have the government create policies and interventions that would remove some obstacles for indigenous children. Policies such as providing mandatory education in the mother tongue of the child (schools offering classes in Indigenous languages up to grade 9), as well as including the provision of administrative support for more teachers, and books in the mother tongue of the student. In practice, the government has not yet invested neither have they created the right environment toward the implementation of a policy providing education in Indigenous languages.

This research also looked at factors associated with students' cognitive gains and according to UNESCO 2008 in an article titled: *School climate is the variable with the strongest impact on achievement among Latin American students*, found that:

> "the quality of Latin American and Caribbean schools account for 40% to 49% of students' learning results. This confirms that school climate along with the schools' average socioeconomic/cultural background represent the main performance

variables, with the rest of the student achievement-related variances being attributable to the socioeconomic/cultural differences inherent to the students and families themselves".

Many education stakeholders in Guatemala lack adequate technical and organizational capacity to fully benefit from evidence on what works to improve early grade literacy. Organizations responsible for planning and implementing literacy programs generally do not have an easy access to reading/writing experts. This can be due to the cost and time involved in obtaining these services. As Verger et al ((2008) point out, the great dependency on foreign assistance in solving any kind of domestic problem is: "Developing countries, especially Less-Developed Countries, are often highly dependent on foreign expertise, information and financing" (p. 5). The flow of funds for development is governed principally by the policy priorities of governments and the contributor's willingness to fund those priorities. Among NGOs in industrialized countries, there continues to be a significant shift in emphasis from direct delivery of services in the field to capacity building and sustainability.

Technical assistance and capacity building is needed to strengthen organizations' ability to design, implement, measure and sustain literacy interventions for a long-term impact through the integration of evidence-based practices and approaches into existing and future programming. To not do so has Guatemala taking the risk of applying measures that don't grasp the root cause of the challenges due to the implementation of top down approaches from developed countries with different realities and culture. Verger et al (2008) warn about the danger of importing solutions without taking into consideration the culture and local needs: "Education measures are applicable globally, independently of the needs and capacities of the countries adopting them" (p.12). The best approach to increase literacy outcomes is to develop the skills and capacities of the Guatemalan people with the right education using a holistic approach to literacy.

School location is yet another factor that contributes in great measure to literacy outcomes and student performance. In Guatemala, the indigenous children constitute the majority of schoolboys and girls found in rural schools and are the ones that show the lower levels of literacy and performance when compared to their urban school counterparts.

It is clear in this research that Guatemala needs to change their public policies in education in order to dramatically improve their current enrolments in primary school and to raise the quality of education so children by the age of 8, should and must read, write and comprehend effectively, according to Guatemalan and international standards. Guatemala has the tools to achieve universal education and to keep enrolment in each grade close to 100%. Whatever investment is needed to effectuate educational interventions to achieve and increase early-grade literacy will truly benefit the current students in school as well as future ones. Since the indigenous children are the majority in the classrooms, policies and interventions must be designed to satisfy and excel the needs of this population, in order to increase enrolment, literacy achievements, and transform the whole education system of Guatemala in the direction that will lead to a holistic approach where literacy is intertwined with the development of society.

In order to increase enrolments in primary school and achieve one of the Millennium Goals in offering universal education, Guatemala has to build new schools, train more teachers and provide social services, especially in under served rural areas.

Some of the educational interventions applied by the government since 2008 have been towards achieving the UN Millennium goals of universal education. The government of Guatemala has created institutions that grant funds for the mothers of poor families in order to afford to feed their children and provide with uniform and school supplies. Also, the government has built 576 schools since 2009, to increase the enrolment in primary schools (DIGEDUCA, 2012). These actions have definitely increase enrolment but the quality of education has decreased. Many students have dropped out due to the high ratio of students to teacher, resulting in less personalized attention from teachers, overpopulated classrooms, among other challenges (MINEDUC 2014).

It is important to be aware of the challenges that students face every day in the classroom as well as the variables that prevent the creation of the right environment for each student to reach their potential and achieve their educational goals. The government of Guatemala must design educational interventions that will alleviate the challenges described above and help to transform the educational system towards a more positive environment for the advancement of its students.

Young (2014) pointed out that the great necessity to start, at the societal level, to break the cycle of inherited poverty and start a new cycle of creating a very positive and progressive human capital, is to focus on soft skills: "the accumulation of human capital is a dynamic life-cycle process and that skill begets skills. But current policies of education and job training are misconceived, tending to focus on cognitive skills, measured by achievement on IQ tests, and neglect the critical importance of social skills, self-discipline, motivation, and other "soft skills" known to determine success in life". Indigenous people-training educations are very much focused on soft skills but are weak on cognitive skills. There must be a synergy of educational models that will construct a society to have very high cognitive skills while at the same time have very motivated, focused individuals that can reach their full potential and better serve society.

In considering the role of assessment in early childhood settings, a distinction was made between assessment for monitoring student learning (formative assessment) and evaluating student learning (summative assessment). It was argued that most assessment at preschool and infant levels should be formative and should occur in authentic literacy contexts such as book reading, or early writing. The importance of observation as an assessment tool was emphasized. The involvement of parents in gathering assessment information was also highlighted.

Waldfogel (2012) proposes the following intervention that could work in the Guatemalan context: "Encouragingly, many of these children, even if lagging initially in literacy, seem to catch up quite quickly once they start school. So the policy solutions here may have more to do with ensuring both that such children receive high-quality language and literacy instruction when they start school and that they are not penalized for any early problems in literacy" (p. 48). In addition, Aboriginal children could particularly benefit from "expanded access to quality preschool programs (such as universal prekindergrams), which have been shown to improve school achievement, with particularly large benefits for at-risk groups" (p. 48). The prevention of reading failure is now part of departmental policies of all countries in the world. This interest in prevention is present in most studies which have demonstrated that it was easier to prevent reading difficulties rather than remedy them later on.

An intervention to assist parents to participate more actively in the emergent literacy phase at home is 'parent training for book reading' strategies suggested by Swanson (2011). The practice of this intervention (parent–child read-aloud) will build and establish a literacy habit for Guatemalan parents. Reading aloud to children is a complex practice, however it will truly help the parents to practice their responsibilities in the literacy development of their children. According to Swanson (2011), "Significant, positive effects on children's language, phonological awareness, print concepts, comprehension, and vocabulary outcomes were found" (p. 258). Studies have shown that pre-school children from poor families and those evolving in stimulating environments obtain reading results that can be compared to the results of the majority of children, whereas children who live in an environment that lacks stimulation may know failure in reading.

Parent engagement intervention could be applied in Guatemala using the Getting Ready intervention described by Knoche et al., in their 2010 article: Implementation of a relationship-based school readiness intervention: A multidimensional approach to fidelity measurement for early childhood. The Getting Ready project is "an integrated, multi-systemic intervention that promotes school readiness through parent engagement for children from birth to age five" (p. 259). In order to implement this intervention one must take into consideration the "surrounding contexts, roles, and relationships that collectively interact to influence child and family development" (p. 259). The core and main differentiated aspect of this intervention compared to other family/parent engagement interventions is the "participatory opportunities for families" (p. 300). The implementation of this intervention will be a challenge in Guatemala because "60 percent of Guatemalan women are illiterate, and 80 percent of these are from the country's rural indigenous regions" (Magnolia (2000) p. 20), therefore they lack the habit of reading, which is an important element of the Getting Ready project.

To sum up and provide a set of interventions recommended for the government of Guatemala in order to increase literacy achievement for children between 3 to 8 years of age, these are four (4) interventions that will start a new phase for all the children of Guatemala, especially for the indigenous children that have dropped out of school, others

are about to drop out, and many more are not happy, nor satisfied with the education provided.

Intervention message 1: To keep a sustained and consistent impulse of intervention for change.

It is necessary to have the support of all the political parties in Guatemala for short, medium, and long-term educational projects. It is necessary to keep the focus for a long period of time in order to start to realize profound changes in the next generation of children.

Although extra resources to increase literacy achievement may be useful, given the range of factors – economic, social, health, to help bring about greater participation and completion of schooling, a comprehensive sector wide approach with interconnectivity between relevant government departments would achieve a more sustainable impact on increasing literacy outcomes.

Intervention message 2: Use of information for a systematic early-grade literacy achievement.

The collection of data and the comparative analysis of literacy achievements in every level of the education system of Guatemala the possibility to disaggregate there poor indigenous population groups, should give the necessary motivation to provide a quality of education needed in order to increase literacy outcomes. The collected data should increase literacy outcomes, especially with aboriginal students, in order to help them gain the support, and to better assign the responsibilities to those directly involved in the process of providing the right environment for children to increase literacy outcomes. With the information that is required to be collected, the Ministry of Education could identify the strengths and weaknesses of the education system and consider sharing these findings at the national level, showing what elements of the education system works and which do not work.

Intervention message 3: Transform the performance of schools with low literacy outcomes by encouraging activities towards design improvements through consultation at the community level where the school is located.

Teachers and directors are the leaders of change in this phase. Teachers and directors are the moral authority responsible for the students.

Intervention message 4: Flexible school hours and systems, together with multi-grade and multi-age teaching approaches and appropriate language of instruction (for indigenous children the instruction should be in their mother tongue) can help to increase early-grade literacy achievements.

The following statement by UNESCO (2014), emphasizes that literacy will solve the problems of poverty and development, summarize the true and real challenge of having every individual of the community fully integrate with their family and fulfill their true potential in contributing to society:

> "Illiteracy and poverty constitute a mutually reinforcing vicious cycle that is difficult to break. People with low levels of literacy are more likely to earn less and experience poverty or extreme poverty; moreover, their opportunities are limited in all spheres of life (work, education, housing and access to health care) and their children risk falling into the same cycle by attending poor quality schools and dropping out of school at an early stage. Access to literacy competence opens up essential learning opportunities, thus contributing to economic development. In this perspective, it is not literacy on its own that makes a difference, but rather what it enables people to do in order to benefit from new freedoms and capabilities to address poverty – accessing information, using services they have a right to and reducing vulnerability to disease or ecological change."

BIBLIOGRAPHY

Bixler, J (2009). *Negotiating Literacy Learning. Exploring the Challenges and Achievements of Struggling Readers, K-6*. Pearson Education, Inc. Boston.

Hurtado, P. (2014). Ex-Guatemalan President Gets 70 Months in U.S. on Bribes Bloomberg L.P. Retrieved March 21, 2014. From: http://www.bloomberg.com/news/2014-05-22/ex-guatemalan-president-gets-70-months-in-u-s-on-bribes.html

Browne, A. (2009). *Developing Language and Literacy 3-8*. SAGE Publications Ltd. 3rd Edition. Los Angeles. London.

Centre for Social Justice (2014). *Aboriginal Issues.* Retrieved April 30, 2014. From: http://www.socialjustice.org/index.php?page=aboriginal-issues

Centro de Investigaciones Económicas Nacionales CIEN (2011). Education Profession Teacher and Continuous Training. Politics Economics, Social, and Security Plans 2012-2020. [*Educación Carrera Docente y Formación Continua. Lineamientos de Política Económica, Social y de Seguridad 2012-2020]*. Guatemala.

ICEF Monitor (2014). *Connect Recruit Grow (ICEF).* Retrieved June 8, 2014. From: www.icef.com

CQ Global Researcher (2011). *Saving Indigenous Peoples. CAN NATIVE CULTURES SURVIVE IN THE MODERN WORLD?*. Published by CQ PRESS, a division of SAGE. Sept. 20, 2011 Volume 5, Number 18, p. 447-472. Retrieved February 25, 2014. From: http://www.sagepub.com/sageEdge/chambliss/files/pdf/cq_05types.pdf

Education for All – Global Monitoring Report (GMR) (2014). *Global progress towards universal primary education has halted.* Retrieved April 1, 2014. From: http://unesdoc.unesco.org/images/0022/002281/228184e.pdf

United Nations 2010. *Education for All. Why is education important?* Retrieved March 21, 2014. From: http://www.un.org/en/globalissues/briefingpapers/efa/

Anderson, T., Griffith, W., Horst, O., Stansifer, C. (2014). *Guatemala.* Encyclopedia Britannica. Retrieved June 8, 2014. From: http://www.britannica.com/EBchecked/topic/701217/Guatemala

Fact Sheet USAID Literacy Program. *The Challenge.* Retrieved March 21, 2014. From: http://pdf.usaid.gov/pdf_docs/Pdacs289.pdf

Ferrer, G. (2006). *Educational Assessment Systems in Latin America. Current Practice and Future Challenges. Partnership for Education Revitalization in the Americas (PREAL).* Inter American Dialogue. Washington, D.C.

Fletcher-Campbell, F., Soler, J., Reid, G. (2009). *Approaching Difficulties in Literacy Development. Assessment, Pedagogy, and Programmes. United Kingdom.* SAGE Publications Ltd. London.

Flores, B., Sheets, R., Clark, E. (2011) *Teacher Preparation for Bilingual Student Populations. Educar para Transformar [Educate to transform].* Taylor and Francis. Routledge. New York.

Flynn, N. (2007). *What do effective teachers of literacy do? Subject knowledge and pedagogical choices for literacy.* Winchester, UK. Literacy Volume 41 Number 3.

Foreign Affairs and International Trade Canada DFAIT (2009). *Centre of Intercultural Learning.* Retrieved June 8, 2014. From: http://www.intercultures.ca/cil-cai/ci-ic-eng.asp?iso=gt#cn-7

Giasson, J. (1995). *Reading from theory to practice.* [*La lecture De la théorie à la pratique*]. Gaëtan Morin éditeur. Montréal, Canada.

Giasson, J (2011). *The learning and Reading difficulties.* [*La lecture Apprentissage et difficulties*]. Gaëtan Morin éditeur.

Giorgis, C., Glazer J. I. (2013) *Literature for Young Children. Supporting Emergent Literacy, Ages 0-8.* Pearson Education Inc. 7th Edition. New Jersey, USA.

Gleason, J., Ratner, N. (2009). *The Development of Language.* Pearson Education, Inc. 7th Edition. Boston.

Guatemala - Educational System—overview - Students, Schools, Country, and Technology - StateUniversity.com. Retrieved June 1, 2014. From: http://education.stateuniversity.com/pages/567/Guatemala-EDUCATIONAL-SYSTEM-OVERVIEW.html#ixzz38jQDzPGr

Guatemala Human Rights Commission – USA. Fact Sheet - Education in Guatemala. Retrieved March 1st, 2014. From: http://www.ghrc-usa.org/Publications/factsheet_education.pdf

Hall, G., Patrinos, H. (2010). Indigenous Peoples, Poverty, and Development. World Bank. Retrieved April 30, 2014. From: http://siteresources.worldbank.org/EXTINDPEOPLE/Resources/407801-1271860301656/full_report.pdf

Heckman, J. (2000). *The real question is how to use the available funds wisely. The best evidence supports the policy prescription: Invest in the Very Young.* Published by Ounce of Prevention Fund and the University of Chicago Harris School of Public Policy Studies. Retrieved March 21, 2014. From: http://www.ounceofprevention.org/news/pdfs/HeckmanInvestInVeryYoung.pdf

International Fund for Agricultural Development IFAD (2012). *Building a poverty-free world.* International Fund for Agricultural Development.

International Work Group for Indigenous Affairs (IWGIA) (2014). *Indigenous Peoples of Guatemala.* Retrieved January 31, 2014. From: http://www.iwgia.org/regiones/latin-america/guatemala

Institute of Strategic Studies and Public Policy (2012). *Primary Education in Nicaragua.* Ministry of Education of Nicaragua.

Kennedy, E., Dunphy, E., Dwyer, B., Hayes, G., McPhillips, T., Marsh, J., O'Connor, M., Shiel, G. (2012). *Literacy in Early Childhood and Primary Education (3-8 years). National Council for Curriculum and Assessment (NCCA.)* Retrieved May 1, 2014. From: http://www.scribd.com/doc/181018582/litreport-pdf

Knoche, L., Sheridan, S., Edwards, C., Osborn, S. (2010). *Implementation of a relationship-based school readiness intervention: A multidimensional approach to fidelity measurement for early childhood.* Early Childhood Research Quarterly 25 (2010). Lincoln, NE, USA. 299–313.

La Vanguardia (2012). *Los beneficios de la lectura. [The benefits of reading].* Retrieved June 1, 2014: http://www.lavanguardia.com/estilos-de-vida/20120613/54312096470/los-beneficios-de-la-lectura.html

Levey, S (2014). *Introduction to Language Development.* Plural Publishing Inc., San Diego.

Magnoli, A. (2000). *Bridging the Gender Gap in Developing Regions.* Integration and Regional Programs Department, Inter-American Institute for Social Development. Washington, D.C.

McEwan, P., Trowbridge, M. (2007) *The achievement of indigenous students in Guatemalan primary schools.* Published in the International Journal of Educational Development, Vol. 27, No. 1, p. 61-76. Wellesley, MA, USA.

Meneses, J. (2011). Proposal of the DIDEDUC, for the implementation with effectiveness of the CNB in the classroom. Universidad de San Carlos Guatemala. Guatemala.

Mourshed, M., Chijike, C., Barber, M. (2010). *How the world's best-performing school systems come out on top.* McKinsey & Company. Education. London, England.

Ministry of Education of Guatemala MINEDUC (2014). Retrieved April 8, 2014. From: www.mineduc.gob.gt

Ministry of Education of Guatemala (MINEDUC) (2013). Retrieved March 1st, 2014. From: www.mineduc.gob.gt/

Minster, Christopher. The Federal Republic of Central America (1823-1840). *Latin American History.* Retrieved June 8, 2014. From: www.about.com

Mitchell, D., Crowson, R., Shipps, D. (2011). *Shaping Education Policy: Power and Process.* Routledge, New York.

Olson, D., Torrance, N. (2009) *The Cambridge Handbook of Literacy.* Cambridge University Press. New York, NY, USA.

Phillips, S., Raham, H. (2007). *Sharing Our Success: Promising Practices in Aboriginal Education.* Advancement of Excellence in Education (SAFE). Winnipeg.

Piaget, J. ([1959] 2002). *The Language and Thought of the Child.* Routledge Classics. London.

Poppema, M. (2009). *Guatemala, the Peace Accords and education: a post-conflict struggle for equal opportunities, cultural recognition and participation in education.* Routledge. Globalisation, Societies and Education. Vol. 7, No. 4, November 2009, 383–408. Amsterdam.

Robinson, M. (2008). *Child development from birth to eight. A journey through the early years.* Open University Press. Berkshire, England.

Save The Children Guatemala (2013). *Pasitos de Aprendizaje en Casa [Small Steps of Learning at Home].* Save the Children. Guatemala.

Save The Children Guatemala. Retrieved March 1, 2014. From: www.savethechildren.org.gt/

Schiefelbein, W. (1999). *Cost-Effectiveness of Education Policies in Latin America: A Survey of Expert Opinion.* Inter-American Development Bank. Washington, D.C.

Snow, C., Burns, M., Griffin, P. (1998). *Preventing Reading Difficulties in Young Children.* National Research Council. National Academy Press. USA.

Subuyuj, M. (2006). *El Bilinguismo y Los Trastornos Del Lenguaje en un Grupo de Ninos y Ninas de Edad Preescolar" [Bilingualism and Language Disorders in a group of Children in Kindergarten age].* Universidad de San Carlos. Guatemala.

Swanson, E., Vaughn, S., Wanzek, J., Petscher, Y., Heckert, J., Cavanaugh, C., Kraft, G., and Tackett, K. (2011). *A Synthesis of Read-Aloud Interventions on Early Reading Outcomes Among Preschool Through Third Graders at Risk for Reading Difficulties.* Journal of Learning Disabilities. 44(3) 258–275 © Hammill Institute on Disabilities. Austin, Texas.

Taft-Morales, M. (2013). *Guatemala: Political, Security, and Socio-Economic conditions and the US relations.* Congressional Research Service. Report for Congress of the United States of America. Washington, D.C.

Taft-Morales, M. (2012). *Guatemala: Political, Security, and Socio-Economic conditions and the US relations.* Congressional Research Service. Report for Congress of the United States of America. Washington, D.D. Retrieved April 1, 2014. From: http://www.scribd.com/doc/135317996/R42580

Teachers of the Web [Maestros de la Web] (2006). *Internet by satellite, the solution.* Retrieved June 2, 2014. From: http://www.maestrosdelweb.com/principiantes/intersatelite/

The World Factbook Central Intelligence Agency United States of America CIA (2011). Country profile: Guatemala. Retrieved June 8, 2014. From: https://www.cia.gov/library/publications/the-world-factbook/geos/gt.html

Todaro, M., Smith, S.C. (2012). *Economic Development.* Addison Wesley (Person). 11th Edition. Boston, MA.

United Nations (UN) (2011). *The Millennium Development Goals Report.* New York. Retrieved March 1st, 2014. From:

http://www.un.org/millenniumgoals/pdf/(2011_E)%20MDG%20Report%202011_
Book%20LR.pdf

United Nations High Commission for Refugee (UNHCR) (2008). *World Directory of Minorities and Indigenous Peoples - Guatemala: Maya.* Minority Rights Group International. Retrieved February 25, 2014. From: http://www.refworld.org/docid/49749d163c.html

UNDP Human Development Report (2013). *The Rise of the South: Human Progress in a Diverse World.* Explanatory note on 2013 HDR composite indices.

United Nations Development Program (UNDP) (2009). *Assessment of Development Results. Evaluation of UNDP Contribution Guatemala.* Evaluation Office, United Nations Development Programme.

United Nations Educational, Scientific, and Cultural Organization (UNESCO 2010.) *Eighth E-9 Ministerial Review Meeting on Education for All on 'Literacy for Development.'* Abuja, Nigeria.

United Nations Educational, Scientific, and Cultural Organization (UNESCO 2010.) *Global Issues – Education for All.* Retrieved March 1st, 2014. From: http://www.un.org/en/globalissues/briefingpapers/efa/

United Nations Educational, Scientific and Cultural Organization UNESCO (2004). *The Plurality of literacy and its Implications for Policies and Programmes.* Retrieved May 1, 2014. From: http://unesdoc.unesco.org/images/0013/001362/136246e.pdf

United Nations Educational, Scientific and Cultural Organization UNESCO (2013). *Institute for Statistics. ADULT AND YOUTH LITERACY National, regional and global trends, 1985-2015.* Montreal, Canada.

United States Agency International Development (USAID) (2013) *Literacy Program. Fact Sheet.* USAID 50 Anniversary. Retrieved March 30, 2014. From: http://www.slideshare.net/DrLendySpires/usaid-southern-africa-final-cdcs-public-version-2

UNESCO (2002). *Learning to Be. A Holistic and Integrated Approach to Values Education for Human Development.* Retrieved May 30, 2014. From: http://unesdoc.unesco.org/images/0012/001279/127914e.pdf

UNESCO (2008 – 2012). *Integral Family Literacy.* Retrieved June 12, 2014. From: http://www.unesco.org/uil/litbase/?menu=4&programme=94

UNESCO (2008). *Student achievement in Latin America and the Caribbean Results of the Second Regional Comparative and Explanatory Study (SERCE).* Santiago, Chile.

UNESCO (2014). *Literacy: Poverty and Development.* Retrieved March 21, 2014. From: http://www.unesco.org/en/efa/international-cooperation/e-9-initiative/8th-meeting/main-theme/poverty-and-development/

UNICEF (2011). *Latin America and the Caribbean. Guatemala.* Retrieved May 1, 2014. From:http://www.unicef.org/arabic/hac2011/files/HAC2011_4pager_Guatemala_rev1.pdf

UNICEF (2013). *Child protection from violence, exploitation and abuse.* Retrieved June 11, 2014. From: http://www.unicef.org/protection/

UNICEF Millennium Development Goals. Retrieved March 22, 2014. From: http://www.unicef.org/mdg/education.html

US Department of State (2012). *International Religious Freedom Report for 2012.* Retrieved June 8, 2014. From: http://www.state.gov/j/drl/rls/irf/religiousfreedom/index.htm#wrapper

USAID From the American People (2013). LAD Regional Education Policy Assessment. Retrieved June 2, 2014. From: http://pdf.usaid.gov/pdf_docs/pnaeb798.pdf

Villegas, M., Neugebauer, S. R., Venegas, K. R. (2008). *Indigenous Knowledge and Education. Sites of Struggle, Strength, and Survivance.* Harvard Education Publishing Group. Cambridge, MA.

Vogler, P., Crivello, G., Woodhead, M. (2008). *Early childhood transitions research: A review of concepts, theory, and practice.* Bernard van leer Foundation. The Netherlands.

Waldfogel, J. (2012). *The Role of Out-of-School Factors in the Literacy Problem. Princeton University.* The Future of Children, Volume 22, Number 2, p. 39-54. Princeton, NJ.

World Bank (2011). Data: Guatemala. Retrieved March 1st, 2014. From: http://data.worldbank.org/country/guatemala

World Bank (2013). Data and statistics. Latin America and Caribbean. Retrieved June 30, 2014. From: http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/LACEXT/0,,men uPK:258575~pagePK:146732~piPK:146813~theSitePK:258554,00.html

World Bank (2014). Retrieved June 8, 2014. From: http://www.worldbank.org/en/country/guatemala

World Bank (2011). *Crime and Violence in Central America. A Development Challenge.* Retrieved May 1. 2014. From: http://issuu.com/world.bank.publications/docs/crime_and_violence_in_central_am erica_en

World Fact Book Central Intelligence Agency (CIA) United States of America. Country: Guatemala. Retrieved March 21, 2014. From: https://www.cia.gov/library/publications/the-world-factbook/geos/countrytemplate_gt.html

Young, M. (2014) *The case for investing in early childhood. United National Development Programs. Human Development Reports.* Retrieved on March 1, 2014. From: http://hdr.undp.org/en/content/case-investing-early-childhood