

Providing Quality Education for Children with Disabilities  
in Developing Countries:  
Possibilities and Limitations of Inclusive Education in Cambodia

発展途上国における障害児教育の提供  
—カンボジアにおけるインクルーシブ教育の可能性と限界—

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## SUMMARY

Located within the two fields of disability studies and education development, this empirical study sheds light on the forces facilitating and hindering the education and development of children with disabilities (CwDs) in a developing country context and seeks to provide a universal framework for examining the complexities of inclusive education.

Based on Bronfenbrenner's bioecological systems theory, this study analyses the influence of actors and processes in Cambodia at the bio-, micro-, meso-, exo-, and chrono-levels, on access and quality of education for CwDs. It then identifies ecological niches of possibilities that capitalise on the strengths of local communities, for effective and sustainable intervention in Cambodia.

This study was conducted in Battambang, Kampong, Kandal, Phnom Penh, and Ratanakiri in February and July 2015. A total of 88 interviews were conducted with 119 respondents: 50 individual semi-structured interviews were conducted with parents at their homes, 19 focus group interviews were conducted with 50 teachers, and 19 individual semi-structured interviews were conducted with school directors in schools. Participatory observations were also carried out at 50 homes, 6 classes, and 19 schools. Secondary empirical quantitative data and findings from Kuroda, Kartika, and Kitamura (2017) were also used to lend greater validity to this study.

Findings revealed that CwDs can act as active social agents influencing their own education; developmental dispositions have a direct relationship on this influence. Results also show that families with CwDs of lower socioeconomic status are severely disadvantaged in gaining access to information and available education and health services; the severe lack of awareness of disability was found to hinder access to quality education and health services, including the prevention and/or detection of their child's condition. Bonds within most communities were observed to be high, with villages serving as social spaces for communication between teachers/school principals and parents. Villages and chiefs serve as valuable sources of information, and are crucial in cementing processes, relationships, and information for delivering quality education to CwDs, particularly in rural or remote areas. Reported difficulties and frustrations of teachers in including deaf, blind, and children with learning disabilities, were founded in the lack of relevant training and breakdown of the cascade teacher training system, the lack of quality teachers and resources, as well as the splitting commitments of teachers due to low salaries. Results also show the negative impact of the failing public health sector on access to quality education; low and uneven distribution of quality health facilities and services impede the prevention, diagnosis, and rehabilitation of CwDs.

Through discussion of the above, this study thus provides evidence-based insights from Cambodia, on how developing countries can be supported in working towards achieving the global goal of inclusive and equitable quality education for CwDs, in a sustainable manner.

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## ABBREVIATIONS

CRF	Child Right Foundation
EFA	Education for All
FTI	Fast Tract Initiative
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH
ICS	ICS Driver of Development
INGO	International Non-Governmental Organisation
JICA	Japan International Cooperation Agency
KAPE	Kampuchea Action for Primary Education
KOICA	Korean International Cooperation Agency
MoEYS	Ministry of Education, Youth and Sports, Cambodia
NGO	Non-Governmental Organisation
NIE	National Institute of Education, Cambodia
PB	Program Budget
PBB	Project/programme-based budget
PI	Plan International
SC	Save the Children
SIDA	Swedish International Development Cooperation Agency
SIG	School Improvement Grant
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Emergency Fund
VHSG	Village Health Support Groups
VVOB	The Flemish Association for Development Cooperation and Technical Assistance
WB	World Bank
WE	World Education
WFP	World Food Programme

## **CHAPTER 1. INTRODUCTION**

In monitoring the progress of the six Education for All (EFA) goals set in Dakar in 2000 and identifying crucial factors for the shortfall in achievement, the international agenda for educational development has been cast upon governments' failure of reaching out to marginalised groups of people and denying them their right to education, thus highlighting the need for governments to address the root causes of marginalisation in education (EFA Global Monitoring Report 2010). The hidden challenges that conflict-affected societies face was also brought to the forefront as yet another crucial aspect accountable for the major shortfall in achievement of the EFA goals, as they not only cripple economic growth and development, but also severely increase barriers to education (EFA Global Monitoring Report 2011).

Past studies have shown that while children with disabilities are less likely to be in school than their peers without disabilities (Filmer, 2008), this pattern is more pronounced in developing countries (UNESCO, 2009). A World Health Survey across 51 countries revealed that people with disabilities have significantly lower rates of primary school completion and fewer mean years of education as compared to people without disabilities (WHO, 2011). Compared to their counterparts without disabilities, males with disabilities had primary school completion rates lower by 17.5%, while females with disabilities had completion rates lower by 21%.

Criticisms of educating children with disabilities separately from children without disabilities in special schools using tailored resources and techniques gradually led to integrated education programmes. From the 1970-80s, integrated education programmes sought to combine elements of inclusion with special education programmes, so that children with disabilities not only get to continue receiving tailored education separately, but also have opportunities to learn and/or play together with their peers without disabilities.

Following the Salamanca World Conference on Special Needs Education in 1994, and with the rise of the human rights movement within the development agenda, special and integrated education gave way to the call for inclusive education. Reflecting these shifts in perspectives, international trends on education provision for children with disabilities have shifted drastically. In 2006, the UN Convention on the Rights of Persons with Disabilities called for all State Parties to ensure an inclusive education system at all levels, whereby mainstream education schools and classrooms are adapted to accommodate the education

needs of all students, and despite their backgrounds. Today, the shift towards inclusive education is continuing to push on in the post-2015 EFA agenda and amidst growing attention for the social inclusion and participation of people with disabilities.

## Section 1. IN PURSUIT OF INCLUSIVE EDUCATION

The provision of inclusive education seeks to embrace all children and to teach them according to their unique needs together in a classroom. Contrary to integrated education, inclusive education does not seek to make children with disabilities adapt to regular classes, but instead calls for schools and teachers to adapt systems, curricula and resources to the individual and unique needs of children (Armstrong, 2010). Furthermore, the Salamanca Statement (1994) expresses that inclusive education itself implies the provision of quality education to all children in a cost-effective manner.

However, this gave rise to a new problem in developing countries, where both children with and without disabilities are ‘dumped’ together in the same classrooms in the name of inclusive education, but receive sub-par education (Apple, 2011; Forlin, 2012). Taking into consideration instances where children with disabilities are bullied and arising from the need to protect them, some countries assert that special education is more effective and that it serves to strengthen the identities of children. Today, the lack of concurrence over what makes for good education provision of children with disabilities hinders the local implementation of educational policies.

A critical task to achieving universal education for all in the Post-2015 development agenda is to ensure that all children—including those with disabilities—have access to quality education. In order to provide quality education, governments, local and international actors need to know what is required of the education system through substantive field investigation at the micro-level in schools. It is in this light that the current study is timely with far-reaching significance.

## Section 2. RESEARCH GAP AND PURPOSE

In September 2015, the international community came together to adopt a set of seventeen goals as part of the new sustainable development agenda. The international community’s commitment towards education is specifically enshrined in Sustainable

Development Goal (SDG) 4, which seeks to “ensure inclusive and equitable quality education and promote life-long learning opportunities for all” (UN General Assembly Resolution 70/1). Acknowledging that each country faces unique challenges in its pursuit of sustainable development, the SDGs and their respective targets will serve to guide the international community over the next 15 years. This includes the commitment, “(b)y 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations” and it specially mentioned ‘persons with disabilities’ as a prioritised social group, highlighting the contribution of this study in providing evidence on how actions by the international community should be guided (Ibid.).

As shown in Figure 1-1 and Figure 1-2 below, extensive research has been conducted on education for children with disabilities in developed countries, and empirical data largely draws upon teachers’ and administrators’ perspectives. However, there are few such empirical studies in developing countries, and which put the voices of people with disabilities and their families at the forefront. A review of published empirical studies demonstrates unbalanced representation of countries, by region, level of development, and actor-perspectives. The following two tables show studies that were selected based on the criteria of being (i) empirically based and (ii) country case studies.

Level of Development/Region*	Arab States	Africa	Asia & Pacific	Europe	North America & Canada
Developed	2	0	6	17	10
Developing	3	3	5	3	0
Least Developed Countries	0	2	0	0	0

Figure 1-1 Summary list of literature review conducted by author, number of studies by region/level of development \*Categories based on US Statistics

	Parents	Students	Teachers	Principals
	4	3	41	2
<b>Total</b>	<b>7</b>		<b>43</b>	

Figure 1-2 Summary list of literature review conducted by author, number of studies by actors

Located within the two fields of disability studies and education development, this study seeks to contribute to the research landscape through the Cambodian case study, which is a developing country with a protracted history of conflict. This study seeks to reveal new and substantiated perspectives of reality in Cambodia for study, in contemplation of understanding the forces shaping the education and development of children with disabilities in Cambodia. It is hoped that these findings will be able to contribute towards educational policies, as well as other relevant policies that are necessary in facilitating the process of providing quality education.

By doing so, this study further seeks to draw inferences to understand the forces shaping the education and development of children with disabilities in developing countries, particularly in countries that are emerging from or rebuilding after conflicts. Findings from this case study can thus be extended for application in other developing countries.

This study also utilises Bronfenbrenner’s bioecological systems model to comprehensively analyse education for children with disabilities in Cambodia. In doing so, this study demonstrates the potential and relevance of the bioecological systems model for a holistic analysis of the needs, challenges, and potential of providing quality education to children with disabilities. Although the conceptualisation of this framework is based on evidence from a developing country, the bioecological systems framework of human development serves as a universal framework for examining the complexities of inclusive education in a range of contexts, including that of developed countries.

### Section 3. RESEARCH QUESTIONS

**Overarching research question:**

How does the environment, which a child with disability develops in, influence his/her access to quality education, in a developing country context?

**Sub-question 1:** What are the actors and processes in Cambodia at the bio-, micro-, meso-, exo-, and chrono-levels that influence the access and quality of education for children with disabilities?

**Sub-question 2:** Based on an analysis of local perspectives and attitudes to the sub-question 1, what are some ecological niches of possibilities that capitalise on the strengths of local communities, for effective and sustainable intervention towards providing quality education for children with disabilities in Cambodia?

### Section 4. OVERVIEW OF METHODOLOGY

This study adopts the critical communicative methodology (Gomez, et al., 2006; Gomez et al., 2011; Puigvert, et al., 2012), which invites research subjects to reflect and interpret their experiences and social realities of inequality that need to be transformed. The focus is on dialogue with the respondents, whereby the researcher introduces theories and research-based knowledge for discussion, so as to extract exclusionary dimensions of barriers to education and elicit transformative solutions from local perspectives. As such, the social orientation of the critical communicative methodology is transformative, stressing on the role of dialogue as a powerful tool in raising social actors' critical consciousness and empowering them to actively transform oppressive social structures.

This study was conducted in Battambang, Kampot, Kandal, Ratanakiri, and Phnom Penh in February and July 2015. Fifty children with disabilities with a range of disabilities were identified from 19 schools using purposive sampling. A total of 88 interviews were conducted with 119 respondents: 50 individual semi-structured interviews were conducted with parents at their homes, 19 focus group interviews were conducted with 50 teachers in schools, and 19 individual semi-structured interviews were conducted with school directors. Participatory observations were also carried out at 50 homes, 6 classes, and 19 schools. Secondary empirical quantitative data and findings from Kuroda, Kartika, and Kitamura (2017) were also used to complement and lend greater validity to empirical qualitative data from this study.

## Section 5. SIGNIFICANCE OF STUDY

In the field of disability and education, while there are many empirical data studies in developed countries, there are very few based on empirical studies in developing countries. Those that seek to put the voices of people with disabilities and their families at the forefront are far fewer. Located within the two fields of disability studies and education development, this study thus seeks to contribute to the research landscape through the Cambodian case study.

Through substantive field investigation of the situation at the ground level (of the children, schools, and families), this study is expected to shed light on the forces facilitating and hindering the education and development of children with disabilities in Cambodia. It is hoped that these findings will contribute to educational policy-making, as well as other relevant policies that are necessary in facilitating the process of providing quality education.

In doing so, this study further seeks to draw inferences to the education and development of children with disabilities in developing countries, including those that are emerging from or rebuilding after conflicts. Findings from this case study can thus be extended for application in other developing countries.

This study also advances the utilisation of the bioecological systems theory for a holistic analysis of (i) the needs of children with disabilities, (ii) challenges of providing quality education to children with disabilities, and (iii) the latent potential of the society in facilitating the provision of quality education for children with disabilities. The use of the bioecological systems model provides a framework for the comprehensive analysis of education programmes and contexts that ensures the individual and social development of children with disabilities. Although the conceptualisation of this framework is based on evidence from a developing country, the bioecological systems framework of human development serves as a universal framework for examining the complexities of inclusive education in a range of contexts, including that of developed countries.

## Section 6. LIMITATIONS

This study was administered for only fifty children with disabilities across four provinces and the capital of Cambodia. To such a degree, while this study seeks to serve as an exercise to build onto the understanding of implementing inclusive education in developing

countries, caution must be exercised in generalising the results. As a study seeking a comprehensive overview of the provision of children with disabilities across Cambodia, sampling for units of analysis was not restricted to specific types of disability. Studies providing data on, and focusing on the provision of education for, specific types of disabilities would thus be complementary to findings from this study.

The use of Bronfenbrenner's bioecological model of development for longitudinal studies has been argued to be one of the strengths of using his model in disability and special education research (Sontag, 1996). Although a longitudinal study was not conducted for this analysis, this study has sought to include the dimension of time through considering any transitions or changes in the lives of children with disabilities between the pilot and main study. The longitudinal study of examining the provision of education for children with disabilities is an imperative one, and remains an agenda to be strived for.

## Section 7. KEY DEFINITIONS

This section will provide clarifications of key terms, as they shape the discussion of this thesis.

This study differentiates between '*impairment*' and '*disability*', and references to both terms are made within the following context. Impairment is a condition of the body or mind, such as lacking legs or hands, vision or hearing loss, or depression. It is an attribute of the individual. Disability is the loss or limitation of opportunities to participate in activities—social, economic and political—on an equal footing with those with no impairments, which is the result of the social, economic, and physical environment being inaccessible to people with them.

In this study, *education* is regarded as the development of individual potential to promote individual autonomy, identity, and participation in society, and/or to enable individuals to become productive members of society through work and others. At a broader level, education serves not only for the state's economic development, but also for building an inclusive culture for social justice.

This study also utilises Bronfenbrenner's bioecological systems theory of human development as the framework of analysis, whereby *human development* is defined as the process through which the person acquires a deeper and more differentiated understanding of the ecological environment within which the person exists, and is then driven to take action to



reveal the intricacies of the system, thereby maintaining or restructuring the environment to further feed their growth and development (Bronfenbrenner, 1979).

This thesis also seeks to differentiate between *providing quality education for children with disabilities* and *providing inclusive education*. Inclusive education is commonly interpreted as educating children with disabilities in regular classrooms together with their peers without disabilities. However, the provision of quality education requires being responsive to the unique needs of children with disabilities, which seeks to ultimately ensure their inclusion and participation in society, in a manner that is inclusive in practice, and not merely in form. Inclusive education is therefore not limited to the form of merely placing children with disabilities in regular classrooms regardless of how they are able to learn in it; it involves inclusive practices in education that seek to enhance and maximise the learning and potential of all children, for their (eventual) participation in the classroom and larger society.

Hence, *inclusive education* refers to the process of ensuring opportunities for all students to access education, in a manner that positively enhances their learning and participation in classrooms, schools, and the community, by restructuring cultures, policies, and practices of schools and societies, such that the system is able to respond to and accommodate the diversity of students in their locality. That is to say, there is no one fixed model of how inclusive education ought to be; an inclusive education system is effective, efficient, and successful, as long as it serves the diversity of students in its locality. Additionally, while the focus of this study is on the inclusion of children with disabilities, and specifically on their inclusion in educational systems, it should be noted that inclusion should be about the education of all children, including children with disabilities.

## Section 8. OVERVIEW OF THESIS STRUCTURE

**Chapter 2** presents a review of relevant literature for this study, and consists of four sections. Firstly, it looks at models of disability and concepts of inclusion that drive the changing international discourse in education for children with disabilities, as well as the ongoing discussion on the relevance and effectiveness of inclusive education. Secondly, it provides an overview of Bronfenbrenner's bio-ecological systems model—which is used as the analytical framework to discuss and analyse empirical data collected from this study—as well as its application in the field of disability and education. Section 3 looks at some inclusive education programmes and how the concepts in the above two sections are

embedded in them. The last section provides a review of the Cambodian context, including the influence of its history and political situation on the structure and practices of the education system that influence the process of inclusion, as well as current policies and the flourishing non-governmental sector.

**Chapter 3** presents the secondary and primary data used in this study: secondary quantitative data from Kuroda, Kartika, and Kitamura's (2017) study is used to complement empirical qualitative data from this study. After briefly introducing the quantitative methodology put forth in Kuroda, Kartika, and Kitamura (2017), it explains and justifies the critical communicative methodology that was employed for the empirical qualitative component of this study. Given the sensitive and intimate nature of this study in speaking to parents about their child's disability, systemic factors, and other dimensions concerning people influencing their life, this chapter also explains how the interview was conducted and other measures the author took to ensure the psycho-emotional comfort of respondents while collecting necessary data. The last section explains how data coding was conducted for interpreting empirical data, and in using Bronfenbrenner's bio-ecological systems model to discuss the implementation of education for children with disabilities in Cambodia holistically.

**Chapter 4** presents the results observed from empirical qualitative data in ten sections, based on the main threads of findings coded from empirical data. In each section, where they have not been addressed by general literature review in Chapter 2, literature review specifically pertaining to each of these individual threads precedes the presentation of empirical data. Section 1 presents results demonstrating the influence of *personal attributes* (of children with disabilities) in influencing their own education. Section 2 shows the connotation of some *types of disabilities* as demonstrated in the data, and how perceptions of the respondents are influenced by them. Section 3 illustrates the family's *socio-economic status* influences the opportunity to access quality education, and presents both the positive and negative influences of financial and social standing of families. Section 4 presents a picture of the *relationship between parents and teachers* in Cambodia, and its influence on the (education of the) child with disability. Section 5 shows respondents' accounts of bottlenecks, limitations, and possibilities of *schools' and teachers' resources and capacity* in their attempt to provide education for children with disabilities in their classrooms. Section 6 illustrates the general *lack of awareness and information gap* regarding (the various types of) disability, the implications of these disabilities, the rights and needs of children with disabilities (and their

caregivers), as well as available health and educational services that are to their benefit. Section 7 demonstrates *the unique role of the village and village chief* in facilitating the inclusion of children with disabilities through gathering data, raising awareness of disability, and bridging the information gap. Section 8 shows how the *distribution of schools* throughout the country with resources and trained manpower to teach children with disabilities affect parents' decisions to send their children, and its impact on the access of all children with disabilities (particularly those in rural and/or remote areas) to quality education. Section 9 provides evidence to show how the *distribution of quality health facilities and services* throughout the country affect the prevention, diagnosis, and rehabilitation of children with disabilities, and in turn influencing the access of children with disabilities to education. The last section of the data and results chapter demonstrate *the role of international non-governmental organisations and agencies and foreign governmental aid* on providing quality education to children with disabilities in Cambodia, and the current extent of collaboration that the public government sector has with external actors and/or the private sector.

**Chapter 5** provides a discussion of the data findings presented in Chapter 4 based on Bronfenbrenner's bio-ecological systems model. A discussion of the possibilities and limitations identified from the narratives of respondents and participatory observations of the system, as well as the ecological niches is conducted on the *bio-, micro-, meso-, exo-, macro-, and chrono-levels*. Through the empirical findings and discussions, this study thus seeks to demonstrate (i) severe inadequacies in macro structures, (ii) how these inadequacies at the macro level deter processes at the lower levels, (iii) the limits of a purely top-down process in the current context, and (iv) the potential to capitalise on the strengths of local communities for effective interventions in Cambodia, so as to further the vision and process of education for the inclusion and participation of children with disabilities, in a sustainable manner.

## CHAPTER 2. LITERATURE REVIEW

This chapter seeks to illustrate the rising contemporary importance of ethnicity, before turning to trends linking ethnicity and education, thereby demonstrating the increasing contemporary significance of ethnic minority education. Thereafter, this section further outlines an aspect of modern society that has influenced the motivations and operations of ethnic minority education—globalisation. Forces of globalisation have not only intensified patterns of human mobility across borders, it has also provided new or alternative ways to carry out education.

### Section 1. DISABILITY & INCLUSION IN EDUCATION

In disability studies, there are two main threads to the concept of disability: the medical model and the social model. Both models regard disability as a difficult predicament commonly faced by people. However, while the medical model looks at disability as a condition requiring medical intervention, the social model looks at it as a condition that requires the transformation of societal attitudes and state policies to accommodate the needs of people with disabilities (Silvers, 2010).

#### 2.1.1. Models of Disability

##### *Medical model of disability*

Massive numbers of casualties with disabilities after World War 2 served as the foundation for the development of the medical model of disability. The medical model views impairments as the result of identifiable health-related factors, which can be made less severe, or entirely cured of through medical treatment. It focuses on using medical interventions or adaptive technologies to allow individuals to overcome their limitations and adapt to the larger society.

Within this model, people with impairments are passive recipients of their diagnosis, treatment, and services received; the dimensions of choice and decision-making are almost left exclusively to the medical professional. In doing so, the medical model perceives

individuals' functional limitations as physiological 'problems' to be cured, with the main focus on finding out what is 'wrong with the person' so that professionals can provide treatment and cure for them to adapt to a world that is unable to accommodate their limitations. Criticism of this outlook gave rise to the second model of disability – the social model (Oliver, 1983).

### *Social model of disability*

From the 1960s, new and emerging societal values began to shape societies that advocated the quality of lives of marginalised groups, for example people with impairments, women, children and elderly people. This led to the introduction of the social model of disability, which identifies systemic barriers, negative attitudes and exclusion by society (intentional or inadvertent) and argues that societal attitudes and environment are the main barriers for people with disabilities. There are two dimensions to the social model – changing social attitudes and, correspondingly, influencing state policies. While state policies can be amended or implemented in a relatively short period, the changing of social attitudes might take place only over generations, and so relatively short-term state policies do tend to be a reflection of embedded social attitudes.

In contrast to the medical model, the social model looks at disabilities as social rather than natural deficits (Silvers, 2010). It provides a way of conceptualizing the difficulties experienced by people with impairments as social deficits, through the barriers that are set against their participation in socio-economic spheres (Burchardt, 2004). In doing so, it attempts to restore the rights and interests of people with disabilities, calling for social reform instead of medical intervention to address the difficulties they encounter. The strength of the social model lies in how it empowers people with disabilities to greater freedom in social participation through calls for social reform instead of the passive receipt of medical intervention.

There have been debates within the disability movement regarding the precise interpretation of the social model (Oliver, 1996). One commonly accepted characteristic of the social model is the distinction it makes between impairments and disabilities. Late Finkelstein, an advocate on the concept of disability, thus argued that 'Disability is the outcome of an oppressive relationship between people with impairments and the rest of society' (1980, p.47). Similarly, Oliver and Barnes (1998) emphasize society as the cause of disability and reject the idea of it being a personal tragedy. If barriers to full participation are not intrinsic to the

individual but are rather social in nature, it is a matter of social justice that these barriers should be dismantled (Oliver and Barnes, 1998). Additionally, Shakespeare (2011) commented that people with impairments have problems partly generated by those impairments, and partly generated by the way societies fail to respond adequately to those impairments.

### Capabilities framework

The capabilities framework, introduced by Amartya Sen, distinguishes between functioning and capabilities. While one's 'functioning' refers to 'the achievement of a person', the 'various living conditions' of 'what he or she manages to do or be', 'capabilities' refers to a derived notion of the 'ability to achieve them' and 'a person's freedom to choose between different ways of living' (Sen 1987 p.23; 2003 p.44).

The capability approach focuses on human achievement and freedom, as well as the need for reflective evaluation, which provides a useful framework for looking at highly contextual disability issues. In particular, some researchers discuss the synergy between the capabilities framework and the social model of disability (Burchardt 2004; Baylies 2002; Mitra 2006). While the social model of disability evolved through the struggle for the realization of civil rights, the capabilities framework was developed in rejection of the utilitarian notion of value in individual utility and proposes to replace it with capabilities, whereby the freedom and availability of opportunities for people to achieve what they want to do or be is considered.

The capabilities framework provides a general theoretical framework in which to locate the social model of disability since it looks at how the functioning of an individual interacts with the external environment to define the individual's capabilities. Burchardt also highlights common themes between these two approaches, such as the relationship between social barriers and individual limitations, the importance of autonomy and the value of freedom, and dissatisfaction with income as a measure of well-being. More specifically, the capabilities framework measures well-being in terms of the 'capability set of the individual', whereby '[i]nequality is ... assessed by the distribution of capability sets among people' (Burchardt 2004, 738). The concept also provides sufficient and flexible space to introduce the discussion of undefined and undetermined issues, as well as having the capacity to come up with tools to resolve them. This approach later gained prominence when it became the basis for the development of the Human Development Index (1994) and it remains the

foundation for perspectives on development issues in the United Nations.

### 2.1.2. Concept of Inclusion

Inclusion is not only one of the ends of education, it also serves as a means to *how* the purposes of education should be achieved. Societies are non-static and fluid by definition. Correspondingly, the rules of societies evolve together with the changing dynamics of society. Inclusion, or the process of increasing participation, thus involves perpetual change and constant revisitation. While the focus of this study is on the inclusion of children with disabilities, and specifically on their inclusion in educational systems, it should be noted that inclusion should be about the education of all children, including children with disabilities. In education, membership or participation in an inclusive class can thus be seen as being actively engaged in learning, being able to learn alongside a diverse group of other students and collaborating for shared learning experiences. Inclusion is the vision, philosophy, and principle we attempt to uphold, and is “an unending process of increasing learning and participation for all students”; at the same time, it is “an ideal to... aspire but which is never fully reached” (Booth and Ainscow, p.3) and practically, we can only work toward achieving ‘responsible inclusion’ or ‘cautious inclusion’ (Vaughn and Schumm, 1995; Hornby, 1999; Kauffman, 1995; Fuchs and Fuchs, 1994; Clark, et al. 1999; Evans & Lunt 2005). Norwich (1996, 2000) argues that education for children with disabilities demands the balancing of multiple values such as equality, individuality, social inclusion and practicability, and the tolerance of ‘ideological impurity’.

Research on the inclusion of deaf and hard of hearing students in classes with other hearing students distinguish between “membership” and “visitorship” of the former, which is based on the difference in how teachers interact with other teachers and/or with these students in the classroom. When a student who is deaf or hard of hearing gains ‘membership’ in an inclusive class, it means that the student is properly included in the class, interacts with other students and is an integral part of the classroom and school communities; this promotes the student’s learning. By contrast, when a student who is deaf or hard of hearing is placed in a class with other hearing students as merely a ‘visitor’, it only indicates superficial inclusion, which deprives the child from receiving quality education (Antia, Stinson, Gaustad, 2002).

Scholars have pointed out that in conceptualising and theorising inclusion, there is value in investigating its antithesis—exclusion, as “both inclusion and exclusion are necessary

mechanisms in the structure of all communities” (Hansen, 2012, p.94). In acknowledging and accepting that these exclusionary processes are fundamental to the existence of inclusive societies, we learn to draw our attention to question *how* society delineates inclusion from exclusion, instead of *why* (Hansen, 2012). Similarly, Booth and Ainscow (2002, p.3) raised that “[d]eveloping inclusion involves reducing exclusionary pressures”, and knowing what and where these exclusionary barriers lie in is fundamental.

Booth and Ainscow (2002) proposed an Index for Inclusion, as a means to guide students, parents, actors in the school, and actors in the community to examine how barriers to learning and participation can be reduced or eliminated for all students (including those with disabilities), and identify issues for development. Fundamentally, it is a “social model of educational difficulties and disabilities”, whereby “barriers to learning and participation can exist in the nature of the setting or arise through an interaction between students and their contexts: the people, policies, institutions, cultures, and social and economic circumstances that affect their lives” (Booth and Ainscow, 2002, p.6). It seeks to build collaborative relationships and conducive environments that are based in inclusive values. (Refer to Appendix ‘Inclusion in Education’)

Booth and Ainscow’s Index of Inclusion (2012) thus explore both inclusion and exclusion along three interconnected dimensions, which are all necessary for the development of inclusion:



Figure 2-1: Three Dimensions of the Index of Inclusion. Adapted by author, Source: Booth & Ainscow, 2002, p.7

At the heart of it all, creating inclusive cultures and developing shared inclusive values and collaborative relationships between stakeholders, in society and/or in schools,



drive and sustain the processes in the other two dimensions. Producing inclusive policies (from the country level to districts, localities, and schools) ensures that inclusion is institutionalised in all processes, and provides a clear direction and conducive environment for required changes. The development of inclusive practices in schools and classrooms allows for teachers and school staff to mobilise community resources and respond to the variety of students’ needs in supporting their learning and participation. Additionally, it serves as an opportunity for students to actively engage in influencing their own education (Booth & Ainscow, 2002).

For each of the three dimensions, Booth and Ainscow identified two sections to best represent their respective significance and purposes, and further determined a range of indicators within each (Refer to Appendix). Primarily building onto Booth and Ainscow’s dimensions, sections, and indicators using additional findings from other recent empirical studies (underlined in Figure 2-2), the author has organised the dimensions, sections, and components that are necessary for inclusion in education.

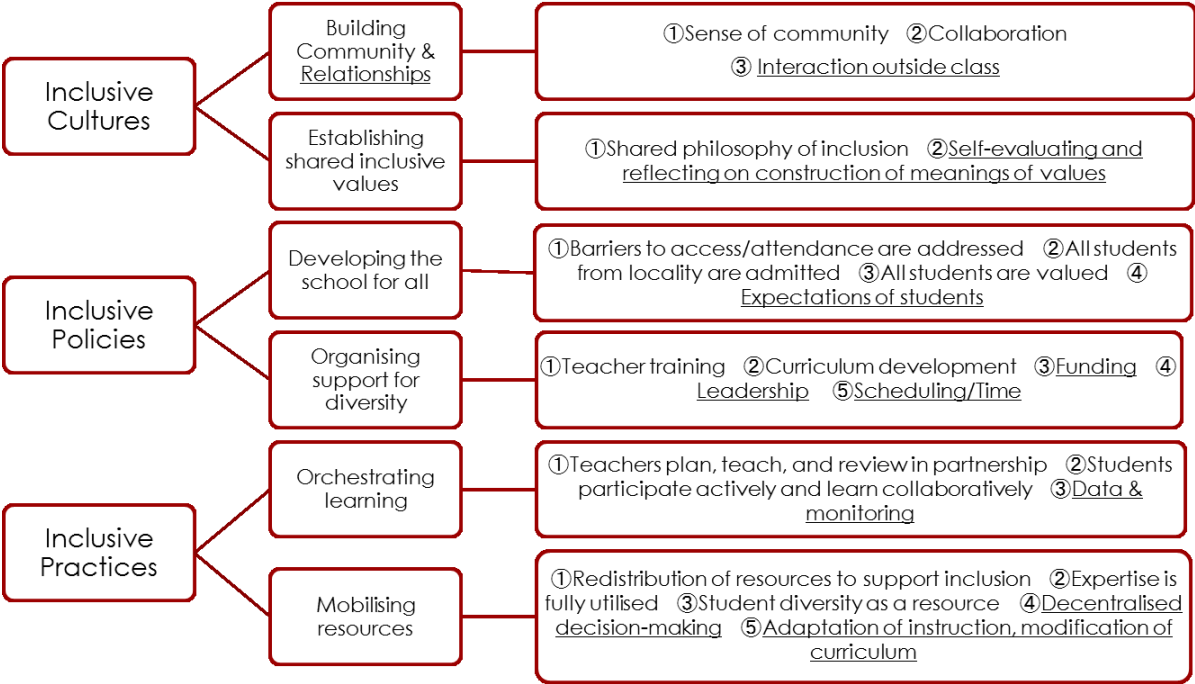


Figure 2-2 Dimensions, Sections, and Components of the Index of Inclusion

\*Author’s adaptation of components based on Booth & Ainscow (2002) and updated with new components from other literature.

Firstly, creating inclusive cultures entails building communities and relationships between actors, as well as establishing shared inclusive values within the community. For the former, building relations to establish a sense of community both inside and outside the classroom as well as encouraging collaboration within active social agents in the community will entrench inclusive values, and thus ensure the sustainability of the inclusion process. This will be further discussed in Section 3 of this chapter, in how community-based rehabilitation programmes are particularly relevant in sustaining the localisation of inclusion, particularly in rural or remote areas where central support and resources are hard to reach.

For the latter, establishing shared inclusive values within a community involve not only the creation of a shared philosophy of inclusion, but also rigorous and meaningful self-evaluation at all levels of the school community to reflect on the construction of meanings and values of inclusion and participation, for inclusion to move forward effectively (Ekins & Grimes, 2009; Hansen, 2012). Studies have shown that there is a lack of shared understanding of inclusion and the kinds of intervention or support schools should provide (Conrad & Brown, 2011; Kholoud & Jumiaan, 2011; Sakiz & Woods, 2014; Starczewska et al., 2011), and when teachers think on the basis of a medical and charity model of 'giving' education, they tend to see greater or more pronounced limitations of including children with disabilities in the education system (Symeonidou & Phtiaka, 2009). Studies have also shown that both parents and teachers tend to have concerns about communicating to each other the organisational planning and structure of the inclusion process, suggesting a need for greater development of shared purpose and common goals between teachers and parents to alleviate parental anxieties and build more positive relationships (Frederickson et al., 2004).

Secondly, producing inclusive policies is important in creating conducive environments for inclusive practices. Past studies have shown that teacher perceptions are related to support in planning time, contact time, class grade or size, training, resources, knowledge, previous experience with inclusion, type and severity of disability, parental support, and participation in the decision making process. In some cases, teachers are unaware of resources available to them, which could otherwise have been mobilised to actualise inclusive practices, due to unsystematic policies and plans. However, the primary reason why teachers immediately see the limits to inclusion is due to the perceived lack of administrative and/or school support (Avramidis et al., 2000; de Boer et al., 2011).

Producing inclusive policies entail developing schools for all and organising support

for diversity. For the former, it involves (i) addressing barriers to access and/or attendance, (ii) ensuring all students in the locality are enrolled, (iii) value students as unique individuals, and (iv) having expectations of students. Teachers who expect students to be motivated and academically successful had students that mirror those attributes. In other words, teachers' perceptions act as a barrier to the achievement of children with disabilities in the inclusive classroom. That is to say, attitudes of all staff involved is what makes inclusion happen and successful for children with disabilities (Tralli et al., 1996; Cook et al., 1999; Kavale & Forness, 2000; Van Reusen et al., 2001; Butler & Shevlin, 2001; Rubie-Davis et al., 2010; Conteras, 2011; Pierson, 2010; Henning & Mitchell, 2002, 2010).

For the latter, organising support for diversity involve (i) addressing teacher training issues; (ii) ensuring the development of relevant curriculum that meet the unique and diverse needs of students; (iii) scheduling blocks of time as structured opportunities to allow for planning, collaboration, and effective distribution of resources (Santoli et al., 2008; Manset & Semmel, 1997; McLeskey et al., 2014; Tralli et al., 1996); (iv) strong and effective leadership at the various levels in organising support and collaboration to facilitate the inclusion process (including the demonstration of strong commitment and will for values-driven inclusion, and serving as a positive model of influence in the process) (McLeskey et al., 2014; Tralli et al., 1996; Zollers et al., 1999); as well as (v) ensuring sustainable and sufficient funding. The last two are particularly in developing country contexts, where resources are limited and governments and local leadership face other priorities of development.

Lastly, developing inclusive practices entail orchestrating learning and mobilising resources to respond to the variety of students' needs in supporting their learning and participation. For the former, it calls for (i) teachers to plan, teach, and review in partnership; (ii) students participate actively and learn collaboratively; as well as (iii) the collection and monitoring of data. In order to reach at informed decisions that is based on objective data (at the school, district, or national level), it is necessary to have accurate, up-to-date, and cumulative data records for schools and communities to identify trends and priorities for development (Manset & Semmel, 1997; McLeskey et al., 2014; Tralli et al., 1996; Ekins & Grimes, 2009). For the latter, mobilising resources involve (i) redistributing resources to support inclusion, (ii) fully utilising available expertise and resources, (iii) utilising student diversity as a resource to drive the inclusion process, (iv) creating structured spaces for decentralised decision-making to allow and facilitate the flexible and efficient redistribution of resource (McLeskey et al., 2014); as well as (v) adapting instructions and modifying

curriculum to meet the unique needs of students in the school and/or classroom (Manset & Semmel, 1997; McLeskey et al., 2014).

In order to increase educational participation of children with disabilities, the resources of the individual child with disability, as well as resources lying in the direct and indirect system or environment of the child with disability should be effectively utilised and coordinated:

*“The minimising of barriers to learning and participation involves mobilising resources within the school and its communities. There are always more resources to support learning and participation than are currently used within any setting. Resources are not just about money. Like barriers they can be found in any aspect of a school; in students, parents/carers, communities, and teachers; in changes in cultures, policies and practices. The resources in students, in their capacity to direct their own learning and to support each other’s learning, may be particularly under-utilised, as may the potential for staff to support each other’s development. There is a wealth of knowledge, within a school, about what impedes the learning and participation of students, which may not always be used to the full.” (Booth & Ainscow, 2002, p.5).*

This section has thus shown that the inclusion of children with disabilities in education is a process that begins first with building an inclusive culture within the school and within the larger community it is in. With a strong inclusive culture, sound inclusive policies can evolve into effective inclusive practices in a sustainable manner. Without which, policies and practices will slip through weak social foundations. There is thus a need to shift the inclusion-exclusion discourse in education for children with disabilities, through increasing awareness of impairments (its possibilities and difficulties) and changing social constructions of pupils, teaching, and the classroom.

### 2.1.3. International Discourse in Education for Children with Disabilities

This section will introduce a summary and evolution of international discourse on education and disability, through a look at UN and other instruments.

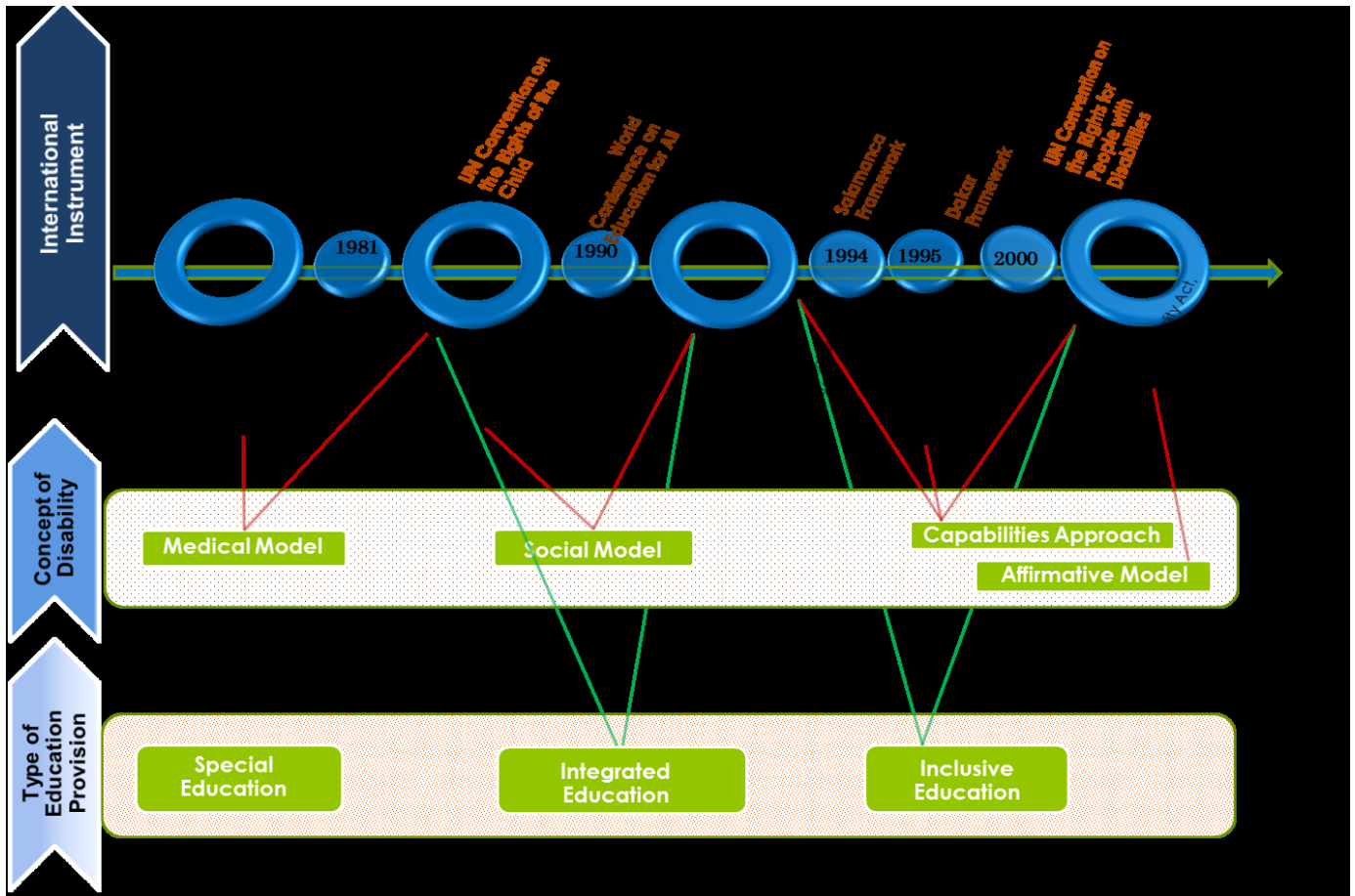


Figure 2-3 An Overview of International Trends in Education for Children with Disabilities. Source: Author.

**Convention against Discrimination in Education of UNESCO, (OHCHR, 1960).**

This Convention does not explicitly refer to people or children with disabilities. However, it does oblige State Parties to “ensure, by legislation where necessary, that there is no discrimination in the admission of pupils to educational institutions”, and to eliminate and prevent any discrimination in education.

**Declaration on the Rights of Mentally Retarded Persons, 1971 (OHCHR, 1971).**

Article 2 of this declaration asserts the individual’s right to “such education, training, rehabilitation and guidance as will enable him to develop his ability and maximum potential”, and calls to promote the integration of ‘mentally retarded’ people “as far as possible in normal life”. The declaration recognises that such integration is dependent on the economic capacity of each State and acknowledges that “certain countries at their present stage of development can devote only limited efforts to this end”. This 1971 declaration is a landmark document in disability and education, as it introduced the concept of ‘maximum potential’ of people with

disabilities, vis-à-vis their (current) capacity.

**Declaration on the Rights of Disabled Persons, 1975 (UN, 1975).** This declaration was the pioneer international instrument to draw explicit linkages between the 1948 Universal Declaration of Human Rights to the needs and rights of people with disabilities. The declaration, was however, still based on the medical model, as can be seen from how it defines a person with disability as one who is “unable to ensure the necessities of normal social life due to deficiency”, and that the means to achieve integration for them was to develop abilities, capabilities and self-reliance of the individual who “needs treatment”.

**WHO International Classification of Impairments, Disabilities, and Handicaps, 1980 (WHO, 1980).** WHO’s classification was intended as a framework to look at the long-term consequences of disease, injuries, or disorders, and applicable both to health care, including early identification and prevention, and to the mitigation of environmental and social barriers. It was primarily used in diagnosis and treatment, evaluation of treatment results, assessment for work, and information. It views illness-related situations on a sequence: disease, followed by impairment, disability, and handicap, in that order. “In the context of health experience”, it defines an impairment as “any loss or abnormality of psychological, physiological, or anatomical structure or function”; a disability as “any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being”; and a handicap as “a disadvantage for a given individual, resulting from an impairment or a disability, that limits or prevents the fulfilment of a role that is normal (depending on age, sex, and social and cultural factors) for that individual”. Today, the term ‘handicap’ is not used commonly, and ‘disability’ has been broadened to define the social and functional limitation of a person.

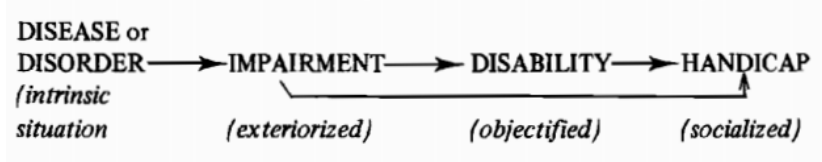


Figure 2-4 Integration of Concepts in WHO Classification. Source: WHO, 1980, p.30.

**Sundberg Declaration, 1981 (UNESCO, 1981).** The Sundberg Declaration was borne out of the World Conference on Actions and Strategies for Education, Prevention, and Integration, which coincides with the International Year of Disabled Persons. The Declaration states that “every disabled person must be able to exercise his fundamental right to have full access to education”, that the education process should start in early infancy and be “conceived and implemented within a global framework of lifelong education”. Article 6 justifies that people with disabilities should “receive appropriate education and training, whatever their personal situation”, with the eventual aim of integrating them into “the ordinary working and living environment”. It is also the first official document to demonstrate acknowledgement that educating people with disabilities benefits not only themselves but also the wider community. Article 3 states that people with disabilities must be “given the opportunity to utilise their creative, artistic, and intellectual potential to the full, not only for their own benefit, but also for the enrichment of the community”.

**World Programme of Action Concerning Disabled Persons, 1982 (UN Enable, 1982).** This instrument is the inaugural global action plan for people with disabilities, and seeks to promote inclusive education, “whenever pedagogically possible”, under three main goals for the future: prevention, rehabilitation, and equalisation of opportunities. Education for people with disabilities “should as far as possible take place in the general school system. Responsibility for their education should be placed upon the educational authorities and laws regarding compulsory education should include children with all ranges of disabilities, including the most severely disabled.” In cases where inclusive education alone is insufficient to meet the needs of children with disabilities, “schooling should then be provided for an appropriate period of time in special facilities. The quality of this special schooling should be [at least] equal to that of the general school system and closely linked to it.” The document also calls for greater focus on the potential ability of people with disabilities, and seeks to respond to criticism of the ‘dumping’ problem in inclusive education. The World Programme of Action has since been reviewed every five years, and the most recent in 2000 set out seven areas of data collection for inclusive education: law and policy, choice and availability of services, barriers to accessibility, portrayal of people with disabilities in school environments, curriculum and materials, school governance, as well as teacher training and competencies.

**Tallinn Guidelines for Action on Human Resources Development, 1989 (UN, 1989).** Particularly, inclusive education as a cost-effective alternative to segregated school facilities was recommended officially through this document, and unique experiences that

exist within the broad group of people with disabilities (e.g. deaf culture, girls with disabilities, and people with disabilities in urban or rural areas) was highlighted, all for the first time. This “notion of place for education of people with disabilities into a continuum” was also raised in the Tallinn Guidelines, from special schools and classes, to resource rooms in general schools, and to special education support teachers in the general education classroom (Peters, 2007).

**UN Convention on the Rights of the Child, 1989 (UNICEF, 1990).** Article 23 of this Convention obliges State Parties to provide free assistance to children with disabilities, “ensuring that the disabled child has effective access to and receives education, training, health care services, rehabilitation services, preparation for employment and recreation opportunities in a manner conducive to the child's achieving the fullest possible social integration and individual development, including his or her cultural and spiritual development”. Further, it calls for States Parties to promote “the exchange of appropriate information in the field of preventive health care and of medical, psychological and functional treatment of disabled children, including dissemination of and access to information concerning methods of rehabilitation, education and vocational services”, “in the spirit of international cooperation”, and “with the aim of enabling State Parties to improve their capabilities and skills and to widen their experience in these areas. In this regard, particular account shall be taken of the needs of developing countries.” It should also be noted that the above language of the Convention suggests that it is still based in the medical model of disability.

**World Declaration on Education for All, Jomtien, 1990 (UNESCO, 1990).** The Jomtien Declaration stresses education for all—universal access and equity. Article 3 states that “[i]n achieving education for all, the learning needs of the disabled demand special attention. Steps need to be taken to provide equal access to education to every category of disabled persons as an integral part of the education system”, indicating a monumental shift towards the social model of disability, and also suggesting that inclusive education should be included (as a practice and/or programme) within the existing education system. This declaration also departs from earlier instruments in how it calls for State Parties and organisation to provide adequate resources and funding solutions for the education of all children (including those with disabilities, and the various categories of it), instead of subjecting it to available state resources and type or extent of impairment.



**UN Standard Rules on the Equalization of Opportunities for Persons with Disabilities, 1993** [A/RES/48/96]. The Standard Rules seek to increase and facilitate people with disabilities' rights to access in society. One of its recommendations include accessibility to information; “[p]ersons with disabilities and, where appropriate, their families and advocates should have access to full information on diagnosis, rights and available services and programmes, at all stages. Such information should be presented in forms accessible to persons with disabilities”, including Braille and sign language. The Standard Rules also state that “[g]eneral educational authorities are responsible for the education of persons with disabilities in integrated settings”, and that “States should aim for the gradual integration of special education services into mainstream education”, which clearly demonstrates the international community’s paradigm move towards a social model of inclusive education. At the same time, the Standard Rules also acknowledges that “in some instances special education may currently be considered to be the most appropriate form of education for some students with disabilities”, including deaf and/or blind students.

**The Salamanca Statement and Framework for Action on Special Needs Education (1994)**. The World Congress on Special Needs Education held in Salamanca is one of the most decisive international instruments, as it “set the policy agenda for inclusive education on a global basis and represented a linguistic shift from integration to inclusion as a global descriptor” (Vislie, 2003; Peters, 2007). Its underlying assumption is that “human differences are normal and that learning must accordingly be adapted to the needs of the child rather than the child fitted to preordained assumptions regarding the pace and nature of the learning process”, with a focus on potential abilities over deficiencies. Consequently, the Salamanca Statement states that “those with special educational needs must have access to regular schools which should accommodate them within a child-centred pedagogy capable of meeting these needs” and that “regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system”.

**World Summit for Social Development, Copenhagen, 1995 (UN, 1995)**. The outcome document of this World Summit states that “one of the world’s largest minorities, more than one in ten, are people with disabilities who are too often forced into poverty, unemployment, and social isolation” UN, 1995), and in doing so, “establishes specific links

between education, poverty, and disability and places people at the center of development issues” (Peters, 2007, p.105). This set a new policy discourse on addressing poverty as a significant cause of disability and barrier to education.

**EFA Framework for Action, Dakar, 2000 (UNESCO, 2000).** In one occasion, the Dakar Framework explicitly calls for “[t]he inclusion of children with special needs” to achieve Universal Primary Education. Even though children with disabilities are not mentioned often in the Dakar Framework, the guidelines for action raised are consistent with those of the Salamanca Statement, indicating a commitment to all children, including those with disabilities. Among others, these two instruments call for more multisector collaboration, universal access to education, and quality education.

**WHO International Classification of Functioning, Disability and Health (WHO, 2001).** In line with the international community’s shift towards a social model of disability in the 1990s, WHO’s revised classification (ICF) looks beyond the idea of a purely medical or biological conceptualisation of dysfunction, and considers the impact of environmental and contextual factors on the functioning of an individual or population. It focuses on the impact on the functioning of the individual. In the 2001 classification, functioning and disability are multi-dimensional and interactive, and pertains (i) the body functions and structures, and impairments of people, (ii) the activities of people and the limitations they experience, (iii) the participation or involvement of people in all areas of life and the restrictions they experience, as well as (iv) the environmental factors which influence these experiences.

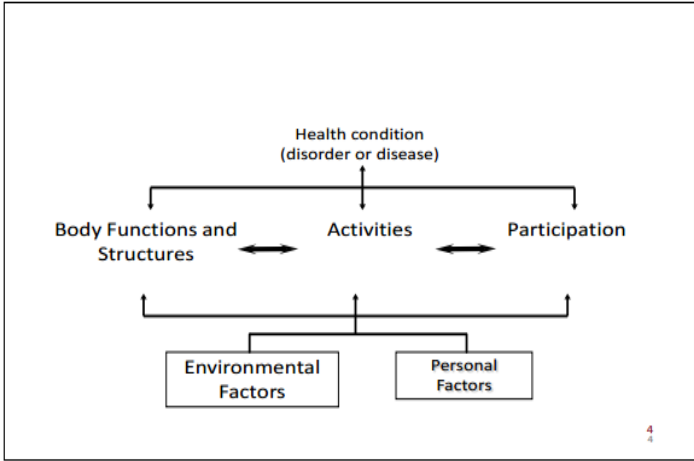


Figure 2-5 Interaction between Components of ICF. Source: WHO, 2001, p.18

**Biwako Millennium Framework, 2002 (UNESCAP, 2002).** This UNESCAP resolution sets out a draft regional framework for action that provides regional policy recommendations for action by Governments in the region and concerned stakeholders to achieve an inclusive, barrier-free and rights-based society for persons with disabilities in the Asia and Pacific region in the twenty-first century. The regional framework identifies seven areas for priority action, with each area containing critical issues, targets and the action required. It explicitly incorporates the millennium development goals and their relevant targets to ensure that concerns relating to persons with disabilities become an integral part of efforts to achieve the goals.

**UN Convention on the Rights of Persons with Disabilities, Article 24 (2006).** The Convention obliges State Parties to recognise the right of persons with disabilities to education, without discrimination and on the basis of equal opportunity. In doing so, “States Parties shall ensure an inclusive education system at all levels and lifelong learning” for (i) “[t]he full development of human potential and sense of dignity and self-worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity”, (ii) “[t]he development by persons with disabilities of their personality, talents and creativity, as well as their mental and physical abilities, to their fullest potential”, and (iii) “[e]nabling persons with disabilities to participate effectively in a free society”.

**Regional implementation of the Biwako Millennium Framework for Action and Biwako Plus Five towards an Inclusive, Barrier-free and Rights-based Society for Persons with Disabilities in Asia and the Pacific, 2010.** UNESCAP resolution 64/8 called for greater coordination and collaboration among United Nations agencies and regional organizations in order to support member States in implementing the Biwako Millennium Framework for Action and Biwako Plus Five, and to incorporate the perspective of persons with disabilities in actions aimed at achieving the Millennium Development Goals, so as to ensure that a rights-based approach to disability is adopted.

**World Education Forum, 2015 (UNESCO, 2015).** The Incheon Declaration explicitly addresses not only the humanistic rationale of education for people with disabilities, but the economic rationale as well; “[t]he failure to provide inclusive education for learners with disabilities is striking, not only from the right to education perspective, but also from a human capital investment logic”. Consistent with earlier guidelines, the Incheon Declaration calls for greater multisectoral collaboration for an “effective inclusive education system”. In

addition, it calls for the diversification of non-state engagement in education in addition to the central role of the State in the provision of education, in part to relieve pressure on public financing as well as to work with the changing dynamics of international cooperation, which has seen “a multiplication and diversification of development partners and a proliferation of non-governmental organizations... multilateral aid agencies and funds, as well as emerging donors introducing new patterns of South-South and triangular cooperation”. This calls for greater coordination at both the national and global levels, “in the monitoring of education as a shared responsibility and in the regulation of education as a public good”.

#### 2.1.4. Why People with Disabilities should be educated

Education necessarily needs a purpose in any society. In order to give us access and insight into the construction and justification of contexts and settings of education, it is important for us to question the purpose of education itself. This is a fundamental step that compels us to reconsider and reflect what we are trying to achieve with our educational arrangements and structures. In doing so, it propels us forward into making justified decisions about what makes for the most conducive processes and interactions between actors, as well as what makes for relevant and appropriate content and curriculum (Biesta, 2010).

Education seeks to contribute toward and serve society; its purposes can therefore lie in multiple dimensions and domains. As illustrated in Figure 2-6, Biesta (2010) argues that the purposes of education can be categorised into three simultaneous domains, which should always be reflected upon in considering the purpose(s) of any education; these three conceptions should take place in a balanced dynamic, without an excessive emphasis on any single domain.

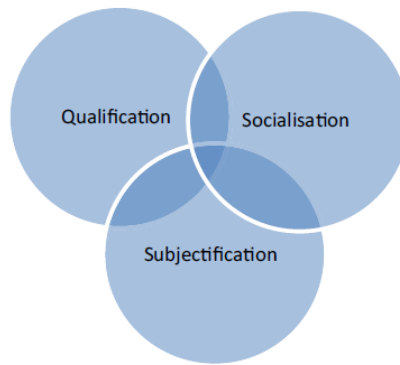


Figure 2-6 Three functions of education and three domains of educational purpose

Source: Biesta, 2010, p.78.

Qualification is a major function of education that seeks to transmit and acquire knowledge, skills, and dispositions, so as to qualify learners and enable them to ‘do’ something. This ‘doing’ can refer to life skills and/or vocational education, or more broadly to general education, which eventually seeks to prepare children and young people to live in modern society (Biesta, 2009; 2010). Socialisation is a two-edged sword in its educational function; it seeks to initiate the young in cultural, political and/or religious traditions and ways of being and doing, but can also work to reproduce existing social structures, divisions and inequalities (Biesta, 2010). Subjectification of the individual seeks to enable those have been educated to go through processes of individualisation and “become more autonomous and independent in their thinking and acting” (Biesta, 2009, p.41). Another empirical research demonstrates that the purpose of education for students with intellectual disabilities in Europe is for them to become skilled and knowledgeable citizens (Hansson, 2015).

#### 2.1.5. Inclusive Education & Disability Studies

Inclusion is not only one of the ends of education, it also serves as a means to *how* the purposes of education should be achieved. The social justification for inclusive education is based on the premise that inclusive schools serve as a platform for all children to come together and learn, in spite of, and to learn from their differences. Inclusive schools are, in essence, miniature models of society at large. Schools are one of the first social institutions that our young enter. Taking a rights-based and inclusive approach, where we seek to include different groups of people (people with disabilities, various ethnicities, various religious, etc.),

we should seek to reflect that inclusion in schools for our young.

The educational justification for inclusive education is based on the premise that creating inclusive schools where all children learn together necessitates developing ways of teaching that can be tailored to the various needs of all children. This is consistent with child-centred learning, where children benefit most when education and teaching is provided to them based on their needs, and is beneficial for all children.

The economic justification for inclusive education is based on the premise that it is less costly to establish and maintain inclusive schools (where all children learn together) than to establish different types of schools specialising in different groups of children.

Inclusive education is not an end in itself, it is something that we progress towards; rather, it is a precondition of a democratic education (Knight, 2000).

‘Inclusion’ has become a subject of debate internationally (Peters, 2003). The concept has become confused and lost its clarity, meaning different things to different people (Slee, 2004). For some, inclusion is still viewed as an attempt to move away from segregated provision for students with disabilities to creating mainstream placements for them. For others it is a broader concept concerned with identifying and removing barriers to participation and achievement for all students (Booth and Ainscow, 2002), therefore maximising the participation of all in mainstream schools (Allen, 2003) and demanding radical changes within schools (Barton, 1997; Grimes, 2009).

Inclusive education refers to the process of including all students to access education in schools, as well as improving the quality of students’ learning and participation in schools and classrooms, by restructuring the cultures, policies, and practices of schools and societies, such that they are able to respond to and accommodate the diversity of students in their locality. That is to say, there is no one fixed model of how inclusive education ought to be; an inclusive education system is effective, efficient, and successful, as long as it serves the diversity of students in its locality.

## Section 2. A BIOECOLOGICAL SYSTEMS THEORY OF HUMAN DEVELOPMENT & EDUCATION FOR CHILDREN WITH DISABILITIES

In order to understand the system supporting a child’s development, an analysis of the ecology of development should engage directly with existing programmes and policies

that are aimed at promoting development (Bronfenbrenner, 2005). A fundamental basis of this study is that education serves as a process and tool for individual and social development of children with disabilities. This utilisation of the bioecological systems model thus provides a framework for the comprehensive analysis of education programmes and contexts for children with disabilities.

*Human development* here is defined as the process through which the person acquires a deeper and more differentiated understanding of the ecological environment within which the person exists, and is then driven to take action to reveal the intricacies of the system, thereby maintaining or restructuring the environment to further feed their growth and development (Bronfenbrenner, 1979).

In order to say that human development has taken place, “development validity” must be verified—it is necessary to verify that a change in the person’s perceptions or actions of their environment also happens and continues to exist in other settings and times (Bronfenbrenner, 1979, p.35). The ecology of human development is thus,

*“the scientific study of the progressive, mutual accommodation, throughout the life course, between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded”*  
(Bronfenbrenner, 1979, p.21).

Coming from the field of psychology, Bronfenbrenner (1979) argued that the “marked asymmetry... focusing on the properties of the person and only the most rudimentary characterization of the environment” (Ibid., pp.12-3) is one that needs to be overcome, such that substantial and/or equal emphasis is given to the two elements of the person and the environment.

The ecology of human development thus lies at the convergence of multiple academic disciplines, as it seeks to look at the development of the person in society. With its interdisciplinary and integrative focus, the bioecological model of human development specifically draw upon the age periods of childhood and adolescence (Bronfenbrenner & Morris, 1979, 1986).

Bronfenbrenner’s conception of the first ecological model was inspired heavily by Elder’s work on life-course development; subsequent evolutions of the bioecological model

drew upon and deepened the discussion the four defining principles of Elder's life-course theory:

1. "*Principle of historical time and place*", whereby the life course of individual is defined and influenced by life and historical events,
2. "*Principle of timing in lives*", whereby the impact of events is dependent on when they occur in a person's life,
3. "*Principle of linked lives*", whereby lives are interdependent and the impact of social or historical events are manifested in the network of shared relationships, and
4. "*Principle of human agency*", whereby individuals have the capacity to act independently and make free choices, within the opportunities and limitations of their circumstances. (Elder, 2008, cited in Bronfenbrenner & Morris, 1986, pp.821-2).

#### *Person-in-environment & Development-in-context*

Bronfenbrenner's bioecological systems model is also influenced by Lewin's emphasis on "the evolving nature and scope of perceived reality as it emerges and expands in the child's awareness and in his active involvement with the physical and social environment" (Bronfenbrenner, 1979, pp.9-10). When a person is born, s/he is aware only of their family as the immediate environment (microsystem), where the focus of attention and developing activities are centred in. As implied by Piaget's concept of perceptual constancy, Bronfenbrenner reputed that as the child grows, s/he becomes increasingly aware of relations and/or events in settings that do not include their active participation. In this way, the developing child begins to recognize their existence and develops an emerging sense of the mesosystem, thereafter the exosystem, and eventually the macrosystem.

This lays the basis for the "phenomenon of *development-in-context*" in Bronfenbrenner's framework. As a systematic study of human development in the human context, the bioecological systems theory provides a single but delineated conceptual framework to describe and interrelate "structures and processes in both the immediate and more remote environment as it shapes the course of human development throughout the life span" (Bronfenbrenner, 1979, pp.11-12).



### *Process-Person-Context-Time*

Adding to Elder's four principles, Bronfenbrenner & Morris assert a fifth *principle of time*, whereby "changes over time... are not only products, but also "*producers* of historical change" (1986, p. 822). This now serves a major characteristic of Bronfenbrenner's bioecological systems model, with four defining properties—PPCT (Process-Person-Context-Time) (Bronfenbrenner & Morris, 1986; Bronfenbrenner, 2005)

*Process* serves as the core of the model, encompassing various forms of interaction between the child and the environment. These *proximal processes* operate over time and are "the primary mechanisms producing human development". The power of these proximal processes in influencing the development of a child is "a function of the characteristics of the developing *Person*, of the immediate and more remote environmental *Contexts*, and the *Time* periods, in which the proximal processes take place" (Bronfenbrenner & Morris, 1986, p.795).

These proximal processes are also powerful engines of development, as they explicitly concern "applications to policies and programs pertinent to enhancing youth and family development" (Bronfenbrenner & Morris, 1986, p.794, 825).

### *The role of the family*

Bronfenbrenner argues that "the heart of our social system is the family" (Bronfenbrenner, 2005), as children need the consistent and reliable care of their parents and other adults caring for them. However, in order to be able to provide that quality of care, parents need the support of the system and society as a whole, and this forms the social fabric of our ecosystem and environment. He thus advocates that "if we are to maintain the health of our society, we must discover the best means of nurturing that heart", and urged for the creation of policies that would support the primary caregiver in their role in the child's development (Ibid., p.199, p.122).

One central theme of this model is thus that not to shy away from giving parents all the support to do what they want and need to do, as if "we are reluctant to assume responsibility for supporting parents, the price of that reluctance can be seen in... trends that weaken the values we hold dear" (Bronfenbrenner, 2005, p.199).

True to his beliefs, Bronfenbrenner was the co-founder of the US Head Start

Program<sup>1</sup>. With the aim of stopping child poverty, Head Start enabled families with low incomes to access advice and support in areas related to health and nutrition and increased parental involvement in the education of their children. Bronfenbrenner's played an influential role in the introduction of the Head Start Program in America in 1965, and today, this federal child development programme remains one of the most successful and longest-running programmes (Ibid.).

The field of educational development is driven by local, national, or global context, but strongly centred in the mission of providing education for all (EFA). The 'marked asymmetry' of this field is its focus on the environmental context and only an elementary focus on the properties of the person. This utilisation of Bronfenbrenner's bioecological systems model can thus help to overcome this 'marked asymmetry'. This focus on the properties of the person becomes significantly more pertinent since the study looks at children with impairments.

Utilising this model can also help to illuminate 'ecological niches', which are "regions in the environment that are especially favorable or unfavourable to the development of individuals with particular personal characteristics" (Bronfenbrenner, 2005, p.111). In other words, this allows for both the identification and greater understanding of exclusionary barriers and transformative dimensions concerning access to quality education.

### 2.2.1. Individual level

The individual bio-level emphasis of the influence of personal characteristics on one's own development is inspired by Lewin's and Piaget's work. Bronfenbrenner reputed that as the child grows, s/he becomes increasingly aware of relations and/or events in settings that do not include their active participation, eventually developing an emerging awareness of and active involvement in the mesosystem, thereafter the exosystem, and eventually the macrosystem.

Gradually, the person acquires a deeper and more differentiated understanding of the

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<sup>1</sup> Head Start is a program of the United States Department of Health and Human Services that provides comprehensive early childhood education, health, nutrition, and parent involvement services to low-income children and their families.

ecological environment, and is then driven to take action to maintain or restructure the environment within the opportunities and limitations of their circumstances, so that it is more compatible with his abilities, needs, and desires.

Development at the individual level is influenced by personal attributes, i.e. developmentally instigative characteristics. At the individual level, the bioecological model regards a person as:

*“an active agent who contributes to his or her own development. Correspondingly, personal characteristics are distinguished in terms of their potential to evoke response from, alter, or create the external environment, thereby influencing the subsequent course of the person’s psychological growth.”* (Bronfenbrenner, 2005, p.121)

There are three types of Person characteristics, which are distinguished as “most influential in shaping the course of future development through their capacity to affect the direction and power of proximal processes through the life course” (Bronfenbrenner & Morris, 1986, p.795-6).

First, *dispositions*, or *force characteristics*, trigger and sustain proximal processes. Of the three Person characteristics, dispositions are the most likely to influence future development. Dispositions or force characteristics are categorised into two types: developmentally generative force characteristics and developmentally disruptive force characteristics. The former include positive dispositions, such as curiosity, tendency to initiate and engage in activity alone or with others, readiness to pursue long-term goals, etc. Conversely, developmentally disruptive force characteristics include negative dispositions, such as feelings of insecurity, shyness, general tendency to avoid or withdraw from activity, distractibility, aggression, etc. (Bronfenbrenner & Morris, 1986)

Next, *resource characteristics* are necessary for the effective occurrence of proximal processes, which “involve no selective disposition to action, but constitute biopsychological liabilities and assets that influence the capacity of the organism to engage effectively in proximal processes” (Bronfenbrenner & Morris, 1986, p.812). Positive resource characteristics, or development assets include ability, knowledge, skill, and experience that help to extend the domains of proximal processes. Negative resource characteristics, or conditions that “limit or disrupt the functional integrity of the organism” include genetic

defects, low birthweight, physical handicaps, severe and persistent illness, or damage to brain function through accident or degenerative processes” (Bronfenbrenner & Morris, 1986, p.812).

This group of characteristics is imperative in any research that undertakes a study of people or children with disabilities, and is also a decisive justification for the relevance of the ecological systems model as a framework to explore and identify various patterns of inclusive education. One direct course of this application is exploring how children’s impairments limit or disrupt their access to education and learning in the classroom.

Finally, *demand* characteristics have the capacity to “invite or discourage reactions from the social environment that can foster or disrupt the operation of proximal processes”, e.g. a smiley baby versus a frowning one, attractive versus unattractive physical appearance (Bronfenbrenner & Morris, 1986, p.812).

The differentiation and combination of these three forms of Person characteristics can be used to shed light on difference(s) in proximal processes and developmental effects. Additionally, Bronfenbrenner and Morris also pointed out that due recognition must be given to the three demographic factors of age, gender, and ethnicity, as “they are so pervasive in affecting future development that their possible influence routine needs to be considered in relation to the particular phenomenon under investigation” (1985, p.814).

### 2.2.2. Micro level

The microsystem refers to a pattern of activities, social roles, and interpersonal relations experienced by the developing person in a given face-to-face setting with particular physical, social, and symbolic features that invite, permit, or inhibit, engagement in development, and containing other persons with distinctive characteristics of temperament, personality, and systems of belief (Bronfenbrenner, 1979; Bronfenbrenner, 1994; Bronfenbrenner, 2005). Examples of micro-level settings (where the child is an active participant) are the family, the class, and the school.

Bronfenbrenner also emphasises that when applied to education research, the *principle of reciprocity* of this model is especially significant. This principle is concerned with mutual accommodation and influence between a child’s learning and his/her environment. Education research utilising the bioecological systems model should thus look not only for the influence of the parent on the development of the child, but also for the effect of the child on

the actions of the parent (Bronfenbrenner, 1976).

### 2.2.3. Meso level

The meso-level or mesosystem is “a system of microsystems”, and refers to “the linkages and processes taking place between two or more settings containing the developing person” (Bronfenbrenner, 2005, p.148; 1979, p.25). For example, a child’s mesosystem can refer to the relations between his family and his school (both of which he is actively participates in). In his 1986 essay, Bronfenbrenner raised (i) the Family and the Hospital, (ii) the Family and Day Care, (iii) the Family and the Peer Group, and (iv) Family and School, as some mesosystem models. He also argues for strong parental support networks and collaboration between the home and the school.

In looking at the dynamics of family setting in relation to other or broader social contexts, Bronfenbrenner raises five topics: (i) social class—family’s occupational status, parents’ education, family income—(ii) families in the community, (iii) family and geographic mobility, (iv) television and the family, as well as (v) family, poverty, and unemployment (1986, pp.735-737).

### 2.2.4. Exo level

The exo-level or exosystem refers to “one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by, what happens in the setting containing the developing person” (Bronfenbrenner, 1979, p.25). Some exosystem models highlighted by Bronfenbrenner include: (i) Family and Work, (ii) parental support networks, and (iii) the Family and the Community (1986, pp.722-32). In the Cambodian context, the Family (micro-level setting) and the Village (exo-level setting) can also be observed as an exosystem model.

### 2.2.5. Macro level

The macro-level or macrosystem may be thought of as “a societal blueprint for a particular culture, subculture, or other broader social context” and is defined as “the

overarching pattern of micro-, meso-, and exosystems characteristic of a given culture, subculture, or other broader social context, *with particular reference to the developmentally instigative belief systems, resources, hazards, lifestyles, opportunity structures, life course options, and patterns of social interchange that are embedded in each of these systems*” (Bronfenbrenner, 2005, p.149-50).

Macrosystems should also be conceived and examined not only as social infrastructure and structures, but also as “carriers of information and ideology that, both explicitly and implicitly, endow meaning and motivation to particular agencies, social networks, roles, activities, and their interrelations” (Bronfenbrenner, 1976, p.5). In this sense, Bronfenbrenner identifies that social classes, ethnic or religious groups, or persons living in specific regions or communities can also constitute as macrosystems if “patterns of belief and behaviour... are passed on from one generation to the next through processes of socialisation” (Bronfenbrenner, 2005, p.150).

However, in line with the development-in-context concept of the bioecological systems model, Bronfenbrenner points out that every macrosystem is unique to its context. The concept of the macrosystem includes “not only the subculture in which the person has been raised but also the subculture in which the person lives” (Bronfenbrenner, 2005, p.159). In such cases, a contrast of macrosystems is useful for understanding the structure and substance of the macrosystem.

In the Cambodian developmental aid context, foreign governments and NGOs are long-time actors, and have deep roots and influence in Cambodian society. In this regard, the two macrosystems of local and global governance<sup>2</sup> interplay and manifest in the daily lives of the Cambodian people. The international community and its actors have been actively contributing to education for children (with disabilities) in Cambodia, alongside many other development agenda. To some extent, there is collaboration between local and international programmes, but there still exists a deep fragmentation of programmes and overlap of agenda across various regions of the country.

One of Bronfenbrenner’s hypothesis of proximal processes occurring across the levels of the bioecological systems model is that its power in developing the developing child “will

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<sup>2</sup> Global governance is defined here as “the complex of formal and informal institutions, mechanisms, relationships, and processes between and among states, markets, citizens and organizations, both inter- and non-governmental, through which collective interests on the global plane are articulated, Duties, obligations and privileges are established, and differences are mediated through educated professionals” (Weiss and Thakur, 2006).

be greater in advantaged and stable environments than in those that are disadvantaged and disorganized” (Bronfenbrenner & Morris, 1986, p.819), highlighting the need for stable and effective macrosystems to support and facilitate proximal processes.

#### 2.2.6. Chrono level

The chrono-level or chronosystem refers to the time dimension that occurs across the levels of the bioecological systems model, i.e. how the ecology of a developing person changes over time, and can include the impact of life transitions on proximal processes and/or the development of the child (Bronfenbrenner, 1986). More specifically, microtime refers to the continuity (or not) of episodes of proximal process; mesotime refers to the period of these episodes across broader time intervals; and macrotime focuses on “the changing expectations and events in the larger society, both within and across generations, as they affect and are affected by, processes and outcomes of human development over the life course.” (Bronfenbrenner & Morris, 1986, p.796)

#### 2.2.7. Application of the Bioecological Model in Education & Disabilities

Sontag (1996) argues that the use of Bronfenbrenner’s model is a comprehensive approach to the study of development in children with disabilities, particularly due to the inclusion of Person characteristics, hierarchical levels of ecological systems of influence, as well as the dimension of time (Sontag, 1996). The inclusion of children with disabilities as active agents bring the ‘developing person’ to the forefront of the bioecological systems model, bringing attention to the role of children with disabilities. This would “shift the traditional investigative focus from generalized descriptions of the individual as a person with disabilities to more detailed characterizations of the children” (Sontag, 1996, p.338).

For fields whose focus lie more within the classroom and school context, as well as the broader education system (i.e. education development), this comprehensive analytical model is highly applicable, since it requires a close examination of the contexts and the larger system, allowing the identification of possible intervention strategies. For those more focused on micro interactions, it allows for logical expansion into examination of larger contexts, which has not conventionally been done in special education research (Malouf & Schiller, 1995; Sontag, 1996). Utilising respondents’ perceptions and participatory observations can

also serve to facilitate our understanding of the mechanisms in the nature and reciprocity of interactions between the child and environment (Sontag, 1996).

Moreover, Sontag argues that shifts towards increasing inter-relations and complexity in the child's environment is casting doubt on whether the individual person approach will continue to be relevant and serve the needs of disability studies, where the traditional research focus is on the individual person with disability. In this line, Bronfenbrenner's approach will enable scholars of this field to make sense of a potentially complex reality, and to describe unique ecological niches that support the development of children (Sontag, 1996, p.339).

Anderson et al. (2014) applied the model in studying inclusive education (see Figure 2-7 **The Ecology of Inclusive Education. Source: Anderson et al., 2014.** and reflected that “the theory offers an invaluable framework with which to organise the environmental factors and understand their influence on inclusivity by placing the learner at the centre and each contributory factor is located in relation to the learner's educational ecosystem—resulting in the ecology of inclusive education” (Anderson et al., 2014, p. 28).

Aligned with the social model of disability that recognises the need for the system and its infrastructure to be adapted to meet the needs of people with disabilities, the examination of the environment and factor that sit within using bioecological systems model imply that it is the environment and the processes occurring that influence whether or not a student is delivered an effective inclusive education.



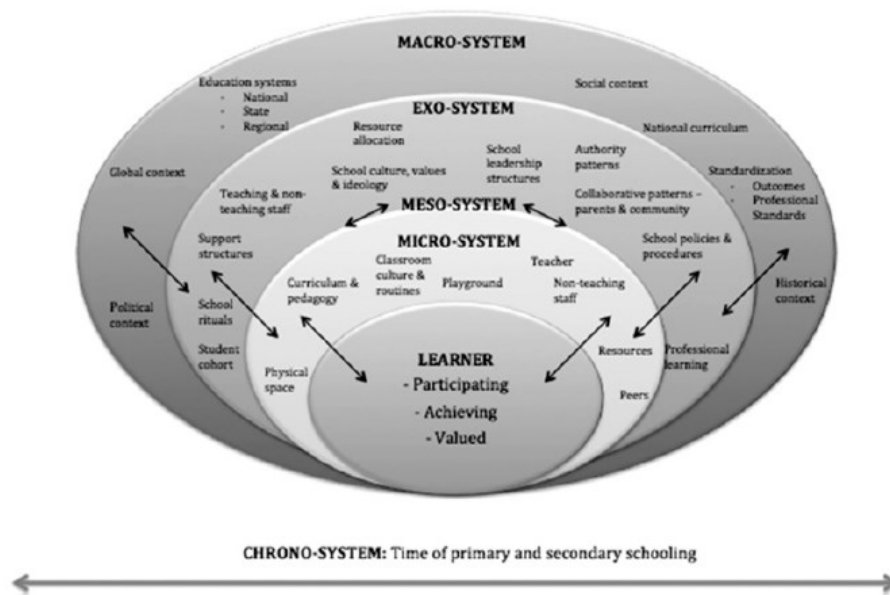


Figure 2-7 The Ecology of Inclusive Education. Source: Anderson et al., 2014.

Among the factors influencing the delivery of inclusive education, its amount of influence is dependent upon how much importance is placed on it, by those responsible for the system within which it is situation. The macrosystem, however, is influenced by local and international contexts. The chrono-system sits outside the other systems and represents the constant and consistent movement of time. It provides opportunity for reflection, change, reform and evolution of the factors that sit within each system; an essential component of the framework as inclusive education is a dynamic and evolving process. Thus, the ecology of inclusive education assumes multiple levels of influence that are invariably interactive, while reinforcing either IE or exclusionary practice.” (Anderson et al., 2014, p.30)

Schools tend to be contextually very diverse environments, making research potentially challenging. Inclusive education itself is also a complex construct with multiple interpretations. The re-conception of Bronfenbrenner’s theory as the *ecology of inclusive education* thus provides researchers with an operational yet theoretical framework within which they can situate their work, as well as the flexibility to explore various aspects as signalled by the data they have. The ecology of inclusive education allows for both quantitative and qualitative studies, studies at a single point in time or longitudinal, and across

any number and type of school settings. In terms of focus, the framework is also capable of supporting comparative studies, whether the focus be on systemic, institutional or ideological aspects of inclusive education (Anderson et al., 2014).

Geldenhuys and Weavers (2013) studied the implementation of inclusive education in mainstream primary schools in the Eastern Cape of South Africa, based on analysis of qualitative data using Bronfenbrenner's ecological systems model. Through a comprehensive analysis of ecological aspects that influenced the implementation of inclusive education in the Eastern Cape, they were able to conclude that implementation was severely hindered at the macro-level due to the lack of coordination between actors at various levels of the education system, inappropriate training, and lack of a common vision for inclusive education.

At the lower levels of the ecological system, they identified multiple aspects interfering implementation, including the lack of early identification and no proper assessment, little individualised attention, the neglect of learners left behind in learning, and limited collaboration and cooperation between microsystems, enabling them to identify ecological niches for intervention. They were thus able to deliver various policy and strategy recommendations at the various levels.

Another study based in a developing country that applies Bronfenbrenner's ecological systems model to study the influences and contexts involving children with disabilities is Ben-David and Nel's study in rural Kwa-Zulu Natal (2013). They focused on children with visible physical disabilities using qualitative and ethnographic methods. Based on analysis of the various levels and settings using the ecological systems model, they identified fragmentation of the (social support) system as one of the negative influences. In light of this, they argued for greater community participation (at the meso- and exo-levels) in people-centred strategies to facilitate the development of children with physical disabilities.

Singal (2006) also utilised Bronfenbrenner's ecosystemic multi-level approach to explore the various meanings of inclusive education in the Indian context, by focusing on the perceptions and experiences of social actors of inclusive education in India. Singal acknowledged that due to limitations, this research design was not able to take into consideration the dimension of time at the chrono-level. Based on Bronfenbrenner's earlier model of ecological systems, Singal considered that since the classroom teacher is the key person in shaping inclusion (include micro level of teacher practices), the ecosystem framework can be adapted to place the classroom teacher at the heart of the system. However, the study did not appear to reference Bronfenbrenner's later model (from 1994) that

developed to include the characteristics of the child affecting his/her own development.

Sharing a similar country context with Cambodia, Singal's analysis of the Indian education ecosystem revealed the tensions such as those rising from the influence of international developments on national contexts, the fragmented nature of efforts for inclusive education, lack of involvement of and collaboration between practitioners and teachers, and the lack of a common inclusive culture. The identification of these tensions and disjunctions will in turn make it possible to explore underlying assumptions, values and beliefs that are hindering efforts for inclusion (Singal, 2006).

What do our children with disabilities in those societies need within that system to thrive? What do family systems in Cambodia and other developing countries need to grow and succeed? What can the system do to support these? There can be patterns to those answers, but no generalisations. This study's analysis using Bronfenbrenner's bioecological model seeks to provide local answers from comprehensive contextual analysis in Cambodia, which can in turn contribute to identifying patterns of providing education for children with disabilities in future. The use of this model in this study is expected to bring to light current processes that are already undergoing in Cambodia but limited in scale, and thus identify feasible developmental mechanisms that can support and facilitate the education of children with disabilities in developing countries such as Cambodia.

### Section 3. COMMUNITY-BASED PROGRAMMES FOR INCLUSIVE EDUCATION

Community-based rehabilitation (CBR) programmes is the brainchild of the World Health Organization (WHO), and serves as one of the strategies for inclusive education and other related services targeting children with disabilities that is very much based in the grassroots. Fundamentally, the strategy seeks to respect and promote the rights of all people, not only as an end in itself but also as the means for development. CBR programmes do so by enabling the inclusion and participation of people with disabilities and their families, while also ensuring that their basic needs for social, economic, and physical facilities and/or services are met. As a multi-sectoral strategy, it is implemented through the collective will and effort of people with disabilities and their families, communities, relevant governmental and non-governmental agencies and services in health, education, vocational, and social sectors.

The idea of inclusive education can only flourish and sustain in an inclusive

community that embraces, among other things, the inclusion of children with disabilities to become active members of their own society. An inclusive community advances its own concerns and requires the adaptation of processes, structures and procedures. This allows for the accommodation of the needs of people with disabilities instead of expecting them to fit into with existing structures. In doing so, the community reflects on how current policies, laws, and practices affect members of their own community (ILO, UNESCO, WHO, 2004). Many governments today recognise CBR as an effective strategy for meeting community needs in health, education, income-generation, employment, community development, and programmes targeting people with disabilities living in rural areas (ILO, UNESCO, WHO, 2004; Carter, 2009; UNICEF, 2013).

CBR programmes are often initiated from outside of the community, but community action itself is the initiative of local communities. For this, the community needs to be aware and convinced of the necessity of the CBR programme in question, with other partners of the community taking the management leadership to provide relevant support, training, access to services, and mobilising resources. In CBR programmes so far for people with disabilities, the focus has been on (i) raising awareness of their needs in the community, (ii) obtaining and sharing information about available services, (iii) collaborating with relevant sectors to provide coordinated and comprehensive services for people with disabilities, (iv) promoting the inclusion of education, social, and work spaces, as well as (v) mobilising funds for the above activities (WHO, 2004).

CBR programmes essentially also work with other partners in the community, especially organisations of people with disabilities (DPO) (WHO, 2004). DPOs play meaningful roles in the initiation, implementation, and evaluation of CBR programmes. They not only serve as the primary voices of people with disabilities in the community, but also serve to educate people with disabilities of their rights. In order to participate fully serve their function in developing their communities, DPOs need to be empowered with the capacity to do so.

Promoting the inclusion of people with disabilities in schools and other places of education requires adapting the curriculum and teaching methods to meet their needs. CBR programmes targeting the inclusion of children with disabilities in schools can thus provide assistance in supporting schools and teachers in adapting themselves to provide quality education for children with disabilities. This can be facilitated by the sharing of knowledge and skills within schools and teachers in the community. Schools with existing special

resources and/or teachers can also function as resource schools in the community, and work together with regular schools to include and provide quality education for children with disabilities.

CBR programmes in the education sphere are now carried out in many countries, including Botswana, Ghana, Kenya, Lesotho, Namibia, Tanzania, Zimbabwe (Kisanji, 1999), Laos (Inthirat & Thonglith, 1999), as well as Vietnam (Tran & Tran, 1999). These programmes facilitate formal inclusive schools (Inthirat & Thonglith, 1999; Kisanji, 1999) and special schools (Tran & Tran, 1999). They are mostly initiated and supported by the government (Inthirat & Thonglith, 1999; Tran & Tran, 1999), and in some cases, first initiated by NGOs before being increased in scale by the government (Kisanji, 1999).

By virtue of being community-based, CBR programmes tend to be limited in scale and dependent on non-governmental donors. In this sense, collaboration with the government can serve to increase the sustainability and impact of a CBR programme. WHO (2004) noted how CBR programmes with stronger links to governmental structures have greater impact and are more sustainable than those working alone. Allocation of national resources generally takes place in two ways: the direct allocation of budget to support the CBR programme, or including the CBR programme as a component of governmental development programmes and strategies. For either of this to be possible, alignment with national policies is necessary. Additionally, a solid management structure, the support of different government ministries, NGOs and other stakeholders are also important for sustainability. A study of CBR programmes in various countries revealed that the common elements contributing to greater project sustainability include:

- (i) “national level support through policies, co-ordination and resource allocation,
- (ii) recognition of the need for CBR programmes to be based on a human rights approach,
- (iii) the willingness of the community to respond to the needs of their members with disabilities, and
- (iv) the presence of motivated community workers” (WHO, 2004).

That said, multi-sectoral collaboration is essential to address the local needs of people with disabilities, to support the management of CBR programmes, and to strengthen the role of DPOs. For this collaboration to take off, the smooth exchange and sharing of information between the sectors is also necessary.

As observed in CBR programmes to date, the collaboration of the various sectors in CBR programmes has also necessitated a national level co-ordinating body (WHO, 2004), the structure of which is dependent on government preferences. In addition to collaboration between government ministries, collaboration is needed between the national, intermediate and community levels to ensure that services are appropriately developed and delivered (WHO, 2004).

Even when CBR programmes collaborate with governments, it is important for other sectors of the community to actively ensure the community's access to support services and resources. WHO's study of CBR practices (2004) have shown that both local and international NGOs can make significant contributions to the development of CBR alongside the government, by initiating and scaling up localised programmes and training CBR programme management.

## Section 4. THE CAMBODIAN CONTEXT

### 2.4.1. General Background

Cambodia's population is approximately 15.2 million people, with an annual population growth rate of 1.79% from 1998 to 2014. Birth registration has been adopted in Cambodia to support national planning and to provide evidence of every birth, stillbirth, death, adoption and marriage and provide a secure repository for public records. An estimated 74% of all children aged 0-4 years are registered with a birth certificate in Cambodia; this percentage is highest in Phnom Penh, at 91%, followed by the other urban areas, at 78%, and other rural areas, at 71% (CSES, 2014).

The Khmer population is the largest ethnic group in Cambodia. The percentage of the Khmer population in Cambodia is an estimated 96%, followed by Cham, the second largest ethnic group, constituting about 2% of the population (CSES, 2014). Similar to country data on other marginalised populations such as people with disabilities, there is a lack of reliable demographic, socio-economic, and cultural information on ethnic minorities in Cambodia (Sokhon, 2004). Within the ethnic minority or indigenous population, there are two ethno-linguistic families: the Austro-Thais (or Malayo-Polynesians) and the Mon-Khmer. The first comprehensive study on ethnic groups in Cambodia was published in French by Frédéric

Bourdier in 1996 later reproduced in English.

Appendix 5 shows the geolinguistic classification of the main ethnic groups in Cambodia and their locations. As part of the country's development movement after the Khmer Rouge regime, the Government has encouraged the Khmer population to migrate to the less densely-populated highlands, and this trend of migration continues today.

Based on UN's classification of World Bank's data, the UN Committee for Development Policy has designated Cambodia as one of the (current) 48 countries designated as least developed countries (LDCs) since 1991 (UN DESA, 2016; UNCTAD, 2015). About 20.4% of Cambodia's population live near multidimensional poverty<sup>3</sup> (2,935 thousand), 30.4% live in multidimensional poverty (approximately 4,373 thousand), and 16.4% live in severe multidimensional poverty (approximately 2,359 thousand) (approximate figures are based on author's calculations from UNDP 2015).

Cambodia's Human Development Index (HDI) value for 2014 is 0.555 (ranked 143 out of 188 countries), putting it in the medium human development category; between 1990 and 2014, Cambodia's HDI value increased by about 52 percent. Cambodia's HDI of 0.555 is below the average of 0.630 for countries in the medium human development group and below the average of 0.710 for countries in East Asia and the Pacific. Countries which are close to Cambodia in the 2014 HDI rank and comparable in terms of population size are Lao People's Democratic Republic and Myanmar, which have HDI values of 0.575 (ranked 141) and 0.536 (ranked 148) respectively (UNDP, 2015). When adjusted for inequality, Cambodia's HDI value falls to 0.418, indicating a human inequality coefficient of 24.6% for Cambodia. (Refer to Appendix 1.)

Rapid economic development has led to increasing inequality between the rich and the poor masses (WB, 2008), and about 90% of Cambodia's poor live in rural areas (Bailey and Nguon, 2014). Figure 2-8 below shows the average monthly disposable incomes of households and breaks it down based on location (rural or urban). Figures indicate that the average monthly disposable incomes of households in Cambodia is approximately 351 USD, with those in the capital having average monthly disposable incomes twice that of the country's average (about 698 USD), and those in other rural areas having average monthly disposable

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<sup>3</sup> In 2010, UNDP introduced the MPI (Multidimensional Poverty Index) in the Human Development Report, which identifies combined deprivation (indicated by deprivation scores in percentage) in the same households for multiple dimensions of education, health and living standards. Percentage:  $20 \leq$  deprivation score  $< 33.3$ , near multi-dimensional poverty;  $33.3 \leq$  deprivation score  $< 50$ , multi-dimensionally poor; deprivation score  $\geq 50$ , severe multi-dimensional poverty.

incomes approximately 20% lower than the country’s average (about 284 USD). The average monthly disposable incomes of households in Cambodia have been increasing at an accelerating rate by about 93% from 2009 (Figures based on author’s calculations from CSES 2014 data, and conversion rates are based on FX Exchange Rate.)

Domain	CSES 2009	CSES 2010	CSES 2011	CSES 2012	CSES 2013	CSES 2014
Cambodia	736	877	871	1,014	1,231	1,424
Phnom Penh	2,016	1,944	1,793	1,870	2,498	2,836
Other urban	1,089	1,468	1,158	1,493	2,103	1,858
Other rural	554	676	713	813	928	1,155

Figure 2-8 Average monthly disposable income per household by location, ‘000 Riels  
Source: CSES, 2014.

Similar to other developing countries, accurate and up-to-date data on the population and situation of people with disabilities in Cambodia is not readily available. To understand the current situation that people with disabilities face, one has to put together and draw a picture from the bits of official governmental data on people with disabilities (CSES, 2004; Ministry of Planning, 2010), as well as various reports by international and/or non-governmental organisations (UNESCAP, 2002; Knowles, 2005; Handicap International, 2009; Kleinitz, et al., 2012), and independent studies (Gatrell, 2004; Thomas, 2005; VanLeit, et al., 2007; Carter, 2009; McColl, et. al., 2010).

Cambodia does not have a standardised disability classification system, although Ministry of Social Affairs, Veterans and Youth Rehabilitation, as well as the Ministry of Planning have an operational definition for their data collection and policies. The operating classification system has nine categories: seeing difficulties, hearing difficulties, moving difficulties, feeling difficulties, psychological difficulties (strange behaviour), learning difficulties, people who have fits, and others. Under this definition, a person with disabilities refer to “any person who lack, lose, or suffer impairment of their physical or mental being resulting in disturbance to their daily life or activities such as physical disabilities, visual, audio and mental impairments, consciousness disorders and other forms of disabilities resulting in an abnormal state” (MoSVY, 2008), the disability prevalence rate in Cambodia is estimated to be 4.7% of the entire population (Knowles, 2005).

The Southeast Asian region has the second highest prevalence rate for moderate disabilities and the third highest prevalence rate for severe disabilities (WHO, 2011; WHO,



2013). Based on 2014 data, the number of disabled persons was about 524,000 persons out of the approximate total population 15.2 million people, making the disability prevalence rate “[a]bout 4 percent of the total non-institutional population of Cambodia” (CSES, 2014).

Type of difficulty	CSES 2004	CSES 2009	CSES 2014
Seeing	1.5	3.9	1.7
Hearing	0.5	1.2	0.7
Speaking	0.2	0.3	0.2
Moving	1.1	1.6	1.1
Feeling or sensing*	0.4	0.4	0.2
Psychological	0.3	0.4	0.2
Learning	0.1	0.1	0.1
Fits	0.1	0.1	0.1

\*2004, 2014: “Feeling”, 2009: “Feeling or sensing”

Figure 2-9 Percentage of general population with disabilities, by types of disabilities.  
Source: CSES, 2014.

Causes of disease and old age constitute over 70% of the country’s disability cases (Author’s calculations based on data from CSES, 2014), and majority of the disability cases in Cambodia are preventable (Kalyanpur, 2007), which strengthens the case that the leading causes of disability in Cambodia are household poverty and the resulting lack of access to health services (Pitt, 2008). Further, children under the age of 5 in developing countries tend to be exposed to multiple risks, including poverty, malnutrition, poor health, and unstimulating home environments, which can impair cognitive, motor, and social-emotional development (Turkish Statistical Institute, 2002).

A strong correlation between disability and poverty has also been demonstrated; poverty leads to increased disability, and disability in turn leads to increased poverty. Thus, a majority of people with disabilities live in poverty. Studies show that they have higher rates of unemployment compared to non-disabled people even in industrialised countries. Majority of people with disabilities today live in developing countries, where the lack of access to health care and rehabilitation, education and training, as well as employment contribute to the vicious cycle of poverty and disability that they find themselves in (ILO, UNESCO, WHO, 2004).

As the country recovers from genocide and conflicts, Cambodia now has a population distribution skewed towards the young, and almost half of those with disabilities are under the age of 20 (VanLeit, et al, 2007). This makes the coming decades an excellent

window of opportunity, to develop these children to become productive adults of the working population to drive Cambodia's progress and economy. However, letting up on this window of opportunity will put a heavy burden on Cambodia's future economy and health sector.

Studies also show a pronounced disparity between the socio-economic levels of Cambodian households that have a child/person with disability vis-à-vis those without. One study of 500 households in Cambodia that have a child with disability showed that 49% of its respondents reported making less than the equivalent of 1 US dollar per day as compared to 34% of the general Cambodia population (World Bank, 2006; VanLeit, et al., 2007). The household wealth of families consisting of people with disabilities was estimated to be half that of the general population, and the individual income of people with disabilities (if any) was reported to be on average 65 per cent lower than their peers without disabilities (CSES, 2004; Knowles, 2005).

In examining Cambodia's health system in servicing people with disabilities, Kleinitz, et al. (2012) conducted a study of 98 participants all over Cambodia. Interviews with first conducted with sixty-three people with disabilities, health professionals, and administrators, and they identified five barriers and four facilitators of access to quality public health service. Thereafter, barriers to access were categorised for ranking by people with disabilities over focus group discussions. Results revealed that there were five main categories of barriers to access of public health services: (i) finances, including other hidden costs such as transport to health facility and cost of companion; (ii) quality of care, including skills, knowledge, and attitudes of health professionals; (iii) "user knowledge barriers", or lack of awareness of their rights and where to seek professional help and services; (iv) negative sociocultural beliefs and attitudes towards disabilities; as well as (v) difficulty of physical access to facilities, including long distance and lack of modes of transportation. Of these, participants ranked financial barriers as the most significant, followed by low quality of care, and thirdly user knowledge barriers (lack of awareness), as the top three barriers affecting their access to public health care services. Their study also demonstrated that these three factors were far more significant than the other barriers of negative sociocultural beliefs and physical barriers to access.

On the other hand, their study also revealed that there were factors that served to facilitate users' access to public health services. Namely, this required (i) data collection for the formulation of strong policies led by strong political will on issues concerning people with disabilities, (ii) enhanced coordination and collaboration between disability and health professionals and administrators, (iii) improved service quality, as well as (iv) empowerment

and meaningful engagement of people with disabilities.

Many of these points have also been raised by VanLeit, et. al. (2007). In their study of 500 households that have one child with disability, in the rural provinces of Siem Reap and Takeo, they identified two categories of barriers of access to services for children with disabilities. Informational barriers need to be addressed through early detection of health conditions, assertive outreach to raise awareness, involve and empower families to make decisions and solve their problems, as well as improved coordination and collaboration between public and private providers; practical barriers need to be addressed by strategies that enable families of children with disabilities, who are often poor, to afford to send their children to schools or hospitals. Their results also demonstrated that there was a gap in services and resources, as some forms of disabilities (particularly severe and multiple impairments, e.g. cerebral palsy) were met by very limited services and facilities, or not at all. They also reported an under-usage of existing resources by international and local NGOs, mostly because families were unaware of these available services. The study also reiterates that to be able to provide relevant services to children with disabilities, it is important for developing countries to collect accurate and up-to-date data for identifying children with disabilities and understanding their situations and difficulties.

#### 2.4.2. Education Situation & System of Cambodia

Cambodia's education landscape has undergone dramatic change in recent years as the country attempts to rebuild a system that was systematically destroyed during the Khmer Rouge period, but the devastating influence of Cambodia's pre-colonial history on education in Cambodia remains. The government estimates that 75% of teachers, 96% of university students, and 67% of all primary and secondary school pupils were killed during this period. Infrastructure and equipment were destroyed or abandoned and books were burned (Beneviste, et al., 2008; Kalyanpur, 2011; Šiška and Suchánek, 2015).

Looking at the relationship between Cambodia's education system, its development, and the state, Ayres described the pervasive problems in Cambodia's education system as a "crisis", which is deeply entrenched in the country's "tragic modern history" (Ayers, 2000, p.2). This notion of crisis in Cambodia's education system surfaced in 1960s, when expansive policies of education so as to bring about great social change was let down by the personal motivations of the then-Sihanouk government. This disparity between the education system

and the political system remains valid in today's Cambodia, reflecting the pervasive deprivation of quality education, which consequently robs the people of opportunities to engage and participate in society.

Cambodia's traditional education system was centred in religion, and based in the local wat (temple or pagoda), where children were taught by monks to read scriptures. Throughout the French colonisation, this method remained primarily through word of mouth, where literacy had little focus.

#### *Pre-1953: Education under French Colonialism*

Under French colonisation, however, the importation of Paris' education systems into Cambodian society directly undermined Cambodia's ideology of traditional religious education. The French educational system paid heavy attention to the elites, neglecting and excluding the masses of poor; this was highly incompatible to Cambodia's society, which traditionally places strong focus on social cohesion, values, and norms. Thus, the effective impact of education under French rule was minimally felt by the Cambodian majority.

#### *1953-1970: Education under Prince Sihanouk & Buddhist Socialism*

Prince Sihanouk began his governance of independent Cambodia, where he was driven to build a modern Cambodian nation-state. This period is characterised by two main issues: the failure of education policies, and the failure of policy practices and implementation, causing the education system to fester from within.

The French model of education (which was tailored to train small groups of administrative elites) was Sihanouk's model for the expansion of education. Its incompatibility to Cambodia's cultural society undermined Cambodia's traditional education system, where all students (albeit only the Buddhists) learned together at the local wats (temples). The expansion of education also took place too quickly for an equal improvement in the quality of education.

Secondly, the very modernity that Sihanouk sought led to the building of a social tension, as it simultaneously advanced the Cambodian peoples' belief to their right to both economic and political participation. This was outside of Sihanouk's expectations, as he then tried to deny political participation to enhance his own power and motivations on one hand, while advancing 'modernity' on the other.

### *1970-1975: Education under Lon Nol's Republican Regime*

The Khmer Republic period was one fraught by civil war, where infrastructure and human capacities were devastatingly destroyed, by Cambodian Republicans, Cambodian Communists, Vietnamese Communists (and their South Vietnamese enemies), as well as the United States. The population was estimated to be 7.7 million by the end of the civil war in 1976, with 800,000 fatalities and 240,000 people left impaired (Ponchaud, 1977; Brinkley, 2011). The basis of the education crisis in this period was the destruction of educational infrastructure, and of heavier consequence, capacities of the Cambodian people.

### *1975-1979: Education under Pol Pot's Democratic Kampuchea Regime*

In pursuit of a rural utopia, the Khmer Rouge abolished money and private property, destroyed schools, and forced city dwellers (a good portion of whom are educated—students, teachers, and scholars) to the countryside to cultivate the fields. With more than half of Cambodia's workforce still employed in subsistence farming and agriculture today, and many of those living in rural or remote areas being deprived of quality education opportunities, the effects of the Khmer Rouge regime can still be felt. After the Vietnamese (PRK) army's defeat of the Lon Nol's revolutionary regime, Cambodia's population had dwindled down to 5 million, with more than 10% left disabled (Brinkley, 2011).

During this period, there was a devastating impact on education, both in terms of suffering and the psychological impact on the pupils, teachers, and communities. For Cambodia, this meant not merely the degradation of the education system and its infrastructure, but the destruction of it.

More critically, “[i]t is the accumulated backlogs in human and institutional capacity that add most significantly to the burden of post-conflict reconstruction” (World Bank, 2005, p.18). During this period, with the educated being driven off and/or killed, forced to hide their identities in the name of survival, even from loved ones, human and institutional capacity-building—the lifeblood of any education system—deteriorated. The restoration of intangible capacities of human and institutions are far more challenging than addressing the destruction of physical infrastructure. It is this aspect, of human and institutional capacity-building, that education plays an immense role in the social reconstruction in Cambodia.

### *1979-1993: Education under the People's Republic of Kampuchea (PRK)*

Also known as ‘the Emergency Period’ where the Vietnamese installed the PRK, this period is marked by the education crisis it had inherited from the Khmer Rouge Regime, the civil war, and the Democratic Kampuchea (DK) period<sup>4</sup>. Cambodia’s international isolation during this period also meant that essential development assistance was denied.

Upon coming in power, the top priority of PRK was “rapid educational expansion”, and “[w]ith educational expansion given priority over qualitative progress or improvement, the seed for the growth of a sustained crisis in education had been sowed” (Ayes, 2000, p.148).

Expansionist educational policies were successful with increasing quantities, as can be seen from growth to over 10,000 school buildings across the country (MoEYS, 2013; Sitha, et al., 2016). However, these were not always accompanied by an equal improvement in quality, as can be seen from poor learner performance (RGC, 2003). As such, till today, they suffer from the leftover legacy of being almost empty shells with a form but very little substance. This has been detrimental in improving Cambodia’s educational situation, as it not only fails to contribute to the situation, but in fact, magnifies the problem through the mere quantifiable increase of ‘unsuccessful school systems’.

Here, the World Bank (2005, p.47) points out that, “[i]t is important to acknowledge that quality improvement is a process and requires an ongoing commitment”. In the desire to act quickly, post-conflict situations sometimes place an excess focus on increasing access to education, without giving much thought to ensuring its quality. As discussed earlier, where the deterioration of intangible capacities as a result of conflict is more abstract to deal with, as to reversing the destruction of physical infrastructure, “the most profound and lasting impact of conflict on education was on quality rather than on access”. As such, “[t]he deterioration in quality, which represents one of the most significant challenges to reconstruction, should be a consideration from the outset” (World Bank, 2005). Other than coming up with sound policies, committed leadership and political will are the defining factors to the success of the education system.

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<sup>4</sup> Democratic Kampuchea period is marked by 3 characteristics:

- (i) Egalitarianism replacing traditional social hierarchy
- (ii) One group of leaders replacing a prior group of leaders within the social hierarchy
- (iii) Reversal of the traditional social hierarchy

### *1993-Now: Education in Modern Cambodia*

The “tension between modernity and tradition and between development and state-making” in Cambodia’s education policy has been the major obstacle of its progress (Ayres, 2000, p.3). Even as its leaders acknowledge a good education system as essential for the country and its people to progress, their pursuit of modernity for Cambodia has been stumped by their unwillingness to relinquish power. Despite embracing progress, Cambodian leadership has been unable to embrace the sharing of power that comes along with modernity. This lack of political will and commitment to implement sound educational policies is a distinct characteristic of Cambodia, since its pre-colonial days.

This limitation of Cambodia’s formal public education system leads us to explore the possibilities of the informal education system in Cambodia that is primarily led by international bodies and NGOs.

One such example is, Save the Children (Norway), which aims to build the capacities of individual Cambodian learners, through providing primary schooling, buildings, teacher training using sustainable techniques, and library resources for thousands of primary schoolchildren. They target an area in the far north of Cambodia, which until 1998 remained ‘hidden’ since the Khmer Rouge regime, and still remains difficult to access to today.

Another local initiative taps onto the role of the local grassroots community, to encourage community initiatives, and build on the capacity of those who run schools. New Horizons in Learning (Morefield, n.d.) is one such organisation that looks into school leadership professional development in Cambodia, through facilitating leadership workshops for school administrators. Most of these school administrators were teachers, who were instructed to take up leadership positions in schools, usually without any form of appropriate training. As such, they became mere puppets of the higher administration by doing what was centrally instructed. However, through such informal professional development, they have been increasingly able to take ownership of their schools, and independently consider the best policies for their schools, teachers, and students.

Figure 2-10 shows the education structure in today’s Cambodia. Primary education from Grades 1 to 6 is compulsory in Cambodia, preceded by 3 years of early childhood education, and followed by 3 years of lower secondary education. Basic education comprises of primary and lower secondary education, and students thereafter divide into two tracks: 3 years of upper secondary education or vocational education. Higher education is an option available to those who have undertaken upper secondary education. Aside from formal

education, non-formal education at the grassroots level is also actively spearheaded by NGOs.

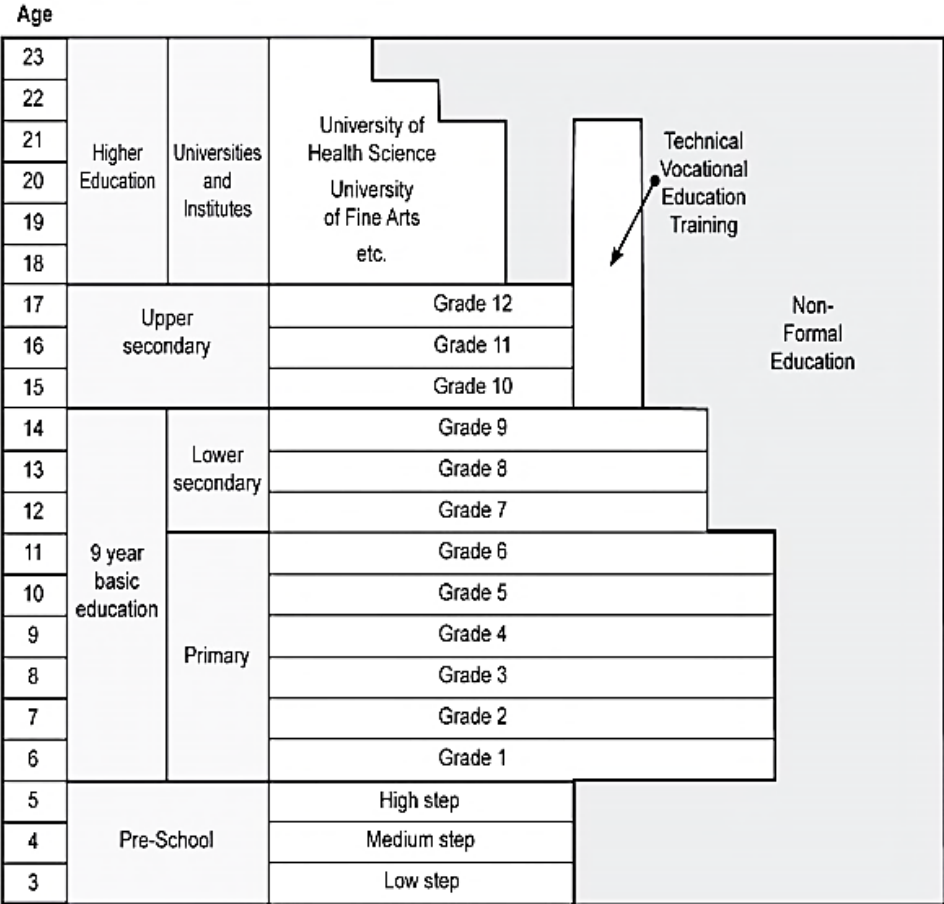


Figure 2-10 Education Structure in Cambodia  
Source: CSES 2014.

Domain	CSES 2004			CSES 2009			CSES 2014		
	Women	Men	Both sexes	Women	Men	Both sexes	Women	Men	Both sexes
Cambodia	75.9	77.2	76.6	82.1	80.2	81.1	85.5	84.1	84.8
Phnom Penh	87.2	90.1	88.8	89.3	89.9	89.6	86.7	89.2	88.0
Other urban	80.5	80.7	80.6	87.7	81.3	84.5	84.2	87.2	85.7
Other rural	74.5	75.8	75.2	80.9	79.2	80.1	85.5	83.3	84.4

Figure 2-11 Net attendance rates in primary school by location and sex, %  
Source: CSES 2014.

The net attendance rate in primary school for children aged 6-11 years has increased by about 8 percent in the last ten years (2004-2014), with a 10 percent increase among women



and 7 percent increase among men. Figure 2-11 shows the net attendance rate in lower secondary school for children aged 12-14 years. As indicated, the net attendance rate in lower secondary school in 2014 is much lower than in primary school. In Phnom Penh, about 62 percent of women and 59 percent of men have continued to study at lower secondary school. These rates are larger compared to other urban and other rural areas. The net attendance rate is higher for women than men in all areas in Cambodia. The net attendance rates in lower secondary school have increased in all areas in the last ten years (2004-2014), especially in the other urban and other rural areas, with about 25 percent each, respectively.

Age group	CSES 2004			CSES 2009			CSES 2014		
	Women	Men	Both sexes	Women	Men	Both sexes	Women	Men	Both sexes
6+	29.3	16.0	22.9	24.9	13.6	19.5	20.5	11.4	16.1
6-14	15.4	15.0	15.2	10.7	12.1	11.5	7.7	9.5	8.6
15-24	17.5	11.5	14.5	10.5	8.4	9.5	6.9	6.4	6.7
25-34	28.6	17.2	23.1	23.9	14.5	19.4	16.2	9.7	13.0
35-44	36.8	19.7	28.9	29.9	16.0	23.3	25.8	14.7	20.4
45-54	40.3	16.9	30.5	39.5	19.8	30.8	36.1	19.4	28.4
55-64	57.3	17.6	40.6	44.6	15.8	32.3	38.9	16.4	29.8
65+	82.9	34.9	63.1	77.6	27.5	56.8	66.8	24.7	49.7

Figure 2-12 Persons who never attended school by age group and sex, %.  
Source: CSES 2014.

Figure 2-12 shows the percentage of the Cambodian population aged 6 years and above who have never attended school by age groups and sex. As indicated, the percentages of the population who have never attended school have decreased in the last ten years (2004-2014). More women than men have never attended school in all age groups except for the age group 6-14 years, which fewer men than women have never attended school. There are significant differences in geographical domains as well as between men and women. In Cambodia in 2014, 16 percent of the population aged 6 years and above has never attended school. The rate is lowest in Phnom Penh, at 5 percent only, and the rates in other urban and other rural areas are higher, at 11 percent and 19 percent, respectively. Overall, the percentage of women who have never attended school is higher than the corresponding percentage for men in all areas in Cambodia, but this difference has decreased over the last ten years.

Reasons for not attending school	Women	Men	Both sexes
<b>CSES 2009</b>			
Don't want to	11.3	17.5	14.4
Did not do well in school	11.5	13.2	12.4
No suitable school available/school is too far - No teacher/Supplies	6.0	6.8	6.4
High cost of schooling	0.2	0.1	0.1
Must contribute to household income	18.6	13.9	16.2
Must help with household chores	13.3	8.1	10.7
Too poor	15.9	15.9	15.9
Due to disability - Due to long term illness (over 3 months)	2.2	2.6	2.4
Too young	17.4	18.9	18.2
Other	3.5	3.0	3.3
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>CSES 2014</b>			
Don't want to	15.9	21.9	19.0
Did not do well in school	8.7	12.7	10.8
No suitable school available/school is too far - No teacher/Supplies	5.0	4.1	4.5
High cost of schooling	0.0	0.0	0.0
Must contribute to household income	33.9	24.5	29.1
Must help with household chores	8.1	4.8	6.3
Too poor	9.6	12.3	11.0
Due to disability - Due to long term illness (over 3 months)	1.8	2.5	2.1
Too young	16.2	16.1	16.2
Other	0.8	1.0	0.9
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>

Figure 2-13 Reasons for not attending school among persons aged 6-17 years, by sex, %.  
Source: CSES, 2014.

Approximately 34 percent of women and 25 percent of men answered that, they would not be able to attend school, because they must work to contribute to household income. This first indicating reason is higher in 2014 than in 2009 for both women and men. The second most common reason they cite is that they do not want to go to school, at 16 percent of women and 22 percent of men. Being too young to go to school is the third most common reason, at 16 percent of non-attending men and women alike. However, the reason that prevented them from going to school is due to the poverty-stricken effects in the families, which also constitutes about 16 percent in 2009 and 11 percent in 2014.

Sex	CSES 2004	CSES 2007	CSES 2008	CSES 2009	CSES 2010	CSES 2011	CSES 2012	CSES 2013	CSES 2014
Women	28.0	33.8	35.9	36.2	38.4	41.7	42.6	43.4	45.5
Men	48.0	52.7	53.6	54.1	56.5	59.2	59.6	59.2	60.1
Both sexes	37.3	42.7	44.1	44.7	47.0	50.0	50.7	50.9	52.5

Figure 2-14 Primary School Completion Rates, by sex, %.

Source: CSES, 2014.

The primary school completion rate has been steadily increasing, which constitutes about 53 percent in 2014 from 37 percent in 2004. More men than women had at least completed primary school in 2014 and the gap between women and men has remained at 15-20 percent since 2004.

Sex/ Type of Disability	Educational Level (Percent)*											
	Number	Total	Literate	Illiterate	Not Reported	Total	None	Primary Not Completed	Primary	Lower Secondary	Secondary /Technical Diploma	Beyond Secondary/ Technical Diploma
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
<b>Total Disabled</b>												
<b>Both Sexes</b>												
Total	289,917	100	57.54	42.46	0	100	0.82	55.68	30.88	2.26	9.39	0.96
In Seeing	99,811	100	67.68	32.32	0	100	0.74	56.63	27.18	2.15	11.57	1.72
In Speech	14,646	100	26.86	73.14	0	100	0.00	66.28	26.33	0.00	3.39	4.00
In Hearing	26,866	100	48.97	51.03	0	100	0.00	68.64	19.38	0.00	9.86	2.11
In Movement	98,361	100	61.51	38.49	0	100	0.88	51.43	37.10	2.97	7.63	0.00
Mental Retardation	15,198	100	25.95	74.05	0	100	6.31	71.33	17.09	1.61	3.67	0.00
Mental illness	20,527	100	47.18	52.82	0	100	0.00	48.52	37.27	2.43	11.78	0.00
Other	9,869	100	61.79	38.21	0	100	1.49	57.50	33.57	3.70	3.74	0.00
Multiple Disabilities	4,638	100	41.87	58.13	0	100	0.00	44.15	40.51	0.40	14.94	0.00
<b>Males</b>												
Total	152,710	100	68.37	31.63	0	100	0.57	49.55	34.11	2.74	11.68	1.34
In Seeing	47,201	100	78.61	21.39	0	100	0.18	47.19	30.93	2.67	16.06	2.97
In Speech	6,446	100	28.81	71.19	0	100	0.00	46.14	45.52	0.00	7.18	1.15
In Hearing	11,621	100	65.99	34.01	0	100	0.00	63.41	23.19	0.00	9.77	3.63
In Movement	63,946	100	70.27	29.73	0	100	0.98	50.01	37.50	3.32	8.18	0.00
Mental Retardation	5,597	100	31.54	68.46	0	100	0.00	74.12	15.33	3.59	6.96	0.00
Mental illness	9,545	100	52.65	47.35	0	100	0.00	26.91	48.57	3.81	20.72	0.00
Other	5,693	100	80.28	19.72	0	100	1.99	55.10	35.50	2.43	4.99	0.00
Multiple Disabilities	2,663	100	55.79	44.21	0	100	0.00	57.72	22.24	0.52	19.53	0.00
<b>Females</b>												
Total	137,206	100	45.48	54.52	0	100	1.24	65.93	25.47	1.47	5.56	0.32
In Seeing	52,611	100	57.88	42.12	0	100	1.42	68.12	22.63	1.51	6.12	0.20
In Speech	8,200	100	25.33	74.67	0	100	0.00	84.27	9.17	0.00	0.00	6.55
In Hearing	15,245	100	36.00	64.00	0	100	0.00	75.96	14.05	0.00	9.99	0.00
In Movement	34,415	100	45.23	54.77	0	100	0.58	55.53	35.92	1.94	6.03	0.00
Mental Retardation	9,601	100	22.70	77.30	0	100	11.42	69.06	18.51	0.00	1.00	0.00
Mental illness	10,982	100	42.42	57.58	0	100	0.00	71.82	25.08	0.96	2.14	0.00
Other	4,176	100	36.57	63.43	0	100	0.00	64.70	27.81	7.49	0.00	0.00
Multiple Disabilities	1,975	100	23.10	76.90	0	100	0.00	0.00	100.00	0.00	0.00	0.00

\* Excludes "Not reported" and "Other" educational levels

Figure 2-15 Percent Distribution of Literate Disabled Population Aged 7 and over by Educational Level, Cambodia, 2013

Source: CIPS, 2014, p.39.

In 2013, the literacy levels of persons with disabilities in seeing, in movement and in other are higher than the national average of 58.03 for the total disabled population. The literacy rate of disabled in hearing is 28 percent points less than the national average. The literacy rates of those disabled in speech (46.86), the literacy rate of persons mentally illness disabled (48.07) and the literacy rate of persons in multiple disabled (44.70) are much below the national average. The literacy rates of those with intellectual disabilities (26.08) is the

most less than other type of disabilities and the national average (CIPS, 2014).

Based on 2014 data, the average annual expense for children at the primary level in Cambodia is 314,000 Riels (approximately USD), a six-fold increase from 2004; the expense for those studying in Phnom Penh is approximately three times the average annual expense in other rural areas (Author's calculations from CSES 2014 data).

A study of 500 households that have a child with disability revealed that of the 500 children with disabilities, 55% of school-aged children attended public schools, but many of them tend to drop out in the early grades from Grades 1 to 4 (VanLeit, et al., 2007). However, according to World Bank sources (2006), the primary school completion rate for Cambodia is 81%, suggesting that there is a severe under-representation of children with disabilities in official data.

Similar to people with disabilities, ethnic minorities in Cambodia face significant exclusionary barriers to education. A study by ADB (2002) reported that ethnic minorities have significantly lower education status and encounter more barriers than the average population. Formal education policies for ethnic minority hill tribe communities (Ratanakiri and Mondulakiri) began in the 1960s, where the Government provided basic education to remote and rural communities to promote development and integration of those areas. In addition to issues of providing education common throughout Cambodia, these regions face further problems such as difficulty in attracting and retaining teachers, limited number of trainable people, lack of teachers and students, difficulty in accessing schools located at geographically inconvenient locations, and the language barrier. Ethnic minority children are also less likely to go to school than Khmer children due to the family's poverty level, the distance from their homes to schools, the lack learning materials, and because ethnic minority children are often called upon to work to ease their families' financial burden (ADB, 2002).

Ethnic minorities have also expressed that while formal education is not so appropriate to them, non-formal education is "interesting to them because they can be active participants and the curriculum is based upon their priorities" (ADB, 2002, p.31).

#### 2.4.3. Policies & Current Practices of Education for Children with Disabilities

As raised in Section 2.1.3, norms for international policies of education for people and children with disabilities were established since the 1960s. In light of these international trends, Cambodia began including policies targeting people and children with disabilities in the 2000s. The 2008 Policy on Education for Children with Disabilities (MoEYS, 2008)

sought to establish a clear direction and vision to ensure the educational rights for children with disabilities. Articles 65 and 66 of Cambodia’s Constitution encouraged and promoted special education for disabled persons (Constitutional Council, 2010). The 2008 Education Law thus specifically calls upon special education and the provision of special education services for children with disabilities. There was a shift in the current 2014 Education Strategic Plan, whereby MoEYS now seeks to expand an inclusive education program for children with disabilities in public and community schools (MoEYS, 2014).

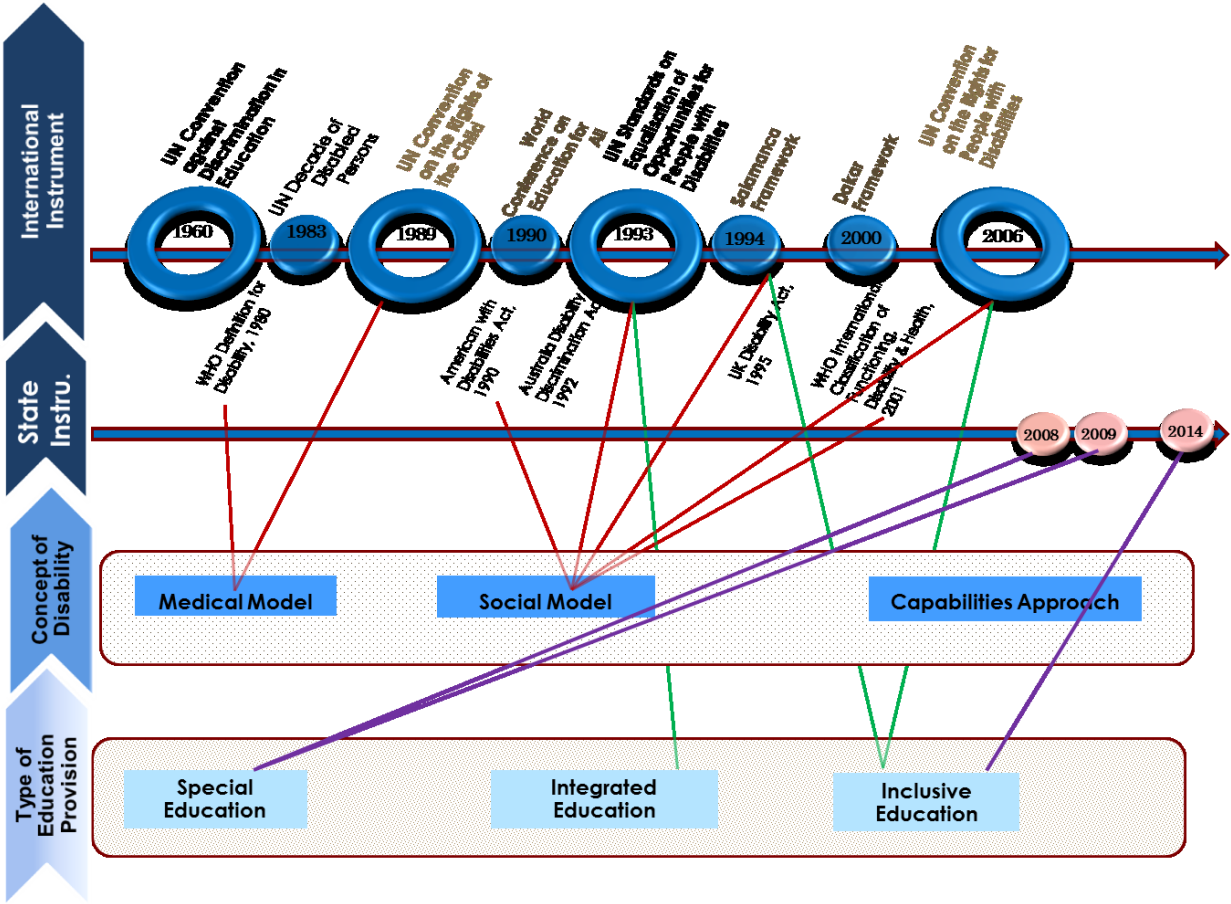


Figure 2-16 Cambodia’s State Instruments for Educating Children with Disabilities in the Context of International Trends. Source: Author.

The Disability Action Council (DAC) serves as the national coordination and advisory

mechanism on disability issues established in 1997 as a semi-autonomous organisation responsible for implementing the national policy on disability so as to strengthen the implementation of the Law on the Protection and Promotion of the Rights of Persons with Disabilities, and promoting the enhancement of rights and welfare of the disabled according to the United Nations Convention on the Rights of Persons with Disabilities. (RGC's Rectangular Strategy Phase III, 2013: DAC website). The Prime Minister serves as DAC's Honorary President; the Council is led by a President (Minister in Charge of Social Affairs) and five vice presidents from the government sector (Secretaries of State from MoSVY, MoH, Council of Ministers, Ministry of National Defense, and Ministry of Interior), as well as a sixth vice president (necessarily a person with disability) representing an organisation serving the interests of people with disabilities (DAC website).

The Council's work is divided between five units: the unit for administration and finance, the unit responsible for securing the rights of persons with disabilities, the unit for coordinating welfare and developing rehabilitation policies or programmes, the unit responsible for developing policies for the integration of persons with disabilities, as well as the unit responsible for developing and coordinating sign language, Braille, assistive technologies, and other platforms for people with disabilities.

At Cambodia's central level of government, policies for people with disabilities is straddled between the Ministry of Social Affairs, Veterans and Youth Rehabilitation (MoSVY) and the Ministry of Health, each symbolising the two contrasting constructs of disability: the social model of disability (MoSVY) and the medical model of disability (MoH). On top of focusing on policies assisting people with disabilities, MoSVY also works with NGOs running educational programs for children with disabilities. In terms of education policies, the Ministry of Education, Youth and Sports (MoEYS) administers all state education policies and programmes. In line with the Education Strategic Plan (ESP) and Education Sector Support Program (ESSP), the Special Education Office was established within the Primary Education Department of MoEYS in 2000, to oversee the educational development of disadvantaged groups of children (including children with disabilities), to ensure that all Cambodian children will receive a nine-year basic education by 2015.

Cambodia continues to have issues with both access and quality of education. Based on the 2004 Cambodia Socio-Economic Survey (CSES), 2.6% of boys and 2.9% of girls aged between 5 and 17 years old are out-of-school children due to some form of disability, and 68% of all of them are not enrolled in primary and secondary education (UNESCO-IBE,

2010). From 2000 to 2001, MoEYS implemented an inclusive education pilot project (focusing on children with disabilities) in one cluster school in Svay Rieng province, in collaboration with the Disability Action Council (DAC) and funded by UNICEF (MoEYS, 2008). They established Provincial Implementation Teams to manage, coordinate, and monitor the pilot project. By the end of this period, it expanded to 14 cluster schools and 80 schools across 15 provinces. However, MoEYS acknowledged that the inclusive education project implementation was not as successful as expected, “due to a lack of time and technical expertise... PIT members were unable to provide the necessary support to teacher”. This serves as another case where an expansionist education policy in Cambodia was not met by a sufficient improvement in quality, resulting in the failure of the policy.

Articles 65 and 66 of Cambodia’s Constitution declare the state’s role in protecting and promoting quality education at all levels to all citizens, in order to ensure that all citizens have an equal opportunity to earn their own living. Articles 38 and 39 of the Education Law drafted in 2008 states that, “[t]he state encourages and promotes to have **special education** for disabled persons and outstanding learners who are gifted and/or talented. Disabled learners have the same rights as able learners and have separate special rights as follows: disabled learners of either sex have the right to study with able learners if there is sufficient facilitation in the study process for the disabled learner to fulfil the educational program of the educational institutions; disabled learners with special needs have the rights to receive additional teaching in the regular educational program, which is not a particularly special educational program. Disabled learners who are not able to learn with abled learners have the right to receive special education in separate special classes. These disabled learners can study at community schools in their locality.” The 2008 Education Law thus specifically calls upon special education and the provision of special education services for children with disabilities.

However, up until the Policy on Education for Children with Disabilities drafted in March 2008, educational arrangements for children with disabilities have largely remained outside state policies, and NGOs have borne most of the responsibility in providing education to children with disabilities. The 2008 Policy on Education for Children with disabilities has four aims and six strategies.

Aims:

1. Increase awareness and acceptance of disabilities among communities, relevant institutions and stakeholders

2. Provide early identification and intervention through rehabilitation services, such as physiotherapy, and health services, e.g. immunization, to all children with disabilities from birth to five.
3. Provide **quality education, life skills** or **vocational training** to children and youth with disabilities equitably and effectively.
4. Increase enrolment, promotion and survival rates in the schools.

Objectives	Strategies
Identify and enrol [sic] all children with disabilities in all communities in Cambodia	Identify and enroll [sic] children with disabilities.
To provide children with disabilities educational services appropriate to their needs, such as health, community rehabilitation and modifications of educational services from pre-school to lower secondary school.	Implement early intervention and other services to children with disabilities.
To ensure all children with disabilities the same guarantees of health and safety in their lives at schools, in families and communities.	Provide the opportunity for, and implement, an inclusive education program.
To ensure all children, especially girls with disabilities, access to schools and their participation in all school and social activities similar to non-disabled children.	Increase the enrolment [sic] of girls with disabilities.
To increase awareness and acceptance of disability, and the needs of children with disabilities, within communities and among stakeholders to provide the education of children with disabilities.	Raise awareness about understanding of disability.
To ensure support for the education of children with disabilities effectively from all levels of the education system.	Support program from the education system.

Figure 2-17 Objectives and Strategies of Educating Children with Disabilities in Cambodia. Adapted by Author.  
Source: Policy on Education for Children with Disabilities (MoEYS, 2008).

While the 2008 Education Law and Policy for Children with Disabilities have managed to establish a clear direction and vision to ensure the educational rights for children with disabilities, MoEYS' current focus is primarily to ensure children with physical disabilities' access and participation in regular schools (Carter, 2009).



Articles 17 and 27-32 of the Law on the Protection and the Promotion of the Rights of Persons with Disabilities (2009) calls for information dissemination, sensitisation towards (the types of) disabilities, provision of training and resources, as well as setting up relevant facilities. Specifically, Article 17 calls for the provision of “education and training on the causes of disabilities”; Article 28 outlines the State’s responsibility to “develop policies and national strategies for the education of pupils and students with disabilities”, including promoting inclusive education for pupils and students with disabilities to the utmost extent possible, establishing special classes to respond to the needs of pupils and students with disabilities.

In another demonstration of Cambodia’s recent progression toward inclusive education, Cambodia ratified the Convention on the Rights of Persons with Disabilities in 2012. In terms of Education for All (EFA) millennium goals, Cambodia has achieved in the following six ways as of the end (UNESCO Phnom Penh, 2015):

1. Expanded and improved early childhood care and education; the percentage of enrolled children aged five years old increased from 6% in 1999 to 61.4% in 2015.
2. Increased primary school enrolment rate (for all Cambodian children) from 87% in 2001 to 97.9% in 2015.
3. Improved adult literacy levels and life skills training programmes for youth; adults’ literacy rate increased to 80% in 2013 and literacy rates for youths (aged 15 to 24) increased from 76% in 1998 to 93% in 2013.
4. Reduced gender disparities; the gender parity index of actual rate of study at primary education increased from 0.87% in 2001 to 1.01% in 2015.
5. Efforts to improve all aspects of quality of education (teacher qualification and training, school facilities and learning resources, as well as learning assessments and system monitoring).

The Education Strategic Plan (ESP) was developed for implementation from 2014 to 2018 to develop human capital to push for Cambodia’s transformation into an upper-middle income country by 2030, and a developed nation by 2050. This Plan highlights the State’s strong awareness and clear vision of the role of the Cambodian people and human capital as it rebuilds from its past conflicts and catapults into the future. Specific points for action concerning children with disabilities include (i) collecting out-of-school children (including children with disabilities) and building non-formal education and implement measures to

reduce the number of out-of-school children with target programmes, (ii) revise the master plan to help children with disabilities, particularly at the primary level, and (iii) increase enrolment of children aged 0 to under six years old, and expand inclusive program for children with disabilities in public and community pre-schools.

However, stepping into the new phase of working towards the 2030 education agenda, Cambodia's Minister of Education highlighted some long-term priorities (excerpt of unofficial translation, UNESCO Phnom Penh, 2015):

1. To ensure Cambodian children and youth are provided with 12 years of quality and equitable access to education for free (primary and secondary levels), providing at least one year of early childhood education or care service, and creating opportunities for out-of-school children and drop-outs to re-access school services.
2. To resolve all forms of discrimination, gaps, and inequality, for disadvantaged groups including children with disabilities, such that they can access educational services to learn and gain knowledge.
3. To ensure gender equality in accessing quality education.
4. To improve the quality of education and learning outcomes of students through ensuring quality teachers, and having a focus on both cognitive and non-cognitive skills.
5. To provide opportunities for lifelong learning through the provision of vocational education and higher education.
6. To promote the fields of sciences, technology, innovation, as well as the use of Information and Communication Technologies (ICT) in strengthening the education system.

In line with this, the Minister highlighted five priority areas for action: (i) implementing the Teacher Policy Action Plan, (ii) monitoring and reviewing the curriculum and core textbooks, and review the learning environment, (iii) setting up the implementation of inspectorate, (iv) improving assessment and evaluation of learning outcomes, and (v) higher education reforms.

Cambodia faces a chronic problem of teacher shortage—particularly in rural areas (Geeves and Bredenberg, 2005), and the education system has been slow in providing professional teacher development or effective pre/in-service education and training (UNESCO Phnom Penh, 2010). In line with the National Strategic Development Plan 2014-2018 (RGC,

2014) and the Teacher Policy (MoEYS, 2015), the Teacher Training Department of MoEYS came up with a Teacher Policy Action Plan (TPAP) for implementation in two periods: from 2015 to 2017 in the short-term; and from 2018 to 2020 in the medium term. Under the overarching goal to “develop teachers with quality, competencies and accountability in line with their professional code of conduct as well as providing enabling conditions to fulfil their profession effectively and efficiently”, the Teacher Action Policy Plan has four objectives and nine relevant strategies:

Objectives	Strategies
<i>(Overarching)</i>	Developing legislative instruments and mechanisms.
To attract and motivate competent persons into the teaching profession.	Attracting competent persons into the teaching profession.
To ensure quality of pre-service teacher training.	Defining the standards of teacher training systems.
	Developing teacher training centres
	Rationalising teachers to meet the needs of education institutions
To ensure regular professional development and in-service training for teachers.	Provision of in-service trainings and professional development
To ensure the conditions necessary for teachers to fulfil their professional activity effectively and efficiently. (MoEYS, 2015)	Motivating and retaining teachers in the system
	Strengthening effectiveness of school leadership
	Strengthening teacher monitoring and evaluation mechanism/systems.

Figure 2-18 Objectives and Strategies of Teacher Policies in Cambodia. Adapted by Author.  
 Source: Teacher Policy Action Plan (MoEYS, 2015).

The Teacher Policy Action Plan (MoEYS, 2015) also identified four main priority areas that the success of the TPAP hinges upon: teacher education and recruitment, (quality of) professional development, teacher management and career development, and the school

environment, based on an extensive study of existing conditions and regional best practices in working towards ESP 2014-2018.

Established in 2012, SIG (School Improvement Grant) is part of the scheme established under the Education for All Fast Track Initiative. However, guidelines for SIGs were earmarked as funds for improving female access, achievement, and completion of basic education among their priorities.

To provide ongoing financial and technical support for programmes targeting children with disabilities, UNICEF Cambodia spearheaded the 5-year Disability Rights Initiative Cambodia (DRIC), in partnership with UNDP and WHO. The Initiative expects to increase opportunities and participation of people with disabilities in social, economic, cultural and political aspects of society through effective implementation of the National Disability Strategic Plan (NDSP). Specifically, it seeks to (i) ensure the effective coordination and implementation of NDSP by the MoSVY and the Disability Action Council, in alignment with CRPD, (ii) ensure the effective representation of DPOs in advocating for the rights, needs, and priorities of people with disabilities, (iii) improve rehabilitation services for people with disabilities, and (iv) increased the capacity of and collaboration between sub-national decision makers, civil society, and communities (UNICEF, UNDP, and WHO, 2014).

Other local programmes by heavyweight international actors include the Sweden's development cooperation with Cambodia in a few areas, including education and employment, as well as World Bank's Fast Track Initiative Catalytic Fund Projects for Cambodia, as part of the Education Sector Support Scale Up Action Program (World Bank, 2010). With increasingly high international attention in this aspect and due to pressure exerted by the international community and aid partners, there is now a stronger political will to legally require and encourage the inclusion of children with disabilities into Cambodia's public education system (Kalyanpur, 2011).

UNESCO has also supported the Provincial and District Education of the Non-Formal Education Department for a pilot project on adult literacy for disadvantaged groups in rural remote areas of Ratanakiri, through income-generating activities that are relevant to their learning needs and their environment. The target population was children of primary school age, out-of-school youth, and adult illiterates of 6 hill tribes (Tampoun, Jurai, Kreung, Brao, Kachak, and Kravet) (ADB, 2002).

Another programme targeting ethnic minority children in Cambodia has also been spearheaded by CARE International in Cambodia, MoEYS, and UNICEF (Sun, 2008). A

bilingual education programme for ethnic minority groups is being carried out in Cambodia to address the problem of language barrier, through the establishment of community-governed bilingual primary schools. The programme sought to increase the primary completion rate of ethnic minority children, by providing class instruction in their mother tongues and gradually introducing the Khmer national language from Grades 1 to 3. CARE now produces its own in-house bilingual textbooks that are also approved by MoEYS. The success of this programme led to CARE-supported community schools gaining full registration with MoEYS.

#### 2.4.4. The NGO sector in Cambodia

VanLeit, et al. (2007) predicts that in Cambodia, a mix of public and private services provided by a mix of government actors, local and international NGOs, international organisations and governmental agencies, as well as other private providers, will continue to be an essential piece of the local development scene for many years.

The Cooperation Committee for Cambodia (CCC) plays the unique role of strengthening the cooperation, professionalism, accountability, governance, and development effectiveness of the Civil Society Organizations (CSOs) working across diverse sectors in Cambodia.

“Cambodia has a relatively large civil society community focused on serving the disability population. The Cambodian Disabled People’s Organisation (CDPO) is the peak body representing people with disability in Cambodia. There are a large number of DPOs, self-help groups (SHGs) and NGOs working in disability. There is, however, an absence of one informed and strategic ‘voice’ representing people with disability. There is a lack of dialogue between organisations (including INGOs, local NGOs and DPOs) as to who is doing what, where, why and how, and on opportunities to collaborate and reduce duplication. This includes areas such as rehabilitation. The low level of meaningful collaboration results in missed opportunities for civil society to advocate effectively as one voice.” (UNICEF, 2013).

Komar Pikar Foundation (KPF, or the Foundation for Disabled Children) is a local non-governmental organisation that develops programmes and strategies that meet the needs of Cambodian children and youth with moderate to severe disabilities, so that they can live dignified lives in inclusive communities (KPF website). All members currently serving on the KPF Board of Directors are Cambodians, and three out of five of them are people with

disabilities. KPF seeks to build the capacity of families to advocate for the needs of their own children and ensure their rights are respected. It does so through a sustainable community based rehabilitation programme, and actively collaborating with communities, government ministries, DPOs and other organisations, to facilitate the inclusion of all people with disabilities in society.

One of the more influential local NGOs, Krousar Thmey (initially funded by CBM-Australia) set up the Krousar Thmey School for the Deaf, which provides inclusive education for children with visual and hearing impairments at the pre-primary and primary level. The Krousar Thmey School for the Deaf stands out for its unique approach to the implementation of inclusive education, and pioneered the practice of conducting morning and afternoon sessions for children with visual and hearing impairments separately.

Krousar Thmey is the first Cambodian foundation for underprivileged children, and has its roots in a Cambodian refugee camp in Thailand. It has three programmes: education for deaf or blind children, child welfare for marginalised children, as well as cultural and artistic development for all. Krousar Thmey is the only organisation in Cambodia offering comprehensive education for deaf or blind children that also follows the national curriculum, and based on 2015 data, there are 600 deaf children and 350 blind or low vision children enrolled in one of their five schools and 73 integrated classes in public schools (Krousar Thmey website). The five schools are in Phnom Penh, Siem Reap, Battambang and Kampong Cham.

In order to provide this education, the foundation also created and developed Khmer Braille and sign language, alternative formats of school textbooks and specific training for teachers. Krousar Thmey's teaching syllabus follows the national curriculum, with additional English and computing lessons and instruction in Braille or sign language. 73 classes integrated into state schools around the country allow children with disabilities to attend school in rural areas. Kindergarten classes are being progressively opened in all schools.

The Braille department adapts and prints all the school textbooks from the national curriculum, transcribes documents using dedicated software, and prints them out on their own machines before distributing them to the various schools. The Sign Language Committee created the Khmer sign language and is in the process of perfecting it for full adaptation into school textbooks and the publication of a sign language dictionary. As part of its strategies of raising public awareness, committee members also interpret the news on national television to increase the exposure of the Khmer sign language, and organises campaigns around the

country to raise awareness about education for children with disabilities.

For her work on providing children who are blind with access to quality teachers, one of Krousar Thmey's teachers, Phalla Neang, was nominated and short-listed for the Global Teacher Prize in 2015. Today, it is the 10th best NGO in the field of education (Global Geneva) and won the Impact Award for Education in Asia-Pacific from the Stars Foundation. It was also named the 88th best NGO in the World (Global Journal), based on its impact, innovation and sustainability. In 2004, it opened its doors for the first time to deaf children at the pre-school level. In 1997, the first school for deaf children was opened, and in 2011, its first cohort of deaf children entered university. It has a career guidance service to facilitate the continued training, education, or job placements of its youth with disabilities.

In 2011, teachers of Krousar Thmey became officially recognised and registered as civil servants of Cambodia. Other local initiatives include the Rabbit School, which implements educational programs for Cambodian children with multiple and severe disabilities. Other domestic actors include Capacity Building of People with a Disability in the Community Organization (CABDICO) that has worked with 84 schools and 543 children with disabilities since 2009 and put 257 (47%) of these children into regular schools through ensuring that schools are well-adapted to the needs of children with disabilities and conducting teacher trainings on inclusive education in line with MoEYS training programs. Another local NGO, Cambodian Development Mission for Disability (CDMD), embarked on a new project ("Social Care and Inclusive Education for Children with disabilities Project 2013-2015") together with Catholic Relief Service (CRS) to increase the enrolment and attendance of children with disabilities in inclusive classes and has been implemented across 18 primary schools in the Takeo Province. Other international actors include Light for the World (INGO), which has established a Multi-Stakeholder Inclusive Education Pilot Programme in Cambodia, and World Bank, which conducts teacher training for inclusive education.

## **CHAPTER 3. RESEARCH METHODOLOGY**

This third chapter thus seeks to provide an explanation of the methodology adopted in this study. In clarifying the research design, it describes the research perspectives, type, context and methods that were used. It then goes on to account for the data collection process, providing a profile overview of the research participants, as well as the tools and procedures of the interviews and participatory observations. Finally, it outlines how the data was coded, categorised, and analysed, so as to provide a systematic interpretation that addresses the research questions in the last two chapters.

### **Section 1. SECONDARY DATA**

This study will utilise secondary data from Kuroda, Kartika, and Kitamura (2017) to introduce general patterns of teachers' perspectives, and use empirical qualitative data collected in this study to throw light on the rationale behind those patterns.

The secondary data for this study is based on t research project organized by the Japan International Cooperation Agency Research Institute (JICA-RI) on education for children with disabilities in developing countries, and particularly based on empirical evidence obtained in Cambodia. The study uses data from surveys conducted with 448 teachers across Cambodia to verify the effect of (1) teacher training for teaching students with disabilities and (2) experience in teaching students with disabilities on teachers' perceptions towards education for students with disabilities in Cambodia, as well as (3) how the type of disability affects perceptions towards the possibility of inclusion of children with disabilities (Ibid.).



Location	Urban	Rural	Total
Ratanakiri	3	12	15
Phnom Penh	29	-	29
Battambang	5	19	24
Kandal	6	23	29
Kampot	3	12	15
<b>TOTAL</b>	<b>46</b>	<b>66</b>	<b>112</b>

Figure 3-1 School sampling, by urban/rural and area. Source: Kuroda, Kartika, and Kitamura (2017).

Selected primary schools for their study are located in both urban and rural areas; with the exception of Phnom Penh, responses were also balanced by samples from both urban and rural areas within each of the other provinces. The criterion for school selection was based on a minimum of four children with disabilities per school, and priority went to schools with a high number of children with disabilities. Their unit sampling is not random, but by non-proportional quota sampling. As mentioned earlier, children with disabilities were identified through school principals, teachers, or village heads.

The study categorised eight types of disabilities. Kuroda, Kartika, and Kitamura's study (2017) differentiates between severe sensory impairments ('*Deaf*' and '*Blind*') and mild sensory impairments ('*Hard of hearing*' and '*Low vision*'). '*Deaf*' refers to situations where the child is completely unable to hear sounds; '*hard of hearing*' refers to all other situations where the child is able to hear, assisted or not (ranging from hearing a little to most). '*Blind*' refers to situations where the child is completely unable to see; '*low vision*' refers to all other situations where the child is able to see, assisted or not (ranging from seeing a little to most). '*Oral and speech disabilities*' include cases of slurred speech and (complete) inability to talk, where such impairments affect their learning. '*Physical disability*' refers to situations where the child's mobility in daily living and education is hindered by a physical impairment, including disability/difficulty in walking or picking up a pen. '*Intellectual disabilities*' refer to situations of intellectual impairments where a child faces significant limitations in intellectual

functioning (including reasoning and problem solving) and adaptive behaviour in daily life (including conceptual and practical skills of daily activities). ‘*Learning disabilities and slow to learn*’ refer to situations where the child has a cognitive impairment and their learning is affected by their difficulty in reading, writing and/or math. ‘*Severe disabilities*’ refer to situations where a child’s physical or mental impairments significantly limit their functional capacity and whereby they require extensive support to function in daily activities that other children of the same age are able to engage in independently. Lastly, ‘*multiple disabilities*’ refer to situations where a child has more than one of the above types of disabilities.

The study analyses the data from a total of 448 surveys with Cambodian teachers of both students with and without disabilities. Their surveys were conducted with the parents, guardians and teachers of the children with disabilities, and not directly with the children themselves, in view of ethical reasons and the fact that their parents/guardians are the ones making educational decisions for them and can thus be thought to be capable of responses that also reflect child perceptions. Their survey seeks to retrieve teacher responses in five aspects: (i) demographic information, (ii) policy and classroom practices, (iii) teachers’ perceptions towards educating children with disabilities in a continuum of inclusive and special classrooms, (iv) teachers’ perspectives on the inclusion of children with disabilities by the types of disabilities, and (v) the obstacles to education for children with disabilities as observed by teachers.

Among the 448 teacher-respondents, 66.6% were females and 44.4% were males. The average age is 40.9 years old, which is lower than the OECD average (average age of male primary school teachers=43.2, average age of female primary school teachers=42.3, OECD, 2014). More than half of all teachers have upper high school level educational qualifications (57.6%), about one-fifth of them have up to lower high school level qualifications (20.3%), and 3.4% of them have primary school educational qualifications. Only 17.9% of teachers have a university degree and above. Among the teachers, the average length of teaching experience is 18.9 years and up to 77.7% of all respondents reported that they had experience in teaching at least one child with disability in their classroom. 97.5% of the teacher respondents indicated that they received general teacher training prior to teaching in classrooms, but the percentage fell to 80.6% for those who continued to receive training while in service. However, only 20.5% of all teachers reported ever receiving training specifically on teaching children with disabilities. Within this group, approximately 70.7% had their training within the last two years, and 88% reported that the training lasted 1-6 days.

<b>Teachers (N=448)</b>		<b>Obs (%)</b>	<b>Me an (SD)</b>
Gender	Male	199 (44.4)	-
	Female	249 (66.6)	
Age		-	40.9 (10.1)
Education level	Primary	16 (3.4)	-
	Lower high school	91 (20.3)	-
	Upper high school	258 (57.6)	-
	Vocational	3 (0.7)	-
	University	73 (16.3)	-
	Postgraduate	7 (1.6)	-
Years of teaching		-	18.9 (9.3)
Class size		-	33.5 (31.3)
Pre-service Training	Yes	437 (97.5)	-
	No	11 (2.5)	-
In-service Training	Yes	361 (80.6)	-
	No	76 (17.0)	-
Training to teach CWDs	Yes	92 (20.5)	-
	No	356 (79.5)	-
Most recent training held		92 (100)	-
	< 2 years ago	65 (70.65)	-
	2-5 years ago	19 (30.65)	-
	5-10 years ago	6 (6.52)	-
	> 10 years ago	2 (2.17)	-
		92 (100)	-
Duration of most recent training		92 (100)	-
	1-6 days	81 (88.04)	-
	7-14 days	5 (5.43)	-
	15-30 days	1 (1.09)	-
	31 days or more	5 (5.43)	-
Experience in teaching CWDs		448 (100)	-
	Yes	348 (77.68)	-
	No	100 (22.32)	-

Figure 3-2 Summary Statistics Source: Kuroda, Kartika, and Kitamura, 2017.

## Section 2. PRIMARY DATA DESIGN

### 3.2.1. Research Perspective

This research takes on a qualitative perspective, so as to gain an in-depth and holistic understanding, with children with disabilities as the units of analysis. Critical communicative methodology was adopted for this research, which invites research subjects to reflect and interpret their experiences and social realities of inequality that need to be transformed. The researcher then introduces theories and research-based knowledge into the dialogue with the

subject for contrast and discussion. The social orientation of the critical communicative methodology is transformative, stressing on the role of dialogue as a powerful tool in raising social actors' critical consciousness and empowering them to actively transform oppressive social structures (Freire, 1970; Popkewitz, 1990).

This is done through three ways: communicative daily life interviews, communicative focus groups, and communicative observations. Through these three modes of data collection, exclusionary dimensions identified can include reflections, interpretations, and information that represent barriers to educational opportunities and possibilities to achieving social inclusion in the local context (Gomez, Puigvert, & Fletcha, 2012). Through such interviews with respondents, this study seeks to highlight specific process-person-context representations (Bronfenbrenner, 2000) to identify transformative dimensions of inclusive practices and community participation.

### 3.2.2. Research Type

This study adopts the case study method with a descriptive approach to convey a comprehensive picture of the main issues and nuanced undertones within Cambodia as a developing country. Secondary data was first scoured thoroughly based on workshop findings and special reports on the Mon education system. Following which, information gaps were identified and qualitative methods were used to gather primary data.

### 3.2.3. Research Context

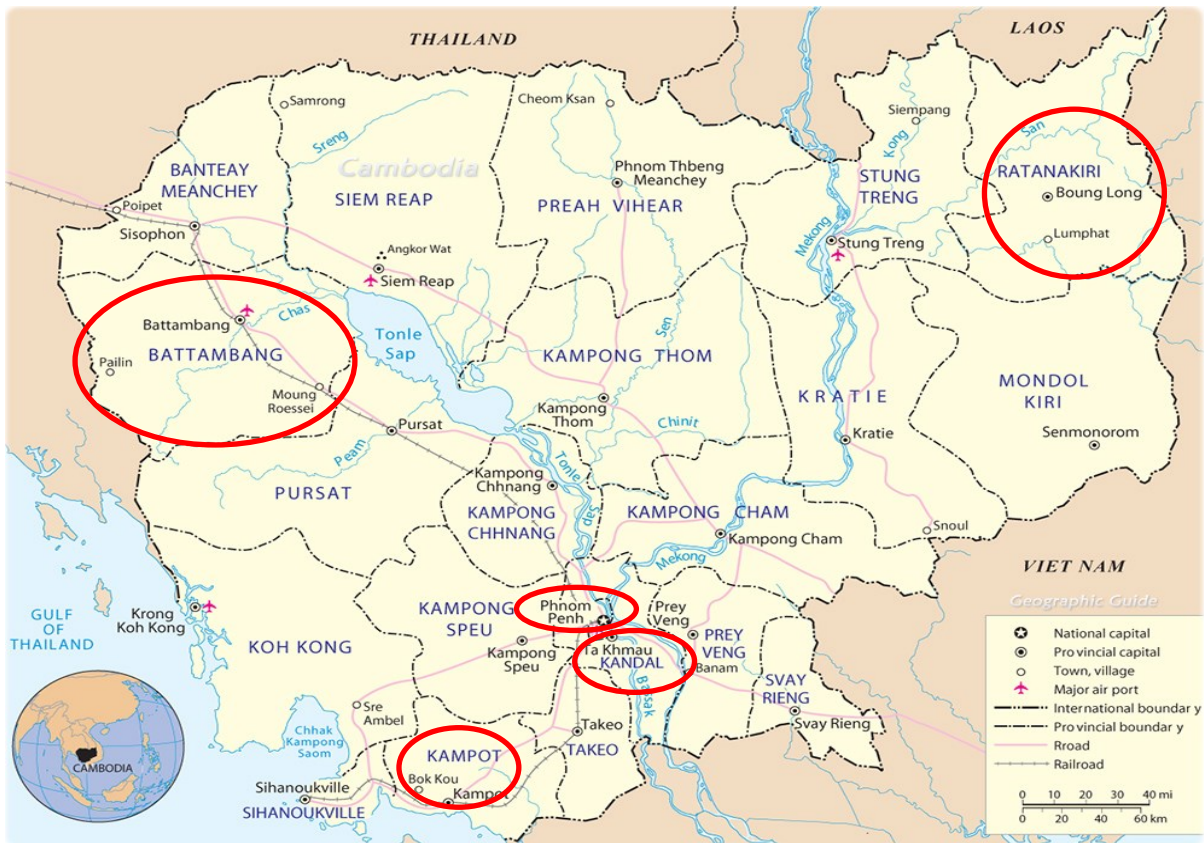


Figure 3-3 Map of Cambodia. Source: No. 3860, Rev. 4, UNITED NATIONS, January 2004. \*Research sites are circled in red.

The provincial selection for this study is consistent to the rationale for provincial representation in Kuroda, Kartika, and Kitamura (2017). Phnom Penh serves as the country’s capital, slightly south from the center of Cambodia. Access to other provinces is mostly by road, and almost all national highways run to and through Phnom Penh. Ratanakiri is located in Northeast Cambodia, and is a mountainous region with many ethnic minorities. It is surrounded by Laos to the north, and Vietnam to the east. Battambang is in West Cambodia sharing the border with Thailand, and is the second most economically developed province in the country after the capital, Phnom Penh. Kandal province surrounds the country’s capital and is the nearest province to Phnom Penh within the provinces selected. The provincial capital is a one-hour drive south of Phnom Penh and the province is also the second most densely populated one after Phnom Penh. Kampot is the southern-most province of Cambodia and faces the Gulf of Thailand. Both Kandal and Kampot also share the border with Vietnam.

#### 3.2.4. Research Participants

The samples for this qualitative study were selected from the database of the JICA study. In each province (Battambang, Kampot, Kandal, Phnom Penh, and Ratanakiri), schools were selected for the best representation of the various types of disabilities (all types to be covered for overall understanding) and locality (balance of rural or urban schools), and to hear a wide range of opinions, concerns, and difficulties parents of children with disabilities face. Selected primary schools are located in both urban and rural areas. Criteria for school selection from the JICA study was based on a minimum of four children with disabilities per school, and priority went to schools with a high number of disabled children. As mentioned earlier, children with disabilities were identified through school principals, teachers, or village heads.

Respondents for this study are the parents or guardians, teachers, and school directors of the identified children with disabilities. Informed deductions on how the entire ecology within which a child is situated affects his/her development can be arrived at, through observations and accounts of interactions, processes, and patterns in the microsystem. This allows us to gain well-founded first-hand insight on how the developmental potential of a child with disability is affected, and form admissible discourses for inclusive education.

Serial		Location	Province	1	2	3	4	5	6	7	8	9	No. of teachers who teach SwDs
				Hard of hearing	Deaf (and unable to speak)	Oral and speech disabilities	Low vision	Blind	Physical disabilities	Mental/Intellectual disabilities	Learning disabilities and slow learner	Severe and Multiple disabilities	
2386	1	Urban	Phnom Penh				11		4	1	7	2	17
2554	2	Urban	Phnom Penh	4		8	23			4	10		3
2492	3*	Urban	Phnom Penh	1		2	9		2				8
2162	4	Rural	Kandal		1	6	6			9	5	1	16
2240	5	Urban	Kandal	1		5	3		1	6			12
1625	6*	Rural	Kandal		1	1	2		1	2			4
1538	7	Urban	Kampot				3		1	1			3
1426	8	Rural	Kampot	3		1	4		1		7		4
1523	9*	Urban	Kampot	1		4	10		4		5		12
1477	10*	Rural	Kampot	1		2			3				3
246	11	Urban	Battambang			13		10	2	2	19		14
422	12	Rural	Battambang		2	3	1			2	4		7
244	13	Urban	Battambang	1		10	28		6	6	9	1	40
49	14*	Rural	Battambang		1	1	2					1	3
2819	15	Rural	Ratanakiri	5	1	4	11		4			2	10
2787	16	Urban	Ratanakiri				3		1				3
2831	17	Rural	Ratanakiri	3		3			3	2	5	2	8
2803	18*	Rural	Ratanakiri	2		2					2		2
2870	19*	Rural	Ratanakiri				2				2		4
* Data from pilot study													

Figure 3-4 Demographics of schools sampled. Source: Author.

From the schools sampled in Figure 3-4, children with disabilities were identified on the day of our appointments. The school directors, teachers and in some instances, village chiefs in each school were of tremendous help. Village leaders were asked to help identify households where there was a child with a specific type of impairment, or an out-of-school child with disability. From these 19 schools, 50 children with disabilities were purposefully sampled as units of analysis. (Refer to Appendix 7 for demographics of the sampled population.)

Although samples for qualitative studies are generally much smaller than those used in quantitative studies, it is concerned with meaning and not making generalised hypothesis statements. (Ritchie, Lewis & Elam, 2003; Crouch & McKenzie, 2006; Mason, 2010). As far as possible, qualitative samples were maximised to assure that most or all of the perceptions that might be important for this study are supported by evidence. Towards the end of primary data collection, the data obtained through interviews was becoming repetitive and approaching the point of saturation within the constraints of the current data collection phase. (Glaser & Strauss, 1967; Mason, 2010).

Location	No. of Schools		Principals		Parents		Teachers	
	Pilot	Main	Pilot	Main	Pilot	Main	Pilot	Main
Ratanakiri	2	3	2	3	5	7	6	7
Battambang	1	3	1	3	3	10	4	8
Phnom Penh	1	2	1	2	0	1	3	6
Kandal	1	2	1	2	3	6	3	4
Kampot	2	2	2	2	7	8	5	5
	7	12	7	12	17	34	21	29
<b>Total N=119</b>	19		<b>19</b>		<b>50</b>		<b>50</b>	
<b>No. of Interviews = 69</b>	-		<b>19</b>		<b>50</b>		-	
<b>No. of Focus group Interviews = 19</b>	-		-		-		<b>19</b>	
<b>No. of Observations = 75</b>	19 schools		-		50 homes		6 classes	

Figure 3-5 Number of respondents, by type of respondents and site. Source: Author.

A total of 88 interviews were conducted with 119 respondents: 50 individual semi-structured interviews were conducted with parents at their homes, 19 focus group interviews were conducted with 50 teachers in schools, and 19 individual semi-structured interviews were conducted with



school directors. Participatory observations were also carried out at 50 homes, 6 classes, and 19 schools. Focus groups with other participants were also conducted in situations where the author saw that there were other relevant stakeholders (e.g. other parents, relatives, and children in the vicinity looking on in the interview and giving responses to the parents' accounts). This allowed the research to recognise participants as experts in their experience with children with disabilities, and obtain a picture of the dilemmas and common experience of the community in which the child with disability is located. "In terms of research method, the child's evolving construction of reality cannot be observed directly; it can only be inferred from patterns of activity as these are expressed in both verbal and non-verbal behaviour, particularly in the activities, roles, and relations in which the person engages." (Bronfenbrenner, 1979, p.11) These constitute the elements or levels of the microsystem.

### 3.2.5. Research Tools and Procedures

This study was conducted in Battambang, Kampot, Kandal, Ratanakiri, and Phnom Penh over two periods. One round of pilot study was conducted over two weeks in February 2015 to test the research themes identified for study, and other logistical aspects of data collection (including sampling, contacting informants, accessing schools and homes). Building on the experience from the pilot study, bulk of the empirical qualitative data from this study was collected in July 2015.

Semi-structured interviews were carried out, with different sets of guiding questions for different categories of respondents (teachers or students or donor organisations). This was to provide respondents with the "freedom to... talk about what is of central significance to him or her rather than to the interviewer", guided by a "loose structure to ensure all topics which are considered crucial to the study are covered" (Bell, 1999, p. 138). Interviews lasted about 60-90 minutes each, and were conducted in each of the 19 schools for teachers and directors, and mostly at home for parents.

Interviews were carried out in English and Khmer with the help of a Cambodian translator who is fluent in both Khmer and English. The translator explained in Khmer the purpose of the study, general aim of the interview, and how their interview data would be used. Parents and staff, teachers, and directors of the public education system were also informed that their names, affiliation, age, and other relevant data that would otherwise give away their identity would not be released. This study did not seek to obtain written consent as these modes of approval intimidated the respondents. Interviews were conducted only if respondents gave an explicit verbal consent that it was alright to

proceed with the interview (“I am willing to take this interview”). All interviews were recorded with the permission of the respondents on an iPad that was placed between the researcher and the respondent.

Questions and comments were fielded by the author in English, and thereafter translated into Khmer by the translator for the interviewees. Responses from the interviewees were provided in Khmer, and thereafter translated back into English by the translator for the author. In some cases where the interviews involved ethnic minorities who did not speak Khmer, a second translator filled in the language gap and translated the ethnic minority language into Khmer for the main (Khmer-English) translator. The second translator was usually a grown-up child or relative of the ethnic minority parent/guardian, who is able to speak both Khmer and the ethnic minority language, and whose presence at the interview site allowed for their role in translating. This has its difficulties and limitations as ethnic languages are usually languages that reflect the daily lives of ethnic minorities, so they tend to only consist of basic expressions or vocabulary. This made it difficult to translate complex and/or technical concepts (for example, inclusive education, or Braille).

### 3.2.6. Ethics and Compliance

Direct interviews with children were not conducted as a child’s (evolving) perceptions and construction of reality is not directly sought or obtainable, for ethical reasons and practical limitations. This accounts for the selection of respondents for this study as the parents or guardians, teachers, and school directors of the identified children with disabilities.

It is important to note that terminologies for impairments and disabilities that might be taken for granted do not translate as well in the Khmer or the ethnic minority languages used in this study, as those local languages lack the vocabulary to do so. In order to conduct surveys and interviews accurately, it is also crucial that researchers avoid terminologies and give examples. It is also useful to ask for examples instead of ensure common understanding with the respondents.

The data collection team was careful to be sensitive to parent respondents, as the author is aware that speaking about one’s own child’s disability can be rather emotional for parents, who have had to deal with a plethora of issues that others around them might not understand or support. The author thus sought to maximise parents’ comfort and emotional safety by conducting interviews in a manner whereby participants can freely share their thoughts and feelings whenever they want and not be interrupted or judged, regardless to its relevance to the interview question or theme at any specific point of time. In many cases, the author also served as an information platform, providing information on available health services, educational facilities and organisations, Khmer Braille and

sign language, as well as other possibilities for their child with disability. To the parents of children who are blind, the author also showed a documentary of Krousar Thmey's work (NHK, 2015), to share information about Braille and how other children who are blind are learning well. For many of the parents, particularly in rural areas, the interview was a chance to broach a usually taboo subject and talk about their child's disability and the problems they face. Many expressed their gratitude for the opportunity just to be able to talk about their child's disability and get to know relevant information.

When teachers or school directors reported that they went for training, the author requested to make a copy of the manuals and resources they received. When going about other schools who say that they have never seen these books before, the author also acted as a messenger of information and available materials of teacher training and other resources, by making copies for the teachers.

Parents were not given monetary compensation for their accounts and interview, but a box of colour pencils and a notebook were provided to all of their children (none interviewed had a child who was blind). The author also made sure that all their children were physically able to use the box of colour pencils and notebook before offering them their gift. Many children who received the gift used it immediately to draw pictures during the interview, and parents looked on with smiles at their children doing so.

As part of this study, reflections and findings will be shared with Cambodian researchers through seminars to activate greater discussion of inclusive education among the locals. There are also plans with a local Cambodian NGO to conduct other relevant studies as a continuation of this research phase.

### 3.2.7. Primary Data Analysis: Coding & Interpretation

Analysing Bronfenbrenner's bio-ecological systems theory in the *Process-Person-Context-Time* (PPCT) model is a critical aspect of utilising the model as an analytical framework. *Person* here refers to the child with disability and his/her characteristics (demand, resource, and force characteristics) that influence his or her education. *Processes* refer to the interactions between the child with disability and his/her immediate environment, *context* refers to the five levels of Bronfenbrenner's systems theory (micro, meso, exo, macro, and chrono-level), and *time* manifests as both short episodes and prolonged interactions within each level of context. *Processes* involving micro-level actors are based on both specific episodes and daily interaction (*micro-time*) with their child with disability. Processes involving meso- and exo- level actors are based on both specific episodes and prolonged interaction (*meso-time*) with the child. *Processes*

occurring at the macro-level evolve over months, years, or decades (*macro-time*) to influence the education received by a child with disability in Cambodia.

In using Bronfenbrenner's model as the analytical framework for this study, it should be noted that Bronfenbrenner himself noted how "the child's evolving construction of reality cannot be observed directly; it can only be inferred from patterns of activity as these are expressed in both verbal and non-verbal behaviour, particularly in the activities, roles, and relations in which the person engages." (Bronfenbrenner, 1979, p.11) These constitute the elements or levels of the microsystem. Bronfenbrenner also asserts that using the bioecological systems framework will have achieved its goal as long as "the investigation offers new, revealing vistas for the scientific understanding of the forces shaping the development of human beings in the environments in which they live", and that "[i]t is neither necessary nor possible to meet all the criteria for ecological research within a single investigation" (Bronfenbrenner, 1979, p.15).

Empirical data will first be presented in the form of themes, or threads of findings, in the PPCT context, where processes between the various levels and how they interact can be displayed, as how they actually occur in realistic settings (See results, Chapter 4). A discussion of these PPCT themes will then be carried out using Bronfenbrenner's bioecological systems model by the various levels in Chapter 5.

## CHAPTER 4. BIO-ECOLOGICAL PROCESSES OF INCLUSIVE EDUCATION IN CAMBODIA

This chapter will introduce ten main threads of results based on the analysis of empirical qualitative data conducted in this study. Some of the qualitative findings have also been brought to attention by secondary quantitative conducted by JICA Research Institute.

The first section will present the *influence of personal attributes* of the child with disability on his or her own education. The second section will demonstrate the impact of *types and severity of disability* on parents' and teachers' perspectives towards the purpose and form of education for children with disabilities. The third section will illustrate the significance of *socio-economic effects* on both parents and teachers, and which serve to deter or facilitate their role in providing quality education for children with disabilities. The fourth section will illustrate the *relationship and contact between parents and teachers*. Section 5 will present accounts and observations of *school and teacher capacity*—how it serves to deter or facilitate the provision of quality education for children with disabilities, how it affects teachers' perceptions towards the possibility of including children with disabilities in regular classrooms, and how the current training system undermines school and teacher capacity. Section 6 will present *local concepts and awareness of disability*. Section 7 will illustrate the *role of the village in information dissemination & communication*. Section 8 will bring to attention how many parents and families have described that *distance from state services*, such as health and education, is a key reason why their child with disability is unable or unwilling to access these services. Section 9 will illustrate the severity of *low quality & distribution of healthcare services* across Cambodia as a problem that directly contributes to consequent difficulties and barriers children with disability in Cambodia face. Lastly, section 10 will portray the extensive *role of (international) non-governmental organisations and foreign governmental aid* in Cambodia, as well as the current extent and state of collaboration between these entities and the local Cambodian government.

In adopting Bronfenbrenner's bio-ecological systems theory as the analytical framework, of which the Process-Person-Context-Time (PPCT) model is a critical part of, this chapter seeks to illustrate the threads of findings in the PPCT context and to answer the following research question:

**Overarching research question:**

How does the environment within which a child with disability develops, influence his/her access to quality education, in a developing country context?

**Sub-question 1:** What are the actors and processes in Cambodia at the bio-, micro-, meso-, exo-, and chrono-levels that influence the access and quality of education for children with disabilities?

**Sub-question 2:** Based on an analysis of local perspectives and attitudes to the sub-question 1, what are some ecological niches of possibilities that capitalise on the strengths of local communities, for effective and sustainable intervention towards providing quality education for children with disabilities in Cambodia?

## Section 1. INFLUENCE OF PERSONAL ATTRIBUTES ON EDUCATION

Environment can indeed influence personal characteristics, but the reverse also works such that personal characteristics can influence or define environments. Past empirical studies have also shown how teachers who expect students to be motivated and academically successful had students that mirror those attributes. When teachers expect students to take ownership of their own development and support them in doing so, they effectively empower students to actualise those expectations (Rubie-Davis et al., 2010; Conteras, 2011; Pierson, 2010; Cook et al., 1999; Henning & Mitchell, 2002, 2010; Kavale & Forness, 2000; Van Reusen et al., 2001; Butler & Shevlin, 2001).

At the individual level, the bioecological model regards a person as an active agent who contributes to his or her own development (Bronfenbrenner, 2005). There are three types of Person characteristics, which are most influential in shaping human agency and the course of future development (Bronfenbrenner & Morris, 1986).

First, *dispositions*, or *force characteristics*, trigger and sustain proximal processes. Of the three Person characteristics, dispositions are the most likely to influence future development. Dispositions or force characteristics are categorised into two types: developmentally generative force characteristics and developmentally disruptive force characteristics. The former include positive dispositions, such as curiosity, tendency to initiate and engage in activity alone or with others, readiness to pursue long-term goals, etc. Conversely, developmentally disruptive force characteristics include negative dispositions, such as feelings of insecurity, shyness, general tendency to avoid or withdraw from activity, distractibility, aggression, etc. (Bronfenbrenner & Morris, 1986)

Next, *resource characteristics* are necessary for the effective occurrence of proximal processes, which “involve no selective disposition to action, but constitute biopsychological

liabilities and assets that influence the capacity of the organism to engage effectively in proximal processes” (Bronfenbrenner & Morris, 1986, p.812). Positive resource characteristics, or development assets include ability, knowledge, skill, and experience that help to extend the domains of proximal processes. Negative resource characteristics, or conditions that “limit or disrupt the functional integrity of the organism” include genetic defects, low birthweight, physical handicaps, severe and persistent illness, or damage to brain function through accident or degenerative processes” (Bronfenbrenner & Morris, 1986, p.812).

Finally, *demand* characteristics have the capacity to “invite or discourage reactions from the social environment that can foster or disrupt the operation of proximal processes”, e.g. a smiley baby versus a frowning one, attractive versus unattractive physical appearance (Bronfenbrenner & Morris, 1986, p.812).

This section will first cover each of the three types of personal attributes or characteristics, and present accounts of them occurring in isolation. At the same time, empirical data of children with disabilities in Cambodia revealed intriguing evidence that more often these three types of personal attributes or characteristics act together and intertwine in a range of ways to result in different educational outcomes. An explanation and presentation of three selected individual cases will thus follow after.

#### 4.1.1. Force Characteristics

Force characteristics are those that are related to variations in motivation, persistence and temperament. Such characteristics have strong influences over one’s development; our self-perception and the confidence we have in our own abilities help to further perpetuate our development. As Theunissen, et al. put, “[b]esides an evaluation of the self, self-esteem also denotes how one values oneself. This basic appreciation of the self has effects on multiple dimensions in our lives, such as our friendships, our successes, and our... career” (2014, p.1).

Young children who are deaf might have lower self-esteem and level of confidence, even when they are around peers and parents, as compared to children without hearing impairments. However, cochlear implant recipients have levels of self-esteem that are equal to those of children with normal hearing, underscoring the relationship between adequate language development and self-esteem. Studies have thus concluded that improving language development and communication skills of children with hearing impairments could help to build up higher levels of self-esteem around peers (Percy-Smith, et al., 2008; Theunissen, et al., 2014). However, thus far, there is no study

providing evidence of the impact of positive dispositions or force characteristics of children (with disabilities) on their own education.

Two patterns of the impact of positive dispositions on the learning outcomes of children with disabilities have emerged in this study. Firstly, empirical results show that those children with disabilities who demonstrated developmentally generative dispositions such as curiosity, readiness to pursue long-term goals, and tendency to engage in activity alone or with others, tend to encourage children with disabilities to continue or re-enter the education system. (*Individual Case 3* illustrates a deaf girl who has a strong enthusiasm to work as a hairdresser. While recognising the limitations of her impairment, she has never let her impairment deter her from her goal for the future, and uses it to motivate herself to continue learning in school.)

Secondly, empirical cases in this study also demonstrated how children with disabilities who demonstrated developmentally disruptive dispositions such as low self-esteem, “insecurity, shyness, general tendency to avoid or withdraw from activities”, aggression, tend not to enrol in school, drop out of school, or exhibit a slower pace of learning and/or weaker relationship with their peers and teachers. (*Individual Cases 1 and 2* illustrates children who dropped out of school after developing negative dispositions of low self-esteem, which is the result of their impairment or ethnicity.)

#### 4.1.1. Resource Characteristics

Bronfenbrenner & Morris defined bioecological resources (or resource characteristics) as “biopsychological liabilities and assets that influence the capacity of the organism to engage effectively in proximal processes” according to various stages of development (1986, p.812). Similarly, they further divided these into (i) development assets that include one’s ability, knowledge, skills, experience, and (ability or ease of) access to public services or facilities—assets that “extend the domains in... [which] proximal processes” occur; as well as (ii) impairments that “limit or disrupt the functional integrity of the organism”, such as “genetic defects, low birthweight, physical handicaps, severe and persistent illness, or damage to brain function through accident or degenerative processes” (Ibid.). When children with intellectual impairments or learning disabilities are unable to pick up non-verbal behaviour like body language or tone or become aware of social norms, they face major challenges in social interaction and developing intimate relationships.

However, some studies cast doubt on the impact of resource characteristics such as intelligence on intangible education outcomes. Wehmeyer and Garner (2003) argue that while their results showed that “[i]ntellectual capacity was not a significant contributor to either



self-determination or autonomous functioning” for people with developmental disabilities (p.255).

Leap (pseudonym) is a 10 year old girl in Grade 2 at the point of data collection, who has been unable to hear and speak from birth. She is of Khmer ethnicity and lives in Ratanakiri with her family. Although the school is situated in Ratanakiri, where many ethnic minorities call their aboriginal homeland, Leap’s school is also completely run by Khmer teachers (c.f. school case study above). Even though Leap is unable to hear and speak, and the school is unable to accommodate her impairment, Leap’s mother has received relatively good feedback about Leap from her current school:

*“Now at this school, looks like she does get some kind of special attention. Her teacher said not to allow her to stop, just [continue to] come to school because her performance is quite good at school, and I am satisfied with her education here [current school, learning alongside peers without disabilities].”*

From the interview, Leap’s mother revealed that there is ongoing communication between Leap’s teacher and herself, and the school demonstrates a positive and encouraging attitude towards Leap’s education there. During the interview with Leap’s teacher, when trying to illustrate how Leap learns in the classroom, she used an example from Khmer literature class. This could likely suggest that even though Leap is fully unable to hear and speak, as a Khmer, Leap and her mother is able to communicate with Leap’s teacher and peers in Khmer language. Leap’s case contrasts that of the next case, a boy from another district of Ratanakiri who is also unable to hear and speak, but whose ethnicity minority circumstance and identity further disadvantages his experience of learning in school.

#### 4.1.2. Demand Characteristics

In this study, demand characteristics are those that set proximal educational processes for children with disabilities in motion, and can include physical temperament of the child, appearance, as well as demographic factors such as ethnicity, age, and gender.

The same significance of history to ethnic minority education can be observed in the UN Convention on the Rights of the Child (1989), which points out the delicate balance between (i) minority identity and values, and (ii) values of the larger system they belong to, at the same time implying that dual identities can exist and need not be mutually exclusive:

*(Article 29, c) The development of respect for the child’s parents , his or her own cultural*

*identity, language and values, for the national values of the country in which the child is living, the country from which he or she may originate, and for civilisations different from his or her own.*

In line with this, Kitwood and Borrill (1980) argued that ethnic minority students faced greater issues with learning and/or schooling, more so than being merely ‘socially disadvantaged’ since they tend to experience added “problems of ‘personal identity’ and “cultural confusion”. This would be especially pronounced in situations where ethnic minorities are denied or suppressed by the state being in a situation where their immediate and broader community systems are in contradiction or at conflict with each other, whereby “these children live in two conflicting systems of meaning and value, and thus cannot develop consistent guidelines for their conduct, or discover a coherent basis for knowing 'who they are’”.

Thus, in looking at the education of young ethnic minorities through the scope of British-Asian Muslims, they dwell upon three aspects: their socialisation within their own community, the influence of the formal curriculum, and the social experience of school (Kitwood & Borrill, 1980). Children first experience ‘socialisation within their own community’, and develop a sense of self through language, culture, and values passed down to them by parents and their immediate environment. At the same time, they begin to realise the influence of the formal curriculum within the larger system they live in. Kitwood and Borrill discuss how the British-Asian Muslims, “being relatively unfavoured under Imperial rule... realized that their main hope of social betterment lay in gaining formal qualifications”; ethnic minorities might be driven by the need to gain (formal) qualifications for betterment in economic, political, and social status. Since schools belong “to the essentially alien world of the host society”, it might be a “hostile and uninviting” social experience of school, whereby “[i]ts primary effect... is not to facilitate general 'social mixing' but to promote their solidarity” (Ibid.).

As such, Thornberry notes that “[m]inorities have special claims which also reflect the idea of equality by virtue of their vulnerable position in relation to more powerful groups in society”; and have special needs attributed to their distinct characteristics (such as linguistic, religious, cultural, or ethnic), justifying the need for differential treatment and resources. The state should thus recognise and define the existence of ethnic minorities, in such a way that does not diminish or change their status and their right to education (Minority Rights Group International, 1994).

Sutherland discusses similar concepts to the special claims of minorities by virtue of their relative vulnerable position in society, and identifies how “the three most important aspects of ethnic identity preservation are language, religion and historical/cultural traditions. To some groups, they

are vital, if not sacrosanct; to others their importance is marginalized in favour of upward economic and/or social mobility. Thus some form of educational provision which preserves these three areas is usually eagerly sought” (Sutherland, quoted in Lynch, et al., 1992, p. 247).

This same conception of ethnic minority education is also held by the international community, where in the same year, the International Labour Organization (ILO) Convention No. 169 (Indigenous and Tribal Peoples Convention, 1989) devoted a section on Education and Means of Communication, providing a definition to education content for ethnic minorities, that:

*(Article 27:1) Education programmes and services...shall be developed and implemented in co-operation with them to address their special needs, and shall incorporate their histories, their knowledge and technologies, their value systems and their further social, economic and cultural aspirations...*

*(Article 31) Education measures shall be taken among all sections of the national community, and... efforts shall be made to ensure that history textbooks and other educational materials provide a fair, accurate and informative portrayal of the societies and cultures of these peoples.*

The ILO Convention 169 also makes specific references to the medium in which such education content should be transmitted:

*(Article 28) Children...shall, wherever practicable, be taught to read and write in their own indigenous language or in the language most commonly used by the group to which they belong. Adequate measures shall be taken to ensure that these peoples have the opportunity to attain fluency in their national language or in one of the official languages of the country.*

The UN Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities (1992)

*States should, where appropriate, take measures in the field of education in order to encourage knowledge of the history, traditions, language and culture of the minorities existing within their territory. Persons belonging to minorities should have adequate opportunities to gain knowledge of the society as a whole.*

*Ethnic Minority School Case: Ethnic minority school in rural Ratanakiri (Bokeo district, Kok commune-village)*

This school (School 18) is located in rural Ratanakiri, approximately one hour from the provincial centre. The school building is made of concrete and built in 2004, and is located just beside a village that houses many ethnic minority families. The school building is a single-level building with four classrooms. There are no toilet facilities in the school and village, and they all do their business in the open field of tall grass beside the school. Until last year, there was only one male teacher (and also school director) teaching at the school, and two new female teachers were sent by MOE last year. All three teachers from this school are ethnic minorities.

The village houses where the ethnic minority families live in is situated just behind the school, and are visible from the school. Most families living here are ethnic minorities. The ethnic minority people living near the school are highland Khmers (Khmer Loeu), one of the many hill tribes of Ratanakiri that speak the Mon-Khmer language, and can also speak standard/central Khmer. Mapping of households and needs of children in these households was conducted the village community under CARE Cambodia's training, as part of their School Governance for Quality Education Project<sup>5</sup>.

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<sup>5</sup> CARE is an international development organisation fighting global poverty, with a special focus on working with women and girls to bring sustainable changes to their communities. Working together with UNICEF and MoEYS, the School Governance project sets out to empower (particularly ethnic minority) communities to become active members of their schools' governance structures



Figure 4-1 Mapping of households in village. Photo taken by author in Ratanakiri school.

The mapping of village households in Figure 4-1 locates all households of the village and particularly identifies disadvantaged households (1) who fall under the ‘poorest’ category (based on house, income, and farm), (2) which include orphans, (3) which include adults and children with disabilities, as well as (4) out-of-school children. Their collaboration with UNICEF and MoEYS will be further discussed under macro-level issues.

Empirical data showed that these three types of personal attributes or characteristics often intertwine to influence the Person’s educational outcomes. As this section will go on to illustrate, in the first case, the impairment (*resource characteristic*) of a child influenced his self-esteem and confidence (*force characteristics*), which led to him to dropping out of school. In the second case, the ethnicity (*demand characteristic*) of a child influenced her self-esteem and confidence (*force characteristics*) that led her to quit school in Grade 2, only to re-enrol when she became older (*age, demand characteristic*) and gained enough experience (*resource characteristic*) interacting with people of her own ethnic minority and the ethnic majority to be less concerned with how people thought of her. In the third case, the child with the same impairment (*resource characteristic*) as in the first case, but not an ethnic minority and a girl (*ethnicity and gender, demand characteristics*),

appeared to demonstrate stronger readiness and motivation (*force characteristics*) to pursue her goals as a hairstylist, after watching hairstylists working on the television (*resource characteristic*). This gave her the drive to remain enrolled and actively learn to draw and write in school, so that she can communicate with her customers in future.

*Individual Case 1: Deaf Boy in Ratanakiri (Cannot hear and cannot speak since birth, Tam Puan ethnic minority, dropout)*

Veha (pseudonym) is a 12-year-old boy living in Ratanakiri with his family, and attended elementary school from Grades 1 to 4. They belong to the Tampuan (pronounced *tem-poon*) ethnic minority, who are one of the highland Khmers (Khmer Loeu) ethnic minority hill tribes, and speak their own language under the Mon-Khmer language branch.

This particular village is mostly self-sustainable, whereby they produce most of their own food and sell whatever excess at the nearby market. Even though the village is located approximately 10 minutes away by car from the main road, some villagers had shared that they did not “go outside” so it was not until ten years ago that the first among them saw a motor vehicle. Likewise Veha’s mother had shared about how “health access [before] was not richful like nowadays [not as good]”, and so she had never brought him for a check-up.

Numbering about 31,000, the Tampuan people live in the mountainous Southern and Western portions of the Cambodian province of Ratanakiri. Though historically their language has been without a writing system, in the last ten years an NGO has overseen the creation of a writing system, based on the Cambodian (Khmer) alphabet.<sup>6</sup> However, fewer than 80% of Tampuans are literate. On their ethnicity and living situation, Veha’s mother points out that: “I can speak Khmer because I stay here very long. Here is my hometown, but there are some Khmer people who come and live nearby.”

The boy was born with no hearing, and even though his mother is unaware of sign language for those with hearing impairments, they have developed their own system of gestures, without which communication is impossible. She would have to physically tap him and point to him the thing that you want him to take or to do, or describe literally thought motions. When people gesture with him to communicate, he is also able to read their reactions and react. She had never brought him for check-ups, because

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<sup>6</sup> Evangelical Mission to the Unreached (EMU) is a Christian missionary organisation, and one of their early goals in Cambodia was to put the Tum Poun ethnic minority language into writing, in preparation for a Bible translation. This culminated in one of the missionaries authoring “The Tampuan/Khmer/English Dictionary” (Source: Website of Evangelical Mission to the Unreached).

*“Health access is not as good and readily available as it is nowadays I also used to ask people... Khmer people if they know anywhere that they can bring deaf children to any place for treatment. And they say that so far there is no place that they can bring us or show us.*

She elaborated on her son’s physical condition and how her son was the one who requested for her to enrol him in school when he was 7-years-old. Her son was accompanying her to the market when he saw children his age wearing the blue and white uniform carrying their bags. He seemed to like it and motioned for his mother to buy those for him. The next day, when he woke up in the early morning, he gestured to his mother that he wanted to go to school and so she sent him. His mother took out his school workbook to show us his writing and proudly shared that he was able to follow what teachers write at school. He was diligent with his homework too, and like to do simple mathematics and writing on his book. However, recently he stopped wanting to go to school, and the mother said it is impossible to ask him to explain to her why. She worries whether her son was being bullied at school, and whether teachers show him enough care and attention.

*“ When he gets ten out of ten at school, he comes home very excited and immediately points to tell me that he’s the one who did it... Recently, he did not go to school [stopped going to school] and we tried to push him to go, and we sent him for two days again, and after two days, he stopped until now. So far, around two months that he did not go to school... I’m not sure [why he stopped wanting to go to school]. I think he can learn but maybe it’s because he cannot speak he cannot hear so he feel embarrassed or shy... Maybe he cannot speak and cannot hear and sometimes teacher just find it boring to try to explain to him, unlike mothers who try their best to help. For deaf people we have to do gestures. And sometimes teachers might find it hard to do gestures.”*

#### *Individual Case 2: Girl with speech impairment in Ratanakiri (Tampuan ethnic minority)*

Rotha is a 16-year-old girl, and the fourth of six daughters in a family. Rotha and her sisters speak both the Tampuan ethnic minority language, as well as Khmer, but Rotha’s mother only speaks the Tampuan language. Rotha had enrolled in elementary school back when she had turned 7 years old, and of enrolment age. However, she ended up not going and dropped out because she felt

“embarrassed”. She decided to enrol back in school again two years ago, after she saw her youngest sister learn in school and come back home reading and writing. It was then that she decided to learn again. At the point of data collection, Rotha was in Grade 2. She “wants to know how to read and write and tell the direction”, and is “happy to go to school because she can learn”, but “she has no friends at all, only her sister”. Previously, she was embarrassed about going to school and learning with others, but now “she doesn’t care whether other people or students understand her as long as her teacher understands.

One surprising observation was that some episodes and responses seemed to suggest that the ethnic minorities themselves are not welcoming of the idea of interacting with Khmers. Perhaps in addition to the ethnic language disadvantage they face, further communication breakdown caused by disabilities make the entire experience an unpleasant or uncomfortable for ethnic minorities. From interviews with Veha’s teacher and school director, they said that after Veha stopped coming to school, they tried to visit the mother and ask about Veha and encourage him to come to school, but they always got rejected. Their impression was that Veha’s family are refusing or avoiding to meet them.

Similarly, the ethnic minority girl Grade 2 who has speech impairment did not want to socialise with the others because she did not want to cause or be involved in conflicts. She talks to ethnic group children well, because Khmer children sometimes laugh or blame her in Khmer words and she doesn’t understand. When asked about what she would like to do in future, the girl replied that she wanted to open a store selling food and other provisions, but only serving ethnic minorities so she doesn’t need to deal or interact with Khmer people.”

Empirical data from the two cases of Veha and Rotha demonstrate a tendency for young ethnic minority children with disabilities to drop out of school because they feel “shy” or “embarrassed”. This perhaps suggests that their ethnic minority identity coupled with their impairment has a significant multiplying effect on their disability, especially when they are still young and have not yet developed a strong sense of self, resulting in a lower sense of self-confidence as compared to Khmer children. This can be observed in how Rotha and Veha had both dropped out of elementary school at a young age, but Rotha was able to enrol back in school at 14 years old with a stronger sense of purpose and confidence, especially in interacting with her peers.

### *Individual Case 3: Deaf girl in Kandal (Cannot hear and cannot speak since birth)*

Bua is very interested in learning and has a goal for the future. Her cousin owns a hair salon,



and she is thinking to work as a hairstylist eventually. Despite her impairment, Bua told her mother that it is possible because she can simply get customers to write down what they want, and she can just do it for them. Her thought showed that she was very aware of her communication issues with the larger society, but was willing and able to use the resources available to her to work around the issue.

Her mother worked in Malaysia as a domestic helper for a few years and was able to remit money home. In addition to the extra income, the mother also gained some experience and it rubbed off on her daughter's exposure to the world.

This section has looked at the influence of personal characteristics on the development of the individual. However, some studies argue that while personal characteristics influence the overall development of a Person, contextual and environmental factors play an equal or larger role in defining the developmental status. The remaining sections go on to demonstrate the influence of environmental factors on the development of the individual.

## Section 2. TYPES OF DISABILITIES

Studies have discussed how parental support and involvement are important in facilitating inclusive education (Palmer, Fuller, Arora and Nelson 2001), and others have discussed how positive attitudes held by parents (of children with and without disabilities) tend to influence teachers and support staff to realise inclusion in schools and classrooms (de Boer et al. 2010). In developing countries, while the direct influence of parental attitudes on implementation of inclusive education at the school-level might not be significant, acquiring knowledge about parents' attitudes could still be useful in identifying gaps in the implementation of inclusive education.

Parents tend to prefer placing their child with disability in a regular school, mainly because of the possibilities for their child to participate socially with their peers. Parents hope and expect that being there will lead to their child participating socially with the peer group (Scheepstra et al., 1999; de Boer et al., 2010; Yssel et al., 2007; Gibb et al., 1997; Gasteiger-Klicpera et al., 2012; Leyser & Kirk, 2004).

Pijl and Hamstra (2005) found that the parents of students with disabilities who were being educated in inclusive classrooms had overall positive perceptions of inclusive education in terms of how it influenced their child's development. Yssel, Engelbrecht, Oswald, Eloff, and Swart (2007) compared parents' perceptions of the inclusion of students with disabilities in general education

classrooms and found that parents perceived the inclusion of their student with disabilities in the general education class as a positive placement and the correct place for the child to learn. Gibb, Young, Allred, and Dyches (1997) found that parents of children with disabilities in mainstream classrooms perceived the following positive results for their child: increased social relationships, more positive experiences, greater self-image, and increased academic achievement.

Some parents of children with special needs argue that a regular classroom is not an option for their child (Green and Shinn 1994, 1995). Some have concerns about the social impact of inclusive education on their child with disability such as being isolated, rejected, or bullied by other students (Bailey and Winton 1987; Leyser and Kirk 2004; Salisbury 1992). Others have concerns whether teachers are properly trained to educate their children, whether they are able to allocate sufficient attention to their children, and whether there are appropriate support and resources in schools and classrooms to meet their child's needs (Bennett and Deluca 1997; Fox and Ysseldyke 1997; Grove and Fisher 1999).

In a study, the majority of parents of children with impairments perceived the impact of inclusion as positive for their child. However, some parents of children without disabilities in inclusive classrooms expressed concerns of behavioural disruptions and lack of teacher time as negative issues (Peck et al, 2004).

Teachers' attitudes toward the inclusion of children with disabilities also have to do with their notions of disability types, Children with disabilities' educational needs arising from the various impairments as well as the prevalence of disability types (Clough and Lindsay, 1991, cited in Avramidis & Norwich, 2002). Avramidis & Norwich (2002) review also demonstrated that teachers were generally more positive about having children with physical and sensory impairments in regular classes, as compared with other kinds of disabilities.

Some studies in developed countries have demonstrated that teachers are more receptive towards the integration of students with physical impairments, specific learning impairments, visual impairments (Clough and Lindsay, 1991; Glaubman and Lifshitz, 2001, Alghazo and Gaad, 2004) as well as students with hearing impairments into regular classes (Clough and Lindsay, 1991; Lifshitz, Glaubman, and Issawi, 2004). On the other hand, teachers tend to be more negative or demonstrate less willingness in including students with learning and emotional-behavioral difficulties (Clough and Lindsay, 1991; Glaubman and Lifshitz, 2001; Alghazo and Gaad, 2004; Advramidis and Norwich, 2010).

Cook's study (2001) on US teachers' attitudes also showed that compared to children with specific learning or behavioral disorders, those with "easy-to-notice disabilities" (including sensory impairments of hearing and vision) were more frequently accepted for inclusion in regular

classrooms,  $\chi^2(1, n = 63) = 3.00, p < 0.05$ . Glaubman and Lifshitz (2001) also found that Israeli teachers' attitudes for inclusion differed by students' types of disabilities. Similar to studies in other developed countries, teachers in Israeli showed more readiness to include students with physical or sensory impairments, relative to other students with less easily noticeable impairments, such as learning and emotional-behavioral difficulties

However, when our review expanded to incorporate those that include developing countries, we found that the tendency of teachers to disfavor inclusion of students with sensory impairments increased. Bowman's 1986 study of fourteen countries (of which half were developing countries) showed that compared to 63% of teachers who favored children with physical impairments to join regular classes, only a mere 23.5% of teachers felt the same way for visual impairments and 22.5% for hearing impairments. Lifshitz, Glaubman, and Issawi's study of Israeli and Palestinian teachers (2004,  $n = 66$  for Israel,  $n = 192$  for Palestine) argues that the type and severity of disability and the corresponding educational needs affect teachers' attitudes towards inclusion. Their results also showed that not only were Palestinian teachers significantly less willing to include Children with disabilities in regular classes as compared to Israeli teachers, Palestinian teachers were less willing to include students with sensory impairments as compared to Israeli teachers. Particularly, Palestinian teachers had negative attitudes towards including students who were blind.

Teachers' attitudes toward how to educate children with disabilities differ by the types and severity of disabilities. While teachers acknowledge the rights of children with disabilities to education, they expressed difficulties and frustrations accommodating (i) deaf and (ii) blind children, as well as those with (iii) learning disabilities, because they perceive that making accommodations was disruptive to the class.

Based on secondary data by JICA (Kuroda, Kartika, and Kitamura, 2017), Figure 4-2 shows teachers' responses to "*How should children with disabilities be educated?*"

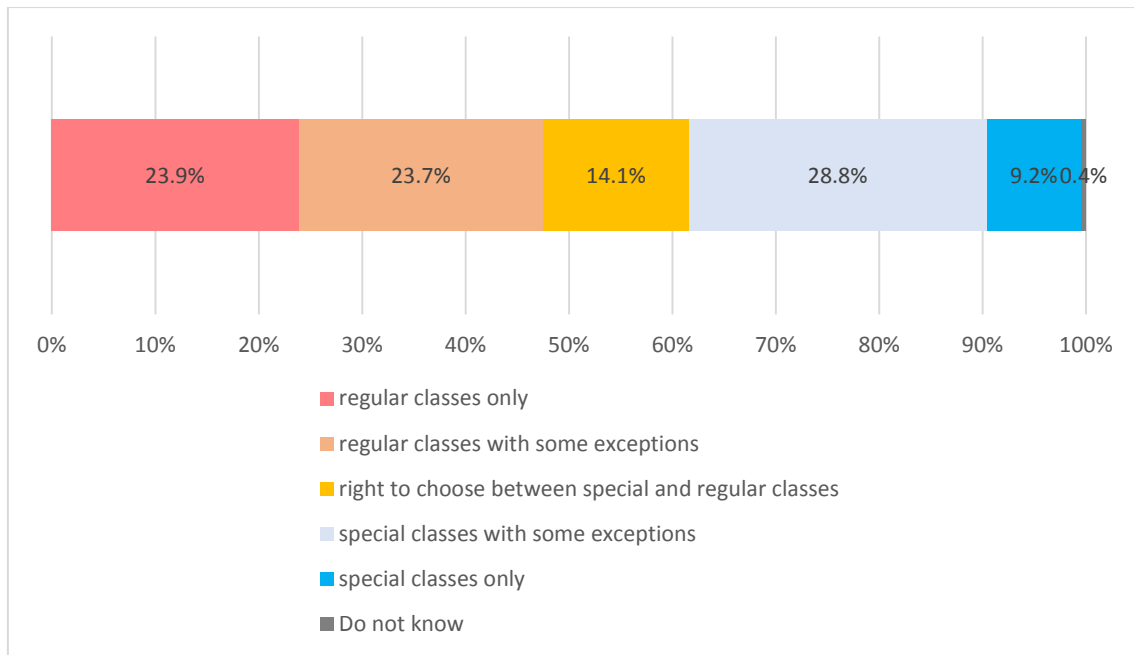


Figure 4-2 Type of education preferred for children with disabilities. Source: Kuroda, Kartika, and Kitamura (2017).

Out of 448 teacher respondents, 47.5% felt that children with disabilities should be educated in regular classes only or with some exceptions (preference for inclusive education setting), while 37.9% felt that children with disabilities should instead be educated in special classes only or with some exceptions (preference for special education setting) and 14.1% felt that children with disabilities (or their parents) have the right to choose between either special or regular classes. Therefore, we found that the teachers' perspectives on inclusive and special education are quite diversified and have not reached consensus in this country.

Figure 4-3 shows teachers' perceptions towards the possibility of including children with disabilities, based on the types of disabilities they have. Consistent with earlier studies, it is observed that teachers' perception towards the possibility of inclusion is clearly influenced by the types of disabilities.

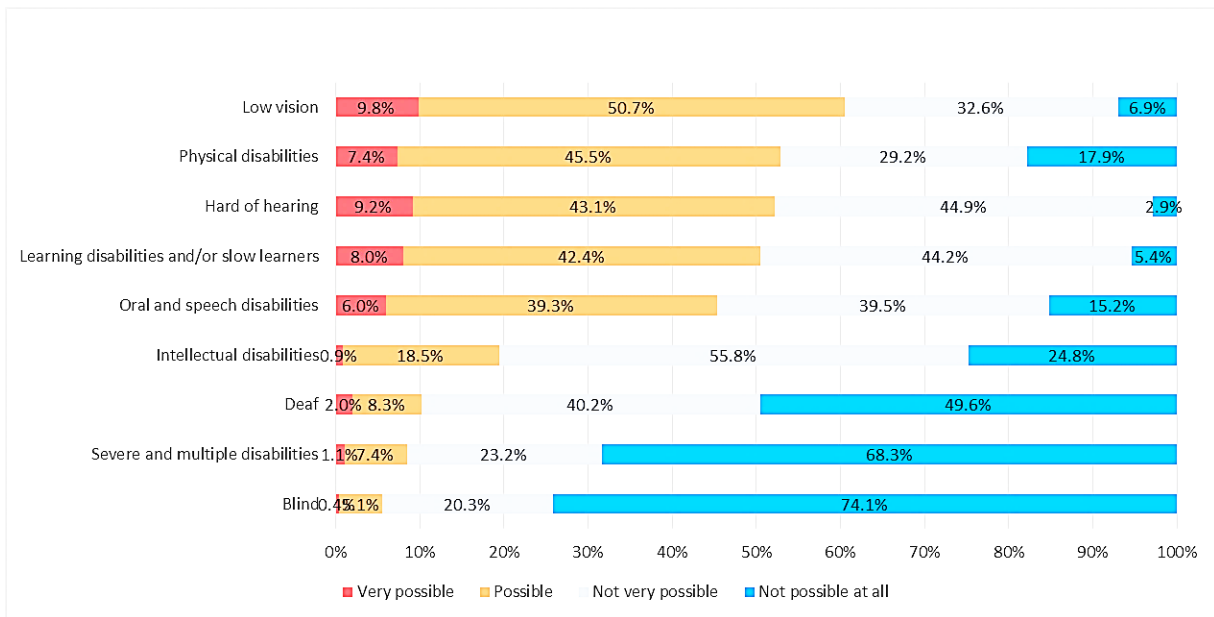


Figure 4-3 Teachers' perceptions on possibility of inclusion, by types of disabilities. Source: Kuroda, Kartika, and Kitamura (2017).

Results from their study showed that more than half of the teachers surveyed had negative perspectives towards the inclusion of five disability types in regular classrooms. For children who are blind, a high of 94.4% of all teachers felt negative about their inclusion in regular classrooms (not possible at all= 74.1%). For children who have severe and multiple disabilities, a staggering 91.5% of all teachers felt strongly negative about their inclusion in regular classrooms (not possible at all= 68.3%). For children who are deaf, up to 89.8% of all teachers felt negative about their inclusion in regular classrooms (not possible at all= 49.6%). For children who have intellectual disabilities, as many as 80.6% of all teachers felt negative about their inclusion in regular classrooms (not possible at all= 24.8%). For children who have oral and speech disabilities, up to 54.7% of all teachers felt negative about their inclusion in regular classrooms (not possible at all= 15.2%).

More than half of the teachers surveyed had positive perspectives towards the inclusion of other four disability types in regular classrooms. For children with low vision, 60.5% of all teachers felt positive about their inclusion in regular classrooms. For children with physical disabilities, 52.9% of all teachers felt positive about their inclusion in regular classrooms. For children who are hard of hearing, 52.3% of all teachers felt positive about their inclusion in regular classrooms. For children who have learning disabilities and/or are slow learners, 50.4% of all teachers felt positive about their inclusion in regular classrooms.

Empirical qualitative data from interviews conducted in this study also similarly reflect their findings. Firstly, this can be observed in the school sampling, as in Figure 3-4. For types of

impairments across Categories 1, 3, 4, 6, and 8 (Hard of hearing, Oral and speech disabilities, Low vision, Physical disabilities, and Learning disabilities/slow learners), children with such impairments are more commonly observed to be enrolled across the 19 schools. However, consistent with the five types of disabilities identified in Kuroda, Kartika and Kitamura's study, these five types of disabilities were not commonly found to be enrolled among the 19 schools. Students with severe or multiple impairments and students who were deaf were few and far between. Particularly, students who have completely no vision [Blind] were only found in one out of all 19 schools, and this school in Battambang (School 11) is one that is directly affiliated with Krousar Thmey (an NGO that specifically caters to children who are deaf or blind).

Empirical data collected from interviews conducted in this study showed that a significant number of both teachers and school directors felt that special education is not feasible. On being asked on the possibility of inclusive or special education for children with disabilities, a school director from a school in rural Kampot replied unhesitatingly,

*“if there're more than 15-20 students with disabilities, they can be separated. Otherwise [we] can't do so because [the number of] students with disabilities are not enough and we have not enough classrooms and no specially trained teachers”.*

One of the schools in Phnom Penh (urban, School 2) that is renowned for being an established educational institute has three students who are hard of hearing, one student who is deaf (and mute), eight students with oral and speech disabilities, twenty-three students with low vision, four students with intellectual disabilities, and ten students with learning disabilities. The director, who first entered the school as a teacher 27 years ago, was very clear in expressing how the school is simply unable to accommodate (and thus accept) some types of disabilities:

*“Most students [with disabilities] in the list can study, but if they're blind or deaf they [teachers] will sent to other schools. So far we have no case [of blind or deaf students], because we'll talk to parents when children cannot learn and ask them to search for suitable schools by themselves... Parents are more aware now [of the school's position] and send their children to blind or deaf schools.”*

In addition to students who are blind or deaf, the school director was also strongly against accepting students with severe intellectual impairments, as “children with severe intellectual impairments are difficult to include in a regular classroom”. To deal with this, if the school is aware of the child's impairment at the point of enrolment, they would simple tell the parents to find another suitable place for these kids. The school also has a very clear position on accepting students with

disabilities, and assesses them for suitability to continue education at this school within two years. After allowing children with disabilities to be enrolled, teachers observe students' progress in class and report to the management. After a year or two, if teachers still report difficulties that the students with disabilities cannot learn, the school will get the teachers to speak with the child's parents to search for schools that are more suitable for their child.

Another school in Phnom Penh (School 1) has eleven students with low vision, four students with physical disabilities, one student with intellectual disability, seven students with learning disabilities, and two students with severe and multiple disabilities. Despite the school's taking on a School for All approach (cf. section on 'Capacity of teachers/school') and the school director stating that "we don't practise discrimination against any [kind of] student", the director admitted that the school is unable to accommodate some types of disabilities, and makes the distinction between the possibility of educating blind and deaf students:

*"We can't accept the blind and deaf because we don't have the teachers and resources to teach... I'm not so sure whether the deaf can really be included, but it might be good for blind students who use Braille to learn together with other students without disabilities."*

Another special support teacher from School 11, who receives training from an NGO to teach students who are blind and deaf, also shares this view:

*"Compared to being blind and deaf, other disabilities are easier to teach. For [students who are] deaf, I try to observe and conduct private discussions with them during breaks to check on their progress. In terms of learning, I think physical disabilities have mild impact, blind also has strong impact, but deaf has the most severe impact [on their ability to learn]. For severe disabilities, it's just to make them happy, to teach about ethics and dignity."*

Three teachers of a school in urban Kampot (School 7) and who also teach students with disabilities in their class shared with us their perspectives on teaching children with different types of disabilities in focus group interviews. The school has students with three types of disabilities (low vision, physical disabilities, and intellectual disabilities). One of the teachers pointed out on educating children with various types of impairments, and shared the following observations, which were met with fervent nodding by the other two teachers: The teachers were unanimous that children with disabilities should be included and educated, not discriminated against. For those children with heart conditions or physical disabilities, they are difficult to teach, but still possible. If a child has a

problem with only one eye, whether it is low or complete loss of vision, it is also possible to teach. However, for children with intellectual disabilities, it is hard to include them. If they are blind, “they need to study touching the words that appear” [Braille system] somewhere else, as the teachers have no knowledge and materials of the Braille language to teach them.

However, the preferred exclusion of students who are blind or deaf is not merely a one-sided argument. The school director of an NGO in Battambang that focuses on students who are blind and deaf talks about how such an education is necessary for them:

*“Our job is to provide students who are blind or deaf with basic education—how to learn. It is very important for the blind to learn Braille, and for the deaf to learn the Cambodian sign language. It is only then that they can go to public schools and learn.”*

In sharing about the case of Vaha, a deaf boy in Ratanakiri who had dropped out at Grade 4, and asking him to help make sense of why he dropped out, the school director pointed out that dropping out is not uncommon for students who are deaf and do not receive ‘basic education’, i.e. learn sign language: To them, it is easy for them to understand simple concepts like  $1 + 1 = 2$ . However, without being equipped with a proper language for communication, the teacher is unable to communicate the logic of it, and so, as they go higher, the more complicated it gets, and the less it works for their morale and learning pace.

*“Small kids need to build confidence to learn. For deaf children, if we talk and look at him, he might think we’re talking about him, then he’ll have no confidence.”*

The mother of the boy with intellectual disabilities who dropped out of the school at Grade 2 (School 7) shared her worries about her son’s condition and what to do for him: The boy is 16-years-old with a heart problem. When he was young, he suffered from a bout of pneumonia and brain fever (acute inflammation of the brain), and many people told them that with his condition, he might die at 18 or 19-years-old. There were times when the boy nearly passed out at school, and the mother is always worried that that his heart might give way at school when he is playing or running around. He used to just go to school and play with smaller children. He liked to go to school and was happy to play at school, but he was not able to learn. The mother felt that it is because his teachers pay less attention to students with disabilities at public schools. She also mentioned that she would have preferred sending him to a special school, but she wants him to play with other normal children and not be discriminated, in hope that he can also learn from them and follow them in reading and



writing.

*“He didn’t want to go to school because others beat him. He’s afraid of people and has no friends [of the same age] but younger children in Grade 1... His thinking is still young... so when he talks and behaves like a kid, others hit him... So since he doesn’t learn anything in school and he’s afraid of people at school, I decided not to send him anymore.”*

This mother had made the tough decision to take him out of school due to the above reasons, even though she believes that education is very important for her son. For students with severe sensory impairments (blind or deaf), their dropout is likely linked to the various problems that come along with low/no communication with teachers and peers. The school director of a primary school in rural Kampot also described how there were initially no students with disabilities for the first five years or so, but a student who was blind in one eye enrolled in 2010. According to the director, the student finished primary school but he heard that the student had eventually “stopped studying” [continuing onto secondary education].

Teachers from other schools responded that they “cannot accept the blind and deaf because [they] don’t have the teachers and resources to teach”, or that “students who are slow or with severe disabilities should go to special schools”. A teacher with 27 years of teaching experience with children with disabilities who despite viewing that “as a teacher it’s their duty [to educate them]” shares how her experience has told her that “blind students cannot be mixed up with arm or leg disability”.

Both teachers and parents agreed that children who are completely blind and deaf require specific resources that mainstream classrooms cannot offer in Cambodia’s current situation. However, data from Maryknoll Cambodia (NGO) revealed that out of 50,000 people in Cambodia who are deaf and another 500,000 with hearing impairments, only 1,800 have been taught sign language, and there is no existing public programme to support this group of people (Šiška and Suchánek, 2015). In order to be able to learn, blind and deaf children require the knowledge of Braille and sign language to be able to express themselves and learn new concepts. This becomes increasingly critical as they move onto higher levels of education, and new concepts become increasingly more complex. The medium of communication then becomes an essential tool for the teacher to explain the logic and rationale of new concepts, and for students to convey and clarify their understanding. Without which, students who are blind or deaf are left behind in understanding and learning.

Even when students who have impairments are enrolled, results show cases where they **drop out** of the education system at some point, when they are unable (or become unable) to overcome the

difficulties that their condition presents.

Teacher Jorani (of School 7 in urban Kampot) previously taught a child with intellectual disability in her class, who had dropped out because the child was unable to catch up in class and school. Teacher Jorani's biological daughter also has intellectual impairments, and she shared with us her reflections on her daughter and the student who dropped out: Her daughter also has intellectual impairments and "is not enough" to study at a regular school. Her condition is slightly better than her student who dropped out], and she can still learn some. Teacher Jorani spends a lot of time and attention to teach her at home. But for her student, she is aware that he comes from a poor farming family with little education, so it would have difficult for them to help him out with learning.

She went on to share her worries and concerns of having a daughter with intellectual impairments. After finishing primary school, her daughter now studies from home. Now that she is older, her mother "does not dare not to send her to high school, because she is afraid that people will take advantage of her.

*"I prefer her to be in school, but I am scared that people will cheat her. I cannot trust other people, so I can only keep her at home to prevent her from getting raped or taken advantage of. "*

This opinion is also shared by the guardian (grandmother) of a 14-year-old girl with mental and intellectual impairment in Grade 5. As the main caretaker of the girl, the girl approaches the completion of her primary education, the grandmother admitted that she has not yet decided on high school [for her granddaughter, even as she is approaching the end of her primary education]. It is far away and difficult since the grandmother would have to send her to school every day, which is a big problem. If there were no better alternatives, she then thought that perhaps teaching her granddaughter at home would be better:

*"If possible, I want to send her to private school, because there would be a security guard, and it would be able to control [monitor] who fetches her".*

The grandmother expressed her worry that because the girl is mentally and intellectually impaired, she would not be able to tell if other people would mean harm to her if she follows them. This point was brought up not only by parents or guardians, but also by a teacher at School 11 who has rather extensive experience teaching students with disabilities. He raised that:

*"Child or sexual abuse is a common issue for severe disabilities, not only for girls, but also for boys. They [sexual offenders] like to take advantage of small children. As teachers or care takers, we cannot get close and persuade them to have sexual*

*relations with us.”*

Another case of an out-of-school girl in Ratanakiri [from village of School 18] illustrates how the current education system is also unable to accommodate severe intellectual disabilities. Chaya (pseudonym) is a 6 year old girl with severe intellectual impairment who is well into primary schooling age, but was not enrolled in school. Chaya and her parents were referred by the village head, who knew about Chaya’s condition and that she is still not enrolled in school. We were brought to their family, who were all at their farmland located within 1 kilometre of the school and the main village area. Upon arriving, I found the parents tilling on the field located between a dense plantation and the hills, while Chaya and her younger brother were playing together in an open wooden hut next to the field. The family lives a distance away from the village and in the day-time, they tend to their land and crops away from the village, and their two children follow their parents everywhere. When asked about Chaya’s condition and why she was not enrolled in school, her parents replied:

*“She was born on the farm and couldn’t speak from birth. We haven’t brought her for any medical check[up] since she was born... we don’t know what to do. Chaya can’t understand others and doesn’t follow instructions well so we think it’s not possible for her to go to school. Children laugh and make fun of her because she looks and behaves different... even adults [feel/behave awkward when they see her] ... Nobody welcomes her so it’s better for her to stay with us”.*

However, Chaya’s parents shared that they would be more convinced to send her to school if it were “a special class with [students of] the same situation so that they can help each other”. Chaya appeared to be intellectually impaired and since she has not received any form of medical check-up or attention since she was born, not even her parents are aware of the nature of her condition. She appears unable to control bodily reactions (e.g. drooling or twitching), but she was able to take a cloth hanging on one side of the hut to brush the dust off the wooden deck where I had the interview with her parents. Throughout the interview, she also remained quietly by the side with her brother, looking on and smiling occasionally as we conducted the interview.

Through accounts of other villagers, Chaya’s parents themselves do not interact much with other members of the village and community, as the parents themselves admitted that due to Chaya’s physically apparent disability, they try to hide her away from prying eyes.

### *Purpose of Education for CwDs and Expectations*

Parents of children with disability expressed awareness that their child will grow up and will eventually have to learn how to cope with their disabilities. Some expect that their child should grow to be independent, while some acknowledge that they will have to care for their children until their last breath. This appeared to be influenced by the nature of their child's disability. Individual cases of children with disabilities with different disabilities will be used to demonstrate and contrast parents' expectations and the corresponding purpose of education.

Makara (pseudonym) is an 8 year old boy (in Grade 3 at the point of data collection) who developed learning impairments from a concussion to the head in an accident when he was younger. Makara had fallen over backwards and struck hard on the back of his head. After the accident, his mother said that he has a "low memory" and "knows his way around but can't tell where the north is". His teacher had also commented that Makara "has low cognition and can't catch up with his peers". On being asked what kind of education she wanted for Makara, his mother shares: The boy is unable to remember or repeat. The mother also reported that the teacher hits him lightly on the hand because he is unable to learn as fast as his peers. Even though he has not learnt anything, the teachers simply promote him to the next grade because there are other students entering his grade and the teacher is unable to cope with so many students. Even though he is not learning based on the appropriate grade, but it is good and important for him to play together with other children without disabilities.

*"At higher levels, lessons become even more complicated [difficult], so it accumulates. But he comes home and tells me what he learnt and did. [He's always] excited to come home and tell me. He looks happy to be learning in school, but I just want him to study at lower grade. If he learns with other slower students, maybe he'll learn better."*

Makara's mother expressed her worry for his pace and ability of learning and feels like he does not receive sufficient attention from his teacher as the majority of his peers are faster than him. However, she shared how her concern about his education is not so much learning fast or better, but simply for Makara to learn at his pace. Through her response, she is comforted to hear from Makara that he is learning. Her view that "all people need to play together" reflects her position that in every society, different types of people come together and co-exist. Along those lines, she prioritises that Makara should have the opportunity to learn and interact with his peers in an inclusive school environment instead of receiving special attention in a manner that does not reflect society in itself.

Sopheap (pseudonym) is an 11 year old boy in Grade 2 at the point of data collection, and he suffers from Dupuytren's contracture, a condition in which the fingers bend towards the palm and cannot be fully extended or straightened. With this condition, Sopheap is able to write but only with great difficulty. On being asked what kind of education he wanted for Sopheap, his father shares:

*“As a parent, I want him to learn and do something by himself in future so that he will be able to survive. When he grows up, he’s the one [with] disability so he should learn to think for himself. The child is clever and I want him to do a job that he can. Like learning language so that he can do translation. I don’t expect him to study until a specific grade, but I hope he can finish Grade 11 or 12, so he can learn [and do] something.”*

Sopheap’s teachers had commented that “maybe [it’s] because he’s difficult and unstable, so he’s lazy to write even when he can”. Since it appears to be difficult for the boy to use his hands to write or for other activities, Sopheap’s father demonstrated how he felt that the next best alternative would be for Sopheap to eventually go into a career where the use of his hands are not needed (as much). In his father’s perception, this avenue will allow him to make a living and enable Sopheap to maintain a certain level of independence and be able to take care of himself in future. As such, the education that he hopes for Sopheap is one that supports his individual development and maximises his potential for independent living in future.

This section has demonstrated the situations and various concerns children with disabilities and their families face, as well as how parents have different expectations of purposes in educating their children with disabilities. From their responses and observations made through this study, these differences in perceived purpose of education appear to be related to their child’s type of disability. Parents of children with severe or multiple impairments want their child to go to school like other normal children, not necessarily studying the same curriculum as other children, but simply to learn some skills. However, parents of children with other impairments tend to expect more and hope that through education, their children will be better able to survive independently in future.

Parents’ perceived purpose of education for their children with disabilities also informs their perceptions on how students with disabilities *should* be educated. For teachers, in addition to their perceived purpose of how children with disabilities should be educated, they are also aware of the extent of resources (manpower, curriculum and materials, teachers’ resource or skills) that are available in the micro-environment of children with disabilities. This awareness and perceptions of the resources available to children with disabilities informs parents’ perceptions on how students with disabilities *can* be educated.

### Section 3. SOCIO-ECONOMIC EFFECTS

#### 4.3.1. On Parents

As discussed in Chapter 2 analytical framework section, Bronfenbrenner argues for the central role of the family in the development of children and the need to strengthen family systems. The family plays a critical role in the life and development of children with disabilities, as it serves as the first support mechanism, as well as the child's gateway to other support mechanism and infrastructure in the larger society. The effects of insufficient support from larger contexts is not only limited to the lowered capacity of the family to support the child's development, the lack of support and socio-economic stresses also determine the confidence or stress that parents bring to parenting and their relations with their child (ICS & RUPP, 2014).

While the family plays a significant role in the development of the child, its capacity to do so is dependent upon support from larger social contextual levels. Data from qualitative interviews showed how children with disabilities from families with lower socioeconomic status face greater disadvantage in gaining access to school or staying enrolled. This section will look at the impact of different socio-economic backgrounds (such as income level, social position, and ethnicity) affect education for children with disabilities. Individual cases of children with disabilities from different backgrounds will be used to demonstrate and contrast the effects of such socio-economic status.

*Case II: Physically Impaired Boy in Kandal (Legs are underdeveloped and weak). Boy's father is an entrepreneur and owns his own business.*

Charya (pseudonym) is an 11-year-old boy in Grade 5 at the point of data collection. Similar to Bunroeun, his medical condition remains undiagnosed, but "he had weak legs since young" and "broke his legs many times". He lives with his family 5 kilometres away from school, but his father who owns his own small business spends USD 1,000 to modify a scooter that he could use. Charya rides the scooter for 10 kilometres every day to-and-fro school amidst Cambodia's notorious traffic road conditions. Even for those who have accommodations for better access to school, there are less than ideal conditions they have to overcome.

In the interview, the school director also shared how Charya is doing very well in school and receives plenty of help from his peers with his homework and moving about school. He also shared how Charya is very generous and asked his father to buy bags for his friends when he saw that they

did not have any. From observations in school and class, Charya's classroom was situated at the corner of the classroom block, and the principal said that they had specially moved his class down to the ground floor to facilitate Charya's movement. As Charya rode his scooter into the school, he passed the courtyard where we were conducting our interviews, and greeted us with a bright smile. The scooter pulled up beside the classroom block, and a few boys came out: one grabbed Charya's bag, while one helped him alight and held onto him as they entered the classroom. During breaks, Charya's friends helped him out to sit along the corridors, where they remained there throughout the break, talking and laughing. Once the bell rang for lunch, the same boys helped him out again, one carrying his bag and putting it on the scooter for Charya, and the other supporting him.



Figure 4-4: Modified Scooter of Boy with Physical Disability in Kandal. Photo taken by author.

*Case III: Physically Impaired Boy in Ratanakiri (Legs are weak and bent inwards). Boy's father is a former teacher and a member of the school committee.*

Khean is a 13-year-old boy who was repeating Grade 4 at the point of data collection. Khean has weak legs that are bent inwards. This makes walking challenging as he has to circle his legs from back to front every step he takes. Khean's father is 45 years old and currently serving as a member of the school committee. His current main occupation is a farmer, but previously he was working as a teacher in another district of Ratanakiri from 1990. After quitting in 1998, he took on the position as a member of the school committee in the elementary school Khean is currently attending. He then

went on to explain that his son developed his current condition of slurred speech and difficulty in balancing when walking, after an episode where “lumps grew on his body” [mumps with complications]. Now, his son’s legs are very weak and he takes a very long time to walk to school and even falls down along the road (national highway). When the father is free, he brings the boy, but otherwise, his son leaves at 10 in the morning.

*“I don’t know how long he takes to go to school (laughs). But he goes to school regularly and likes to play at school with other children, and he has many friends. My son wants to learn and always insists on going to school even if he is sick.”*

From observations in school and class, Khean appeared to be the only student in school wearing a gold necklace and bracelet. During class breaks, he took off his white school shirt (that was turning yellowish) and walked to sit on a bench a few metres from the classroom. During the break, he was seated alone and no one came up to talk to him. After the bell rang, Khean went back in to his seat and put on his school shirt again. At this time, a few friends seated around him crowded around him and they chatted for a while before their teacher entered the classroom.

Once class started, the teacher (who was aware that an observation was going on) went about ‘a typical classroom teaching routine’, where students repeated after her from the textbook. After some reading, the teacher called Khean up to the blackboard and asked him to answer a question. When he gave the correct answer, she patted his back and commended him before he returned to his seat. During interviews with his teacher earlier in the day, she had raised that Khean’s father is on the school committee and is aware of what is going on in school so they make it a point to make sure that Khean is well taken care of.

*Case I: Physically Impaired Girl in Kampot (Permanent leg injury impairing her ability to walk for long distances). Girl’s mother is a widow and earns the family’s living through one-off labour jobs.*

Bunroeun (pseudonym) is a 13-year-old girl from Kampot. Her school is in Kep, central Kampot, and she lives with her mother and two other siblings at their home located about 10 minutes by car from school (approximately 40 minutes’ walk along a main road). Their home is a typical wooden house on stilts about 15m<sup>2</sup> in area, with an open space under the house. The space inside the house consists of a small cooking area, and the remaining space serves multiple purposes. Mattresses are folded in one corner of the house in the day, and the space is converted into a sleeping area at night. The house is dimly lit even in the day, with one door entrance and a small rectangular window on the opposite side. The family does not own a television or radio, but pen drawings by Bunroeun



and her sister are pasted around the house.

Bunroeun's current leg condition renders her unable to walk for long distances without significant pain. Her mother described how Bunroeun sustained her leg injury a few years back from a damaged wooden plank in their house. The mother was out working and Bunroeun was home alone with her sister, when she accidentally hit an exposed nail on a wooden plank protruding from the flooring of their wooden stilt house. Bunroeun broke a bone on her leg and it was very swollen, even after going to the hospital three times. She had a surgery three months ago before the interview, and her leg is less swollen now, but she is still unable to walk properly. In her condition, it is impossible to walk all the way to her school, 40 minutes away. Her mother had then no choice, but to take Bunroeun out of school.

Bunroeun's father passed away when the children were still young and her mother has since single-handedly raised Bunroeun and her two siblings. Their mother leaves the house at daybreak to "sell her labour" by doing odd jobs. She further describes:

*"I don't have any skills so I cannot do proper jobs. I can only do labour work when people need my help, so my work and income is not regular. Sometimes, I help people on their farms, sometimes I work in the salt mine. I usually leave early in the morning and only come back in the late evening, so Bunroeun has to help cook for the family."*

As the sole breadwinner of the family and with three schooling children to support, the mother's income only allows the family of four to survive from hand to mouth. Based on their household income level, they were identified as a 'poor household' and received an Equity Card<sup>7</sup>, which serves as an important safety net for the family:

*"With this poverty [equity] card, we get health treatment free of charge at public hospitals. Previously when I was hospitalised, we also received 5000 riels daily. But it has benefits only for health and nothing for education... So if I don't earn enough, I can't send them to school."*

When further asked whether it was possible for Bunroeun to get a lift from her neighbours who are on the way to send their children or simply passing by the school, she said very

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<sup>7</sup> Under the Identification of Poor Households Programme (IDPoor) by Cambodia's Ministry of Planning, poor households are identified on a rolling basis. The process of identification takes place on the provincial, commune, and village level. Based on a questionnaire with proxy indicators of poverty, a List of Poor Households is finalised. These households receive an Equity Card, which aims to "directly target services and development assistance to the poorest households in a village in order to help lift them out of poverty and to protect them from the impact of shocks (e.g. serious illness, crop failure) which may deepen their poverty". (Source: Website of Ministry of Planning, Cambodia: Identification of Poor Households Programme).

matter-of-factly:

*“We only have one bicycle, but three children. My eldest son is in high school and he takes the bicycle to school, so they can’t all go together. I am a single mother busy working and raising three children and I don’t get to talk to the other villagers, so I am not close to them. And there is no one else I can ask for help.”*

This left Bunroeun and her mother to see no other choice but for Bunroeun to stop attending school.

#### 4.3.2. On Teachers

Circumstances in Cambodia leave teachers with little time and energy to accommodate or pay attention to the special needs of children with disabilities. Teacher salary in Cambodia is very low and many teachers take on other day jobs for the betterment of their family’s survival and quality of life.

This situation is amplified in rural areas, where transportation and making a livelihood are issues that become more pronounced. During participatory observations at schools, some teachers, particularly those in rural areas, were observed to be selling food and drinks within the school compounds over short breaks between classes to supplement their income. Others carried out supplementary lessons after school for students and collected additional class fees from those attending.

This is further exacerbated for teachers who live far away and/or it is difficult to travel to school. The teachers of a rural Kampot school shared how living far away from school makes it difficult for them to get to school in the first place. All of them live rather very far away, about an hour by motorbike through mountainous roads, which they reported as a “very tiring” journey. During the rainy season, the road conditions become worse, which makes them “sometimes late by 15-20 minutes”. Although it is common for people in Cambodia to return home for lunch during their 2-hour lunch break, the teacher are unable to due to the distance. With their low salary, “they cannot afford to buy lunch outside as it is too expensive”, so they have to bring food from home at the beginning of the day.

While bringing a lunchbox might be a common concept in most countries, such practices are kept safe by being able to store food in refrigerators. However, Cambodian teachers who bring food to school are unable to do even amidst high temperatures, and it means that their food go bad,

particularly amidst especially humid conditions.

Additionally, most female teachers who are mothers are faced with an additional task of returning home to cook lunch for their family and children, so they leave work after the morning session to fetch their children before heading home to prepare lunch for the family. This leaves them with barely enough time before classes start for the afternoon session, making it difficult to set aside time for class preparation and activities that are necessary to accommodate and include children with disabilities, or to monitor their progress.

In other cases, the lack of teacher attention to class preparation and students as a result of having to cope with other work to support their livelihood is also observed by parents. Some parents have also reported that teachers absent themselves when they have something else important to attend to, making it inconducive for students to learn. The mother of a boy with intellectual disabilities who dropped out of school (School 7) expressed her thoughts and how teachers do not appear to be interested in giving her son the attention he needs in school and class. Her son is 16 years old and has a heart problem; he had pneumonia and brain fever [acute inflammation of the brain] when he was young. She had decided not to continue sending him to school since he was not able to learn anything in school and some incidents of being beaten by other children led to him being afraid of people at school. With regards to her son's teachers at school, she commented that at public schools, teachers places less attention on students with disabilities, and just want to get 500 riels (their salary).

#### Section 4. PARENTS' RELATIONSHIP WITH TEACHERS

Studies have shown that there is a need to develop a greater sense of shared purpose and common goals to alleviate parental anxieties and establish a positive relationship between parents and teachers. Both parents and teachers have concerns about communication, as well as organisational planning and structure in the implementation of inclusive education (Frederickson et al., 2004). Bronfenbrenner (1979, p.211) posits that,

*“[t]he developmental potential of a setting in a mesosystem is enhanced if the person's initial transition into that setting is not made alone, that is, if he enters the new setting in the company of one or more persons with whom he has participated in prior settings (for example, the mother accompanies the child to school).”*

He also argues that the developmental potential of the individual can benefit from a

supportive link between the settings in a mesosystem, for example, when a child's father visits the school, or when there is regular communication between the mother and the teacher. Parents' positive attitudes tend to influence teachers and support staff, and also help to realise inclusion in schools and classrooms (de Boer et al. 2010).

However, empirical qualitative data in this study shows that interaction at this level is severely lacking, although not fully absent. Generally, teachers enjoy a respected position in Cambodian society as educated people, but there is very little and irregular contact between parents and teachers (or the school). Schools in Cambodia have a contact book system, where both parents and teachers can write down things they would like to bring to the attention of the other, but only a handful of the parents spoken to know about it, and even so, do not actively use it. From observations, parents in Cambodia do visit the school, but they do so only for the purpose of fetching their children to and fro school, and have no intentions of speaking with teachers or the school director. Parents reported fear or hesitation—of “being scared”—in talking to teachers, and in some cases, even expressing discomfort or dislike towards the child's teacher.

Some teachers observe that parents do not give enough attention to their children with disabilities. The teacher of 7 years old boy with physical disabilities in Phnom Penh shares about how the parents of this boy do not appear to be very involved in his life: “I call the parents only if he falls sick. I feel very pity for the child... because the parents don't pay attention. I'm really not sure if he receives enough attention at home. They should bring him to school. Sometimes, an uncle brings him to school.” No matter the actual situation—the boy's parents might be busy with work and take care of him well but only when they meet him at home—the teacher's observation and apparent lack of communication with or understanding of the boy's parents suggests a weak or absent relationship between the boy's teachers/school and his parents/family.

Interestingly, data also showed inconsistencies in responses from parents and teachers. In some instances, parents and teachers differed in how they defined the impairment of a child with disability (refer to Appendix 6), their observation of how the child is coping and learning in school, as well as their opinions on the (level of) interaction between them.

## Section 5. SCHOOL & TEACHER CAPACITY TO INCLUDE CHILDREN WITH DISABILITIES

Past studies have shown that teacher perceptions are related to support in planning time, contact time, class grade or size, training, resources, knowledge, previous experience with inclusion, type and severity of disability, parental support, and participation in the decision making process. In

some cases, teachers are unaware of resources available to them, which could otherwise have been mobilised to actualise inclusive practices, due to unsystematic policies and plans. However, the primary reason why teachers immediately see the limits to inclusion is due to the perceived lack of administrative and/or school support (Avramidis et al., 2000; de Boer et al., 2011).

#### 4.5.1. Teacher Training & its Impact on Teachers' Perceptions

Many studies in the context of developed countries have argued for how gaining knowledge about the special educational needs of children with disabilities is crucial in improving teachers' attitudes towards their inclusion in regular classrooms, and systematic training and staff development are important for the inclusion of students with disabilities in educational systems (Dickens-Smith, 1995; Avramidis & Norwich, 2002).

Studies have highlighted how training affects teachers' attitudes toward children with disabilities. Ghanizadeh, Bahredar and Moeini's study (2006) in Iran demonstrated that while knowledge of ADHD was low, they found a significant correlation between teachers' knowledge and attitudes, indicating that "those who know more about ADHD also have a more tolerant attitude" toward children with ADHD,  $r = 0.23$ ,  $p < 0.01$ . Similarly, Batsiou et al. (2008, Greece and Cyprus) also found a significant relationship between how teachers' attitudes are influenced by the knowledge and information they have about the inclusion of pupils with special needs in regular classrooms. (1) Knowledge and attitudes ( $r = 0.26$ ,  $p < 0.001$ ) and (2) information and attitudes ( $r = 0.36$ ,  $p < 0.001$ ). In fact, Campbell, Gilmore and Cuskelly (2003) had also showed through their study that when teachers who acquired greater knowledge about a specific condition or disability, their positive attitude towards including children with disabilities broadened to include children of other types of disabilities than the one they had acquired knowledge about.

Sari's 2007 study in Turkey showed that teachers who attended an in-service teacher training program scored significant higher scores than those who did not attend ( $r = 15.6$ ,  $p = 0.0001$ ), indicating that an increase in knowledge of deaf children led to positive attitudinal changes towards their inclusion in regular classrooms, in terms of both knowledge about educating deaf students in inclusive settings and classroom management

Beh-Pajooch (1992) and Shimman (1990) found that the acquirement of knowledge on disabilities through pre- and in-service training is an important factor in improving teachers' attitudes towards the implementation of inclusive education policies in UK. Their findings showed that college teachers who had been trained to teach students with learning difficulties expressed more favorable attitudes and emotional reactions to students with SEN and their integration than did those

who had no such training.

Similar studies in other countries also reinforced that special education qualifications acquired from pre- or in-service courses were associated with less resistance to inclusive practices. (US case studies: Buell et al., 1999; Van-Reusen, Shoho and Barker, 2000; Australian case study: Center and Ward, 1987; and UK case studies: Avramidis et al., 2000a). Teachers were found to also demonstrate more favorable attitudes towards inclusion after in-service training, with regular education teachers showing the strongest positive attitude change (Dickens-Smith, 1995; Avramidis & Norwich, 2002; Lifshitz, Glaubman & Issawi, 2004).

However, Wilkins & Nietfield's study (2004) on a US school-wide inclusion training program showed that "training was not... effective at instilling favorable attitudes towards inclusion", and "untrained... teachers actually reported significantly more favorable attitudes". They explained that teachers were not convinced of the inclusion-based classroom approach after experiencing the program and that "infrequent workshops, goal statements, orientation training and even limited amounts of co-teaching may not be powerful enough interventions to sustain lasting attitudinal changes in teachers". They added that "training methods need to take a more aggressive approach at increasing both the knowledge and efficacy of teachers" in their approach to include children with disabilities in regular classrooms, and that "teachers need support, additional training, common planning with special education teachers, and staff development that is ongoing to increase knowledge and gain confidence". Staff development was also highlighted as central to the inclusion of children with disabilities in Dickens-Smith's 1995 study.

Some studies have also similarly demonstrated how systemic development of long-term training in inclusive education should be a priority to form positive teacher attitudes and concerns towards the inclusion of children with disabilities (Batsiou, et al. 2008; Avramidis & Kalyva, 2007). Their data showed how teachers who were trained were significantly more positive towards statements about the general philosophy of inclusion, compared with those who had no training at all ( $F\{2, 152\} = 4.85, p < 0.01$ ). Figure 4-5 shows teachers' responses to "*How should children with disabilities be educated*", with responses categorized by whether teachers have ever received specific training on teaching children with disabilities. As mentioned in Figure 3-2, only 20.5% of all teacher-respondents reported that they had previously received specific training on teaching children with disabilities.

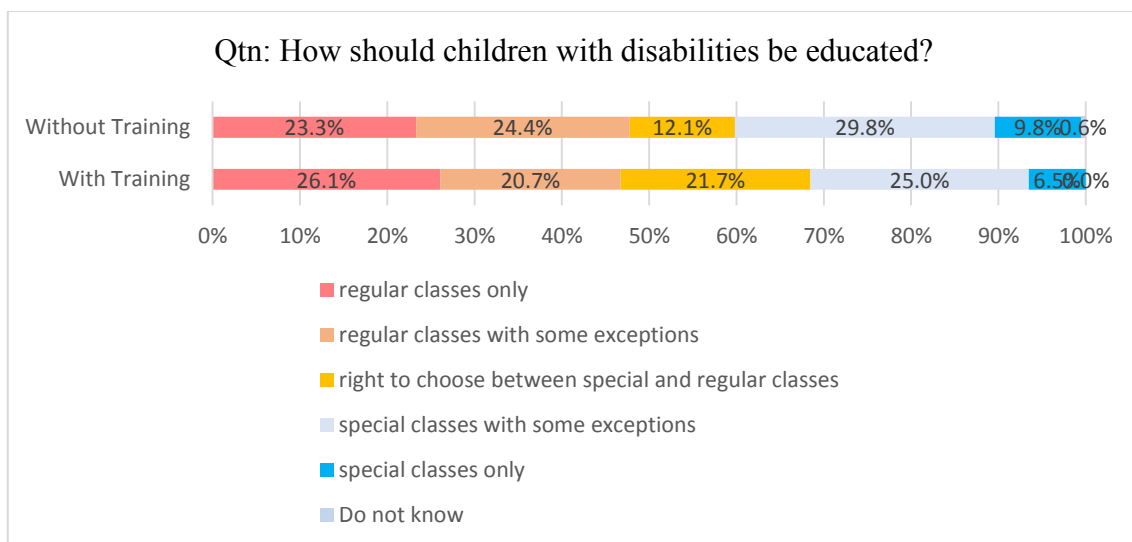


Figure 4-5 Type of education preferred for CwDs, by training. Source: Kuroda, Kartika, and Kitamura (2017).

From Figure 4-5, we can see that for teachers who did not receive specific training for children with disabilities, 47.7% indicated a preference for inclusive education setting (23.3% for regular classes only, 24.4% for regular classes with exceptions) and 39.6% indicated a preference for special education setting (9.8% for special classes only and 29.8% for special classes with exceptions). For those who did receive specific training for children with disabilities, responses were found to be similar to those who did not receive specific training. 46.8% of all teachers who received specific training for children with disabilities indicated a preference for inclusive education setting (26.1% for regular classes only, 20.7% for regular classes with exceptions) and a slightly lower 31.5% indicated a preference for special education setting (6.5% for special classes only and 25.0% for special classes with exceptions). When we include the group who responded that children with disabilities (and/or their parents) have the right to choose between special and regular classes, we find that in both cases, more than half of all responses belong to the ‘Others’ response group (51.7% for teachers without training, 53.2% for teachers with training).

Using chi-square test, they observed that results are not strong enough to conclude that there is a statistically significant relationship between training received for students with disabilities and teachers’ perspectives on how children with disabilities should be educated.

		<b>With Training n=92</b>	<b>Without Training n=356</b>	r-value	p-value
<b>IE Setting</b>	<i>In regular classes only</i>	0.467	0.478	0.03	0.862
	<i>In regular with exceptions</i>	(n=43)	(n=170)		
<b>Others</b>	<i>In special with exceptions</i>	0.533	0.522		
	<i>In special classes only</i>	(n=49)	(n=186)		
	<i>CWD's right to choose</i>				

Figure 4-6 Results of chi-square test, x= type of education preferred, y= training. Source: Kuroda, Kartika, and Kitamura (2017).

In interviews with them, teachers expressed awareness in that they “lack technical skills” to teach students with disabilities. Teachers wanted to learn about “proper teaching methodology”, or specific things they could do in classrooms, to help students with different types of disabilities learn better. Fundamentally, they “don’t know how to help” as well, partly because they cannot or have difficulty communicating with students who have severe sensory impairments (blind or deaf). Many teachers had not heard about Cambodian Braille and/or the Cambodian sign language, and when told about it, many expressed that they would want to learn so that they can communicate with their students and “become able to teach those students”.

#### 4.5.2. Failure of the Cascade Training System

Respondents shared anecdotes that revealed how teacher training in inclusive education is not systematically implemented. Teacher training is currently carried out by a cascade system, where only selected teachers from selected schools have the chance to attend a regional or country level training. In turn, they return to their schools and train or share the knowledge with their colleagues. A school director at a primary school in Ratanakiri shared how he had previously been one of the school directors selected to attend a district-level training workshop for identifying children with low vision and they “learned teaching methodology from experts”. The participants were supposed to return to their schools after training and “expected to share with others” what they had learnt. However, interviews with the teachers of that school showed that while they knew the school director had previously gone on training, they reported not knowing what the training was exactly



about.

This was also the case in other schools, where some respondents reported being aware that some of their colleagues had gone for such seminars, but were unaware of what they learnt, while some were entirely unaware that their colleagues had been sent for such seminars. This demonstrates that the current cascade training system is not effective, such that information and knowledge is not properly disseminated and trickled down.

Secondly, although no correlation between training and teachers' perceptions was observed as shown from the analysis in Figure 4-6, responses from qualitative interviews reveal that schools receiving systematic support and training are generally more positive in their attitudes towards children with disabilities and educating them with others without disabilities, in addition to being better able to adapt their methods to accommodate learning needs of children with disabilities.

#### 4.5.3. Negative Impact of the Lack of Resources on Teachers' Experience

Evidence suggests that the lack of resources has a negative impact on teachers' experience with inclusive education, which can lead them to develop negative perspectives towards inclusive education.

Other than the positive effect of relevant teacher training on perspectives towards inclusive education, multiple studies in the context of developed countries have also shown how experience in teaching children with disabilities is a decisive factor in having a similar positive impact on teacher perspectives (Yuker, 1988; Janney et al., 1995; Jobe et al., 1996; Avramidis et al., 2000a; Avramidis & Norwich, 2002). These studies mainly demonstrate how teachers who have direct contact with these students and experience in implementing inclusive education at the classroom level begin developing positive attitudes towards the inclusion of students with disabilities, and significantly so as compared to teachers without such experiences ( $F\{1, 153\} = 12.33, p < 0.001$ ) (Avramidis and Kalyva, 2007, Greece). The study by Janney et al. (1995, p.436) went as far as to describe how despite being "wary" and "overloaded with work", teachers were able to "re-evaluate the balance the cost of teachers' time and energy as compared to the benefit for students" through the course of implementing inclusive education, and eventually come to terms with such efforts as "successful".

Leyser et al. (1994, six countries including the two developing countries of Ghana and the Philippines) found that, overall, teachers with much experience with disabled persons had significantly more favorable attitudes towards integration than those with little or no experience.. Findings of several other studies conducted in USA (Leyser and Lessen, 1985; Stainback, Stainback

and Dedrick, 1984), Australia (Harvey, 1985; McDonald, Birnbrauer and Swerissen, 1987) and UK (Shimman, 1990) have also stressed the importance of increased experience and social contact with children with disabilities, in conjunction with the attainment of knowledge and specific skills in instructional and class management, in the formation of favorable attitudes towards integration.

Sharma, Forlin & Loreman's study (2008) on Australia, Canada, Hong Kong and Singapore also demonstrated that teachers who come into contact with people with disabilities systematically become more aware of disabling conditions, policies and legislations regarding their inclusion. These studies seem to suggest that contact with students with significant disabilities, if carefully planned (and supported), results in positive changes in educators' attitudes. These studies, coupled with more recent ones on teachers' attitudes towards inclusion presented earlier, indicate that as experience of mainstream teachers with children with disabilities increases, their attitudes change in a positive direction (LeRoy and Simpson, 1996, US).

Kalyva, Gojkovic, and Tsakiris (2007) found similar results among Serbian teachers. The results of the study also showed that teachers with experience in teaching pupils with special educational needs were more positive compared to those without experience ( $F\{1, 69\} = 55.41, p < 0.001$ ). Everington, Steven, and Winters (1999) also reported that teachers who had experience in teaching children with disabilities in regular classrooms were significantly more positive towards it than those without any experience. Opdal, Wormæs, and Habayeb (2001) concluded that even teachers who had experience in teaching children with disabilities in special classrooms (29%) were more positive towards their inclusion in regular classrooms than teachers without experience (9%).

Batsiou et al. (2008) found a significant positive correlation between experience and teachers' attitudes ( $r = 0.88, p < 0.001$ ) in Cyprus as well, indicating that teachers' positive attitude is influenced "by their greater and more positive experience in the teaching" students with disabilities.

However, there are also some studies that report no such correlation between experience in teaching children with disabilities and perceptions towards their inclusion. For example, two studies in the 1980s demonstrated no such positive correlation. Stephens and Braun (1980) found no significant correlation between reported contact with students with significant disabilities and teachers' attitudes towards integrating these students into regular classrooms, while Center and Ward (1987) argued through their study that contact experience with students with disabilities does not necessarily result in the formation of more positive attitudes, as their teacher-respondents were found to be more tolerant of integration if no special class or unit was attached to their school.

Center and Ward's study (1987) also showed that those with the least teaching experience (0-2 years) were consistently more tolerant of including individual disabled children than their more experienced colleagues ( $p < .01$ ). Teachers with more experience expressed their lack of expertise

and confidence in teaching children with disabilities due to inadequate support services. This inverse relationship between experience in teaching children with disabilities and perception towards their inclusion is also observed in Forlin’s study (1995, New South Wales), where teachers with active experience in teaching students with disabilities reported that dealing with children with disabilities was more stressful than with those without such experience, because of the actual stress they experienced in their actual attempt to include children with disabilities in their classroom/school environment. They attributed this stress to reasons including the lack of control over decisions regarding the implementation of inclusive education and in their experience, felt that inclusion was not suitable for all children.

As shown in Figure 3-2, approximately 77.7% of all teacher-respondents have had some experience in teaching children with disabilities in their regular classrooms. Based on secondary data from JICA’s survey in Cambodia (Kuroda, Kartika, and Kitamura, 2017), Figure 4-7 shows teachers’ responses to “*How should children with disabilities be educated*”, with responses categorized by whether teachers have experience in teaching children with disabilities.

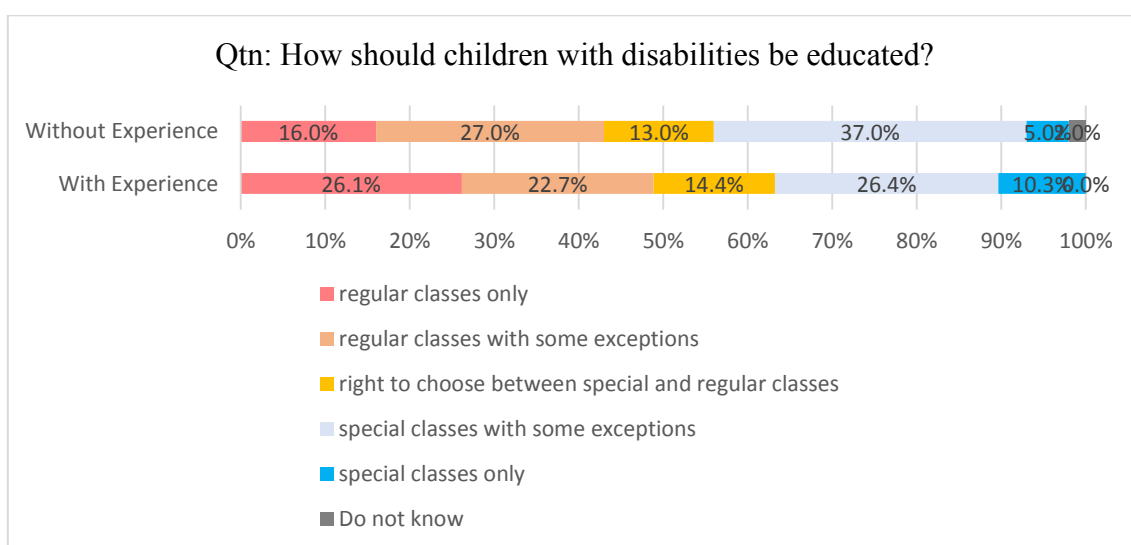


Figure 4-7 Type of education preferred for CwDs, by experience. Source: Kuroda, Kartika, and Kitamura (2017).

Among teachers who did not have experience in teaching children with disabilities, 43% indicated a preference for inclusive education setting (16% for regular classes only, 27% for regular classes with exceptions) and 42% indicated a preference for special education setting (5% for special classes only and 37% for special classes with exceptions).

For those who did have experience in teaching children with disabilities, responses were found to be similar to those who did not have experience. 48.8% of all teachers who have experience

in teaching children with disabilities indicated a preference for inclusive education setting (26.1% for regular classes only, 22.7% for regular classes with exceptions) and a slightly lower 36.7% indicated a preference for special education setting (10.3% for special classes only and 26.4% for special classes with exceptions).

Using chi-square test, they concluded that results are not strong enough to conclude that there is a statistically significant relationship between experience in teaching students with disabilities and teachers' perspectives on how children with disabilities should be educated.

		<b>With Experience n=348</b>	<b>Without Experience n=100</b>	r-value	p-value
<b>IE Setting</b>	<i>In regular classes only</i>	0.489	0.430	1.07	0.302
	<i>In regular with exceptions</i>	(n=170)	(n=43)		
<b>Others</b>	<i>In special with exceptions</i>	0.511	0.570		
	<i>In special classes only</i>	(n=178)	(n=57)		
	<i>CWD's right to choose</i>				

Figure 4-8 Results of chi-square test, x= ideal type of education preferred, y= experience. Source: Kuroda, Kartika, and Kitamura (2017).

Interviews with teachers revealed that those with experience in teaching students with disabilities recognized the rights of children with disabilities to education and that “as a teacher it’s their duty [to educate them]”, but teachers commonly discussed the limits of implementing inclusive education in the current situation and that it is “difficult to teach students with disabilities”.

The general lack of resources available (e.g. Braille printers and/or textbooks) as well as the lack of systematic support and planning between teachers and at the school level also make it a much less conducive environment for teachers to pay attention to the special needs of children with disabilities. Teachers shared how they devise their own ways of teaching students with disabilities. For those with low vision, a teacher at Ratanakiri with 13 years of experience with teaching children with disabilities tries to deal with it by writing in different colours and in bigger fonts, or putting them right in front of the board.

Another school director at Kandal with 20 years of experience with teaching children with disabilities described how they “don’t have ability or qualifications, so [they] just use gestures” to communicate with a student who “can’t speak but can hear and has lower understanding”. The director seemed to welcome the idea of educating children with disabilities in their school, but he felt that “students with severe disabilities should go to special schools” and that he “hope[s] for some organizations to help them”, because the school lacks resources. For the student mentioned above who “can’t speak but can hear and has lower understanding”, the director accepted his enrolment only because one of the teachers had already accepted the child’s enrolment directly. The director had also previously attended study seminars and heard that there would be support coming in for students with disabilities. However, that was back in 2014, and he was shared his disappointment on how it has not yet come in after more than a year. The director appeared resigned to the situation and said that “if they [children with disabilities] come [I’ll] accept, but let them know in future [if] there is any lacking in teaching, please understand (sic)”.

Teachers’ lack of knowledge in interacting with and teaching students with disabilities (as a result of the lack of training) also further leads to a lack of confidence in teaching students with disabilities, which results in a negative, or at best neutral, experience in teaching them. A teacher with 20 years of teaching experience but who “only just recently face these kind of students” shared that it is “difficult to teach students with disabilities” because she has “difficulty explaining to them”. Even though teachers believe that it is their “responsibility and duty as teachers to educate their students”, they reported feeling unable to cope with such situations and eventually draw away from or reject such situations. A teacher with 20 years of teaching experience but who “only just recently face these kind (sic) of students” shared that it is “difficult to teach students with disabilities” because she has “difficulty explaining to them”.

A teacher with 9 years of teaching experience in rural Kampot reflected on his classroom experiences with two students with learning disabilities: one who “cannot understand well” and “cannot speak clearly”, and another who has “low cognition” and “cannot catch up with the rest”. The teacher further shared,

*“I tried my best to teach, speak, write, and listen for four subjects, but the students [with disabilities] still don’t understand and I have difficulty explaining. Teaching students with disabilities is more difficult than normal. If I give more them, it may affect the pace of other students without disabilities and they may feel bored.”*

The experiences of this teacher of students with learning disabilities illustrates his uncertainty and lack of confidence in teaching them as he is concerned about whether he is able to get his point

across to the student, and whether it is affecting other students in his class.

In addition to these perspectives, results also showed that resources have tangible effects on student dropout. Teachers in rural Kampot [School 10] shared that:

*“There is also the dropout problem. At the lower levels it is ok, but at the upper primary levels it gets more abstract. It becomes more difficult to teach them with limited resources.”*

Within this school, one child who is hard of hearing, two with oral and speech disabilities, and three with physical disabilities are enrolled. Through the process of learning, children feel a sense of achievement when they are able to do so. However, teachers shared the worry of students with disabilities dropping out. Teachers shared that:

*“Teaching skills are most important and we need to learn how to teach. The students can’t catch up because we have no proper teaching methodology. Then, it is discouraging for students with disabilities when they are unable to catch up, so they drop out.”*

In this sense, teachers worry that because they are unable to support the learning and special needs of children with disabilities, and it eventually leads to lower student morale and dropping out.

#### 4.5.4. School Capacity

The school director of one school in Phnom Penh (School 1) suggested adopting a School for All approach:

*“We pay attention to all children, all disadvantaged students, including students with disabilities but not only students with disabilities. On Thursdays [usually staff meeting days with no classes], we teach as normal and just help all the weak students. The teachers gather them and place them nearby [the meeting] to help them catch up. They then update each other on the number of weak students monthly. For this monthly meeting report, teachers also have to report and update each other on what they do for weak students and how they are. Teachers share their class situations and difficulties with each other here.”*

At the school level, school directors and teachers also shared how they face difficulty

allocating students with disabilities to classes and getting support, as there are “not enough students with disabilities for one class”, and to get additional budget or resources from the government, they need to have a “minimum number of students with disabilities”.

Moreover, the school director shared with us how the school used to face many financial difficulties in allocating resources to their students’ learning, but had recently received monetary support of 10,000 riels from the government to encourage the school to pay attention to disability issues and their students with disabilities. They also receive other funds from NGOs in the area. He mentioned that the school used to receive little attention, and that “no one supported our school, but we continued to pay attention to disadvantaged students, including students with disabilities”. As the director used to work at the headquarters of MoEYS from 1985 till he decided to go into teaching, before joining the current school as vice-director from 2007 and then school director from 2010, he was familiar with the grants available to schools.

The director shared how School-in-Grant support is allocated to all schools, in addition to materials and information, but voices from school directors at rural areas such as those in the highlands at Ratanakiri reported that these take a long time to reach their schools—usually not in time for the new term, and sometimes almost towards the end.

## Section 6. CONCEPT & AWARENESS OF DISABILITY & AVAILABLE SERVICES

Parents who receive less knowledge, information, advice, and experience about disabilities seek less social support, and expect less from schools and their children, to the extent that it hinders the development of the Child (Bronfenbrenner, 1979; Wong et al., 2014). Interviews revealed that parents have limited, and in some cases almost no, idea of their child’s condition or services available their child.

One example is the case of a boy in Ratanakiri who suffers from episodes of fits. His mother has little idea of what her son’s condition about, and was unable to give a name to his condition. She shared how sometimes foam comes out of her son’s mouth suddenly, and that he has a weak hear so he feels faint very often. When asked whether she know what triggers her son’s condition, she replied that she had no idea but added that the family now knows that when he begins to “feel weak”, it is a sign that he might go into fits soon. This helps the family members support the boy in coping with the physiological difficulties of his condition. The mother also added that she went to “the doctor in the market” (the drugstore) to get medicine for her son, but it does not seem to be helping, and he is also not willing to take the medication.

In other instances, parents are unaware of where to bring their children for checkups and get a diagnosis, even when they suspect a disability or condition, or about educational services available to their children, even if it is near by. During an interview with the mother of a 13-year-old boy with intellectual disabilities, she was unaware that there was an NGO (EpicArt) only less than 5km away that accepts children with disabilities for their activities.

Veha, a 12-year-old boy in Ratanakiri, cannot speak and cannot hear. When asked about how to communicate with Veha, his mother shares that “using gesture is the only way to communicate with him”, but when she was asked about whether she knew that there is a kind of language [of gestures, sign language], she shook her head and said she had no idea, and listened attentively to my explanation of how sign language works. The mother also mentioned that some people (possibly from Krousar Thmey) had come to visit them at the family house and suggested that Veha go with them to the boarding school and learn there. She mentioned that she was not keen as it meant having to send him away from her. The author showed her a documentary of Krousar Thmey’s work (NHK, 2015) for her to see how children who are deaf learn with their teachers. Veha and his mother watched the video together and halfway through, the mother commented that it “looks good to send him [Veha] there”. Even though Veha could not hear, he watched keenly to the end without interruption and his face visibly lit up. After watching the video, it was evident that their perceptions had been changed; Veha’s mother asked him how about going to this school, and he nodded with a smile without hesitating.

Through the account of another mother of a 7 year old boy (Grade 1) in Battambang who is deaf, her response similarly showed that she was able to communicate basic instructions with her son, but not able to know what he thinks:

The school director of School 12 in rural Kampot shared with us how he had “heard about inclusive education from a meeting with other school directors”, and that he understood that it refers to “the right of all children to go to school regardless of disability and we shouldn’t discriminate them”. However, he went on to share with us how his teachers seem to have a low awareness of disabilities and how to approach students with disabilities.

*“Teachers tell me that some students don’t understand even when the teachers try hard to teach. Teachers usually give general feedback to the entire class and not particularly for students with disabilities. They don’t talk about conditions and students with disabilities particularly, but about ‘weak students’. Maybe they’re not familiar or aware about different kinds of disabilities, why the children face these difficulties and how to work around those limitations.”*



The school (School 12) has three children who are hard of hearing, one child with oral and speech difficulties, four children with low vision, one with physical disabilities, and seven with learning disabilities. Among these types of disabilities, the only ‘apparent’ one is physical disabilities. Only disabilities that are ‘visible’ (e.g. physical disabilities, blind, deaf) are problematised and recognised; those that are not visible (autism, etc.) are seen as ‘abnormal’ or ‘crazy’.

The lack of awareness of disabilities, the various types of them, as well as a lack of familiarity towards people with disabilities also manifests in bullying, which was an area of concern identified by many parents, to a variety of extents. Other than some accounts from parents about their child (with disability) being beaten by their teacher(s), one school director raised an incident where he was aware of a child with disability being beaten:

*“I want to eliminate discrimination of students with disabilities. More people are now less discriminatory towards children with disabilities, but it still occurs sometimes. There was even a case where one of my teachers used to hit a student with disability, but we managed to peacefully solve this problem. One of our students with autism is older and bigger than the other kids—12-years-old and in Grade 1—but he still gets bullied by the younger boys. This is still an issue to be addressed.”*

A female teacher in Battambang with a student that has mental impairments talked about how he tends to get into fights with classmates. However, she now knows how to deal with him, so she gives him tasks for him to do well at and receive acknowledgement from the class (e.g. cleaning the blackboard or classroom). The other children in the class get into fights with him because they “don’t know how to deal with him”, so she always has to talk to both sides and solve the problem.

Having positive role models with disabilities seem to have a positive impact on the outlook of not only children with disabilities, but also their parents. Studies have also shown that “[i]t can be very helpful in some contexts to encourage disabled children to meet in groups in order to develop a positive self-identity, to be exposed to disabled role models, and to share experience about the particular difficulties they may be facing.” (Ras, 2008, p.13). One mother of a child with disability shared how after watching Hun Sen on television giving a speech, she gained more courage and confidence that having disabilities does not mean the end. Seeing how Hun Sen is able to stand in front of a country and lead, despite being blind in one eye, introduced to her the idea that having physical impairments does not simply mean that one just stays at home and not lead a productive life. She felt it gave her confidence to encourage her child with disability to work hard and an active

member of society too.

## Section 7. ROLE OF VILLAGE IN FACILITATING INFORMATION & COMMUNICATION

This section will show observations of how villages serve as effective spaces in Cambodia to facilitate the flow of information (regarding available support and services, etc.) and communication to occur organically and informally.

Mapping of the village household situation is usually carried out at the village-level. Referring to **Figure 4-1**, this village in Ratanakiri has been able to obtain useful information that has helped them identify children with disabilities as well as those who are out-of school. The village gathers information that highlight disadvantaged households, including mapping the income level of each household, as well as the condition and number of children per household, including households of people with disabilities and out-of-school children. This information is then shared with key members and schools, and serves as village data that provides information on the extent and type of support of (disadvantaged) households need. The role of the school then comes in here, where they act to ensure that all children of schooling age from every household are enrolled.

However, without such information, the central role of the village in facilitating the provision of education to children with disabilities cannot be fulfilled. The school director of a primary school in rural Kampot shared how the school receives FTI (World Bank's Fast Track Initiative Catalytic Fund Project for Cambodia) and SIG (School Improvement Grant) as part of the scheme established under the Education for All Fast Track Initiative. However, he expressed,

*“The village doesn't have a record of the specific number of children with disabilities, so even though the school has received SIG to visit the houses of disadvantaged backgrounds, we can't implement it because the village chief doesn't have information”.*

Due to the lack of village data such as the presence and number of children with disabilities across households, the school director shared how the school has not been able to carry out projects and utilise the fund to reach out to out-of-school children (who are of schooling age) or to encourage those who have come of schooling age to enrol. This highlights the crucial role that villages in Cambodia play, as household information collected at the village-level is in turn used by service providers (in this case, schools) to ensure that their services are able to reach out to all target populations, particularly those from disadvantaged backgrounds.

Generally, compared to the other four provinces of Battambang, Kampot, Kandal, and

Ratanakiri, the capital Phnom Penh appeared to have indications of a weaker village or community relationship. In the process of data sampling and speaking to the schools for information, or neighbours of families with children with disabilities, the urban capital appeared more detached, with many neighbours or schools not knowing each other's household situations or being entirely unfamiliar.

One of the schools in Phnom Penh (School 1) demonstrated that they enjoyed the support from the community and NGOs:

*“ASPECA supports the orphans and place them here [this school]. They also provide some [monetary] help for painting of the school. We also receive support from the village chief, commune, police, or community, who all help protect the school. The local authority [state, district office] also provides studying equipment at the beginning of the semester.”*

## Section 8. DISTANCE FROM SPECIAL (RESOURCE) SCHOOLS

While parents generally believe that it is important for their child with disability to play with other children without disabilities, some parents expressed their preference for their children to receive education in special-resourced classrooms. These cases tend to particularly involve children with severe sensory impairments (e.g. blind or deaf), where usual schools are unable to support their needs and learning. However, these parents choose not to send their children to special schools as they tend to be further away, or in a completely different province, and travelling between provinces (regularly) is not a feasible option for them financially.

Leap is a 10-year-old girl in Grade 2 at the point of data collection, and she is unable to hear and speak. Her mother shared how “when she was a baby, she had some voice, but when she reached the age of talking, she couldn't talk”. Leap's teacher commented that, “because Leah can't speak I don't know how much she understands”. She is also more sensitive and cries sometimes”. Her mother shared about sending her to a special school setting:

*“It should be the case that she just studies with those children with [similar] disabilities. There, she would be able to get special attention from the teacher and there should be gestures [sign language] that she can use to communicate with and understand the teacher”.*

If the special school is nearby, the mother would have wanted to send her there, but sending

her to the special school at Kampong Cham province means a one-way four-hour travel by car.

*“The school is very far and I have to separate from her. If it is near here, then I can bring her there in the morning, and back in the evening. She is my daughter and I want to take care of her. I want to be able to send and fetch my daughter from school. There’re people coming to my house and they mention about a school at Kampong Cham and they can accommodate this kind of children [deaf and cannot speak], but I decided not to.”*

Parents are unwilling to be separated from their children, particularly those from poor families whose parents cannot afford to travel (often) and visit the students if they were sent further away. In one case in Kampot, a parent of a boy with cleft lip said that an NGO had sent her son for corrective surgery. She knew that there was a special school operated by an NGO in Phnom Penh, but the only reason why she does not send him there is the distance. However, Krousa Thmey deals with this well, by having their teachers send children back home once a month through school transport. This serves as a good local example of addressing parents’ concerns and worries.

*“Our school accepts all students, regardless of [their] condition or background. Students have the right to study. Maybe in future, they will have an association for students with disabilities. But they [students with disabilities] cannot be [sent away and] separated, because they’re from poor families who live further away... But in Cambodian culture, parents worry too much for their children, and [are] different from western culture. They don’t let their children go far away, and have short thinking [don’t think for the future]. They simply don’t want to live far away from their children and keep them at home, which is not good. Knowledge of parents are still very limited—too emotional and outdated in thinking. They just don’t want to separate.”*

## Section 9. LOW QUALITY & ACCESS TO PUBLIC HEALTHCARE SERVICES

Since impairments are to do with the human body, the development of children with disabilities intrinsically require healthcare at some point, albeit to varying extents, depending on the type of impairment. In some instances, access to proper health services can help to completely prevent, eliminate, or lighten impairments, which in turn makes it easier for children with these

conditions to access education services. This is not a general implication across all types of disabilities, but particularly in those that are avoidable.

Based on official data (CSES, 2014), Figure 4-9 shows the type of healthcare services sought after. The top provider of healthcare is the private sector, with more than half choosing to go private. On the other hand, only about 23.5% go to public healthcare providers, even though it is supposed to be one of the basic essential services for people. This heavy reliance on private healthcare providers is because the locals do not trust healthcare in Cambodia, and when they need good healthcare services, people go to Vietnam, Thailand, or Singapore. It is usually said that those who are not so rich will go to Vietnam, those who are slightly better off will travel to Thailand, and those who are doing well will take a flight to Singapore or France to enjoy better healthcare services.

The next noticeable type is self-care, where people go to their local shops or markets to get medicine for their condition. Majority of these places have no pharmacists or doctors, where medicines that require prescription are simply given out in wrong dosages, e.g. antibiotics.

Provider of health care	Women	Men	Both sexes
Public	24.2	22.5	23.5
Private	62.0	64.3	62.9
Self-care*	12.7	12.2	12.4
Traditional care	0.6	0.3	0.5
Other	0.1	0.4	0.2
Overseas	0.5	0.4	0.4
Total	100	100	100

\* Self-Care includes: Shop selling drugs/market

Figure 4-9 Type of healthcare services sought among those who sought services in the last 30 days by sex, %. Source: CSES, 2014.

In 1995, the Ministry of Health implemented a health coverage plan for all 21 provinces (as of 1995) across the country. The important feature of that plan was the health center, which was located in “health catchment areas”, and supposed to cover a population of 4,000-11,000 (ADB, 2002). This was particularly relevant for densely populated areas of the country, such as Ratanakiri and Mondulakiri. Today, even though all the districts in these two provinces have their own health centers, the population is so sparsely spread out such that accessing health services at these centers still poses as a problem for many highlanders (ADB, 2002).

Traditional healing is also a common resource of health in Cambodia, particularly in rural areas. Healers often have “a wealth of assistance and indigenous experience and are usually trusted by the many villagers who seek out their assistance” (ADB, 2002, p.32). The father of an 11-year-old boy with frequent seizures in rural Kampot shared how the boy’s impairment began from an episode

of illness when he was an infant, and how they had initially brought their son to a traditional Khmer doctor:

*“My son had a high fever when he was five months and five days old. The family brought him to a traditional Khmer doctor in the village and treated him the way traditional doctors do, but he didn’t improve. So we decided to bring him to the hospital in Vietnam five or six days later, and the doctor treated him for 11 days at the hospital. Now he has to take medicine twice a day until he reaches the age of 12. The medicine is to prevent foaming from his mouth. But now, we have to go to the provincial hospital once every two months to get medicine for two months at a go, because we don’t want to travel there too often.”*

Another case in urban Kampot that illustrates this case involves the mother of a boy 16 years of age with intellectual disabilities and had dropped out of school (School 7). Their family earns USD 3,660 annually and finished studying up to the upper secondary level. Her son has a heart problem and had pneumonia and brain fever [acute inflammation of the brain] when he was young. In speaking to the school director of the school that the boy was previously enrolled in, the director shared that “the mother had eaten some [wrong] medicine during her pregnancy”, which led to the birth defect. The mother had also shared that “the boy was only one kg when he was born, after the full 9 months of pregnancy”. A year ago, she sent her son for a free check-up at Kantha Bopha Children’s Hospital in Phnom Penh (3.5 hours away by car), and managed to receive some medicine for his condition. However, due to the unpredictable nature and quick course of his condition, coupled by the fact that quality health care facilities for her son is a good distance away, the mother remains worried and apprehensive about his future and what she can or should do for him.

The lack of or neglect in quality maternal healthcare is not a rare occurrence. Sotear is a girl with mental/intellectual impairments (Sotear, pseudonym) from Phnom Penh (School 1). Her grandmother (Sotear’s main caregiver) shared how Sotear’s mother suffered from typhoid (and fever) during her pregnancy, which probably resulted in Sotear’s current condition. The mother went for treatment at a Japanese hospital, but aftereffects still lingered on. Sotear’s teacher also commented on her condition in school and class:

*“Sotear can’t write and answer questions. She likes to talk about happy things. Initially, she couldn’t wear her shoes and skirt by herself, but she has now improved after treatment. Currently, she is receiving mental treatment at the Russian hospital*

[Khmer-Soviet Friendship Hospital<sup>8</sup>] and receives medicine. She can't follow others and is quick to anger. It is difficult to teach her because you must pay attention to her all the time before something escalates suddenly. But then other students get jealous and ask me, 'why do you pay so much attention to her'.

Over the course of conducting fieldwork, many respondents raised the name of a hospital that they brought or are bringing their child for check-ups and treatment. Kantha Bopha Children's Hospitals are a group of five hospitals located in Phnom Penh and Siem Reap<sup>9</sup>, and people from all over the country who are unable to pay for treatment make their way to one of these five hospitals. To date, the hospitals have treated approximately 15 million outpatients and 1.5 million hospitalisations in the past 24 years (Kantha Bopha website). The hospitals provide free treatment for children, mainly for malaria, dengue fever, typhoid, and tuberculosis. Tuberculosis remains the major health problem in Cambodia as a direct consequence of the prisons and torture centres during the Khmer Rouge regime.

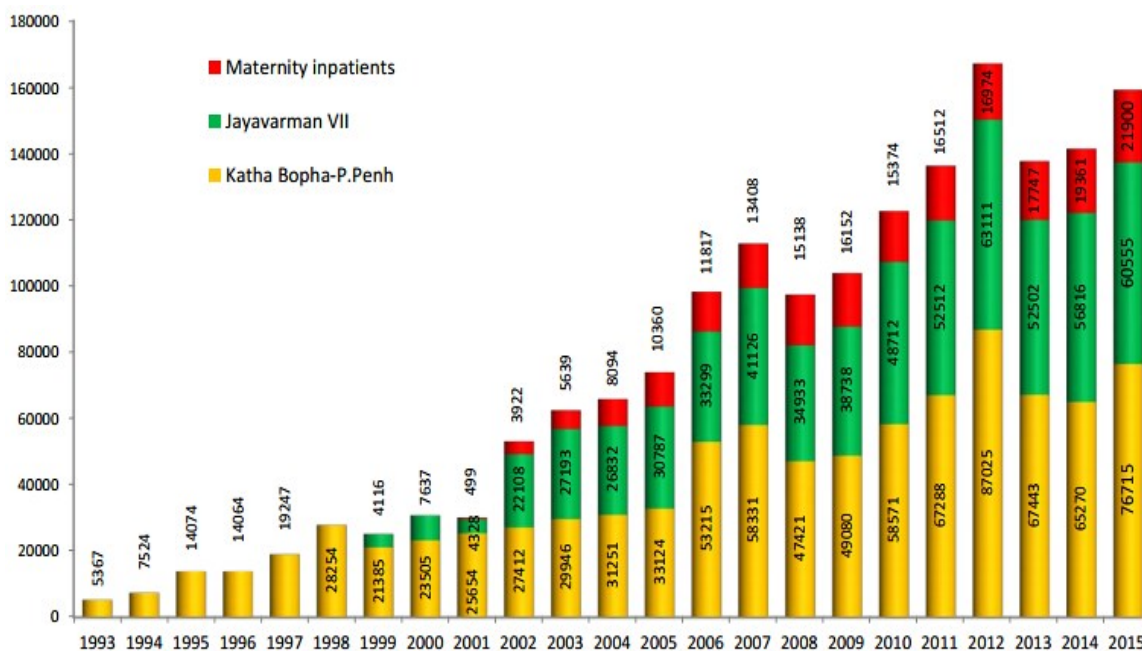


Figure 4-10 Yearly Global Hospitalisations across Kantha Bopha Hospitals in Cambodia. Source: Kantha Bopha website.

<sup>8</sup> The Khmer-Soviet Friendship Hospital is a public hospital managed by the Ministry of Health.

<sup>9</sup> Kantha Bopha I, II, IV, and V: Phnom Penh (Land for KPII donated by King Norodom Sihanouk, USD15 million in donations from the people of Swiss for KPIV). Jayavarman VII: Siem Reap. (Land donated by Prime Minister Hun Sen).

The first of Kantha Bopha's hospitals was founded in March 1992 by Dr. Beat Richner, a Swiss doctor who was sent by the Swiss Red Cross to treat the people in Cambodia prior to the Khmer Rouge regime, and returned in 1991 to find "the country's children suffering due to a catastrophic health system" (Gachot, 2007). The Kantha Bopha hospitals are named after Norodom Sihanouk's daughter (Kantha Bopha), who died of leukaemia in childhood. Sihanouk supported Dr. Richner's work despite opposition from the government, going as far as to open his palace grounds for Dr. Richner to treat patients, and remained a strong patron of the Kantha Bopha's hospitals until his death in 2012.

As pointed out in Gachot's documentary, "[f]or the children of Cambodia, Beat Richner's hospitals are a substitute for the failing health service". Cambodian public hospitals are overcrowded, with people fighting to get their family members looked at by a doctor, even if they are able to pay. Richner (Burnand, 2013) pointed out that the failing health service is attributed to issues of local governance:

*"The government is not doing enough... the reason is corruption in the public health system. This corruption means that patients die, deprived as they are of proper care".*

However, the financial dependency of Kantha Bopha's hospitals on private donations from Switzerland based on Beat Richner's fame and charisma is one that has been heavily criticised by international organisations such as WHO and other NGOs. In his interview with Burnand in 2013, Richner admitted that this financial dependency is the Achilles heel of the hospitals and responded that the Kantha Bopha hospitals are now looking to increase national contributions, as even the Cambodian government has recognised they are the single organisation capable of providing quality health services to the public:

*"In 2012 they realised at the very top level of government that our system is probably the only one capable of functioning in Cambodia. That year we received \$3 million from the government, \$1 million from the Cambodian Red Cross [headed by the wife of the prime minister], and \$1.5 million from the Bayon foundation<sup>10</sup>".*

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<sup>10</sup> Philanthropist organisation headed by Hun Mana, the daughter of Prime Minister Hun Sen.



## Section 10. ROLE OF (I)NGOs & FOREIGN GOVERNMENTAL AID

Globalisation has altered the dynamics of international relations, leading to the emergence of “an increasingly strong and complex array of international nongovernmental actors and new non-governmental organizational (NGO) forms” (Mundy and Murphy, in Lauder, et al. 2007, p.991-2). Working in a transnational framework of networks and movements, “these new organizational forms bring together a wide array of nongovernmental organizations, citizens’ associations... in forms of activism that target global-level institutions and issues while they attempt to use global-level visibility to level changes at the national level”. Acting as “building blocks of a prototypical ‘global civil society’, with the power to influence, and perhaps democratize, the structure of world politics, both through their increasing influence within existing international institutions and through their capacity to use this influence to leverage change in individual nation-states”, these new organisational forms are also able to freely address national issues at a local level across borders without being saddled by sovereign constraints (Ibid., pp.991-2).

Mundy and Murphy (Lauder, et al. 2007) acknowledge that “a widening and increasingly influential ‘international architecture’ has developed in the field of education has been made with relative frequency in recent years as interest in and research on international organizations... have grown”. Such reflections have been made not only by academics, but also acknowledged and represented by multilateral organisations of UNESCO, OECD, and World Bank. Mundy and Murphy further identify a few key trends of non-governmental involvement in the field of international education cooperation that are central to this research, particularly including “unprecedented levels of interaction emerg[ing] between nongovernmental actors and intergovernmental bodies” and the emergence of “[n]ew forms of cross-organizational collaboration” (Ibid., p.991).

Other provinces of Cambodia that enjoy a high concentration of international partners and programmes are Kampot and Siem Reap. Kampot is just a three hour car ride from the Phnom Penh capital, and its location as a riverside town and a short distance from Kep, an upcoming seaside destination by the Gulf of Thailand that attracts many expatriates. The high concentration and established presence of NGOs and international organisations in Kampot can be seen in how the school director of a school in rural Kampot (School 10) shared readily about the external partners and the services they provide:

*“There are guidelines on inclusive education from the government, and we received them, but there are no projects for implementation. I know which NGO to go to for*

*help, such as Epic Arts<sup>11</sup> and the Cambodia Trust<sup>12</sup>, although the latter mainly works with artificial limbs.”*

Another school in central Kampot (School 7) shares the same compound as ASPECA Orphanage Center (ASPECA Orphanage Project website), one of the projects by Enfants d’Asie (Children of Asia)<sup>13</sup> NGO. The school has enjoyed a partnership with ASPECA from 2010, and the school director exhibited extensive knowledge on NGO partners and the available services in the district. He accounted how the school used to have a boy in Grade 2 who was “able to hear but not able to speak”. The boy seemed able to follow the teacher and was a good student, but he ended up dropping out of school and moving to Epic Arts, perhaps because “that school suits him better and is able to help him face his conditions”. Epic Arts is a nearby NGO working with various disabilities, including blind, deaf, and intellectual. The school also sends its teachers to Epic Arts for training to teach deaf students. Epic Arts also works on inclusive education programmes together with Krousar Thmey, and target a few schools in the same district.

*Case: School 11 in urban Battambang, affiliate school of Krousar Thmey Battambang*

School 11 in urban Battambang is a school closely affiliated to Krousar Thmey Battambang. In itself, Krousar Thmey is a special school for children who are blind or deaf, but it works with partners like School 11 to carry out what appears to be an integrated education programme for its students who are blind or deaf. The school director, who used to teach students with disabilities herself, explained how the system works:

*“We accept students with disabilities from Grades 3 to 6. In Grades 1 and 2, they study at Krousar Thmey Battambang...Those students register at Krousar Thmey first, then they get integrated into this school. People [in this area] know very well [that they should send their children who are blind or deaf to Krousar Thmey] because the Krousar Thmey committee spreads news to families...Because of the close distance between our schools, even blind students can walk here and learn. It also makes*

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<sup>11</sup> Epic Arts is an organisation based in UK that is active in Kampot. The Inclusive Education Programme is one of their three main programmes, and it consists of inclusive arts courses and special education. The former aims to “use the Arts to transform expectations and broaden horizons about the potential of a more inclusive society where Every Person Counts”, and the latter offers “creative educational programs to children and young people with learning disabilities so they can become active members of society”.

<sup>12</sup> The Cambodia Trust is a UK-based charity that mainly works to make and fit artificial limbs and supports for Cambodians who are least able to pay for these life-changing services.

<sup>13</sup> Enfants d’Asie – Children of Asia has been involved in Cambodia since 1991, not only in orphanages, but also educational and health programmes. Their goal has been to help and support thousands of orphans in a country devastated by the Khmer Rouge Regime, including the underprivileged and ethnic minorities. The NGO is also active in Laos, Vietnam, and the Philippines.

*communication easier”.*

On speaking to the director of Krousar Thmey Battambang (KTB) on their collaboration with public school for the education of children who are blind or deaf, the director shared that KTB has this initiative in two districts in Battambang, and they choose their partners from within the cluster primary or high schools. Since one of KT’s focus is on low vision, they go around visiting schools to seek out low vision students, so as to send them for check-ups and consultations. Thereafter, they bring the students to KTB as a boarding school, where they take classes at KTB as well as the partner regular school. He also shared how Krousar Thmey’s integrated education programme works as well as its rationale:

*“Our purpose at Krousar Thmey is to provide these students with disabilities with basic education on how to learn. For students who are blind, we teach them here at Krousar Thmey until Grade 2; from Grade 3, they begin schooling there [School 11] in the morning, and return here for other lessons. For students who are deaf, we teach them here at Krousar Thmey until Grade 4; from Grade 5, they begin schooling there [School 11] in the morning, and return here for other lessons. The students who are blind can go earlier from Grade 3 because they can speak and hear enough to get information [learn] there. But for students who are deaf, they go later from Grade 5, because in our experience, they need more time learning here to reduce difficulty in communicating with others at public schools.*

Through school and classroom observations, classes with students who are blind were put on the ground floor. In the classrooms, students who were blind were placed together at the back. During breaks, some students who were blind appeared to be curious and came up to us to ask questions about where we were from and in turn shared about how they walk to school together and go back to Krousar Thmey together after school. Other students in their class also came up to their seats and talked to them. The interactions between the students who were blind and their other classmates appeared to be close, positive, and reciprocal.

The school director of School 11 explained that teachers from Krousar Thmey also teach at the school, together with the main teacher. Main teachers in their school also receive training from Krousar Thmey during vacations, on how to listen, write and use the slate (and stylus, which are tools used by the blind to read and write without assistance).

Before, it used to be that teachers started off as government teachers, before moving on to Krousar Thmey as private sector teachers (which means higher salary). However, in 2011, Prime

Minister Hun Sen acknowledged Krousar Thmey teachers as public sector teachers, so nowadays, some teachers from Krousar Thmey are willing to move over to be government teachers (while receiving the same salary). Krousar Thmey teachers just have to complete some forms have priority in returning to teach at public schools.

This flexibility in the teacher recruitment and management process between the NGO sector and the public sector allows for greater ease in placing available teacher expertise required for deaf and blind students in public schools, while also providing training opportunities for teachers without such expertise to ease into. She also explains how there is also monetary incentive from Krousar Thmey of an addition 5 USD if they teach students with disabilities:

*“As part of the collaboration between the school and Krousar Thmey, Krousar Thmey provides support for main teachers who teach students with disabilities from Krousar Thmey, no matter whether or not the main teachers were trained by Krousar Thmey.”*

Support teachers in School 11 who were trained at Krousar Thmey (Teacher Srey 47-years-old female) also shared that as a support teacher, she received 6 months training for Braille, Khmer, Math, and English, as well as a special orientation for walking, to experience how blind students walk around, interact in their physical space, and gauge distance. Teacher Chandra (55-years-old, male) also said that for the training, they observed students and learnt how to read and write in Braille. Krousar Thmey also sent them for training at NIE<sup>14</sup> (public institution) to learn basic training Braille and Cambodian Sign Language, but it is not enough. Main teachers from the regular school also receive some training and information from Krousar Thmey on addressing the learning needs of students with disabilities and accommodating them.

The training that Teacher Srey and Teacher Chandra receive involves learning how to communicate and interact with blind and/or deaf students. For communicating with blind or deaf students, teachers learn how to read and write in Braille using portable slates for the former, as well as how to use the Cambodian sign language for the latter. In addition to the tools of communication, teachers also learn the social aspect of communicating with students who are blind and/or deaf, particularly those who are born with the condition. For those who are born with complete loss of vision or hearing, the way they sense, interpret, and interact with their environment can tend to be different from those who are born with those senses. Thus, teachers not only learn how to communicate with them using tools such as Braille or sign language, they also learn the social dimensions of communicating with a child who has no vision or hearing.

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<sup>14</sup> National Institute of Education, Cambodia

Being located in Battambang, where many international and local NGOs play active roles, another school director from rural Battambang (School 12) shared how the school and many of its students receive support from them: Most of the students in this school are from financially disadvantaged families, and most receive support from foreign aid and governments. SIDA<sup>15</sup> had a programme with the school from 2013-2016, focusing on low income SES. They support the school administratively not only to increase student enrolment in this area, but also to ensure the quality of teaching and education. SIDA supports the education of students with disabilities and other disadvantaged students by buying study equipment, to help reduce the repetition rate.

In addition to direct positive impact from the various sectors of SIDA's field of work, the school director also shared how their effort in other sectors also demonstrated an indirect positive impact on developing students with disabilities: One issue they face is water consumption. Water is not clean at the downstream of the river, as farms use very harsh chemicals and water. The water that flows out of the fields end up as water for our consumption, and it is very unhealthy for everyone. So we want to educate children to be aware and hope they can have a better living environment in community.

*“We hope that education for our children can eventually change the community. In fact, we see that this kind of non-academic focus is also beneficial for our students with disabilities. We have one girl who is autistic in the school, she learned about hygiene practices and environmental issues in school, for example not throwing rubbish into our water channel and washing hands. After learning all this, she went home and taught her mother what she learnt in school. Her mother was very happy and gave good feedback to me. It made me very happy.”*

Another school in urban Kampot (School 9) is a Krousar Thmey partner. There are no students who are deaf or blind in the school, but they have ten students with low vision, one who is hard of hearing, four students with oral and speech disabilities, four students with physical disabilities, and five students with learning disabilities.

Some of the 20.5% of teachers who have received training on educating children with special needs are currently teaching at the school in urban Kampot. In our interview, the director shared how the school has an inclusive education project plan cycle, which is supported by Krousar Thmey (specialising in visual and hearing impairments) and MoEYS. The training and exposure (especially in visual impairments), the school directors and teachers demonstrated a sincere concern

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<sup>15</sup> Swedish International Development Cooperation Agency

for and strong commitment

The nearest Krousar Thmey school is located at a short walking distance away and provides the school with information on NGO support available to people with specific types of disabilities and conducts teacher training for students with visual impairments. Two of the teachers in this school went for a 5-day course by Krousar Thmey in Kampot, and a one-month training at Krousar Thmey's main school in Phnom Penh. The director and some of the teachers were also sent by MoEYS and Krousar Thmey for a study visit to inclusive classrooms in Vietnam. With such training and exposure (especially in visual impairments), the school directors and teachers demonstrated a sincere concern for and strong commitment towards keeping track of the results of students with visual impairments in the school, particularly those who perform well. The top performing student in this school is also a student with low vision.

The school has also demonstrated that it is accommodating of students with other disabilities. One of their students is a boy with severe physical impairment (unable to move from waist down) on a wheelchair, who has been rejected by other schools, but the director of this school replied without hesitation, "We see students as sons and daughters and don't have the heart to turn them away. If we don't accept them, who else will?" Teachers of this school also responded that it is "better to have inclusive classroom because children with impairment can be helped by regular students".

Furthermore, on our walk around the school for observations, the school director also mentioned that the school had been selected by CellCard (Cambodia's leading and fully-integrated communications company) as well as PSE (*Pour un Sourire d'Enfant*, meaning 'for a child's smile' in French<sup>16</sup>) as partners; the school has also received a further donation of USD520 from CellCard. These results were the efforts of the school director, who had proactively approached them for help.

However, the director of School 11 also admits that while there is support from Krousar Thmey for students who are blind or deaf, "there is no support for other types of disabilities. When students can't understand, teachers just repeat. There's nothing else that they can do." In addition, a teacher who started off working at School 11, then taught at Krousar Thmey for 16 years, before coming back to the school to teach shared about how Krousar Thmey itself also faces problems funding its operations:

*"I came back to teach at this school because Krousar Thmey had a lack of fund. They retrenched 3 teaching staff and I was one of them. Originally, I went to teach at Krousar Thmey because of the higher salary. It is quite difficult and competitive to*

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<sup>16</sup> *Pour un Sourire d'Enfant* is an NGO founded in Cambodia by a French couple with a focus on keeping its programmes grassroots-based. The management team is fully run by Cambodians.

*teach there—in my time, there were 100 applications, but only 5 of us were recruited. Many people want to work there because the salary is so much better... more than twice the amount! But teaching there is really not easy, as they review our applications based on our lesson plans and motivation”.*

Although Cambodia’s public schools are generally unable to accommodate children with severe disabilities, there are NGOs that serve to include them in their services. Maly is a 12 year old girl with severe cognitive and physical impairments in urban Kampot (School 9), and was rejected for enrolment in formal schools. She was referred for this study by people living near the school, who knew of Maly and her condition from her parents who also work in urban Kampot. Her father earns approximately USD3,400 annually, and was educated up to the upper secondary level. When we visited Maly and her father at their family house located just a stone’s throw from the central Kampot market, Maly was lying on the floor of the living room with her eyes open. She appeared to be unable to show outward reactions and only minimal control of her limbs. Maly’s father shared her condition with us and his thoughts about it, Maly has a seizures and stays at home most of the time. Her family put her in the living room so that she is aware that they are around as they walk in and out or gather in the living room.

They found out about the Epic Arts programme for children with intellectual disabilities that Maly can take part in, because Maly’s mother is working for the NGO. Since “it’s impossible for her to study at any formal school”, Maly’s parents were glad that they could bring her to an equipped facility and do something:

*We bring her to Epic Arts five days a week. Even though she has seizures, she still goes frequently. There, she plays with their equipment and it’s better than staying at home like that [points at Maly and tears]. There’re about 20-30 students at the school and they all play together... I know Maly is too different from other children and maybe it’s too difficult to for her to study together with other normal children. But I think people with severe and multiple disabilities need more help and services... the government should be the one to organise it”.*

## **CHAPTER 5. DISCUSSION & APPLICATION OF THE BIOECOLOGICAL SYSTEMS MODEL**

In order to understand the system supporting a child's development, an analysis of the ecology of development should engage directly with existing programmes and policies that are aimed at promoting development (Bronfenbrenner, 2005). In examining the provision of education for children with disabilities, a fundamental basis of this study is that education serves as a process and tool for individual and social development. This use of the bioecological systems model thus provides a framework for the comprehensive analysis of education programmes and contexts for children with disabilities.

In acknowledging the limitations and recognising the potential of the ecological systems model, Bronfenbrenner remarked that an investigation using the ecological systems model would have reached its aspirations of understanding "the forces shaping the development of human beings in the environments in which they live" (Bronfenbrenner, 1979, p.15), as long as the investigation reveals new and substantiated perspectives of reality for study that are also well-grounded in sound theoretical insights. He referred to these as "ecological niches" that sheds light on "regions in the [Person's] environment that are especially favourable or unfavourable to [his/her] development" (Bronfenbrenner, 2005, p.111).

This study thus seeks to reveal new and substantiated perspectives of reality in Cambodia for study, in contemplation of understanding the forces shaping the education and development of children with disabilities in Cambodia. By doing so, this study further seeks to draw inferences to understanding the forces shaping the education and development of children with disabilities in developing countries, particularly in countries that are emerging or rebuilding from conflicts.

By introducing the themes identified from empirical data obtained through this study (see methodology section) into Bronfenbrenner's ecological systems models and other relevant interpretations (see literature review on analytical framework), this study has arrived at an ecological framework for localising inclusive education in developing countries (Figure 5-1).

Although the conceptualisation of this framework is based on evidence from a developing country, the bioecological systems framework of human development serves as a universal framework for examining the complexities of inclusive education in a range of contexts, including that of developed countries.



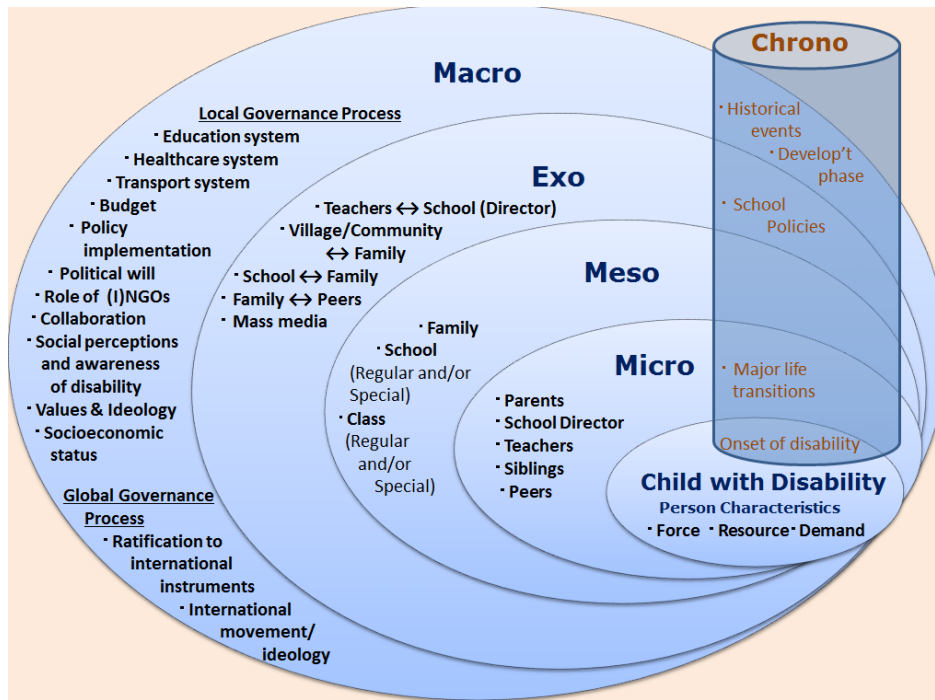


Figure 5-1 Bioecological Systems Framework for Localising Inclusive Education. Source: Author.

Analysing Bronfenbrenner's bio-ecological systems theory in the *Process-Person-Context-Time* (PPCT) model is a critical aspect of utilising the model as an analytical framework. *Person* here refers to the child with disability and his/her characteristics (demand, resource, and force characteristics) that influence his or her education. *Processes* refer to the interactions between the child with disability and his/her immediate environment, *context* refers to the five levels of Bronfenbrenner's systems theory (micro, meso, exo, macro, and chrono-level), and *time* manifests as both short episodes and prolonged interactions within each level of context. *Processes* involving micro-level actors are based on both specific episodes and daily interaction (*micro-time*) with their child with disability. Processes involving meso- and exo- level actors are based on both specific episodes and prolonged interaction (*meso-time*) with the child. *Processes* occurring at the macro-level evolve over months, years, or decades (*macro-time*) to influence the education received by a child with disability in Cambodia.

The results presented in Chapter 4 have thus presented ten threads of empirical findings in the PPCT context, where processes between the various levels and how they interact can be visualised, as how they occur in realistic settings. Chapter 5 will proceed to discuss the findings presented in Chapter 4 by the various levels they manifest within the ecological systems model. Chrono-level issues will be discussed within each level and in their respective frames of time

(micro-time, meso-time, exo-time, and macro-time).

## Section 1. AGENCY OF THE DEVELOPING CHILD WITH DISABILITY

The results from this study provide evidence of the agency of children with disabilities in influencing their own education and development outcomes. Empirical data further highlighted that these three types of personal attributes or characteristics often intertwine and act together to influence the Person's educational outcomes.

Bronfenbrenner's updated ecological systems model (after 1999) adds critical new dimensions to Bronfenbrenner's original 1979 model. One of the new propositions made by the model is that characteristics of the Person (or the child) shapes and affects the direction and degree of proximal processes throughout their life course. There are three categories of Person characteristics: (i) "active behavioural dispositions" or force characteristics, (ii) resource characteristics, and (iii) demand characteristics (Bronfenbrenner & Morris, 1986, p.810).

The conceptual inclusion of Person characteristics as an influential factor in shaping one's own development is a timely one that deserves to be adequately addressed and considered in studies involving disadvantaged or vulnerable populations. As Bronfenbrenner (2005) posited, through acknowledging the influence that personal attributes play in development, the model adopts the perspective that the individual is an active social agent who is capable of influencing his or her own development outcomes. Other empirical studies have also shown demonstrated how children with disabilities are capable of adapting themselves to overcome or deal with challenges they face, as well as how children's perspectives on their own inclusion may run contrary to that of their caregivers, making the case that the agency of children with disabilities should not go unrecognised in inclusive education (Schneider, 2009).

### *Force Characteristics or Active Behavioural Dispositions (Fc)*

Among the three categories of characteristics, Bronfenbrenner & Morris (1986) point out that the type that has the greatest influence over one's development are the dispositions or force characteristics of the Person. One of the categorical divisions are (i) "developmentally generative force characteristics" or dispositions that "set proximal processes in motion or sustain their operation", such as "curiosity, tendency to initiate and engage in activity alone or with others, readiness to pursue long-term goals" (p.810). On the contrary, (ii) "developmentally disruptive force characteristics" or dispositions that "actively interfere with, retard, or even prevent" the occurrence of such processes include characteristics such as low self-esteem, "insecurity, shyness, general

tendency to avoid or withdraw from activities”, aggression, etc. (Ibid.)

Empirical data from this study is consistent with these categorisations, and revealed that (i) children’s developmentally generative dispositions have a positive impact on their own education, while (ii) children’s developmentally disruptive dispositions have a negative impact on their own education. Children with disabilities who demonstrated developmentally generative dispositions tend to enrol in, continue their education, and/or re-enter the education system. Reversely, children with disabilities who demonstrated developmentally disruptive dispositions tend to not enrol in school, drop out of school, or exhibit a slower pace of learning and/or weaker relationship with their peers and teachers.

Firstly, empirical cases in this study demonstrated how children with disabilities who demonstrated developmentally generative dispositions such as curiosity, readiness to pursue long-term goals, and tendency to engage in activity alone or with others, tend to continue or re-enter the education system. In Veha’s case, he saw other children his age in school uniforms playing together when he was accompanying his mother at the market, and his natural disposition drove him to develop a strong curiosity towards his peers who appeared to share a social relationship with each other and belong to a place (school) where all these peers go to regularly to learn and play together. It was this very curiosity, readiness and tendency or desire to be part of that affiliation that made him express his desire to his mother. His mother then acted upon her child’s expressed desire and enrolled him in school.

Similarly, the developmentally generative disposition of a girl with hearing impairment in Kandal was shown to keep her enrolled in school and working towards a goal for her future. Similar to Veha, the girl was born with hearing impairments versus Kandal girl (deaf girl who demonstrated an enthusiasm for the hairdressing profession, and while recognising the limitations of her impairment, had decided her impairment would not prevent her from working as a hairdresser, and set it as her goal for the future—one that she works on in her daily life.)

Secondly, empirical cases in this study also demonstrated how children with disabilities who demonstrated developmentally disruptive dispositions such as low self-esteem, “insecurity, shyness, general tendency to avoid or withdraw from activities”, aggression, tend not to enrol in school, drop out of school, or exhibit a slower pace of learning and/or weaker relationship with their peers and teachers. Or Rotha, who demonstrated a lack of self-esteem among her peers due to her ethnicity. In these two cases, their dispositions eventually led to them choosing to stop going to school.

As illustrated in Chapter 4, Veha’s case (deaf boy from Ratanakiri who dropped out) provides an example of both the positive effects of developmentally generative dispositions as well as the negative effects of developmentally negative dispositions. Veha saw school-going children in their

uniforms when he accompanied his mother to the market, and his *enthusiasm* and *curiosity (Fc)* to go to school like those kids he saw managed to persuade his mother to enrol him in the nearby primary school. For the first three grades in primary school, he seemed to enjoy school life, was *motivated (Fc)* to write and learn, and went to school daily. However, as he grew older, his developed awareness of his difference from his peers and his lack of ability to communicate with his peers and teachers in school led him to *avoid* going to school and wanting to *withdraw (Fc)* from school life. His developed preference to drop out of school despite being the one to persuade his mother to enrol him in school appears to have much to do with his *impairment (Rc)*. As a boy who is unable to hear and speak from birth, and not learning of any way for him to communicate with others,

Such is the case of Veba (deaf boy), who appeared to feel shy and insecure in his interactions with his peers and teachers due to his disability. As well as the Boy who follows his mum around school and does not appear to interact much with his peers.

#### *Bioecological Resources or Resource Characteristics (Rc)*

Bronfenbrenner & Morris defined bioecological resources (or resource characteristics) as “biopsychological liabilities and assets that influence the capacity of the organism to engage effectively in proximal processes” according to various stages of development (1986, p.812). Similarly, they further divided these into (i) development assets that include “ability, knowledge, skill, and experience” that “extend the domains in... [which] proximal processes” occur; as well as (ii) impairments that “limit or disrupt the functional integrity of the organism”, such as “genetic defects, low birthweight, physical handicaps, severe and persistent illness, or damage to brain function through accident or degenerative processes” (Ibid.).

This group of characteristics is imperative in any research that undertakes a study of people or children with disabilities, and is also a decisive justification for the relevance of the ecological systems model as a framework to explore and identify various patterns of inclusive education. One direct course of this application is exploring how children’s impairments limit or disrupt their access to education and learning in the classroom.

Empirical data in this study reassert that the education experience or processes of children with disabilities are disrupted or negatively influenced due to the functional limitations that they experience within systems that are unable to accommodate to their educational needs. Additionally, children with disabilities who are endowed with development assets tend to have higher motivation and remain enrolled in school, vis-à-vis children with disabilities without such development assets.

Firstly, the education experience or processes of children with disabilities are disrupted or negatively influenced due to the functional limitations that they experience within systems that are

unable to accommodate to their educational needs.

Secondly, children with disabilities who are endowed with development assets such as ability, knowledge, skill, and experience tend to have higher motivation and remain enrolled in school, vis-à-vis children with disabilities without such development assets.

Other studies have also underscored the relationship between adequate language development and self-esteem, demonstrating that “[i]mproving language development and communication skills could help to build up higher levels of self-esteem around peers” of children with hearing impairments (Theunissen, et al., 2014). This implies that self-esteem of children with hearing impairments around peers can be boosted by learning sign language and picking up social skills to adapt to the sound-dominant environment that they are born into.

### *Demand Characteristics (Dc)*

Bronfenbrenner & Morris distinguished demand characteristics by their tendency to “invite or discourage reactions from the social environment that can disrupt or foster processes” (Bronfenbrenner & Morris, 1986, p.812), including demographic factors such as ethnicity and age. Bronfenbrenner and Morris (1986) highlighted these three factors to be especially persistent and permeating in affecting development such that their influence needs to be regularly examined.

In societies where ethnic minority identity, rights, and language are not respected and upheld, ethnic minorities tend to be disadvantaged in the education and learning process. When ethnic minority children study in a non-dominant language, they tend to fall behind their peers.

Empirical data from the two cases of Veha and Rotha demonstrate a tendency for young ethnic minority children with disabilities to drop out of school, suggesting that their ethnic minority identity coupled with their impairment has a significant multiplying effect on their education, especially when they are still young and have not yet developed a strong sense of self, resulting in a lower sense of self-confidence as compared to Khmer children. This can be observed in how Rotha and Veha had both dropped out of elementary school at a young age, but Rotha was able to enrol back in school at 14 years old with a stronger sense of purpose and confidence, especially in interacting with her peers.

This leads us to another course of applying the bioecological systems model, and an addition this study proposes into Bronfenbrenner’s framework. Including the consideration of a bio-time dimension would account for how the knowledge, skills, and experiences gained as children with disabilities grow up can act to further their life opportunities or extend the domains of proximal processes.

Consistent with the recently evolving affirmation model of disability, the inclusion of

attributes at the Person level demonstrates the influence that individuals have over their own development. The affirmation model of disability takes the position that affirming the individuality and empowering the developing Person with disability enables them to develop their potential as human beings in the societies they live in. Similarly, in applying Bronfenbrenner's bioecological systems model to analyse educational processes for children with disabilities, the behavioural dispositions (or force characteristics) of a child are less pre-determined than resource and demand characteristics, which tend to be defined early in life and based on the conditions that the child with disability is born into. The three groups of characteristics as well as their combinations "account for differences in the direction and power of... processes and their developmental effects" (Bronfenbrenner & Morris, 1986, p.796), providing a framework to illustrate processes where empowering children and people with disabilities can indeed enable them to contribute to their own development.

As illustrated by accounts of Individual Cases 1-3, this study also suggests that Person characteristics have a combined or multiplying effect on one's own education; characteristics with negative influences accumulate to have distinct negative outcomes. Particularly, it appears that

In the first case, Veha was curious when he saw other children his age at the market wearing school uniforms, and expressed his desire to enrol in school to learn just like them, demonstrating an initial positive disposition (*positive force characteristic, +Fc*). Veha comes from an ethnic minority family (*negative demand characteristic, -Dc*), and his hearing impairment from birth (*negative resource characteristic, -Rc*), which meant he negatively influenced his self-esteem and confidence (*negative force characteristics, -Fc*), which led him to express his desire to drop out of school eventually.

In the second case, the ethnic minority identity of a child (*negative demand characteristic, -Dc*) influenced her self-esteem and confidence (*negative force characteristics, -Fc*) that led her to quit school in Grade 2, only to re-enrol when she became older (*age, positive demand characteristic, +Dc*) and gained enough experience (*resource characteristic, +Rc*) interacting with people of her own ethnic minority and the ethnic majority to be less concerned with how people thought of her.

In the third case, the child with the same impairment (*negative resource characteristic, -Rc*) as in the first case, but a Khmer and not an ethnic minority (*positive demand characteristics, +Dc*), appeared to demonstrate stronger readiness and motivation (*positive force characteristics, +Fc*) to pursue her goals as a hairstylist, after watching hairstylists working on the television. This gave her the drive to remain enrolled and actively learn to draw and write in school, so that she can

communicate with her customers in future.

A summary of the three individual cases concerning the effect of personal characteristics on educational outcomes can be seen as:

$$\textcircled{1} + Fc - Rc - Dc = \text{enrol} \quad - Fc = \text{drop out}$$

$$\textcircled{2} - Dc = - Fc = \text{drop out} + Dc + Rc = + Fc = \text{re-enrol}$$

$$\textcircled{3} - Rc + Dc = + Fc = \text{enrol}$$

Particularly, force characteristics of a child with disability were observed to play a definitive role in their educational outcomes, even overcoming the effect of resource and demand characteristics on their own educational outcomes. The relationships between these characteristics have been identified through this exploratory study. However, this finding demonstrates the need for further study with regards to: (i) the extents of these various characteristics in isolation, as well as (ii) the degree of the relationships between these personal characteristics. Specifically, these further studies would require a quantitative approach towards understanding the degree of both individual and combined influence of the various personal characteristics on one's own development and education.

The discussion for this level is parallel with Finding 1, that there are three types of personal attributes or characteristics that influence one's own education, and further highlights that these personal attributes often act together to have a combined effect on the Person's (child with disability) educational outcomes.

In attempting to comprehensively explore inclusive education in Cambodia with the bioecological systems model, acknowledgement of Person characteristics as a factor influencing the education of a child with disability leads us to consider programmes and modes that empower children with disabilities and their parent. Doing so entails identifying further opportunities for them to actively define and decide their own development.

However, this 'multiplying effect' or the difference in extent of influence of one characteristic over another is one that warrants greater research in, for effective policy targeting.

## Section 2. MICRO-ACTORS IN CONTACT WITH THE CHILD WITH DISABILITY

The micro-level consists of actors and processes that the developing Person experiences in direct contact and face-to-face. They are made up of parents and family, as well as teachers, peers,

and the school. A child's (evolving) perceptions and construction of reality is not directly sought or obtainable, for ethical reasons and practical limitations. However, informed deductions on how the entire ecology within which a child is situated affects his/her development can be arrived at, through observations and accounts of interactions, processes, and patterns in the microsystem. This allows us to gain well-founded first-hand insight on how the developmental potential of a child with disability is affected, and form admissible discourses for inclusive education.

For this reason, based on the empirical data obtained, perceptions of parents and teachers (as micro-level actors) were analysed to identify patterns in the perceptions of how possible inclusive education is. Empirical data revealed three main threads of deliberations that influenced parents' and teachers' perspectives on the purposes and forms of education for children with disabilities: type and severity of disability, teacher training, as well as resources available at the school and classroom level.

From responses and observations made through this study, parents perceived that these differences in perceived purpose of education appear to be related to their child's type of disability. Parents of children with severe or multiple impairments want their child to go to school like other normal children, not necessarily studying the same curriculum as other children, but simply to learn some skills. However, parents of children with other impairments tend to expect more and hope that through education, their children will be better able to survive independently in future.

Parents' perceived purpose of education for their children with disabilities also informs their perceptions on how students with disabilities *should* be educated. For teachers, in addition to their perceived purpose of how children with disabilities should be educated, they are also aware of the extent of resources (manpower, curriculum and materials, teachers' resource or skills) that are available in the micro-environment of children with disabilities. This awareness and perceptions of the resources available to children with disabilities informs their perceptions on how students with disabilities *can* be educated.

Firstly, similar to previous studies in developed countries, analysis of parents' and teachers' perceptions on education for children with disabilities revealed that their perceptions are markedly influenced by the types of disabilities. Teachers perceived that blind and deaf children, children with severe and multiple disabilities and intellectual disabilities are difficult to be taught together in a regular classroom. Particularly, teachers' perceptions from this study on educating blind and deaf students in inclusive education settings are significantly different from the earlier empirical findings in developed countries. While such sensory impairments can be more relatively more feasibly overcome in developed countries through the use of Braille or sign language in classrooms and the presence of assistant teachers, these methods are not yet easily established at the classroom or school



level in developing countries like Cambodia. Using Braille requires both teachers and students learning how to read or use Braille and expensive printers to print Braille textbooks and/or worksheets; using sign language similarly requires both teachers and students learning how to communicate in sign language. Following its introduction in 1997, the documentation of the Cambodian Sign Language is still an ongoing project between Deaf Development Programme and Krousar Thmey, and disseminating or increasing its usage in inclusive education classrooms will take some time to take fruit.

Secondly, contrary to findings from secondary quantitative sources, empirical qualitative data in this study revealed that teachers who had more exposure and training in teaching or interacting with children with disabilities demonstrated more positive attitudes towards their inclusion in regular classrooms. However, empirical accounts demonstrate that the cascade training system in place has not been effectively implemented. These findings suggest that while training has the potential to positively influence teachers' attitudes towards inclusive education, its effects cannot yet be consistently observed even though there are certain training programs. The lack of consistency can be attributed in part to our first finding whereby only 20.5% of all teacher respondents reported ever receiving such training. Another reason might be the breakdown of the cascade training whereby teachers who attend training fail to transfer the knowledge down the system. These two reasons imply that there is a need for (i) training for teaching students with disabilities to be carried out on a larger and more extensive scale and (ii) establishing a training system that secures the systemic transfer of knowledge gained between teachers and within schools.

The third theme affecting micro-level perceptions was resources available at the school and/or classroom level. Secondary quantitative data showed that there is a gap between what teachers view as ideal education for children with disabilities, vis-à-vis what they think is realistically possible.

Teachers' experience in teaching or interacting with children with disabilities appeared to lead them to have more negative perspectives towards the possibility of including children with disabilities in regular classrooms. The lack of correlation could be due to the kind of experience that teachers associate inclusive education with and the lack of incentives for teachers to prepare for classes that better include children with disabilities. These experiences are affected by the resources available to them and are also closely linked to the skills they receive through training. Such factors not only facilitate the learning process of children with disabilities, but also the teaching process of regular classroom teachers who educate them. Thus, these findings reinforce implications from previous studies that experience in teaching children with disabilities can positively influence teachers' perspectives on inclusive education, but careful planning down to, and support at, the

classroom level are necessary.

Despite quantitative analysis showing no correlation between training and positive attitudes, qualitative interviews demonstrated that there is a tendency for teachers who have received training to have more positive attitudes towards inclusive education. This could be attributed to the breakdown of the cascade training system or disrupted transfer of knowledge, implying the need for training on teaching students with disabilities to be carried out on a larger and more extensive scale and establishing a system that secures the systemic transfer of knowledge gained between teachers.

Secondary data showed that experience in teaching children with disabilities is not significantly correlated to teachers' perceptions towards inclusive education in Cambodia. Empirical qualitative data suggests that the lack of correlation could be due to the kind of experience that teachers associate inclusive education with. This thus reinforces implications from previous studies that experience in teaching children with disabilities can positively influence teachers' perspectives on inclusive education in developing countries such as Cambodia as well, but careful planning down to, and support at, the classroom level are necessary.

Empirical results also revealed how parents took the cue to enrol the child with disability, accommodate their preferences while learning in school, or allow him/her to drop out of school, based on the wishes of their child. This two-way influence, or "principle of reciprocity" (Bronfenbrenner, 1976, p.9) at this level, indicate that we can not only observe the (degree of) influence that the micro-level actor (parent, teacher, etc.) has on the developing child, but also vice versa—the (degree of) influence that the developing child has on the micro-level actor.

Interactions between actors and setting within the mesosystem, in the form contact between parents and teachers, such that the efforts of both the school and family settings are complementary, further facilitate the development of a Child. Further, the developmental potential of the individual can benefit from a supportive two-way link between the settings in a mesosystem (Bronfenbrenner, 1979), making the case of the need for positive and closer relations between family (parents or guardians) and school (teachers or school director).

### Section 3. MESO PROCESSES INVOLVING THE CHILD WITH DISABILITY

Bronfenbrenner (1979) argues for the importance of meso-level processes. This is because interactions between (micro-level) settings create channels of communication between the two settings that encourage mutual trust, confidence, common purpose, as well as shared power or responsibility towards the developing Person. The relationship established through interactions

between the two settings thus creates a conducive environment to boost the developmental potential of the Person (child with disability).

This level of interaction is particularly relevant in the study of children with disabilities, as Bronfenbrenner (1979, p.214-215) posits that the positive impact of this “supportive link” is most prominent for vulnerable groups including young children, ethnic minorities, and the sick. This impact can be particularly observed in vulnerable groups as “developmental potential... is enhanced if the person’s initial transition into that setting is not made alone” (Bronfenbrenner, 1979, p.211), but in the company of at least one person that the developing Person (child with disability) has prior trusting interactions with at a closer setting (micro-level). In addition, when a child with disability enters the school setting with a parent or a trusted guardian, the child associates the school setting with the trusted family setting, helping him/her to feel more secure in the transition, and his/her developmental potential can be increased. Such interactions can take the form of a parent visiting the school, or regular contact between at least one parent and the child’s teacher.

Parental support and involvement have been shown to be important in the implementation of inclusive education, by bringing focus and stabilisation to programmes. However, empirical qualitative data in this study shows that this level of processes and interaction is severely lacking, although not fully absent. From observations, parents in Cambodia do visit the school, but they do so only for the purpose of fetching their children to and fro school, and have no intentions of speaking with teachers or the school director. There is very little contact between parents and teachers (or the school), and contact does not take place regularly.

Accounts from respondents revealed that these occur for two main reasons: firstly, organised platforms for contact between parents and teachers are rare; secondly, parents expressed inadequacy, discomfort, and fear in speaking with teachers. Interestingly, data also showed inconsistencies in responses from parents and teachers. In some instances, parents and teachers differed in how they defined the impairment of a child with disability, their observation of how the child is coping and learning in school, as well as their opinions on the (level of) interaction between them.

### *The Family*

Building on the need for strong parental support and involvement in the implementation of inclusive education, the family is the closest setting of a developing child with disabilities; the role of the family is highly pertinent and critical in promoting his/her developmental potential. For children with disabilities, as they grow up and learn to manage their impairments in society, they depend on their family to make sense and cope with the limitations they face in daily life. In this case, what do family systems in Cambodia and other developing countries need to enable and facilitate the

promotion of the Person's developmental potential? What can the system do to support these?

Findings revealed that families with children disabilities who have a lower socioeconomic status (SES) are severely disadvantaged in gaining access to information and available education and health services. This relates to the severe lack of awareness towards disability, which in turn hinders their child's access to quality education and health services, including the prevention and/or detection of their condition.

Thus, in facilitating the process of the families of children with disabilities in making informed decisions and supporting their child's education, it is necessary to empower, not only children with disabilities, but also families, with information and knowledge of what their child is facing, and what they can do about it. This should be accompanied by targeted support to overcome socio-economic difficulties, such as providing free or subsidised health services, free transportation or subsidies to (usually distant) health services, transportation or subsidies to specific schools (where applicable, e.g. schools teaching sign language or Braille), as well as other support that the child with disability might incur on a daily basis (e.g. crutches, wheelchair, medication for persistent health conditions). It is necessary to note that local answers can only be obtained from comprehensive contextual analysis, and the analysis here seeks to provide a reference point for patterns in Cambodia and other developing countries facing similar limitations.

### *The School*

On the supply-side, what can be done at all levels to improve the capacity and resources in schools, so that policies are interpreted in classroom practices in a manner that supports the provision of quality education for children with disabilities?

Results have shown that teachers reported difficulties and frustrations in including children who are deaf, blind, or have learning disabilities, due to (i) the lack of relevant training, (ii) the lack of quality teachers and resources, (iii) the breakdown of the cascade teacher training system, as well as (iv) the splitting commitments of teachers due to low salaries.

Firstly, in addressing the first two, this study has observed existing measures and programmes led by non-state actors that overcome these inadequacies. As a local NGO school that focuses on the education of children who are blind and deaf, Krousar Thmey teaches the Cambodian sign language and Braille to both local teachers and students. Some of the teachers trained by Krousar Thmey serve as links to their affiliate regular primary schools, where children who are blind and deaf are sent to daily from Grades 3 and 4 onwards respectively.

For the developing child with disability who is educated in an integrated education system, the link, smoothness of transition or level of integration between the regular school and the special

school (or class) that they attend can also be analysed at the meso-level. Bronfenbrenner argues that the developmental effect on a Person (child with disability) is derived from the harmonisation between the old setting (special or resource school) and the new setting (regular school). When the two settings are complementary and mutually supportive, such that there is organised coordination and balance between the developmental momentum built up in the special or resource school, and the challenges faced in the regular school, the developmental potential of the child with disability can be maximised. (Bronfenbrenner, 1979).

In addressing the other two issues of the breakdown of the cascade teacher training system in the public education sector and the splitting work commitments of public education teachers, reforms at the macro level of the public education system are required to target at establishing an effective (pre-service and in-service) teacher training system and policies that enable the teacher to focus on their roles as educators in schools. This will be addressed in further detail in Section 5, in light of Cambodia's Teacher Policy Action Plan recently implemented in 2015.

#### Section 4. EXO COMMUNITIES INVOLVING THE CHILD WITH DISABILITY

The data collection process revealed that village chiefs are very familiar with households and household situations in their village, and are respected figures within their community. They also acted as our key informants in locating children with different types of disabilities, including out-of-school children with disabilities. They serve as valuable sources of information, and are crucial in cementing processes, relationships, and information for delivering quality education to children with disabilities, particularly in rural or remote areas. This suggests the unique role of the village and village chief in facilitating the inclusion of children with disabilities, through gathering accurate and up-to-date district or village-level data, raising awareness of disability, and bridging the information gap.

Results also showed that bonds within most communities were observed to be high, with villages serving as social spaces for communication between teachers/school principals and parents. Teachers (who tend to be from the same village, or nearby) are familiar with students, their parents, and their homes/families, and respondents described how informal communication between teachers and parents tend to take place in places like the market or in front of their houses, suggesting the ease of communication in informal settings or spaces where the hierarchy of relationship (whereby the teacher is traditionally more dominant) is not institutionalised or applicable.

A study on service provision for children with intellectual impairments in Cambodia argues

that it is important to recognise that “services for children with disabilities can, in many cases, be provided at a community level rather than by... professionals and experts alone” (Carter, 2009, p.18). As a multi-sectoral and localised strategy, community-based rehabilitation programmes demonstrate strong potential in gathering and consolidating local resources for the facilitation of the provision of quality education to children with disabilities across Cambodia, while also increasing awareness towards disability (needs) and empowering children with disabilities and their families.

## Section 5. MACRO GOVERNANCE PROCESSES SUPPORTING THE CHILD WITH DISABILITY

Results in this study showed that macro-level factors have functional effect on lower level processes. When the state fails to deliver essential public services to its citizens, including the facilitation of a conducive environment for effective delivery, due to lack of resources or low political will “a demand for governance” is borne (Koenig-Archibugi, 2002). This study refers to macro-level processes as processes of governances in the public and global context. Governance rooted in traditional politics and culture, where education services are founded in patron-client relations. The education system and the people in it are left to survive amidst the dynamics of politicisation, instead of being professionalised.

**Public governance** is necessarily bound to the local context. Parents with less knowledge or information about disabilities seek less social support, expect less from schools, and do not actively push their children to participate. (Wong et al., 2014). Children with disabilities and their families or guardians need empowered and made aware of their rights, and be meaningful engaged in the processes that involve them. This applies not only to their rights and where to seek professional help and services in the educational sector, but also necessarily applies to their rights and processes in the health sector

Narratives from respondents also demonstrate how socioeconomic status of parents affects privilege, power, and control over education of children with disabilities. In developing countries where governments lack the resources or political will to invest consistently and comprehensively in areas like inclusive education, family resources become the main defining factor of whether children with disabilities gain access to quality education and stay in it. Among communities of low socioeconomic status, there is a lack of awareness of the concept of disability, hindering their access to both education services and health services. The strong correlation between social class and disability is thus evident.

### *Multi-sectoral Collaboration*

This highlights the case for greater multi-sectoral collaboration and public-private partnership. Majority of the disability cases in Cambodia are preventable (Kalyanpur, 2007), and the leading causes of disability in Cambodia are household poverty and the resulting lack of access to health services (Pitt, 2008). In some instances, access to proper health services can help to completely prevent, eliminate, or lighten impairments, which in turn makes it easier for children with these conditions to access education services. This is not a general implication across all types of disabilities, but particularly in those that are avoidable.

In examining Cambodia's health system in servicing people with disabilities, Kleinitz, et al. (2012) identified five barriers and four facilitators of access to quality public health service, and barriers to access were then categorised for ranking by people with disabilities over focus group discussions. Their study revealed that there were five main categories of barriers to access of public health services: (i) finances, including other hidden costs such as transport to health facility and cost of companion; (ii) quality of care, including skills, knowledge, and attitudes of health professionals; (iii) knowledge barriers in using or accessing state services, or lack of awareness of their rights and where to seek professional help and services; (iv) negative sociocultural beliefs and attitudes towards disabilities; as well as (v) difficulty of physical access to facilities, including long distance and lack of modes of transportation. Of these, financial barriers were ranked as the most significant, followed by low quality of care, and thirdly user knowledge barriers (lack of awareness), as barriers affecting their access to public health care services. A study by Kleinitz et al. (2012) also went further to demonstrate that barriers of finance, quality of healthcare, and user knowledge of health services were far more significant than barriers of negative sociocultural beliefs and physical barriers to access. These barriers of access to health services, as a state service, similarly apply to the public education sector as well.

In terms of the relative significance of these factors, socio-economic status of families, quality of education received or provided, and the lack of awareness—of concepts of disabilities, their rights as well as where to seek professional help and services, did indeed emerge as strong themes in their narratives. Similarly, while there were indeed some accounts of negative socio-cultural beliefs towards disabilities, participants of this study did not report them as decisive factors in influencing their access to quality education and health services. However, from empirical interviews conducted in this study, physical barriers to education and health services—such as distance to schools and hospitals, lack of a relevant provincial school or hospital, as well as the lack of affordable and regular transport to these services—were identified as one of the decisive factors that influence their child's access. This might suggest the need for education and health services to be

provided at least at provincial levels, to address parents' concerns of physical access to services.

While these associations cannot indicate a causal relationship between poverty, disability, as well as educational and health outcomes in Cambodia, it does suggest the possibility that poverty, neglected or poor health outcomes, and limited education may negatively reinforce each other. Facilitating children with disabilities' access to educational services also necessitates the facilitation of their access to health services. This requires enhanced coordination and collaboration not only between disability and health professionals and administrators; the public system needs to ensure systematic coordination and collaboration between the processes of the health and education sectors, including that of the professionals and administrators within these individual sectors.

Currently, policies regarding children with disabilities are separately administered by MoEYS (for education) and MoH (for health). MoSVY also shares the responsibility for policies regarding people with disabilities, and has the critical role of ensuring that children with disabilities can be included in and participate in the larger society as they grow up. Effective strategies for children with disabilities should thus take place in coordination and collaboration with the three ministries.

There is also a need for the systematic collection of accurate and up-to-date local data on children with disabilities—whether they are enrolled students, drop-outs, or out-of-school children—as well as their family situation and ability to care for them. This will serve in the formulation of sound policies based in local contexts, and will need to be led by strong political will on issues concerning people with disabilities.

### *Ethnic minorities*

The ethnic minority situation in Cambodia is divided between two views. The first argues that ethnic minorities have been effectively integrated into the mainstream population, such that their concerns are no different from a Khmer person. The second argues that ethnic minorities face difficulties that are significantly different from the mainstream population, and that they have not been sufficiently discussed at the national level (Palmieri, 2010). From this study, when it comes to ethnic minorities, there were some accounts by respondents of discrimination against children with disabilities because of their ethnic minority status. There are currently bilingual education programmes are carried out in Cambodia at community care schools, spearheaded by CARE International in Cambodia, MoEYS, and UNICEF. However, how do ethnic minority children who are blind and deaf fit in these schools? For them, the issue of communication remains despite these bilingual education programmes as they lack a 'language' to communicate with the world. Within the current context, it would seem that ethnic minority children with disabilities would be compelled to choose between losing either identity—whether to go to special schools for the blind and deaf and



learn to communicate in Khmer (sign language or Braille) and forego their ethno-linguistic identity, or to go to these schools targeting ethnic minority children but unable to address the needs of being visually or hearing impaired.

Responses regarding (or from) ethnic minority children with disabilities themselves also seem to indicate an invisible wall that stopped them from interacting (or wanting to interact) with Khmer people. This can possibly be because in their childhood, their ethnic minority identity has been a factor that suppressed their sense and level of confidence. In this sense, one issue is the lack of empowerment and self-restricting dilemma of ethnic minority children with disabilities who are young and emotionally underdeveloped.

Countries that “seek to recognize the worth of different ethnic groups” through protecting and promoting the rights of ethnic minority groups to their language, religion and cultural become less divisive societies (Lynch, et al. ed., 1992). Thus, the crux is to empower ethnic minorities (both adults and children) so that they can gain the confidence, as early as possible in life, to manoeuvre their way through a society dominated by others.

**Global governance** in this context can be seen in the fragmented international aid scene as well as Cambodia’s high dependency on external partners. An overall vision of the forms of contemporary global governance, demonstrate three important “dimensions of institutional variation”—they can be called publicness, delegation, and inclusiveness (Koenig-Archibugi, 2002). Good global governance necessarily requires pluralism and a prominent citizens’ voice in national development planning (Bhatnagar and Williams, 1992; Clark, 1995, p.595)

A healthy relationship is only conceivable where both parties share common objectives. Where the government’s commitment to poverty reduction is weak, NGOs will find dialogue and collaboration frustrating or even counterproductive. Likewise, repressive governments will be wary of NGOs which represent the poor or victimized. In such situations NGOs would probably prefer to chart their own course, giving all instruments of the state as wide a berth as possible. Where the government has a positive social agenda (or even where individual ministries do) and where NGOs are effective, there is the potential for a strong, collaborative relationship. As Tandon (1991) clarifies, this does not mean the subcontracting of placid NGOs, but a “genuine partnership between NGOs and the government to work on a problem facing the country or a region . . . based on mutual respect, acceptance of autonomy, independence, and pluralism of NGO opinions and positions.” (Clark, 1995, p.595)

However, this kind of ideal relationship is not common due to deep-seated government fears and NGOs’ distrust in politicised policy environments. While governments fear that their political

power and legitimacy might be undermined by NGOs, NGOs doubt the agenda of the government and officials, and particularly in such cases, there is no trust and desire to work together. However, in light of the international movement towards partnership in development, there is a growing shift for NGOs to seek collaboration with governments, so as to promote the participatory development of disadvantaged groups. (Fernandez, 1987; Aga Khan Foundation, 1988; Tandon, 1991; Fowler, 1992; Clark, 1995)

Yet, this in turn brings about another potential issue of greater financial dependency and lesser autonomy over their own agenda. When NGOs are dependent on financial support from a foreign government that the ruling government views as a threat to its legitimacy and sovereignty, they might not trust the NGO as a partner, or have no desire to work with a ‘foreign threat’. However, this does not appear to pose as a major issue in Cambodia, as international aid from foreign governments is aplenty and very much welcomed from international organisations and foreign governments contribute responsibly to the Cambodian economy, society, and people.

This said, “[i]t is the pursuit of genuinely participatory development which should be the motivating force in improving state-NGO relations and in fostering a more enabling environment for NGOs” (Clark, 1995, p.600). Bronfenbrenner also advocated that developmental potential is enhanced when there are “direct and indirect links to power settings through which participants in the original setting can influence allocation of resources and the making of decisions”, for the benefit of the developing person (Bronfenbrenner, 1979, p.256).

There are three aspects to having a constructive relationship between NGOs and the state, in that these collaborations usually occur in liberal democracies, with the intention for “genuine partnership” to tackle mutually agreed upon problems, accompanied by “energetic but constructive debate on areas of disagreement” (Clark, 1995, p.597-8). A close and support NGO-state relationship might also contribute to better coordination among NGOs, to reduce duplication or gaps in local efforts. A study in Romania demonstrated that ingredients of an enabling policy environment include (a) good governance, (b) regulations to help NGO growth, (c) taxation policies to provide incentives for activities, (d) coordination, as well as (e) official support (Matei & Apostu, 2014, p.851).

## Section 6. THE CHRONO-LEVEL & TIME AS OBSERVED IN CAMBODIA’S BIOECOLOGICAL SYSTEM

The chrono-level or chronosystem refers to how the ecology of a developing person changes or has changed over time, and can include the impact of life transitions on proximal processes and/or the development of the child. Such observations are naturally best obtained through longitudinal

studies, but while this research has been unable to do adopt a longitudinal approach, this study has sought to include the dimension of time through considering any transitions or changes in the lives of children with disabilities between the pilot and main study. One part of the (pilot) study was conducted in February 2015, followed by another part of the (main) study conducted in July 2015. The data collected during these two points revealed changes in the status of children (e.g. student dropped out after February and before July).

At the *microtime* level—referring to the continuity (or not) of episodes of proximal process—person characteristics of children with disabilities have been observed to affect their educational outcomes (or participation in micro-settings). Children with disabilities who demonstrated developmentally generative characteristics, or positive dispositions, demonstrated their agency, by asking to get themselves enrolled, or to continue being enrolled.

With life transitions and/or changes in life circumstances, these influences of person characteristics can extend into *mesotime*, influencing their educational outcomes across broader time intervals. As children with disabilities who are enrolled in schools grow up, some of the difficulties they face accumulate, leading to them being left behind in learning or not wanting to go to school anymore, resulting in their dropping out of school. On the other hand, some out-of-school children with disabilities or drop-outs decide to (re-)enrol themselves at school after growing up and being better to cope with their impairments, or being motivated by other life situations.

The *macrotime* level focuses on the changing expectations and events in the larger society, within and across generations, as they affect and are affected by, processes and outcomes of the child's development over his/her life course. As a country that has emerged from an extended period of conflict, the impact of Cambodia's past conflicts on the current education system is still borne by the children and students of Cambodia today. The annihilation of the educated people and books during the Khmer Rouge regime is the initial cause of the lack of teachers and a missing generation of those who would have been senior teachers or at the school management level. Cambodia's economical and developmental setback as a result of past conflicts also form part of the complex causes for Cambodia's developmental and political difficulties.

The process of conducting fieldwork in Cambodia in itself was an introduction to the interlocking nature of issues in education, health, and poverty that the local people face on a daily basis. Due to the interlocking nature of the various limitations the majority of Cambodians face, and because they are merely passive recipients who are unaware of possibilities within the system, the local people can only try to cope with whatever is given or provided to them. There is a fatalistic

attitude to the limitations that they face in daily life, which is strongly reflected in their interview responses. In every turn, they face an obstacle that limits their access to opportunities, and while they work hard from day to day for survival, they appear to accept their lot in life. This is observed more so in rural areas with lower economic development, as well as lower access and information to services, than in the more developed capital of Phnom Penh.

Applying the ecological systems model in inclusive education is no attempt to simplify the complexity of the interlocking issues that is usually seen in developing countries. Instead, it offers a comprehensive framework or map to probe into the complex reality in its various contexts and constructions, and make sense of the processes that take place within them.

As a developing country, there are two distinctive observations in Cambodia's course of implementing quality education for children with disabilities. First, the relative lack of resources in Cambodia make it a challenging task to education children with specific types of disabilities. Educating children with visual and hearing impairments in well-resourced developed countries is relatively easier due to the higher concentration of special schools and because the awareness and/or knowledge of braille and sign language are already disseminated into society. Training teachers with knowledge of braille and sign language is pre-requisite for providing education to children with visual and hearing impairments, but in order to do so, Cambodia needs to overcome inadequacies of teacher training policies in addition to addressing the lack of teachers.

Second, Cambodia's dependence on foreign aid and support in areas of national development is highly symptomatic. There has been a huge influx of international organisations and aid coming into Cambodia since its post-conflict reconstruction period and who have since established a strong local presence, even in rural and/or remote areas. This support comes at the expense of acceding to the development agenda of the international community, even if feasible local alternatives exist. Additionally, in the country's way forward, Cambodia will have to find a way to increase self-sustainability in promoting their development agenda.

The inclusive education movement is one that is driven by rights, which is arguably a universal concept. At the same time, the purpose and value of education is a decision informed by the society at large, at one point of time. Thus the need for dividing into short, medium, or long-term strategies, based on the resources available at each developmental phase, as well as the prioritised needs of people at various developmental phases.

Thus far, the discussion in this chapter has sought to demonstrate how the context of developing countries is more intricately complex than developed countries, as issues of poverty and development are involved. This is further exacerbated in countries recovering from the societal impact from years of conflict, as well as the massive destruction or disruption of the country's

system and/or population. Thus, in introducing inclusive education in developing countries, a comprehensive understanding of the interlocking issues and their demands is necessary for a sustainable and localised approach.

## CHAPTER 6. CONCLUSION

### Section 1. SUMMARY

This section provides an overall summary of the research objectives, methodology, and results of this study. Overall, this study has sought to find out how does the environment which a child with disability develops in affect his/her access to quality education, especially in a developing country context. In doing so, this study first analysed the influence of actors and processes in Cambodia at the bio-, micro-, meso-, exo-, and chrono-levels on the access and quality of education of children with disabilities. Second, based on an analysis of local perspectives and attitudes to the above, this study has sought to identify ecological niches of possibilities that capitalise on the strengths of local communities, for effective and sustainable intervention in Cambodia.

Critical communicative methodology was adopted, focusing on dialogue between the researcher and the respondents, to extract exclusionary dimensions of barriers to education and elicit transformative solutions from local perspectives. This study was conducted in Battambang, Kampot, Kandal, Phnom Penh, and Ratanakiri in February and July 2015. Fifty children with disabilities with a range of disabilities were identified from 19 schools using purposive sampling. A total of 88 interviews were conducted with 119 respondents: 50 individual semi-structured interviews were conducted with parents at their homes, 19 focus group interviews were conducted with 50 teachers, and 19 individual semi-structured interviews were conducted with school directors in schools. Participatory observations were also carried out at 50 homes, 6 classes, and 19 schools. Secondary empirical quantitative data and findings from Kuroda, Kartika, and Kitamura (2017) were also used to complement and lend greater validity to empirical qualitative data from this study.

#### *Influence of Personal Attributes*

Section One has shown how children with disabilities can also act as active social agents; it has demonstrated how the personal attributes and characteristics of children with disabilities have direct influence on their own education and development. Developmentally generative dispositions have a positive impact on their own education. Children with disabilities who demonstrated developmentally generative dispositions such as curiosity, readiness to pursue long-term goals, and tendency to engage in activity alone or with others, tend to continue or re-enter the education system. On the other hand, developmentally disruptive dispositions have a negative impact on their own education. Children with disabilities who demonstrated developmentally disruptive

dispositions—such as low self-esteem, insecurity, shyness, general tendency to avoid or withdraw from activities, aggression—tend not to enrol in school, drop out of school, or exhibit a slower pace of learning and/or weaker relationship with their peers and teachers.

Empirical data also shows that (i) the individual person's dispositions, (ii) assets and liabilities that influence the individual's emotions, thoughts, and behaviour, as well as (iii) characteristics that influence how the individual is treated, can occur in isolation, but more often than not, intertwine to influence the Person's educational outcomes.

While resource characteristics such as impairments and demand characteristics such as the ethnic minority disadvantage are characteristics that cannot be reversed or changed, findings reassert how personal dispositions significantly influence the agency of the individual's in his or her own educational outcomes, despite limitations and constraints within the person's environment. This study thus provides a case for empowering children with disabilities, so that they can become aware of the opportunities possible to them, and develop the drive to fulfil and maximise their own developmental potential.

### *Types & Severity of Disability*

Teachers acknowledged the rights of children with disabilities to education, but they expressed significant difficulties and frustrations accommodating (i) deaf and (ii) blind children, as well as those with (iii) learning disabilities. Most teachers strongly expressed that they are unable to meet the needs of groups (i) and (ii), as doing so requires additional specialised knowledge of sign language and Braille. This was similarly shown in secondary quantitative data (Kuroda, Kartika, and Kitamura, 2017), where teachers perceived that blind and deaf children, children with severe and multiple disabilities and intellectual disabilities are difficult to be educated in regular class rooms.

Particularly, empirical data from this study show that Cambodian teachers' perceptions on educating blind and deaf students in inclusive education settings are significantly different from other empirical findings in developed countries. While such sensory impairments can be more relatively more feasibly overcome in developed countries through the use of Braille or sign language in classrooms and the presence of assistant teachers, these methods are not yet easily established at the classroom or school level in developing countries like Cambodia. Using Braille requires both teachers and students learning how to read or use Braille and expensive printers to print Braille textbooks and/or worksheets; using sign language similarly requires both teachers and students learning how to communicate in sign language. Following its introduction in 1997, the documentation of the Cambodian Sign Language is still an ongoing project between Deaf Development Programme and Krousar Thmey., and disseminating or increasing its usage in inclusive

education classrooms will take some time to take fruit.

### *Effects of Socio-economic Status*

Section Three shows how the family's *socio-economic status* influences the opportunity to access quality education, and illustrates both positive and negative influences of financial and social standing of families. Results from this study has shown that parents and/or guardians of children with disabilities face many barriers, limitations, and stress in accessing education and health services for their children. Families with children with disabilities who have lower socioeconomic status are severely disadvantaged in gaining access to information and available education and health services; the severe lack of awareness of disability was found to hinder access to quality education and health services, including the prevention and/or detection of their child's condition. Lower socioeconomic status (poverty level, social position, ethnic minority, religious minority) puts children with disability at a greater disadvantage in gaining access to school/staying enrolled. Cases where parents lacked knowledge of their child's condition also showed that they were less secure in sending or keeping their children in schools. Parents are the first adults and people that children with disabilities interact intimately with, and on whom they are completely dependent on for care. For this reason, policies and programmes need to be strongly centred on the role of the family unit in facilitating access to educational and health services for children with disabilities. Hence, in addition to empowering children with disabilities, this study also provides a case for empowering their families, to support children with disabilities in fulfilling and maximising their developmental potential.

### *Parents' Relationship with Teachers*

Despite the need for a good relationship between families and teachers for inclusive education programmes to take fruit, interaction and communication between parents and teachers in Cambodia is severely lacking, although not fully absent. Generally, teachers enjoy a respected position in Cambodian society as educated people, but there is very little and irregular contact between parents and teachers (or the school). Most parents reported being unaware of the communication platform (parent-teacher contact book system), and some reported fear or hesitance in talking to teachers, and in some cases, even expressing discomfort or dislike towards the child's teacher. On the other hand, responses from teachers demonstrated that they were unaware of the amount of attention the child with disability receives from their parent as well as the difficulties faced by parents in sending their children with disability to school. Inconsistencies in responses between parents and teachers were also observed. In some instances, parents and teachers differed in how they defined the impairment of a child with disability, as well as their observations of how the



child is coping and learning in school.

### *School & Teacher Capacity*

Reported difficulties and frustrations of teachers in including deaf, blind, and children with learning disabilities, were founded in the lack of relevant training and breakdown of the cascade teacher training system, the lack of quality teachers and resources, as well as the splitting commitments of teachers due to low salaries. respondents' accounts of bottlenecks, limitations, and possibilities of *schools' and teachers' resources and capacity* in their attempt to provide education for children with disabilities in their classrooms.

While quantitative findings from Kuroda, Kartika, and Kitamura (2017) have showed no correlation between training and positive attitudes, empirical qualitative data in this study demonstrated that there is a tendency for teachers who have received training to have more positive attitudes towards inclusive education. This can be attributed to the breakdown of the cascade training or transfer of knowledge, implying the need for training on teaching students with disabilities to be carried out on a larger and more extensive scale and establishing a system that secures the systemic transfer of knowledge gained between teachers.

Additionally, while studies of inclusive education settings in developed countries demonstrate a significant and positive correlation between teaching experience (with children with disabilities) and teachers' perspectives towards inclusive education, secondary quantitative findings in Cambodia has shown otherwise. Empirical qualitative data in this study suggests that the lack of correlation between teaching experience of children with disabilities and teachers' perspectives towards inclusive education in Cambodia is due to negative (or the lack of positive) real experience with implementing inclusive education at the classroom level. This thus reinforces implications from previous studies that experience in teaching children with disabilities can positively influence teachers' perspectives on inclusive education in developing countries such as Cambodia as well, but careful planning down to, and support at, the classroom level are necessary.

### *Concept & Awareness of Disability & Relevant Services*

Results have also shown that among communities of low socioeconomic status, families are severely disadvantaged in gaining access to information regarding (the various types of) disability, the implications of these disabilities, the rights and needs of children with disabilities (and their caregivers), as well as available health and educational services that are to their benefit. Consequently, the severe lack of awareness of disability was found to hinder their access to quality education and health services, including the prevention and/or detection of their child's condition.

### *Role of the Village in Information Dissemination & Communication*

The process of data collection has revealed how village heads, who are familiar with households and household situations in their village, acted as our key informants in locating children with different types of disabilities, including out-of-school children with disabilities. They are respected as authoritative figures in their communities, and serve as valuable sources of information. Village heads are thus crucial in cementing processes, relationships, and information for delivering quality education to children with disabilities, particularly in rural or remote areas. This suggests the unique role of the village and village chief in facilitating the inclusion of children with disabilities through gathering data, raising awareness of disability, and bridging the information gap.

Bonds within most communities were observed to be high, with villages serving as social spaces for communication between teachers/school principals and parents. Teachers (who tend to be from the same village, or nearby) are familiar with students, their parents, and their homes/families, and respondents described how informal communication between teachers and parents tend to take place in places like the market or in front of their houses, suggesting the ease of communication in informal settings or spaces where the hierarchy of relationship (whereby the teacher is traditionally more dominant) is not institutionalised or applicable.

### *Distance from State Services*

Evidence demonstrated how the low and uneven distribution of schools with resources and trained manpower to teach children with disabilities has affected parents' decisions to send their children to school. This has detrimental effects on the access of all children with disabilities, particularly those in rural and/or remote areas, to quality education.

### *Low Quality & Distribution of Public Healthcare Services*

Accounts from respondents and observations showed the severe lack of accessible public healthcare services, particularly in rural and/or remote areas, and demonstrated how the low and uneven distribution of quality health facilities and services throughout the country impede the prevention, diagnosis, and rehabilitation of children with disabilities. Consequently, this negatively influences the access of children with disabilities to education.

Evidence also showed the Cambodian public's lack of trust in their local healthcare services, as those who can afford it cross the border to Vietnam or Thailand, or further to Singapore or France, for better healthcare attention. This suggests that while reforms in the healthcare system are critically necessary to ensure greater accessibility for the masses, it is not in the priority or interests of the

elites to push for them. Since children with disabilities require healthcare services to a greater extent, a quality healthcare system is critical to ensure their (continued) access to quality education. Reforms of this scale thus calls for greater multi-sectoral collaboration between local government ministries and agencies.

### *Role of (I)NGOs and Foreign Governmental Aid*

This study has also demonstrated the steadfast presence of international non-governmental organisations, agencies, and foreign governmental aid in providing quality education to children with disabilities in Cambodia. Although not all are aware of where to go and what services are available, a handful of parents of children with disabilities have provided evidence on their children's access to informal education in the form of NGO programmes, and other children receive poverty allowances.

Current integrated education programmes for children who are blind or deaf has been successful at providing children with vital learning tools (Cambodian sign language and the Braille system), so that they can participate and be included in regular classes, at appropriate timings of their development. Evidence also showed that the system of pre-service and in-service training and support for teachers between resource schools and the affiliated regular school has been effective, such that teachers of regular classrooms including children with disabilities do not feel overwhelmed or unable to support the child's learning. The success of such existing local models of collaboration between non-governmental organisations and the public education system thus calls for a properly examination of these programmes, so that they can be strengthened and rolled out on a larger scale.

## Section 2. THEORETICAL CONTRIBUTIONS

The ecological systems model originates from a position where substantial and/or equal emphasis has not been given to the two elements of the person and the environment, when looking at the interplay between them. Bronfenbrenner (1979, p.15) argued that that the “marked asymmetry... focusing on the properties of the person and only the most rudimentary characterization of the environment” is one that needs to be overcome.

In order to understand the system supporting a child's development, an analysis of the ecology of development should engage directly with existing programmes and policies that are aimed at promoting development (Bronfenbrenner, 2005). A fundamental basis of this study is that education serves as a process and tool for individual and social development. This use of the bioecological systems model thus provides a framework for the comprehensive analysis of education programmes and contexts that ensures the individual and social development of children with

disabilities.

In acknowledging the limitations and recognising the potential of the ecological systems model, Bronfenbrenner remarked that an investigation using the ecological systems model would have reached its aspirations of understanding “the forces shaping the development of human beings in the environments in which they live” (Bronfenbrenner, 1979, p.15), as long as the investigation reveals new and substantiated perspectives of reality for study. These new perspectives and constructions of reality should also be well-grounded in sound theoretical insights.

This study has thus sought to reveal perspectives, as well as to highlight these angles and niches in contemplation of understanding the forces shaping the education and development of children with disabilities in Cambodia. By doing so, this study further seeks to contribute to the greater body of work in understanding the forces shaping the education and development of children with disabilities in developing countries, particularly in countries that are emerging from or rebuilding after conflicts. The medical and social models of disability are not necessarily mutually exclusive, and the claim that the medical model is completely irrelevant today would be overreaching. This is particularly the case in developing countries, since some impairments develop due to the lack of access to medical services.

The field of educational development is bounded by interweaving contexts at the local, national, and global levels, but is also centred in the mission of providing education for all. In the good intentions of identifying and seeking to eradicate systemic barriers to quality education, the tendency has been for studies in the field of educational development to mostly focus on the system. The application of Bronfenbrenner’s ecological systems model in educational development and inclusive education thus lends for the assertion of the individual level of analysis while focusing on system-wide issues and factors. This assertion of that the individual holds agency over one’s own education is also in line with the human rights approach to education, which seeks to focus on empowerment and the individual’s ability to take responsibility over one’s own education. The application of Bronfenbrenner’s bio-ecological systems analysis in inclusive education thus serves to enable us to arrive at a more balanced and comprehensive picture of issues surrounding the provision of quality education for children with disabilities.

Additionally, although the conceptualisation of this framework is based on evidence from a developing country, the bioecological systems framework of human development serves as a universal framework for examining the complexities of inclusive education in a range of contexts, including that of developed countries.

### Section 3. PRACTICAL IMPLICATIONS FOR POLICY CONSIDERATION

Bronfenbrenner (2005) pointed out that an ecological systems analysis enables us to identify ecological niches, indicating aspects that hinder or promote the developmental potential of the child with disability. These ecological niches form practical implications to connect research findings and theoretical contributions that can be translated into programmes and policies. What do our children with disabilities need for them to thrive in the societies they live in? On the supply side, what can we do to improve the capacity and resources in schools so that policies are effectively reflected in classroom practices?

Supporting the development of children with disabilities not only necessitates examining their opportunities to quality education, but also critically requires simultaneous attention into health and social issues. The success of educational policies in ensuring quality education for the inclusion and participation of children with disabilities does not lie only in its own success. Rooted in the needs of local communities and driven by strong political will, it requires the successful implementation of sound educational policies and programmes in coordination with other sectors that influence the life opportunities of children with disabilities, including health, livelihood, empowerment, and other aspects of their life as a social member of society.

This study thus argues that there is a strong need to raise awareness and knowledge of disabilities; ensure a systematic flow of information on available services, resources, and other support; as well as empower families and communities in consolidating resources for providing education to children with disabilities. This study also highlights the need for greater multi-sectoral collaboration, public-private partnership, accurate and up-to date district or village-level data, and programmes that are strongly centred on empowering children with disabilities and their families. Existing successful models of collaboration between (international) non-governmental education programmes and the public school system should be strengthened and rolled out on a larger scale. As a multi-sectoral and localised strategy, community-based rehabilitation programmes demonstrate strong potential to facilitate the provision of quality education to children with disabilities across Cambodia, while also increasing awareness towards disability (needs) and empowering children with disabilities and their families.

In attempting to comprehensively explore inclusive education in Cambodia with the bioecological systems model, the acknowledgement of Person characteristics as a factor influencing the education of a child with disability, or the agency of the individual in influencing one's own education outcomes, leads us to consider programmes and models that empower children with

disabilities and their families. Being the closest setting to a developing child, the role of the family is critical in promoting his/her developmental potential. In the case of children with disabilities, this becomes even more pertinent. For children with disabilities, as they grow up and learn to manage their impairments in society, they depend on their family to make sense and cope with the limitations they face in daily life. Empowering children with disabilities and their families thus entail identifying further opportunities for them to actively define and decide their own development.

Another major finding of this study is also the severe lack of awareness towards the concept of disability, the various types of it, as well as a sense of powerlessness on the part of families and schools (particularly so for those of lower socio-economic status) and what they can do about it. In this aspect, the accurate identification of children with disabilities will also facilitate the dissemination of information, including obtaining an accurate diagnosis of a child's condition, available health services, as well as information on the various impairments and disabilities. The role of villages and/or village chiefs is thus not limited to having an accurate grasp of local data on children with disabilities and facilitating the transfer of such data, but can also serve as a central information guide to increase awareness towards disability, its various types, as well as what action families should take. This increased awareness of disability and knowledge of available services and options will then empower parents, teachers, and children with disabilities to take action into their own hands to influence their own outcomes and development, including education. It is also important to note that the need to increase societal awareness for greater empowerment does not mean the responsibility lies with the people. The responsibility to restructure the culture, policies, and practices for inclusive education remains on the shoulders of the local system; the empowerment of the people will serve to drive and sustain that very restructuring.

Results from this study show that mostly, village chiefs have a good grasp of information on children with disabilities within their village, and serve as focal contact/network points. Schools and teachers had, however, a less comprehensive awareness of the individual situations of children with disabilities; school directors and teacher respondents, particularly in rural areas, also reflected that they look to the village to provide them with information and mapping of children with disabilities. Being in direct contact with the community and families of children with disabilities, there is strong potential in the role of village chiefs in facilitating the transfer of accurate information on children with disabilities (enrolled, drop-out, and out-of-school children) within their (village) locality. However, in some cases, respondents pointed out that village-level data is not available due to the lack of resources.

To this end, there is also a need for the systematic collection of accurate and up-to-date local data on children with disabilities—whether they are enrolled students, drop-outs, or out-of-school

children—as well as their family situation and ability to care for them. District or village-level data should be collected annually and contribute towards the census survey that is carried out once every four years in Cambodia. This will serve in the formulation of sound policies based in local contexts, and will need to be led by strong political will on issues concerning people with disabilities.

Additionally, the government should map all services in Cambodia that are available to people and children with disabilities, including local and international NGOs. In doing so, they will be able to establish a database of the services that are already established at the grassroots or community level. Instead of attempting to establish additional resources and services that are initiated by the state, the Cambodian government can reach out to these NGOs to collaborate and increase the extent of their work. This can take the form of funds, manpower, as well as data on households and people with disabilities, etc.

As demonstrated by the Cambodia-Japan Friendship School in Kampot, actual implementation of programs based on training by Krousar Thmey helped in the transfer of knowledge. One way to ensure that the knowledge and skills gained through training are transferred and actualized would be to provide schools with a post-training budget and require them to implement what they have learnt. This serves a two-fold purpose by ensuring that new knowledge gained is immediately actualized into action and also serves as a concrete avenue for teachers who did not attend the training to learn from their colleagues.

These collaborations between public schools and NGOs within the same locality can be established pilot schools for inclusive education within each province in Cambodia. This serves both as an opportunity to identify what form of inclusive education works in the context of that specific locality, as well as to serve as a resource base. As earlier discussed, the context, limitations, available resources and networks within the various provinces of Cambodia can differ rather distinctly. With this in mind, an in-depth analysis and understanding of the necessary structural changes and sustainable solutions would facilitate the pilot school's role of serving as a model of what works for that locality. A provincial pilot school would also help reinforce the decentralised whole-school approach, which is particularly important for schools in rural areas (of developing countries) as they tend to be far away, or isolated, from other support systems. From there, successful practices can be highlighted, to be scaled up or replicated (as applicable and feasible).

One key aspect of restructuring policies to achieve better practices in the classroom to educate children with disabilities in Cambodia is to create conducive teaching environments. Teachers are at the frontline of the education system, teaching and interacting with students in the school face-to-face; aspects that influence their motivation and ability to teach thus directly impact children's learning. This includes work load-related issues like class size, number of children with

disabilities in the class, types of disabilities, and; as well as other aspects regarding their load in life that affects their motivation and/or ability to teach effectively, such as their salary, socio-economic status, whether they have to take on odd-jobs and supplement their teaching salary for survival, or any other commitments they might have. It is for this reason that a focus on teachers is critical for examining factors affecting the quality of education that children with disabilities receive.

It is thus timely and encouraging that MoEYS drafted and finalised the Teacher Policy Action Plan (thereafter, the Plan), with concrete programmes and budget, timelines, and expected outcomes for implementation from 2015 to 2020. The Plan very comprehensively addresses many critical issues, and many of the programmes and tasks appear promising and look set to resolve current inadequacies, for as long as the Plan is implemented with grit and consistency. However, based on responses from teachers, this study will highlight three main issues that appear to have been overlooked in the Plan. Results from this study suggest an additional need for (i) providing lunches to teachers, (ii) increasing social welfare to include transport allowance, as well as (iii) ensuring that strategies to manage teacher staffing are incentive-based, so as reduce or eliminate negative associations to teaching at schools in rural or remote areas.

Firstly, regarding improving the school environment, particularly for teachers in rural or remote areas, spaces and additional infrastructure being considered include classrooms, latrines, teacher housing, staff room, and libraries. As mentioned earlier, Cambodia has a local culture where almost everyone goes home—from school or from work—for lunch. At companies, employees take up to two hours for their lunch break at home. Some teacher respondents teaching in rural schools had lamented that because they live far away, they cannot travel all the way back just for lunch, and because they cannot afford to eat at the shops, they have to pack food from home to eat between the morning and afternoon sessions. Providing lunches for teachers, particularly those teaching at schools in rural and remote areas, can serve as an incentive, or at least not deter them from teaching in those areas. These lunch meals, or allowances, can be given out to teachers who live beyond a specified distance from their schools.

Secondly, the Plan looks to improve social welfare to motivate and retain teachers. Specific aspects to increase welfare include a comprehensive teacher salary scheme and a life-long social welfare for housing, health, overtime, and pension benefits. Another area of welfare that can help reduce unnecessary burden on teachers would be to provide monetary transport allowances, possibly in tiers and based on the distance of their homes from school.

Thirdly, in a bid to effectively manage teacher staffing, the Plan states that new graduate teachers are ‘obligated’ to teach in teacher shortage areas (usually rural and remote areas). This is efficient in ensuring teacher staffing for shortage areas, but the risk it runs is that it can also serve to



reinforce negative associations to working at rural or remote areas. Results have shown that many young(er) and/or new(er) teachers enter the force with much enthusiasm, only to have their spirits crushed by the harsh reality of limited resources. Policy makers should be careful to ensure that each policy or programme made eventually serve to feed that enthusiasm, and not to smother or extinguish it. To this end, programmes should be incentive-based instead of obligatory, and to manage teacher staffing with a 'willing' manpower.

Facilitating children with disabilities' access to educational services also necessitates the facilitation of their access to health services. This requires enhanced coordination and collaboration not only between disability and health professionals and administrators; the public system needs to ensure systematic coordination and collaboration between the processes of the health and education sectors, including that of the professionals and administrators within these individual sectors. People with disabilities, or specifically, families or guardians of children with disabilities

Policies and programmes need to be strongly centred on the role of the family unit in facilitating access to educational and health services for children with disabilities. Results from this study has shown that parents and/or guardians of children with disabilities face many barriers, limitations, and stress in accessing education and health services for their children. Parents are the first adults and people that children with disabilities interact intimately with, and on whom they are completely dependent on for care, in at least the first decade or so of their lives.

Finally, this study highlights the need for greater multi-sectoral collaboration, accurate and up-to date district or village-level data, and programmes that are strongly centred on empowering, especially that of the family unit. Particularly in rural/remote areas, this study argues that the role of the village and village chief is crucial in cementing processes, relationships, and information for delivering quality education to children with disabilities.

As a multi-sectoral and localised strategy, community-based rehabilitation programmes thus demonstrate strong potential to facilitate the provision of quality education to children with disabilities across Cambodia, while increasing awareness towards disability (needs) and empowering children with disabilities and their families. Based on insights from Cambodia, this study thus provides evidence-based insights into how the international education community can support developing countries in working towards achieving the global goal of inclusive and equitable quality education for children with disabilities.

As the international community steps up to the challenge of ensuring inclusive and equitable quality education for all children in the next era of sustainable development agenda, it is crucial that we bear in mind that we cannot simply assume outcomes in developing countries based on our experience in developed countries. When introducing inclusive education in developing countries,

we should strive to ensure that programs are localised and established upon local data or conditions, and not merely to apply established practices from developed countries.

This paper argues that for developing countries faced with realistic limitations in the short to mid-term context, the inclusion of students with disabilities is not through including all of them in mainstream classrooms (which in fact can lead to their eventual exclusion), but through ‘effective inclusion’. Recognising the realistic limitations of developing countries while ensuring quality education, a certain degree of special or integrated education is necessary to overcome shortcomings such as teachers’ lack of knowledge in sign language or braille in the short term. Effective inclusion refers to inclusion strategies and forms based on current possibilities that recognise current limitations, while working to address full inclusion in the long term. In developing countries, the basic infrastructure for disability (health services, social awareness, etc.) is lacking, and this needs to be gradually addressed, simultaneous to short/mid-term inclusive education strategies, so as to eventually achieve inclusive education in its true philosophy and potential.

In the long term, macro level inadequacies need to be overcome. The public education system needs to facilitate a more conducive environment for teachers to become better equipped to include children with disabilities in their classes, include the community as active actors in educating children with disabilities in their community, and promote greater awareness toward disability and available services for better health and education access.

It is crucial to also note that this distinguishes between the implementation of inclusive education by (i) short to mid-term strategies that recognise the realistic limitations of developing countries, and (ii) long-term strategies that work toward the eventual inclusion of students with disabilities in regular classrooms, in line with the umbrella concept of inclusive education as all students of diverse needs learning together and from each other in one classroom.

That is to say, while being guided by one vision or philosophy towards inclusion in education, inclusive education in practice should also take into consideration the (resources available to the) development stages of countries or communities in question. As with Maslow’s hierarchy of needs, education is seen by developing countries as a tool for achieving material needs of food and income. Only after those needs have been adequately addressed, then education for higher purposes of diversity and self-actualisation will begin to be considered as an agenda to pursue. A consideration of development stages would provide an understanding of the predominant purpose of education for that country or community, and subsequently help to ensure the relevance of inclusive education to that society.

#### Section 4. LIMITATIONS & FUTURE WORK

This study was administered for only fifty children with disabilities across four provinces and the capital of Cambodia. Thus, while this study seeks to serve as an exercise to build onto the understanding of implementing inclusive education in developing countries, caution must be exercised in generalising the results. The different categorisations of disability in Cambodia across studies and organisations also make secondary data collation and comparison difficult or impossible. The use of targeted database to identify children with disabilities in this study and purposive sampling also exposes this study to risks of non-random study samples. However, this study stands by its empirical research design, in view of its purpose of first establishing a picture of the intricacies in providing quality education for children with disabilities in Cambodia at the current stage of research and data.

The use of Bronfenbrenner's bio-ecological model of development for longitudinal studies is one of the strengths of using his model in disability and special education research. Although a longitudinal study was not conducted for this analysis, this study has sought to include the dimension of time through considering any transitions or changes in the lives of children with disabilities between the pilot and main study. One part of the (pilot) study was conducted in February 2015, followed by another part of the (main) study conducted in July 2015. The data collected during these two points revealed changes in the educational outcomes or situations of some children. The longitudinal study of examining the provision of education for children with disabilities is an imperative one, and remains an agenda to be strived for. This study also recognises that as countries and societies develop, accompanied by improved public governance process, the level, quality, and distribution of resources change, requiring a systemic review over time.

This study has explored and demonstrated the positive relationship between personal characteristics and individual access to education or development (as shown in Chapter 4. Section 1). However, this requires further validation with regards to: (i) the extent of these various characteristics in isolation, as well as (ii) the degree of the relationships between these personal characteristics. Specifically, further studies would require a quantitative approach towards understanding the degree of both individual and combined influence of the various personal characteristics on one's own development and education. This 'multiplying effect' or the difference in extent of influence of one form of personal characteristic over another is one that warrants greater research in, for effective policy targeting.

Particularly, force characteristics of a child with disability were observed to play a definitive

role in their educational outcomes, even overcoming the effect of resource and demand characteristics on their own educational outcomes. The relationships between these characteristics have been identified through this exploratory study. However, this finding demonstrates the need for further study with regards to: (i) the extents of these various characteristics in isolation, as well as (ii) the degree of the relationships between these personal characteristics. Specifically, these further studies would require a quantitative approach towards understanding the degree of both individual and combined influence of the various personal characteristics on one's own development and education.

In final conclusion, this study has demonstrated (i) severe inadequacies in macro structures, (ii) how these inadequacies at the macro level deter processes at the lower levels, (iii) the limits of a purely top-down process in the current context, and (iv) the potential of villages and local communities in driving the process of education for children with disabilities. Supporting the development of children with disabilities not only necessitates examining their opportunities to quality education, but also critically requires simultaneous attention into health and social issues.

This study thus argues that there is a strong need (i) to raise awareness and knowledge of disabilities, (ii) to ensure a systematic flow of information on available services, resources, and other support (iii) to empower families and communities in consolidating resources for providing education to children with disabilities, (iv) for greater multi-sectoral collaboration and public-private partnership, (v) for accurate, up-to date district or village-level data, (vi) for programmes that are strongly centred on empowering children with disabilities and their families, and (vii) for existing successful models of collaboration between (international) non-governmental education programmes and the public school system to be strengthened and rolled out on a larger scale. As a multi-sectoral and localised strategy, community-based rehabilitation programmes demonstrate strong potential to facilitate the provision of quality education to children with disabilities across Cambodia, while also increasing awareness towards disability (needs) and empowering children with disabilities and their families.

Based on evidence-based insights from Cambodia, this study has sought to shed light on the forces facilitating and hindering the education and development of children with disabilities in a developing country context, and provide a universal framework for examining the complexities of inclusive education, to understand how developing countries can be supported in working towards achieving the global goal of inclusive and equitable quality education for children with disabilities.

## REFERENCES

- Aga Khan Foundation. (1988). *The Enabling Environment*. Report of Nairobi conference, London: Aga Khan Foundation.
- Alghazo, E.M., & Gaad, E.L.N. (2004). General education teachers in the United Arab Emirates and their acceptance of the inclusion of students with disabilities. *British Journal of Special Education*, 31(2), 94–99.
- Allan, G. (1991). Qualitative research. In Allan G. and Skinner, C. (Ed.s.), *Handbook for Research Students in the Social Sciences*. (pp. xx-xx). Routledge-Falmer.
- Allen, J. (2008). *Rethinking inclusive education: The philosophers of difference in practice*. City: Publisher.
- Analyzing Development Issues Team. (2006). *The challenge of living with disability in rural Cambodia: A study of mobility impaired people in the social setting of Prey Veng district, Prey Veng Province. Report for the Cooperation Committee for Cambodia*. Retrieved September 1, 2016, from www.
- Anderson, J., Boyle, C., & Deppeler, J.. (2014). The ecology of inclusive education: Reconceptualising Bronfenbrenner. In H. Zhang, P.W.K. Chan, & C. Boyle (Eds.), *Equality in Education: Fairness and Inclusion* (pp. 23-34). The Netherlands: Sense Publishers-Rotterdam.
- Ansary, S.J., Perkins, D.F., & Nelson, C.J. (2004). Interpreting outcomes: Using focus groups in evaluation research. *Family Relations*, 53(3), 310-316.
- Antia, S.D., Stinson, M.S., & Gaustad, M.G. (2002). Developing membership in the education of deaf and hard of hearing students in inclusive settings. *Journal of Deaf Studies and Deaf Education*, 7(3), 214-229.
- Apple, M.W. (2011). Democratic education in neoliberal and neoconservative times. *International Studies in Sociology of Education*, 21(1), 21-31.
- Armstrong, A.C., Armstrong, D., & Spandagou, I. (2010). *Inclusive education: International policy and practice*. London: Sage Publications.
- Asian Development Bank. (2002). *Indigenous peoples/ethnic minorities and poverty reduction in Cambodia*. Retrieved July 1, 2016, from <http://www.adb.org/sites/default/files/publication/28021/indigenous-peoples-cambodia.pdf>.
- Asian Development Bank. (2012). *Report and Recommendation of the President to the Board of Directors. Kingdom of Cambodia: Third Education Sector Development Program*. Retrieved June 28, 2016, from <http://adb.org/sites/default/files/projdocs/2012/43260-013-cam-rrp.pdf>.
- ASPECA Orphanage Center—Kampot. Project website. Retrieved from July 9, 2016, from <http://www.proving.it/project/aspeca-orphanage-center-kampot/acrB31BFE59551F68335/>.
- Aubrey, K., & Riley, A. (2016). *Understanding & Using Educational Theories*. Sage Publications.
- Avramidis, E., Bayliss, P., & Burden, R. (2000a). A survey into mainstream teachers' attitudes towards the inclusion of children with special education needs in the ordinary school in one local education authority. *Educational Psychology*, 20(2), 191-211.
- Avramidis, E., Bayliss, P., & Burden, R. (2000b). Inclusion in action: An in-depth case study of an effective inclusive secondary school in the south-west of England. *International Journal of Inclusive Education*, 6, 38–43.
- Avramidis, E., & Kalyva, E. (2007). The influence of teaching experience and professional development on Greek teachers' attitudes towards inclusion. *European Journal of Special Needs Education*, 22(4), 367-89.
- Avramidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education*, 17(2), 129-47.
- Ayres, D.M. (2000). *Anatomy of a Crisis: Education, Development, and the State in Cambodia, 1953-1998*. Honolulu: University of Hawaii Press.
- Barton, L. (1997). Inclusive education: romantic, subversive or realistic?. *International Journal of Inclusive Education*, 1(3), 231-242.
- Batsiou, S., Bebetos, E., Panteli, P., & Antoniou, P. (2008). Attitudes and intention of Greek and Cypriot primary education teachers towards teaching pupils with special educational needs in mainstream schools. *International Journal of Inclusive Education*, 12, 201–19.
- Beh-Pajooh, A. (1992). The effect of social contact on college teachers' attitudes towards students with severe mental handicaps and their educational integration. *European Journal of Special Needs Education*, 7, 231–36.
- Ben-David, B., & Nel, N. (2013). Applying BronfenBrenner's ecological model to identify the negative influences facing children with physical disabilities in rural areas in Kwa-Zulu Natal. *Africa Education Review*, 10(3), 410-430.
- Benveniste, L., Marshall, J., & Araujo, M. Caridad. (2008). *Teaching in Cambodia*. Washington, DC: World Bank.

<http://documents.worldbank.org/curated/en/161351468020945260/Teaching-in-Cambodia>.

- Bhatnagar, B., & Williams, A.C. (Eds.). (1992). *Participatory development and the World Bank: Potential directions for change*. World Bank Discussion Papers No. 183. Retrieved August 15, 2016, from <http://documents.worldbank.org/curated/en/789811468765616541/pdf/multi-page.pdf>.
- Biesta, G. (2009). Good education in an age of measurement: On the need to reconnect with the question of purpose in education. *Educational Assessment, Evaluation and Accountability*, 21(1), 33-46.
- Biesta, G. (2015). What is education for? On good education, teacher judgement, and educational professionalism. *European Journal of Education*, 50(1), 75-87.
- Bines, H., & Lei., P. (2011). Disability and education: The longest road to inclusion. *International Journal of Educational Development*, 31, 419-424.
- Booth, T., & Ainscow, M. (2002). *Index for inclusion: Developing learning and participation in schools*. Bristol, UK: CSIE.
- Bowman, I. (1986). Teacher-training and the integration of handicapped pupils: Some findings from a fourteen nation UNESCO study. *European Journal of Special Needs Education*, 1, 29-38.
- Brinkley, J. (2011). *Cambodia's course: The modern history of a troubled land*. New York: Public Affairs.
- Bronfenbrenner, U. (1976). The experimental ecology of education. *Educational Researcher*, 5(9), 5-15.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Cambridge, MA: Harvard University Press.
- Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, 22(6), 723-742.
- Bronfenbrenner, U. (1986). Recent advances in research on human development. In R.K. Silbereisen, K. Eyferth, & G. Rudinger (Eds.), *Development as action in context: Problem behaviour and normal youth development* (pp.287-309). Heidelberg: Springer-Verlag.
- Bronfenbrenner, U. (1988). Strengthening family systems. In E.F. Zigler & M. Frank (Eds.), *The parental leave crisis: Toward a national policy* (pp.143-160). New Haven, CT: Yale University Press.
- Bronfenbrenner, U. (1992). Ecological systems theory. In R. Vasta (Ed.), *Six theories of child development: Revised formulations and current issues* (pp.187-249). London: Jessica Kingsley Pub., Ltd.
- Bronfenbrenner, U. (1994). Ecological models of human development. In T. Husen & T.N. Postlethwaite (Eds.), *International encyclopedia of education* (2nd ed., Vol. 2, pp.1643-1647). Oxford. England: Pergamon Press/Elsevier Science.
- Bronfenbrenner, U. (2001). The bioecological theory of human development. In N.J. Smelser & P.B. Baltes (Eds.), *International encyclopedia of the social and behavioural sciences* (Vol. 10, pp.6963-6970). New York: Elsevier.
- Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks: Sage Publications.
- Bronfenbrenner, U., & Morris, P. A. (2007). The bioecological model of human development. *Handbook of child psychology* (I:14).
- Buchmann, C. (2002). Measuring family background in international studies of education: Conceptual issues and methodological challenges. In A.C. Porter (Ed.) *Methodological Advances in Cross-National Surveys of Education Achievement*. Washington, D.C.: National Academies Press.
- Buell, M., Hallam, R., Gamel-McCormick, M., & Scheer, S. (1999). A survey of general and special education teachers' perceptions and in-service needs concerning inclusion. *International Journal of Disability, Development and Education*, 46, 143-56.
- Burnand, F. (2013). A Swiss doctor who brought hope to Cambodia. Retrieved July 14, 2016, from [http://www.swissinfo.ch/eng/vital-health-care\\_a-swiss-doctor-who-brought-hope-to-cambodia/34867444](http://www.swissinfo.ch/eng/vital-health-care_a-swiss-doctor-who-brought-hope-to-cambodia/34867444).
- Cambodia—Primary Education in the ex-Khmer Rouge Reconciliation*, YatesWeb, (n.d.). Retrieved December 15, 2009, from <http://www.yatesweb.com/Cambodia/Cambodia.htm>.
- Campbell, J., Gilmore, L., & Cuskelly, M. (2003). Changing student teachers' attitudes towards disability and inclusion. *Journal of Intellectual and Developmental Disability*, 28(2), 367-379.
- CARE International in Cambodia. (2007). Workshop on the analysis of the education situation in Ratanakiri Province and to make recommendations to reach EFA goals in 2015. Provincial Department of Education Ratanakiri, UNICEF, CARE International. 18-19 September 2007. Retrieved July 28, 2016, from <http://119.82.251.165:8080/xmlui/bitstream/handle/123456789/240/Workshop%20on%20the%20analysis%20of%20the%20education%20situation%20in%20Ratanakiri%20Province%20and%20to%20make%20recommenations%20to%20reach%20EFA%20goals%20in%202015.pdf?sequence=1>.
- CARE International in Cambodia. (n.d.) *School governance for quality education project*. Retrieved July 3, 2016,

- from <http://www.care-cambodia.org/#!school-governance-for-quality-education/c11mw>.
- Carter, J. (2009). *Preparing for the journey: A cooperative approach to service provision for children with intellectual disabilities in Cambodia*. Retrieved August 13, 2016, from [http://www.unicef.org/cambodia/Intellectual\\_Disabilities\\_Children\\_Report.pdf](http://www.unicef.org/cambodia/Intellectual_Disabilities_Children_Report.pdf).
- Casey, É. (2012). *Learning history of the pilot programme on inclusive education, Kampot Krong Primary School, Cambodia: A collective reflection on actions and approach to support learning, change and the promotion of inclusive education*. Report submitted to Light for the World. Retrieved August 13, 2016, from [http://www.lightfortheworld.nl/docs/capacity-building/learning-history-inclusive-education-cambodia-\(full\).pdf?sfvrsn=12](http://www.lightfortheworld.nl/docs/capacity-building/learning-history-inclusive-education-cambodia-(full).pdf?sfvrsn=12).
- Center, Y., & J. Ward. (1987). Teachers' attitudes towards the integration of disabled children into regular schools. *The Exceptional Child*, 34, 41-56.
- Cheng, I.H. (2015). Developing and managing international cooperation and partnerships for educational development in Cambodia: Transforming aid effectiveness into development effectiveness. In I.H. Cheng, & S.J. Chan (Eds.), *International Education Aid in Developing Asia: Policies and Practices* (pp.XXX). Singapore: Springer.
- Clark, J. (1991). *Democratizing development: The role of voluntary organizations*. Connecticut: Kumarian.
- Clark, J. (1995). The state, popular participation, and the voluntary sector. *World Development* 23(4), 593-601.
- Connor, D.J., Gabel, S.L., Gallagher, D.J., & Morton, M. (2008). Disability studies and inclusive education—implications for theory, research, and practice. *International Journal of Inclusive Education*, 12(5-6), 441-457.
- Constitutional Council. (2010). *The constitution of the Kingdom of Cambodia*. Kingdom of Cambodia National Religion King. Retrieved September 1, 2016, from <http://www.wipo.int/edocs/lexdocs/laws/en/kh/kh009en.pdf>.
- Cook, B.G. (2001). A comparison of teachers' attitudes toward their included students with mild and severe disabilities. *Journal of Special Education*, 34, 203–213.
- Cooperation Committee for Cambodia (CCC). Retrieved August 17, 2016, from <http://www.ccc-cambodia.org/>.
- Corcoran, T., White, J., Whitburn, B. (Eds.). (2015). *Disability studies: Educating for inclusion*. Rotterdam: Sense Publishers.
- Corps, H., Ceralli, G., & Boisseau, S. (2012). *Inclusive education*. (Handicap International, Policy Paper). Retrieved August 19, 2016, from [http://www.hiproweb.org/uploads/tx\\_hidrtdocs/PP08IE.pdf](http://www.hiproweb.org/uploads/tx_hidrtdocs/PP08IE.pdf).
- de Boer, S.J. Pijl, & Minnaert, A. (2010). Attitudes of parents towards inclusive education: A review of the literature. *European Journal of Special Needs Education*, 25(2), 165-181.
- Dickens-Smith, M. (1995). *The effect of inclusion training on teacher attitude towards inclusion* (ERIC Document No. ED332802). Retrieved May 24, 2016, from <http://files.eric.ed.gov/fulltext/ED331486.pdf>.
- Disability Action Council. (2014). *National disability strategic plan: 2014-2018*. Phnom Penh, Cambodia: Author. Retrieved August 17, 2016, from <http://dac.org.kh/en/download/22/national-disability-strategic-plan-2014-2018.html>
- D'Alessio, S. (2012). *Inclusive education in Italy*. Studies in Inclusive Education. 10, xx-xx. Springer Science & Business Media
- EFA-FTI Secretariat. (2004).
- Ekins, A., & Grimes, P. (2009). *Inclusion: Developing an effective whole school approach*. UK: Kerrypress.
- Elder, G.H., Jr. (1998). Life course and development. In W. Damon (Editor-in-Chief), & R.M. Lerner (Vol. Ed.), *Handbook of child psychology: Vol.1. Theoretical models of human development* (5th ed., pp.1-24). New York: Wiley.
- Enfants d'Asie (Children of Asia). *Work in Cambodia*. Retrieved July 9, 2016, from <http://en.enfantsdasie.com/eaen.nsf/Pages/cambodia>.
- Epic Arts. (n.d.). *Inclusive education programme*. Retrieved July 7, 2016, from <http://epicarts.org.uk/programmes/inclusive-education-program/>.
- Evangelical Mission to the Unreached (EMU). Retrieved July 2, 2016, from <http://emuinternational.org/countries/Cambodia/>.
- Everington, C., Stevens, B., & Winters, V.R. (1999). Teachers' attitudes, felt competence, and need of support for implementation of inclusive educational programs. *Psychological Reports*, 85, 331–338.
- Fernandez, A. P. (1987). NGOs in South Asia: People's participation and partnership. *World Development*, 15, pp. 3949.
- Filmer, D. (2008). Disability, poverty, and schooling in developing countries: Results from 14 household surveys. *The World Bank Economic Review*, 22(1), 141-63.
- Forlin, C. (1995). Educators' beliefs about inclusive practices in Western Australia. *British Journal of Special*

*Education*, 22, 179–185.

- Forlin, C., Loreman, T., Sharma, U., & Earle, C. (2009). Demographic differences in changing pre-service teachers' attitudes, sentiments and concerns about inclusive education. *International Journal of Inclusive Education*, 13(2), 195-209.
- Fowler, A. (1992). *NGOs as agents of democratization: An African perspective*, Mimeo Draft. Brighton: Institute of Development Studies.
- Gachot, G. (Director). (2007). 15 years of Kantha Bopha [Motion picture on DVD]. Switzerland: Off-Line Studio Videoladen Zurich.
- Gartrell, A. (2004). *Flying on hope: The lived experience of people with disabilities in Cambodia*. Unpublished doctoral dissertation, School of Geography, Anthropology & Environmental Studies, University of Melbourne, Australia.
- Gartrell, A., & Hoban, E. (2013). Structural vulnerability, disability, and access to nongovernmental organization services in rural Cambodia. *Journal of Social Work in Disability & Rehabilitation*, 12, 194-212.
- Geeves, R., & Bredenberg, K. (2005). *Contract teachers in Cambodia*. (UNESCO-IIEP Background study, Contract teachers and their impact on meeting EFA Goals). Retrieved March 31, 2016, from <http://www.unesco.org/iiep/eng/research/basic/PDF/cambodia.pdf>.
- Geldenhuys, J.L., & Wevers, N.E.J. (2013). Ecological aspects influencing the implementation of inclusive education in mainstream primary schools in the Eastern Cape, South Africa. *South African Journal of Education*, 33:3, 1-18.
- Ghanizadeh, A., Bahredar, M.J., & Moeini, S.R. (2006). Knowledge and attitudes towards attention deficit hyperactivity disorder among elementary school teachers. *Patient Education and Counseling*, 63, 84–88.
- Glaubman, R., & Lifshitz, H. (2001). Ultra-orthodox Jewish teachers' self-efficacy and willingness for inclusion of pupils with special needs. *European Journal of Special Needs Education*, 16(3), 207-223.
- Giroux, H. (1992). The Hope of Radical Education. In K. Wiler, & C. Mitchel (Eds.), *What schools can do: critical pedagogy and practice* (pp. XX-XX). Albany, NY: State University of New York Press.
- Graham, N. (2014). *Children with disabilities*. Paper commissioned for fixing the broken promise of Education for All: Findings from the global initiative on out-of-school children (UIS/UNICEF, 2015). Montreal: UNESCO Institute for Statistics (UIS).
- Grimes, Peter. (2009). *A quality education for all. A history of the Lao PDR inclusive education project: 1993-2009. Report for Save the Children Norway in Lao PDR*. Retrieved August 18, 2016, from [http://www.eenet.org.uk/resources/docs/A\\_Quality\\_Education\\_For\\_All\\_LaoPDR.pdf](http://www.eenet.org.uk/resources/docs/A_Quality_Education_For_All_LaoPDR.pdf).
- Gomez, A., Puigvert, L., & Flecha, R. (2012). Critical communicative methodology: informing real social transformation through research. *Qualitative Inquiry*, 17(3), 235–245.
- Gómez, J., Latorre, A., Sánchez, M., Flecha, R. 2006. *The critical communicative methodology and the dialogic society*, (Unpublished English translation). Metodología comunicativa crítica. Barcelona: El Roure. Retrieved August 20, 2016, from [http://www.havenscenter.org/files/Critical%20Communicative%20Methodology\\_Chapter%20Unpublished%20English%20translation.pdf](http://www.havenscenter.org/files/Critical%20Communicative%20Methodology_Chapter%20Unpublished%20English%20translation.pdf).
- Hansen, J. H. (2012). Limits to inclusion. *International Journal of Inclusive Education*, 16(1), 89-98.
- Hansson, S. (2015). *Purpose of education for students with intellectual disabilities*. Presentation at the 2015 European Conference on Educational Research (ECER): Education and Transition, 9 September 2015. Retrieved August 19, 2016 from <http://www.eera-ecer.de/ecer-programmes/conference/20/contribution/34408/>.
- Harknett, S. (2005). *Developing Participatory Rural Appraisals Approaches with Disabled People*. Retrieved August 15, 2016, from [https://assets.publishing.service.gov.uk/media/57a08c55ed915d3cfd001304/PolicyProject\\_pra\\_ex.pdf](https://assets.publishing.service.gov.uk/media/57a08c55ed915d3cfd001304/PolicyProject_pra_ex.pdf).
- Harvey, D. H. (1985). Mainstreaming: teachers' attitudes when they have no choice about the matter. *Exceptional Child*, 32, 163–73.
- Hassanein, E.E.A. (2015). *Inclusion, Disability and Culture*. Rotterdam : Sense Publishers
- Holdsworth, J. (2004). Maintaining a fine balance: Lessons on Inclusive education from Lao PDR. London: Save the Children UK.
- Palmieri, S. (2010). *The hidden minorities: Representing ethnic minorities and indigenous peoples in Cambodia*. Mexico: Inter-Parliamentary Union (IPU) & United Nations Development Programme (UNDP).
- International Bureau of Education (IBE-UNESCO). 2010. World Data on Education: Cambodia, 7th edition. Retrieved May 24, 2016, from [http://www.ibe.unesco.org/fileadmin/user\\_upload/Publications/WDE/2010/pdf-versions/Cambodia.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Cambodia.pdf).
- International Bureau of Education (IBE-UNESCO). 2011. World Data on Education. VII Ed. 2010/2011 [revised version: Cambodia]. Retrieved August 18, 2016, from



[http://www.ibe.unesco.org/fileadmin/user\\_upload/Publications/WDE/2010/pdf-versions/Cambodia.pdf](http://www.ibe.unesco.org/fileadmin/user_upload/Publications/WDE/2010/pdf-versions/Cambodia.pdf)

- International Labor Organization. (1989). Indigenous and Tribal Peoples Convention.
- International Labour Organization; United Nations Educational, Scientific and Cultural Organization; World Health Organization. (2004). CBR: A strategy for rehabilitation, equalization of opportunities, poverty reduction and social inclusion of people with disabilities. Joint Position Paper 2004. Geneva: World Health Organization. Retrieved August 17, 2016 from [http://apps.who.int/iris/bitstream/10665/43060/1/9241592389\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/43060/1/9241592389_eng.pdf).
- Inter-Agency Network for Education in Emergencies (INEE). (2011). Education and Fragility in Cambodia. UNESCO: Paris. Retrieved August 18, 2016 from [http://toolkit.ineesite.org/toolkit/INEEcms/uploads/1150/CS2\\_INEE\\_Working\\_Cambodia.pdf](http://toolkit.ineesite.org/toolkit/INEEcms/uploads/1150/CS2_INEE_Working_Cambodia.pdf).
- Inthirat, T.R.S. & Thonglith, S. (1999). Community-based rehabilitation in the Lao People's Democratic Republic. *Disability & Rehabilitation*, 21(10-11), 469-473.
- Investing in Children and their Societies (ICS), & Royal University of Phnom Penh (RUPP). (2014). Seminar Report: Parenting in Cambodia, Phnom Penh, March 21, 2016. Retrieved August 20, 2016, from [http://www.ics.nl/assets/Report%20Parenting%20Seminar\\_March%202016%20Phnom%20Penh\\_ICS%20RUPP.pdf](http://www.ics.nl/assets/Report%20Parenting%20Seminar_March%202016%20Phnom%20Penh_ICS%20RUPP.pdf).
- Janney, R. F., Snell, M. E., Beers, M.K, & Raynes, M. (1995). Integrating children with moderate and severe disabilities into general education classes. *Exceptional Children*, 61, 425-39.
- Japan International Cooperation Agency. (2002). Country Profile on Disability: Cambodia. Retrieved September 1, 2016, from [http://open\\_jicareport.jica.go.jp/pdf/11712981\\_02.pdf](http://open_jicareport.jica.go.jp/pdf/11712981_02.pdf).
- Jobe, D., Rust, J. O., & Brissie, J. (1996). Teachers attitudes toward inclusion of students with disabilities into regular classrooms. *Education*, 117(1), 148.
- John Morefield's Reports From Cambodia, New Horizons for Learning, International NGO, Retrieved, December 15, 2009, from [http://www.newhorizons.org/trans/international/front\\_international.htm#jm](http://www.newhorizons.org/trans/international/front_international.htm#jm).
- Kalyanpur, Maya. (2007). Including the Excluded: Integrating disability into the EFA Fast Track Initiative processes and National Education Plans in Cambodia. World Vision Cambodia.
- Kalyanpur, Maya. (2011). Paradigm and paradox: Education for All and the inclusion of children with disabilities in Cambodia. *International Journal of Inclusive Education*, 15(10), 1053-1071.
- Kalyva, E., Gojkovic, D., & Tsakiris, V. (2007). Serbian teachers' attitudes towards inclusion. *International Journal of Special Education*, 22, 31-6.
- Kantha Bopha. Retrieved July 14, 2016, from <http://www.beat-richner.ch/>.
- Kitwood, T., & Borrill, C. (1980). The significance of schooling for an ethnic minority. *Oxford Review of Education*, 6:3, 241-253.
- Kleinitz, P., Mannava, P., Nimul, O., Vichetra, K., & Walji, F. (2012). Barriers to and facilitators of health services for people with disabilities in Cambodia. Working Paper series. The Nossal Institute for Global Health: The University of Melbourne. Retrieved August 13, 2016, from [http://ni.unimelb.edu.au/data/assets/pdf\\_file/0007/623437/WP\\_20\\_web.pdf](http://ni.unimelb.edu.au/data/assets/pdf_file/0007/623437/WP_20_web.pdf).
- Knight, T. (2000). Inclusive Education and Educational Theory: Inclusive for what? *Melbourne Studies in Education*, 41, pp.17-43.
- Knowles, J.C. (2005). Health, vulnerability and poverty in Cambodia. Analysis of the 2004 Cambodia Socio-Economic Survey. Report to EAS Country Units, Washington DC: World Bank.
- Komar Pikar Foundation website. Retrieved August 18, 2016, from <http://www.komarpikar.org/index.php?id=3>.
- Krousar Thmey website. Retrieved August 18, 2016, from <http://www.krousar-thmey.org/en/>.
- Kuroda, K., Kartika, D., & Kitamura, Y. (2016). *Factors Influencing Teachers' Perspectives on Inclusive Education in Developing Countries: An Empirical Case Study of Cambodia*. Manuscript submitted for publication with JICA Research Institute.
- Kyriazopoulou, M., & Weber, H. (Eds.). (2009). *Development of a set of indicators – for inclusive education in Europe*. Odense, Denmark: European Agency for Development in Special Needs Education.
- Lauder, H. (2006). Education, globalization, and social change. Oxford: Oxford University Press.
- Leroy, B., & Simpson, C. (1996). Improving student outcomes through inclusive education. *Support for Learning*, 11, 32-36.
- Leyser, Y., Kapperman, G., & Keller, R. (1994). Teacher attitudes toward mainstreaming: a cross-cultural study in six nations. *European Journal of Special Needs Education*, 9, 1-15.
- Leyser, Y., & Lessen, E. (1985). The efficacy of two training approaches on attitudes of prospective teachers towards mainstreaming. *Exceptional Child*, 32, 175-183.
- Lifshitz, H., Glaubman, R., & Issawi, R. (2004). Attitudes towards inclusion: The case of Israeli and Palestinian regular and special education teachers. *European Journal of Special Needs Education*, 19, 171-190.
- Lynch, J., Modgil, C, Modgil, S. (Eds). (1992). *Cultural Diversity and the Schools. Human Rights, Education and*

- Global Responsibilities Vol.4*. The Falmer Press.
- MacKinlay, L. (2004). *Disability Research 2004*. World Vision Cambodia.
- Malouf, D.B., & Schiller, E.P. (1995). Practice and research in special education. *Exceptional Children*, 61, 414-424.
- Matei, A., & Apostu, D-C. (2014). The relationship between the state and the non – governmental organizations. *Procedia - Social and Behavioral Sciences*, 143, 847 – 851.
- Mattingly, J., & McInerney, L. (2010). *Education for children with disabilities—improving access and quality*. Guidance Note Practice Paper prepared by DFID Human Development Resource Centre. Department for International Development: UK. Retrieved August 19, 2016, from [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/67664/edu-chi-disabil-guid-note.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/67664/edu-chi-disabil-guid-note.pdf).
- McColl, M.A., Jarzynowska, A., & Shortt, S.E.D. (2010). Unmet health care needs of people with disabilities: Population level evidence. *Disability and Society* 25(2), 205-218.
- Mcdonald, S., Birnbrauer, J., & Swerissen, H. (1987). The effect of an integration program on teacher and student attitudes to mentally-handicapped children. *Australian Psychologist*, 22, 313–322.
- Merriam, S.B. (1998). *Qualitative Research and Case Study Applications in Education: Revised and Expanded from Case Study Research in Education*. 2nd ed. San Francisco: Jossey-Bass Publishers.
- Ministry of Planning, Cambodia. (2010). *Identification of Poor Households Programme*. Phnom Penh, Cambodia: Author. Retrieved July 1, 2016, from <http://www.mop.gov.kh/projects/idpoor/tabid/154/default.aspx>.
- National Institute of Statistics, Ministry of Planning. (2004). *The 2004 Cambodia Socio-Economic Survey Report*. Phnom Penh, Cambodia: Author.
- National Institute of Statistics, Ministry of Planning. (2013). *Cambodia Inter-censal Population Survey 2013 Report 5: Disability*. Phnom Penh, Cambodia: Author. Retrieved August 17, 2016, from <http://dac.org.kh/en/download/25/disability-cambodia-inter-censal-population-survey-2013.html>.
- National Institute of Statistics, Ministry of Planning. (2014). *The 2014 Cambodia Socio-Economic Survey Report*. Phnom Penh, Cambodia: Author. Retrieved August 17, 2016, from [http://www.ilearnincambodia.net/uploads/3/1/0/9/31096741/cses\\_2014\\_report.pdf](http://www.ilearnincambodia.net/uploads/3/1/0/9/31096741/cses_2014_report.pdf).
- Nippon Hōsō Kyōkai (NHK). (2015). *Cambodia's Mother of Disabled Children* [Documentary on Television]. (June 12). Japan: NHK.
- Miles, S. (2000). *Enabling Inclusive Education: Challenges and Dilemmas*. Phnom Penh, Cambodia: Author. Retrieved August 20, 2016, from [http://www.eenet.org.uk/resources/docs/bonn\\_2.php](http://www.eenet.org.uk/resources/docs/bonn_2.php).
- National Institute of Statistics, Ministry of Planning. (2008). *General Population Census of Cambodia 2008: Provisional Population Totals*. Phnom Penh, Cambodia: Author.
- Minority Rights Group International. Ed. (1994). *Education Rights and Minorities*. Retrieved September 1, 2016, from <http://minorityrights.org/wp-content/uploads/old-site-downloads/download-886-Download-full-report.pdf>.
- Ministry of Education, Youth, and Sports, Cambodia. (2008). *Policy on Education for Children with Disabilities*. Phnom Penh, Cambodia: Author. Retrieved August 13, 2016, from <http://www.moeys.gov.kh/en/press-releases/policy-on-education-for-children-with-disabilities.html#.V68vfluLRdg>.
- Ministry of Education, Youth, and Sports, Cambodia. (2013). *Education statistics and indicators*. Phnom Penh, Cambodia: Author.
- Ministry of Education, Youth, and Sports, Cambodia. (2014). *Education Strategic Plan 2014-2018*. Phnom Penh, Cambodia: Author. Retrieved August 10, 2016, from <http://www.moeys.gov.kh/images/moeys/policies-and-strategies/559-en.pdf>.
- Ministry of Education, Youth, and Sports, Cambodia. (2015). *Education Statistics and Indicators 2014-2015*. Phnom Penh, Cambodia: Author. Retrieved August 10, 2016, from <http://www.moeys.gov.kh/en/emis/1607.html#.V6rw1tKLRdg>.
- Ministry of Education, Youth, and Sports, Cambodia. (2015). *Teacher Policy Action Plan*. Phnom Penh, Cambodia: Author. Retrieved August 10, 2016, from <http://www.moeys.gov.kh/en/policies-and-strategies/1442.html#.V6sIXdKLRdi>.
- National Institute of Education, Cambodia. Retrieved July 10, 2016, from <http://www.nie.edu.kh/pages/index.php?p=home&lang=en>.
- Organisation for Economic Co-operation and Development. (2014). *Education Indicators in Focus*. Retrieved May 24, 2016, from [https://www.oecd.org/education/skills-beyond-school/EDIF2014No.20\(eng\).pdf](https://www.oecd.org/education/skills-beyond-school/EDIF2014No.20(eng).pdf).
- Office of the United Nations High Commissioner for Human Rights. (1960). *Convention Against Discrimination in Education*. Retrieved August 25, 2016, from

<http://www.ohchr.org/EN/ProfessionalInterest/Pages/DiscriminationInEducation.aspx>.

- Office of the United Nations High Commissioner for Human Rights. (1971). *Declaration on the Rights of Mentally Retarded Persons*. Retrieved August 25, 2016, from <http://www.ohchr.org/EN/ProfessionalInterest/Pages/RightsOfMentallyRetardedPersons.aspx>.
- Oliver, M. (1981). A New Model of the Social Work Role in Relation to Disability. In J. Campling (Ed.), *The Handicapped Person: a New Perspective for Social Workers?* London: RADAR.
- Opdal, L.R., Wormnæs, S., & Habayeb, A. (2001). Teachers' opinions about inclusion: A pilot study in a Palestinian context. *International Journal of Disability, Development and Education*, 48, 143–62.
- O'Leary, M., & Meas, N. *Learning for Transformation: a study of the relationship between culture, values, experience, and development practice in Cambodia*. VBNK.
- Palombo, J. (1996). The diagnosis and treatment of children with nonverbal learning disabilities. *Child and Adolescent Social Work*, 13, 311-333.
- Pather, S., & Siska, J. (2013). *Situation analysis of inclusive education training courses in Cambodia*. Survey report submitted to Caritas Czech and Catholic Relief Services. Retrieved August 13, 2016, from [https://www.researchgate.net/publication/290344354\\_SITUATION\\_ANALYSIS\\_OF\\_INCLUSIVE\\_EDUCATION\\_TRAINING\\_COURSES\\_IN\\_CAMBODIA](https://www.researchgate.net/publication/290344354_SITUATION_ANALYSIS_OF_INCLUSIVE_EDUCATION_TRAINING_COURSES_IN_CAMBODIA).
- Penn, H. (2008). *Understanding early childhood: issues and controversies*. McGraw-Hill Education.
- Percy-Smith, L., Cayé-Thomasen, P., Gudman, M., Jensen, J.H., & Thomsen, J. (2008). Self-esteem and social well-being of children with cochlear implant compared to normal-hearing children. *International Journal of Pediatric Otorhinolaryngology*, 72(7), 1113-1120.
- Peters, S. (2003). *Education for All: Including children with disabilities*. World Bank: Education Notes. Retrieved May 24, 2016, from [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/11/01/000333037\\_20101101012636/Rendered/PDF/266020BRI0REPL1100EdNotesDisability.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/11/01/000333037_20101101012636/Rendered/PDF/266020BRI0REPL1100EdNotesDisability.pdf).
- Peters, S. (2004). Inclusive education: An EFA strategy for all children. World Bank. Retrieved May 24, 2016, from [http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079993288/InclusiveEdu\\_efa\\_strategy\\_for\\_children.pdf](http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079993288/InclusiveEdu_efa_strategy_for_children.pdf).
- Peters, S. (2007). Education for All?: A historical analysis of international inclusive education policy and individuals with disabilities. *Journal of Disability Policy Studies*, 18(2), 98-108.
- Price, P., & Takamine, Y. (2003). The Asia and Pacific decade of disabled persons 1993-2002: what have we learned. *Asia Pacific Disability Rehabilitation Journal*, 14(2), 115-127.
- Pochaud, F. (1977). *Cambodia: Year Zero*. Canada: Holt, Rinehart and Winston.
- Pollard, N., & Sakellariou, D. (2008). Operationalizing community participation in community-based rehabilitation: Examining the factors. *Disability & Rehabilitation*, 30(1), 62-70.
- Pour un Sourire d'Enfant (PSE) website. Retrieved July 7, 2016, from <http://www.pse.org/>.
- Puigvert, L., Christou, M., & Holford, J. (2012). Critical communicative methodology: including vulnerable voices in research through dialogue. *Cambridge Journal of Education*, 42(4), 513-526.
- Modern, J., Joergensen, C., & Daniels, F. (2010). *DFID, disability and education: bridging the implementation gap*. London: RESULTS UK.
- Rogers, C. (2013). Inclusive education and intellectual disability: a sociological engagement with Martha Nussbaum. *International Journal of Inclusive Education*, 17(9), 988-1002.
- Royal Government of Cambodia (RGC). (2003). *Education for all: National plan: 2003-2015*. Phnom Penh: RGC.
- Royal Government of Cambodia (RGC). (2013). *Rectangular strategy for growth, employment, equity, and efficiency: Phase III*. Phnom Penh: RGC.
- Royal Government of Cambodia (RGC). (2014). *National Strategic Development Plan 2014-2018*. Retrieved September 1, 2016, from [http://cdc-crdb.gov.kh/cdc/documents/NSDP\\_2014-2018.pdf](http://cdc-crdb.gov.kh/cdc/documents/NSDP_2014-2018.pdf).
- Sahli, S., Belgin, E. (2006). Comparison of self-esteem level of adolescents with cochlear implant and normal hearing. *International Journal of Pediatric Otorhinolaryngology*, 70(9), 1601-1608.
- Sari, H. (2007). The influence of an in-service teacher training (INSET) programme on attitudes towards inclusion by regular classroom teachers who teach deaf students in primary schools in Turkey. *Deafness and Education International*, 9, 131–146.
- Sau Man Mak, M. (2009). *Unravelling the barriers to education for children with severe disabilities (Cambodia)*. University of Hong Kong.
- Schneider, C. (2009). Equal is not enough—current issues in inclusive education in the eyes of children. *International Journal of Education*, 1(1), 1-14.
- Sen, Amartya. 1999. *Development as freedom*. New York: Alfred E. Knoph.
- Sen, R., & Goldbart, J. (2005). *Partnership in action: Introducing family-based intervention for children with*

- disability in urban slums of Kolkata, India. *International Journal of Disability, Development and Education*, 52(4), 275-311.
- Sharma, U., Forlin, C., & Loreman, T. (2008). Impact of training on pre-service teachers' attitudes and concerns about inclusive education and sentiments about persons with disabilities. *Disability & Society*, 23(7), 773-785.
- Shimman, P. (1990). The impact of special needs students at a further education college: a report on a questionnaire. *Journal of Further and Higher Education*, 14, 83-91.
- Singal, N. (2006). An ecosystemic approach for understanding inclusive education: An Indian case study. *European Journal of Psychology of Education*, 11(3), 239-252.
- Šiška, J., & Suchánek, O. (2005). Access to education for learners with disabilities in Cambodia as a post-conflict country. *Development, Environment and Foresight*, 1(2), 77-91.
- Sitha, C., Edwards, D.B., Williams, J.H., & Kitamura, Y. (2016). Introduction. In Kitamura, Y., D.B. Edwards, C. Sitha, & J.H. Williams. (Ed.s.). *The political economy of schooling in Cambodia: Issues of quality and equity*. Palgrave Macmillan.
- Slee, R. (2001). Social justice and the changing directions in educational research: the case of inclusive education. *International Journal of Inclusive Education*, 5(2-3), 167-177.
- Slee, R., & Allan, J. (2001). Excluding the included: A reconsideration of inclusive education. *International Studies in Sociology of Education*, 11(2), 173-192.
- Slee, R. (2012). Inclusion in schools: What is the task?. In C. Boyle, & K. Topping, K (Eds.), *What works in inclusion?*. Maidenhead, England: Open University Press, McGraw-Hill Education.
- Slee, R. (2011). *The irregular school: Exclusion, schooling and inclusive education*. Oxon, UK: Routledge.
- Sokhom, H. (2004). Education in Cambodia: highland minorities in the present context of development. *Inter-Asia Cultural Studies*, 5(1), 137-149.
- Sontag, J.C. (1996). Toward a Comprehensive Theoretical Framework for Disability Research: Bronfenbrenner Revisited. *The Journal of Special Education*, 30(3), 319-344.
- Stainback, S., Stainback, W., & Dedrick, V. L. (1984). Teachers' attitudes toward integration of severely handicapped students into regular schools. *Teacher Education*, 19, 21-27.
- Stephens, T., & Braun, B. L. (1980). Measures of regular classroom teachers' attitudes toward handicapped children. *Exceptional Children*, 46, 292-294.
- Sulochini, P., & Šiška, J. (2013). Situational analysis of inclusive education training courses in Cambodia. Caritas Czech Republic. Retrieved August 18, 2016 from <http://svet.charita.cz/res/archive/032/003705.pdf?seek=1410530584>.
- Sun, N. (2008). Education Policies for Ethnic Minorities in Cambodia. SEAMEO background paper. Retrieved December 20, 2016, from [http://www.seameo.org/SEAMEOWeb2/images/stories/Projects/2008\\_MotherTongueBridgeLang/Policies/papers\\_and\\_pdf/Cambodia\\_MotherTongue\\_Policy19jan08.pdf](http://www.seameo.org/SEAMEOWeb2/images/stories/Projects/2008_MotherTongueBridgeLang/Policies/papers_and_pdf/Cambodia_MotherTongue_Policy19jan08.pdf).
- Tandon, R. (1992). *NGOs and Civil Society*. Boston, MA: Institute for Development Research.
- Thakur, R., & Weiss, T.G. (2006). *The UN and global governance: An idea and its prospects*. Indiana University Press.
- The Cambodia Trust website. Retrieved July 7, 2016 from <http://cspo.org.kh/the-cambodia-trust/>.
- Theunissen, S.C.P.M., Rieffe, C., Netten, A.P., Briaire, J.J., Soede, W., Kouwenberg, M., & Frijns, J.H.M. (2014). Self-Esteem in Hearing-Impaired Children: The Influence of Communication, Education, and Audiological Characteristics. *PLoS ONE*, 9(4), e94521. <http://doi.org/10.1371/journal.pone.0094521>.
- Thomas, P. (2006). *Poverty reduction and development in Cambodia: Enabling disabled people to play a role*. Disability Knowledge and Research Programme, UK Department for International Development (DFID). Retrieved July 7, 2016 from [https://assets.publishing.service.gov.uk/media/57a08c5840f0b652dd001280/PolicyProject\\_cambodia.pdf](https://assets.publishing.service.gov.uk/media/57a08c5840f0b652dd001280/PolicyProject_cambodia.pdf).
- Tran, T.H., & Tran, V.C. (1999). Vietnam and activities of community-based rehabilitation. *Disability and Rehabilitation*, 21(10-11), 474-478.
- Trani, J.F., & VanLeit, B. (2010). *Increasing inclusion of persons with disabilities: Reflections from disability research using the ICF in Afghanistan and Cambodia*. Working Paper Series: No.11. Leonard Cheshire Disability and Inclusive Development Centre. Retrieved August 19, 2016 from [https://www.ucl.ac.uk/lc-ccr/centrepublishings/workingpapers/WP11\\_Increasing\\_inclusion\\_of\\_persons\\_with\\_disabilities.pdf](https://www.ucl.ac.uk/lc-ccr/centrepublishings/workingpapers/WP11_Increasing_inclusion_of_persons_with_disabilities.pdf).
- Tudge, J.R.H., Mokrova, I., Hatfield, B.E., & Karnik, R.B. (2009). Uses and Misuses of Bronfenrenner's Bioecological Theory of Human Development. *Journal of Family Theory & Review*, 1, 198-210.
- Turkish Statistical Institute. (2002). *Turkey disability survey*. Ankara. Retrieved August 18, 2016 from [http://www.turkstat.gov.tr/Kitap.do?metod=KitapDetay&KT\\_ID=11&KITAP\\_ID=14](http://www.turkstat.gov.tr/Kitap.do?metod=KitapDetay&KT_ID=11&KITAP_ID=14).

- Un, L. (2012). A comparative study of education and development in Cambodia and Uganda from their civil wars to the present. University of Amsterdam. Retrieved online August 7, 2016 from [https://pure.uva.nl/ws/files/1739827/105671\\_thesis.pdf](https://pure.uva.nl/ws/files/1739827/105671_thesis.pdf).
- UNESCO Institute for Statistics (UIS) & UNICEF. (2015). *Fixing the Broken Promise of Education for All: Findings from the Global Initiative on Out-of-School Children*. Montreal: UIS. Retrieved May 24, 2016, from <http://dx.doi.org/10.15220/978-92-9189-162-7-en>.
- UNICEF, UNDP, & WHO. (2014). *Disability Rights Initiative Cambodia: Joint Programme Document*. (Programme for 2015-2018). Retrieved August 18, 2016, from [http://www.unicef.org/cambodia/1-DRIC\\_ProDoc\\_Final\\_Eng.pdf](http://www.unicef.org/cambodia/1-DRIC_ProDoc_Final_Eng.pdf).
- United Nations. (1995). *World Summit for Social Development—Copenhagen*. Retrieved Last accessed August 25, 2016, from <http://www.un.org/esa/socdev/wssd/text-version/>.
- United Nations. (2006). Convention on the rights of persons with disabilities. Retrieved July, 30, 2016, from <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>.
- United Nations Children's Fund. (1990). *Convention on the Rights of the Child*. Retrieved August 25, 2016, from <http://www.ohchr.org/EN/ProfessionalInterest/Pages/CRC.aspx>.
- United Nations Children's Fund. (2003). *Inclusive Education Initiatives for Children with Disabilities: Lessons from the East Asia and Pacific Region*. Retrieved August 19, 2016, from <http://119.82.251.165:8080/xmlui/bitstream/handle/123456789/239/Inclusive%20Education%20Initiatives%20for%20Children%20with%20Disabilities.pdf?sequence=1>.
- United Nations Children's Fund. (2012). *The Right of Children with Disabilities to Education: A Rights-based Approach to Inclusive Education*. Geneva: UNICEF Regional Office for Central and Eastern Europe and the Commonwealth of Independent States (CEECIS).
- United Nations Conference on Trade and Development. (2015). *The Least Developed Countries Report 2015: Transforming Rural Economies*. UNCTAD/LDC/2015. Retrieved August 18, 2016, from [http://unctad.org/en/PublicationsLibrary/lde2015\\_en.pdf](http://unctad.org/en/PublicationsLibrary/lde2015_en.pdf).
- United Nations Convention on the Rights of the Child (1989). Retrieved July, 30, 2016, from <http://www2.ohchr.org/english/law/crc.htm>.
- United Nations Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities (1992). Retrieved July, 30, 2016, from <http://www2.ohchr.org/english/law/minorities.htm>.
- United Nations Department of Economic and Social Affairs (DESA). (2016). List of Least Developed Countries. Retrieved August 18, 2016, from [http://www.un.org/en/development/desa/policy/cdp/lde/lde\\_list.pdf](http://www.un.org/en/development/desa/policy/cdp/lde/lde_list.pdf).
- United Nations Development Programme. (2015). Human Development Report 2015: Cambodia. Retrieved August 18, 2016, from [http://hdr.undp.org/sites/all/themes/hdr\\_theme/country-notes/KHM.pdf](http://hdr.undp.org/sites/all/themes/hdr_theme/country-notes/KHM.pdf).
- United Nations Educational, Scientific and Cultural Organization. (1994). *The Salamanca Statement and Framework for Action on Special Needs Education*. World Conference on Special Needs Education, Salamanca, Spain. Retrieved May 24, 2016, from [http://www.unesco.org/education/pdf/SALAMA\\_E.PDF](http://www.unesco.org/education/pdf/SALAMA_E.PDF).
- United Nations Economic and Social Commission for Asia and the Pacific. (2002). *Asian and Pacific decade of disabled persons, 2003-2012: Biwako millennium framework for action: towards an inclusive, barrier-free and rights-based society for persons with disabilities in Asia and the Pacific*. Population and Social Integration Section, Emerging Social Issues Division, UNESCAP, Bangkok. Retrieved August 25, 2016, from [http://www.un.org/ga/search/view\\_doc.asp?symbol=E/ESCAP/APDDP/4/REV.1](http://www.un.org/ga/search/view_doc.asp?symbol=E/ESCAP/APDDP/4/REV.1).
- United Nations Economic and Social Commission for Asia and the Pacific. (2010). *Regional implementation of the Biwako Millennium framework for action and the Biwako Plus Five towards an inclusive, barrier-free and rights-based society for persons with disabilities in Asia and the Pacific*. Retrieved August 25, 2016, from [http://www.un.org/ga/search/view\\_doc.asp?symbol=E/ESCAP/66/3](http://www.un.org/ga/search/view_doc.asp?symbol=E/ESCAP/66/3).
- United Nations Educational, Scientific and Cultural Organization. (2015). *Education 2030: Towards inclusive and equitable quality education and lifelong learning for all*. (Incheon Declaration). Retrieved August 25, 2016, from <http://en.unesco.org/world-education-forum-2015/incheon-declaration>.
- United Nations Educational, Scientific and Cultural Organization, Bangkok. (2009). *Towards inclusive education for children with disabilities: A guideline*. Retrieved May 24, 2016, from <http://www.uis.unesco.org/Library/Documents/disabchild09-en.pdf>.
- United Nations Educational, Scientific and Cultural Organization, Phnom Penh. (2010). *UNESCO National Education Support Strategy (UNESS): Cambodia 2010-2013*. Retrieved May 24, 2016, from <http://unesdoc.unesco.org/images/0018/001880/188018e.pdf>.
- United Nations Educational, Scientific and Cultural Organization, Phnom Penh. (2015). *Cambodia National Launch of EFA Global Monitoring Report with Cambodia EFA Achievements*. Retrieved August 10, 2016, from <http://unesdoc.unesco.org/images/0023/002342/234270E.pdf>.

- United Nations Educational, Scientific and Cultural Organization, Phnom Penh. (2015). Cambodia National Launch of EFA Global Monitoring Report 2015 with Cambodia EFA Achievements. Retrieved from: <http://unesdoc.unesco.org/images/0023/002342/234270E.pdf> (Last accessed August 13, 2016).
- United Nations General Assembly. (2015). *Transforming our world: the 2030 agenda for sustainable development*, A/RES/70/1. Retrieved June 13, 2016, from [undocs.org/A/RES/70/1](http://undocs.org/A/RES/70/1).
- Urwick, J., & Elliot, J. 2010. International Orthodoxy versus national realities: Inclusive schooling of children with disabilities in Lesotho. *Comparative Education*, 46, 137-150.
- VanLeit, B., Channa, S., & Rithy, P. (2007). Children with disabilities in rural Cambodia: An examination of functional status and implications for service delivery. *Asia Pacific Disability Rehabilitation Journal*, 18(2), 33-48.
- Vannak, V.C. (n.d.). *Inclusive Education of Blind pupils in Cambodia*. Report submitted to the International Council for Education of People with Visual Impairment (ICEVI). Retrieved August 13, 2016, from [http://icevi.org/publications/icevi\\_wc2006/09\\_inclusive\\_educational\\_practices/Papers/ea\\_011\\_vong%20chhi m%20vannak.pdf](http://icevi.org/publications/icevi_wc2006/09_inclusive_educational_practices/Papers/ea_011_vong%20chhi m%20vannak.pdf).
- Van-Reusen, A. K., Shoho, A. R., & Barker, K. S. (2000). High school teacher attitudes toward inclusion. *High School Journal*, 84, 7-20.
- Voluntary Service Overseas (VSO). (2010). *Reaching the unreached: Bridging the social divide in Cambodia through inclusive education*. Retrieved August 19, 2016, from [http://www.ivoindia.org/Images/reaching-the-unreached-inclusive-education-cambodia\\_tcm93-32441.pdf](http://www.ivoindia.org/Images/reaching-the-unreached-inclusive-education-cambodia_tcm93-32441.pdf).
- Wehmeyer, M.L., & Garner, N.W. (2003). The impact of personal characteristics of people with intellectual and developmental disability on self-determination and autonomous functioning. *Journal of Applied Research in Intellectual Disabilities*, 15, 255-265.
- Wilkins, T., & Nietfeld, J.L. (2004). The effect of a school-wide inclusion training program upon teachers' attitudes about inclusion. *Journal of Research in Special Educational Needs*, 4, 115-121.
- World Bank. (2005). *Reshaping the Future: Education and Postconflict Reconstruction*. Washington D.C. Retrieved June 13, 2016, from [http://siteresources.worldbank.org/INTCPR/Resources/Reshaping\\_the\\_Future.pdf](http://siteresources.worldbank.org/INTCPR/Resources/Reshaping_the_Future.pdf).
- World Bank. (2006). *World development report 2006: Equity and development*. New York: Oxford University Press.
- World Bank. 2008. Cambodia - Fast Track Initiative Catalytic Fund Project: Environmental Management Plan. Retrieved June 28, 2016, from <http://documents.worldbank.org/curated/en/2008/05/9476654/cambodia-fast-track-initiative-catalytic-fund-project-environmental-management-plan>.
- World Bank. (2008). *Growth, poverty, and inequality in Cambodia*. Online presentation. Retrieved August 18, 2016, from [http://siteresources.worldbank.org/INTPGI/Resources/342674-1204834221815/Cambodia\\_GrowthEquity.pdf](http://siteresources.worldbank.org/INTPGI/Resources/342674-1204834221815/Cambodia_GrowthEquity.pdf).
- World Bank. (2010). *Cambodia - Education Sector Support Scale Up Action Program Project: procurement plan*. Washington, DC: World Bank. Retrieve July 15, 2016, from <http://documents.worldbank.org/curated/en/540641468015673788/Cambodia-Education-Sector-Support-Scale-Up-Action-Program-Project-procurement-plan>.
- World Health Organization. (1976). *International classification of impairments, disabilities, and handicaps*. WHO: Geneva. Retrieved August 25, 2016, from [http://apps.who.int/iris/bitstream/10665/41003/1/9241541261\\_eng.pdf](http://apps.who.int/iris/bitstream/10665/41003/1/9241541261_eng.pdf).
- World Health Organization. (2001). *International classification of functioning, disability and health*. WHO: Geneva. Retrieved August 25, 2016, from <http://who.int/classifications/icf/en/>.
- World Health Organization. (2004). 1st Meeting report on the development of guidelines for community based rehabilitation (CBR) programmes.
- World Health Organization. (2011). *World report on disability. Chapter 7: Education*. Retrieved May 24, 2016, from [http://www.who.int/disabilities/world\\_report/2011/report.pdf](http://www.who.int/disabilities/world_report/2011/report.pdf).
- World Health Organization. (2015). *The Kingdom of Cambodia health system review. Health Systems in Transition, Vol. 5 No.2*. Retrieved July 14, 2016, from [http://www.wpro.who.int/asia\\_pacific\\_observatory/hits/series/cambodia\\_health\\_systems\\_review.pdf](http://www.wpro.who.int/asia_pacific_observatory/hits/series/cambodia_health_systems_review.pdf).
- World Health Organization Regional Office for South-East Asia. 2013. *Disability in the Southeast Asia Region, 2013*. Retrieved August 18, 2016, from [http://www.searo.who.int/entity/disabilities\\_injury\\_rehabilitation/topics/disability\\_factsheet.pdf](http://www.searo.who.int/entity/disabilities_injury_rehabilitation/topics/disability_factsheet.pdf).
- Yeo, R., & Moore, K. (2003). Including Disabled People in Poverty Reduction Work: Nothing about Us, Without Us. *World Development*. 31(3), 571-590.
- Yuker, H. E. (1988). The effects of contact on attitudes toward disabled persons: some empirical generalisations. In Yuker, H. E. (Ed.) *Attitudes toward Persons with Disabilities* (pp. 262-274). New York: Springer.



## APPENDIX

Appendix 1 Cambodia's HDI indicators for 2014 relative to selected countries and groups.

Source: UNDP, 2015.

	HDI value	HDI rank	Life expectancy at birth	Expected years of schooling	Mean years of schooling	GNI per capita (PPP US\$)
<b>Cambodia</b>	0.555	143	68.4	10.9	4.4	2,949
<b>Lao People's Democratic Republic</b>	0.575	141	66.2	10.6	5.0	4,680
<b>Myanmar</b>	0.536	148	65.9	8.6	4.1	4,608
<b>East Asia and the Pacific</b>	0.710	—	74.0	12.7	7.5	11,449
<b>Medium HDI</b>	0.630	—	68.6	11.8	6.2	6,353

Appendix 2 Cambodia's IHDI for 2014 relative to selected countries and groups.

Source: UNDP, 2015.

	IHDI value	Overall loss (%)	Human inequality coefficient (%)	Inequality in life expectancy at birth (%)	Inequality in education (%)	Inequality in income (%)
<b>Cambodia</b>	0.418	24.7	24.6	25.3	28.3	20.3
<b>Lao People's Democratic Republic</b>	0.428	25.6	25.3	21.5	34.1	20.3
<b>East Asia and the Pacific</b>	0.572	19.4	19.2	11.7	18.4	27.4
<b>Medium HDI</b>	0.468	25.8	25.5	21.9	34.7	19.8



Appendix 3 Children aged (0-4 years) whose births are registered by geographical domain, 2014, %.

Source: CSES, 2014.

Domain	Certificate	Registration	Neither	Don't know	Total number of children
Cambodia	73.8	8.5	16.5	1.2	1,592,802
Phnom Penh	91.2	2.0	6.1	0.6	151,244
Other urban	77.5	9.8	12.3	0.5	216,473
Other rural	71.1	9.0	18.5	1.4	1,225,083

Appendix 4 Distribution of population by ethnicity and geographical domain, 2014, %. Source: CSES, 2014

	Cambodia	Phnom Penh	Other urban	Other rural
Khmer	96.4	97.9	97.5	95.9
Cham	1.9	1.8	2.3	1.8
Chinese	0.0	0.0	0.0	0.0
Vietnamese	0.3	0.3	0.2	0.3
Thai	0.0	0.0	0.0	0.0
Lao	0.0	0.0	0.0	0.0
Other	1.4	0.0	0.0	1.8
Not stated	0.0	0.0	0.0	0.0
Total	100	100	100	100

Appendix 5 Geolinguistic Classification of the Main Ethnic Groups in Cambodia. Source: ADB, 2002.

<b>Ethnic Group*</b>	<b>Subgroup</b>	<b>Group</b>	<b>Family</b>	<b>Number (approx.)</b>	<b>Location</b>
Jarai	Chamic	Austronesian	Austro-Thai	14,000	Ratanakiri
Rhade	Chamic	Austronesian	Austro-Thai	a dozen	Mondulkiri
Kachac	North Bahnaric and Chamic	Bahnaric	Môn-Khmer	2,200	Ratanakiri
Tampuon	West Bahnaric	Bahnaric	Môn-Khmer	18,000	Ratanakiri and Mondulkiri
Brao	West Bahnaric	Bahnaric	Môn-Khmer	5,500	Ratanakiri and Stung Treng
Kreung	West Bahnaric	Bahnaric	Môn-Khmer	14,000	Ratanakiri
Kravet	West Bahnaric	Bahnaric	Môn-Khmer	4,000	Ratanakiri (Veunsai) and Stung Treng (Siempang)
Lun	West Bahnaric	Bahnaric	Môn-Khmer	300	Ratanakiri (Taveng, Veunsai) and Stung Treng
Phnong	South Bahnaric	Bahnaric	Môn-Khmer	19,000	Mondulkiri, Stung Treng and Ratanakiri
Stieng	South Bahnaric	Bahnaric	Môn-Khmer	3,300	Kratie ( Snuol) and Mondulkiri (Keo Seyma)
Kraol	...	Bahnaric	Môn-Khmer	1,960	Kratie and Mondulkiri (Koh Nyek)
Mel	...	Bahnaric	Môn-Khmer	2,100	Kratie
Poar	(Eastern Pear, Western Pear)	Pearic	Môn-Khmer	1,440	Kampong Thom and Pursat
Saoch	(Saoch)	Pearic	Môn-Khmer	175	Kampot and Pursat
Suoy	...	...	Môn-Khmer	1,200	Kampong Speu (Oral)
Khmer Khe	Khmer	Khmer	Môn-Khmer	1,600	Stung Treng (Siempang)
Kuy	...	Katuic	Môn-Khmer	14,200	Preah Vihear, Kampong Thom, and Stung Treng

Appendix 6 Percent distribution of literate disabled persons aged 7+ across provinces in Cambodia, by level of education and sex. Source: CIPS, 2014.

Cambodia /Province/ Sex	Number Literate 7+	Educational Level of Literate Population* (Percent)						
		Total	None	Primary not Completed	Primary	Lower Secondary	Secondary /Technical Diploma	Beyond Secondary/ Technical Diploma
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>Cambodia</b>								
Both Sexes	168233	100	0.44	55.08	30.62	2.24	10.67	0.95
Males	104813	100	0.48	48.36	33.98	2.72	13.11	1.34
Females	63420	100	0.37	66.18	25.06	1.45	6.63	0.31
<b>Banteay Meanchey</b>								
Both Sexes	8379	100	0.00	53.36	44.87	0.00	1.77	0.00
Males	4824	100	0.00	42.87	57.13	0.00	0.00	0.00
Females	3554	100	0.00	67.59	28.22	0.00	4.18	0.00
<b>Battambang</b>								
Both Sexes	20339	100	0.00	50.55	35.25	1.27	12.92	0.00
Males	12842	100	0.00	45.97	39.51	0.00	14.52	0.00
Females	7497	100	0.00	58.41	27.96	3.45	10.17	0.00
<b>Kampong Cham</b>								
Both Sexes	15908	100	2.28	64.61	27.08	2.61	3.42	0.00
Males	10253	100	3.54	59.37	27.74	4.05	5.30	0.00
Females	5654	100	0.00	74.12	25.88	0.00	0.00	0.00
<b>Kampong Chhnang</b>								
Both Sexes	10108	100	0.00	59.18	35.56	0.78	4.49	0.00
Males	6710	100	0.00	57.10	35.90	1.17	5.83	0.00
Females	3397	100	0.00	63.28	34.88	0.00	1.84	0.00
<b>Kampong Speu</b>								
Both Sexes	6876	100	0.00	57.70	29.99	0.00	11.05	1.27
Males	3217	100	0.00	53.45	32.79	0.00	11.05	2.70
Females	3659	100	0.00	61.43	27.53	0.00	11.04	0.00
<b>Kampong Thom</b>								
Both Sexes	9905	100	1.44	46.79	36.90	1.17	12.33	1.37
Males	6745	100	0.00	38.78	46.25	1.71	13.25	0.00
Females	3160	100	4.51	63.89	16.95	0.00	10.35	4.31
<b>Kampot</b>								
Both Sexes	6837	100	1.12	49.74	27.30	8.82	10.90	2.12
Males	5336	100	1.43	50.93	24.94	11.31	8.68	2.71
Females	1501	100	0.00	45.50	35.70	0.00	18.80	0.00
<b>Kandal</b>								
Both Sexes	12461	100	0.00	49.76	24.46	1.83	22.34	1.61
Males	6835	100	0.00	27.75	25.26	3.33	40.72	2.94
Females	5626	100	0.00	76.50	23.50	0.00	0.00	0.00
<b>Koh Kong</b>								
Both Sexes	1219	100	0.00	80.49	13.84	0.00	5.67	0.00
Males	813	100	0.00	78.18	13.32	0.00	8.50	0.00
Females	406	100	0.00	85.11	14.89	0.00	0.00	0.00
<b>Kratie</b>								
Both Sexes	5584	100	0.00	59.64	28.14	2.98	9.24	0.00
Males	3229	100	0.00	47.80	40.60	3.80	7.81	0.00

Cambodia /Province/ Sex	Number Literate 7+	Educational Level of Literate Population* (Percent)						
		Total	None	Primary not Completed	Primary	Lower Secondary	Secondary /Technical Diploma	Beyond Secondary/ Technical Diploma
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Females	2354	100	0.00	75.57	11.37	1.89	11.16	0.00
<b>Mondul Kiri</b>								
Both Sexes	275	100	0.00	77.67	16.81	0.00	5.52	0.00
Males	192	100	0.00	68.00	24.09	0.00	7.91	0.00
Females	83	100	0.00	100.00	0.00	0.00	0.00	0.00
<b>Phnom Penh</b>								
Both Sexes	8504	100	0.00	54.87	21.61	2.25	14.50	6.77
Males	4213	100	0.00	43.35	17.16	4.54	21.29	13.66
Females	4291	100	0.00	66.19	25.98	0.00	7.83	0.00
<b>Preah Vihear</b>								
Both Sexes	1892	100	0.00	64.04	19.34	0.00	16.62	0.00
Males	1295	100	0.00	58.19	23.14	0.00	18.67	0.00
Females	597	100	0.00	76.73	11.10	0.00	12.17	0.00
<b>Prey Veng</b>								
Both Sexes	13417	100	0.00	61.17	24.93	1.85	12.04	0.00
Males	7944	100	0.00	49.84	26.69	3.13	20.34	0.00
Females	5474	100	0.00	77.61	22.39	0.00	0.00	0.00
<b>Pursat</b>								
Both Sexes	3687	100	0.00	54.24	33.69	0.00	12.07	0.00
Males	2459	100	0.00	47.73	34.17	0.00	18.09	0.00
Females	1228	100	0.00	67.27	32.73	0.00	0.00	0.00
<b>Ratanak Kiri</b>								
Both Sexes	796	100	0.00	47.95	21.77	15.23	15.05	0.00
Males	402	100	0.00	27.04	31.42	24.06	17.48	0.00
Females	394	100	0.00	69.31	11.91	6.21	12.57	0.00
<b>Siemreap</b>								
Both Sexes	13396	100	0.68	66.12	24.24	1.85	7.12	0.00
Males	7681	100	0.00	72.99	20.33	2.05	4.63	0.00
Females	5715	100	1.59	56.89	29.50	1.57	10.46	0.00
<b>Preah Sihanouk</b>								
Both Sexes	6407	100	0.00	32.18	29.98	11.44	19.64	6.76
Males	3836	100	0.00	23.91	36.31	8.75	21.36	9.67
Females	2571	100	0.00	44.51	20.53	15.45	17.08	2.42
<b>Stung Treng</b>								
Both Sexes	543	100	0.00	41.15	44.91	3.90	10.04	0.00
Males	389	100	0.00	40.37	45.79	5.44	8.40	0.00
Females	154	100	0.00	43.12	42.69	0.00	14.20	0.00
<b>Svay Rieng</b>								
Both Sexes	5859	100	0.00	51.69	40.53	0.98	6.80	0.00
Males	4728	100	0.00	47.44	50.23	0.00	2.33	0.00
Females	1131	100	0.00	69.44	0.00	5.06	25.50	0.00
<b>Takeo</b>								
Both Sexes	9826	100	0.00	50.25	37.94	1.31	10.50	0.00
Males	6501	100	0.00	38.23	43.92	1.98	15.87	0.00
Females	3325	100	0.00	73.74	26.26	0.00	0.00	0.00
<b>Otdar Meanchey</b>								

Cambodia /Province/ Sex	Number Literate 7+	Educational Level of Literate Population* (Percent)						
		Total	None	Primary not Completed	Primary	Lower Secondary	Secondary /Technical Diploma	Beyond Secondary/ Technical Diploma
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Both Sexes	4588	100	1.46	56.14	29.78	2.54	10.08	0.00
Males	3230	100	2.08	52.77	32.43	2.35	10.37	0.00
Females	1358	100	0.00	64.15	23.48	2.99	9.39	0.00
<b>Kep</b>								
Both Sexes	417	100	0.00	66.74	13.55	5.67	12.20	1.84
Males	295	100	0.00	63.69	13.56	5.51	14.63	2.61
Females	122	100	0.00	74.11	13.52	6.06	6.31	0.00
<b>Pailin</b>								
Both Sexes	1011	100	0.00	49.08	35.28	2.21	12.07	1.36
Males	843	100	0.00	49.41	33.27	2.65	13.04	1.63
Females	168	100	0.00	47.40	45.39	0.00	7.22	0.00

\* Excludes "Not reported "and "Other" educational levels

Appendix 7 Demographic table of units of analysis (children with disabilities) used in primary data analysis. Source: Author.

S/N	Age	Sex	Disability		Education		Background				
			Type		Status of enrolment	Grade	Type of location	Province (School)	Ethnicity	Total household annual income (USD)	Parent's Level of Education
			As defined by parent/guardian	As defined by teacher(s)							
1	14	Female	Intellectual	Learning disability/ "difficult brain"	Enrolled	1	Urban	Phnom Penh (1)	Khmer	3600	Primary
2	13	Female	Intellectual	Learning disability	Enrolled; Repeat twice	5	Rural	Kandal (6)	Khmer	2900	Primary
3	11	Male	Learning disability/ Slow learner	Learning disability	Enrolled	5	Rural	Kandal (6)	Khmer	880	None
4	7	Male	"Physical disability" (Heart problem)	Slow learner	Enrolled	1	Urban	Kandal (5)	Khmer	3000	Lower sec
5	9	Male	Physical	Physical	Enrolled; Repeat twice	1	Urban	Kandal (5)	Khmer	4800	Lower sec

S/N	Age	Sex	Disability		Education		Background				
			Type		Status of enrolment	Grade	Type of location	Province (School)	Ethnicity	Total household annual income (USD)	Parent's Level of Education
			As defined by parent/guardian	As defined by teacher(s)							
6	9	Male	Low vision (eye cancer)	Low vision	Enrolled	3	Urban	Kandal (5)	Khmer	4200	Bachelor
7	11	Male	Physical	Severe & Multiple	Enrolled	4	Rural	Kandal (4)	Khmer	1825	Primary
8	12	Female	Deaf and can't speak	Deaf and can't speak	Rejected; Re-enrolled; Repeat twice	3	Rural	Kandal (4)	Khmer	N.A.	N.A.
9	7	Male	Deaf and can't speak	N.A.	OFS (Rejected)	N.A.	Rural	Kandal (4)	Khmer	1800	Primary
10	9	Female	Physical	Oral & Speech	Enrolled; Repeat once	2	Rural	Kandal (4)	Khmer	NA	None
11	8	Female	Deaf and can't speak	Deaf and can't speak	Enrolled; Repeat twice	1	Rural	Battambang (14)	Khmer	4500	Primary
12	10	Female	Severe & Multiple	Severe & Multiple	Enrolled; Repeat once	2	Rural	Battambang (14)	Khmer	1080	Primary
13	13	Female	Low vision	Low vision	Enrolled; Repeat twice	6	Rural	Battambang (14)	Khmer	1800	Primary

S/N	Age	Sex	Disability		Education		Background				
			Type		Status of enrolment	Grade	Type of location	Province (School)	Ethnicity	Total household annual income (USD)	Parent's Level of Education
			As defined by parent/guardian	As defined by teacher(s)							
14	11	Female	Learning disability/ Slow learner	N.A.	Dropout	3	Rural	Battambang (14)	Khmer	720	None
15	12	Male	Low vision	Blind	Enrolled; Repeat twice	5	Urban	Battambang (11)	Khmer	1800	Primary
16	13	Male	Learning disability/ Slow learner	N.A.	Dropout	4	Urban	Battambang (11)	Khmer	1000	Informal
17	13	Female	Physical	Physical	Enrolled	1	Rural	Battambang (12)	Khmer	2400	Primary
18	7	Male	Oral & Speech	Deaf and can't speak	Enrolled	1	Rural	Battambang (12)	Khmer	2500	Lower sec
19	13	Male	None	Oral & Speech	Enrolled; Repeat once	4	Rural	Battambang (12)	Khmer	1300	Lower sec
20	7	Male	Low vision	Low vision; Speech	Enrolled; Repeat once	2	Urban	Battambang (13)	Khmer	6000	Upper sec



S/N	Age	Sex	Disability		Education		Background				
			Type		Status of enrolment	Grade	Type of location	Province (School)	Ethnicity	Total household annual income (USD)	Parent's Level of Education
			As defined by parent/guardian	As defined by teacher(s)							
21	10	Male	Learning disability/ Slow learner	Hard of hearing	Enrolled	4	Urban	Battambang (13)	Khmer	3600	Lower sec
22	11	Female	Severe & Multiple	Severe & Multiple	Enrolled (doesn't attend daily)	5	Urban	Battambang (13)	Khmer	2800	Lower sec
23	7	Female	Learning disability/ Slow learner	N.A.	Dropout	1	Urban	Battambang (13)	Khmer	2000	Primary
24	8	Female	Learning disability/ Slow learner	Physical	Enrolled (but rarely attends)	1	Rural	Kampot (10)	Minority (Cham)	4500	Primary
25	10	Female	Learning disability/ Slow learner	Oral & Speech	Enrolled; Repeat once	3	Rural	Kampot (10)	Khmer	1350	Primary
26	13	Male	None	Oral & Speech	Enrolled	3	Rural	Kampot (10)	Minority (Cham)	2700	Primary

S/N	Age	Sex	Disability		Education		Background				
			Type				Status of enrolment	Grade	Type of location	Province (School)	Ethnicity
			As defined by parent/guardian	As defined by teacher(s)							
27	9	Female	Hard of hearing	Hard of hearing	Enrolled	2	Urban	Kampot (9)	Khmer	3600	Upper sec
28	9	Male	Oral & Speech	Oral & Speech	Enrolled; Repeat once	1	Urban	Kampot (9)	Khmer	7000	Lower sec
29	9	Male	Physical	Physical	Enrolled; Repeat twice	1	Urban	Kampot (9)	Khmer	3000	Lower sec
30	12	Female	Severe & Multiple	N.A.	OFS	N.A.	Urban	Kampot (9)	Khmer	3400	Upper sec
31	11	Female	Physical	Physical	Enrolled; Repeat once; Dropout	2	Urban	Kampot (7)	Khmer	1440	Primary
32	16	Male	Intellectual	Intellectual	Enrolled	1	Urban	Kampot (7)	Khmer	1350	Primary
33	6	Female	Low vision	Low vision	Enrolled	1	Urban	Kampot (7)	Khmer	4800	Bachelor
34	13	Male	Oral & Speech	Oral & Speech	Dropout	2	Urban	Kampot (7)	Khmer	3660	Upper sec
35	10	Male	Physical	Physical	Enrolled; Repeat once	2	Rural	Kampot (8)	Khmer	1000	Primary
36	10	Male	None	Oral & Speech	Enrolled;	3	Rural	Kampot (8)	Khmer	1000	Primary

S/N	Age	Sex	Disability		Education		Background				
			Type		Status of enrolment	Grade	Type of location	Province (School)	Ethnicity	Total household annual income (USD)	Parent's Level of Education
			As defined by parent/guardian	As defined by teacher(s)							
					Repeat once						
37	9	Female	Learning disability/ Slow learner	Hard of hearing	Enrolled	3	Rural	Kampot (8)	Khmer	1000	Primary
38	8	Female	Physical	N.A.	Dropout	1	Rural	Kampot (8)	Khmer	2500	Primary
39	11	Male	None	Hard of hearing	Enrolled	3	Rural	Ratanakiri (18)	Minority (Tumpuon)	1500	None
40	6	Female	Severe & Multiple	N.A.	OFS	N.A.	Rural	Ratanakiri (18)	Minority (Tumpuon)	1000	Primary
41	11	Male	Physical	Learning disability/ Slow learner	Enrolled; Repeat thrice	1	Rural	Ratanakiri (19)	Khmer	1100	Primary
42	12	Male	None	Low vision	Enrolled	6	Rural	Ratanakiri (19)	Khmer	2000	Informal
43	10	Female	Deaf and can't speak	Oral and speech (can't speak)	Enrolled	2	Rural	Ratanakiri (17)	Khmer	1300	N.A.

S/N	Age	Sex	Disability		Education		Background				
			Type		Status of enrolment	Grade	Type of location	Province (School)	Ethnicity	Total household annual income (USD)	Parent's Level of Education
			As defined by parent/guardian	As defined by teacher(s)							
44	12	Male	Severe (seizure/fits)	Low vision	Enrolled (but skips often due to health condition)	5	Rural	Ratanakiri (17)	Khmer	1500	N.A.
45	13	Male	Physical	N.A.	OFS	N.A.	Rural	Ratanakiri (17)	Khmer	1400	Primary
46	16	Male	Low vision	N.A.	Dropout; Re-enrolled	5	Urban	Ratanakiri (16)	Minority (Tumpuon)	1000	N.A.
47	7	Male	None (difficulty walking)	Low vision	Enrolled; Repeat once	1	Urban	Ratanakiri (16)	Khmer	9600	Upper sec
48	13	Male	Multiple (Physical & Speaking)	Multiple (Physical & Speaking)	Enrolled; Repeat once	4	Rural	Ratanakiri (15)	Khmer	N.A.	Upper sec
49	12	Male	Deaf and can't speak	Deaf and can't speak	Dropout	4	Rural	Ratanakiri (15)	Minority (Tumpuon)	1000	None
50	16	Female	Oral and speech	Oral and speech	Dropout; Re-enrolled	2	Rural	Ratanakiri (15)	Minority (Tumpuon)	1200	Primary

