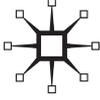# The Political Economy of Schooling in Cambodia

Issues of Quality and Equity

Edited by Yuto Kitamura, D. Brent Edwards Jr., Chhinh Sitha, and James H. Williams

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Series Editors' Introduction

We are pleased to introduce another volume in the Palgrave Macmillan International and Development Education book series. In conceptualizing this series we took into account the extraordinary increase in the scope and depth of research on education in a global and international context. The range of topics and issues being addressed by scholars worldwide is enormous and clearly reflects the growing expansion and quality of research being conducted on comparative, international, and development education (CIDE) topics. Our goal is to cast a wide net for the most innovative and novel manuscripts, both single-authored and edited volumes, without constraints as to the level of education, geographical region, or methodology (whether disciplinary or interdisciplinary). In the process, we have also developed two subseries as part of the main series: one is cosponsored by the East West Center in Honolulu, Hawaii, drawing from their distinguished programs, the International Forum on Education 2020 (IFE 2020) and the Asian Pacific Higher Education Research Partnership (APHERP); and the other is a publication partnership with the Higher Education Special Interest Group of the Comparative and International Education Society that highlights trends and themes on international higher education.

The issues that will be highlighted in this series are those focused on capacity, access, and equity, three interrelated topics that are central to educational transformation as it appears today around the world. There are many paradoxes and asymmetries surrounding these issues, which include problems of both excess capacity and deficits, wide access to facilities as well as severe restrictions, and all the complexities that are included in the equity debate. Closely related to this critical triumvirate is the overarching concern with quality assurance, accountability, and assessment. As educational systems have expanded, so have the needs and demands for quality assessment, with implications for accreditation and accountability. Intergroup relations, multiculturalism, and gender issues comprise another cluster of concerns facing most educational systems in differential ways when one looks at the change in educational systems in an international context. Diversified notions of the structure of knowledge and

curriculum development occupy another important niche in educational change at both the precollegiate and collegiate levels. Finally, how systems are managed and governed are key policy issues for educational policymakers worldwide. These and other key elements of the education and social change environment have guided this series and have been reflected in the books that have already appeared and those that will appear in the future. We welcome proposals on these and other topics from as wide a range of scholars and practitioners as possible. We believe that the world of educational change is dynamic, and our goal is to reflect the very best work being done in these and other areas.

John N. Hawkins
University of California, Los Angeles

W. James Jacob
University of Pittsburgh

Part 1

Intro

Chapter 1

Introduction*

Chhinh Sitha, D. Brent Edwards Jr., James H. Williams, and Yuto Kitamura

ដឹងថាខ្លួនល្ងង់គង់នឹងចេះបាន។

(Knowing your ignorance is your first step to knowledge.)

In 1979, Cambodia restarted social development from near zero. In the years immediately preceding, the Khmer Rouge had violently destroyed all manner of social structures, forcing the population to live communally and engage in collective agriculture for their very survival. With the severe loss of intellectuals as a result of starvation, hard labor, and summary execution, education was provided by teachers with minimal knowledge of content and pedagogy.

Since 1979, the system has grown dramatically with government commitment and technical and financial support from the donor community and development partners. Evidence of this growth is the fact that there are now over 10,000 school buildings across the country serving preschool to university age children (MoEYS 2013; You 2012). Yet success can be claimed with confidence and pride only with regard to educational access, in particular access to primary education, despite the government's commitment to free compulsory education for at least nine years (Royal Government of Cambodia 2003).

The fact of poor student achievement garnered significant attention when a series of national assessments were conducted starting in 2006 (MoEYS 2006, 2007, 2008). Recent reforms in the grade 12 examination—put

in place to stop irregularities such as bribery, cheating, and leakage of examinations—through use of observers from the Anti-Corruption Unit have provided the general public with uncontestable evidence that student learning outcomes are very poor. In recent years, only 40 percent of students were able to pass the examination, as compared with passing rates of around 80 percent in the past decade (MoEYS 2014). Furthermore, yearly education statistics since 1996 suggest that among the 700,000 children who enroll in grade 1 in a given academic year, only about 10 percent successfully complete grade 12. For example, after the 2014 grade 12 examination there were only 49,921 graduates from the 782,840 students who enrolled in grade 1 in 2001 (MoEYS 2014). As explained later in this edited volume, there are many reasons for this attrition.

Moreover, there is ample evidence that schooling in Cambodia from the primary to higher education levels is failing to provide learners with the knowledge, skills, and attitudes that upper-middle income countries demand. This is particularly problematic given that the Cambodian government has made it a goal to join the ranks of such countries by 2030. A recent review of high school curriculum examined the contents, pedagogy, and linkages with university studies and the workplace suggests that the high school curriculum is of low quality, is only weakly linked with higher education, and provides little relevant knowledge and skills to meet market demand (Chet, Ngin, Chhinh, Dy, and David 2014; Un 2014). The studies found that—regardless of their grade—students who left school did not possess the necessary technical and vocational skills to secure employment. The knowledge and skills that are intended to be taught through the curriculum should prepare students for further studies. Assessment results, however, show that this is not the case. Public schooling currently does not deliver practical relevance, linkages to further study, or a level of quality that can lead to market employment (Chet, Ngin, Chhinh, Dy, and David 2014).

Poor learner performance, which has been recently and reluctantly recognized by the MoEYS prior to the fifth mandate of the government in 2013, can be attributed to a number of factors. From the supply side, MoEYS sees it necessary to carry out tough reforms in eight broad areas (see conclusion chapter of this volume for details), focusing in the coming years particularly on curriculum and teacher reform. To that end, the reforms pursued by MoEYS since the beginning of the new government's mandate in 2013 have been greatly appreciated, especially at the grassroots level. As MoEYS moves forward to address the sizeable challenges found in the education sector, one goal of this edited volume is not only to shed some light on key issues but also to help the MoEYS face and overcome them. As the MoEYS strives to achieve comprehensive educational reform,

particularly around issues that affect teachers and curriculum, it faces a difficult challenge—that is, that teachers and curriculum represent both inputs and key elements of the educational process. As described below, the volume looks at aspects of access and quality from the primary to higher education levels, in addition to a number of other facets of the contemporary education system in Cambodia.

Contributions of the Book

This edited volume presents a detailed portrait of the education system in Cambodia. In addition to contextualizing the development of education in Cambodia from a long-term historical perspective, the book addresses such issues as: the local enactment of student-centered pedagogies, practices of private tutoring, the rise of education-related civil society and its influence on education policymaking, and issues around student dropout, as well as current themes in higher education, teacher education, and the teaching profession.

In comparison with previous publications on Cambodian education, this volume is unique in its breadth, depth, and timeliness. For instance, the most widely cited work on Cambodian education is the book written by Ayres (2000), published over ten years ago and covering the period 1953–1998. Another book—by Hirosato and Kitamura (2009)—focuses on education in Southeast Asia generally and contains multiple chapters about Cambodia—none of which, however, address issues of dropout, private tutoring, pedagogical practices, civil society, or teacher education. Other publications dealing with Cambodian education tend to contain a single chapter that characterizes the state of education in this country in broad terms (e.g., Brock and Lorraine 2011; Joseph 2013; Ramesh 2012). In contrast, the contributors to this volume focus on a number of different aspects of education in a detailed way. As such, we suggest that the findings, lessons, and recommendations contained herein are useful to the continued expansion and modernization of Cambodia's education system.

We also suggest that the insights presented in the following chapters are useful more generally beyond the limits of Cambodia. The chapters are intended to provide actionable, policy-relevant information to education professionals, policymakers, researchers, and academics around the world that are struggling to understand and address the challenges investigated by this book, challenges which are among many low- and middle-income countries where the simultaneous trends of globalization, neoliberal policies, and rapid system expansion come together. Put differently, dozens

of countries around the world are grappling with issues such as private tutoring, the rise of civil society, student dropout, the reform of teaching practices, education quality and equity (after two decades of attention being focused primarily on educational access), and an insufficient and/or inadequately trained corps of teachers.

At the core of many of these issues is student dropout. The United Nations Educational, Scientific and Cultural Organization (UNESCO) used the 2012 edition of its Global Education Digest to highlight the severity and urgency of student dropout and retention as issues that need to be addressed by education systems. However, despite such high-profile attention, a review of literature indicates that few previous studies—in any country, let alone Cambodia—have brought the level of attention to these phenomena that the chapters in this volume offer. To that end, this volume includes two chapters on various aspects of dropout, retention, and school continuation. We thus believe this book will make a vital contribution to research on a range of currently salient educational issues within and beyond Cambodia.

Objectives of the Book

The overarching goal of the volume is to offer the most in-depth look at education in Cambodia to date. In so doing, the volume seeks to unpack a variety of key issues of high relevance to Cambodia and other developing countries as they expand their education systems and grapple with challenges to provide a quality and equitable education, from primary school to higher education.

In addition to the overarching goal, seven specific subgoals can be elaborated: (a) to place the progress of the Cambodian education system as a whole into long-term context, (b) to trace the development of higher education in Cambodia from the time of the Khmer Rouge to the present, both in terms of quantitative expansion as well as in terms of the quality of the education offered and research produced by higher education institutions, (c) to illuminate the development of education-related civil society organizations and the ways that these organizations are now able to influence the education policymaking process, particularly as they navigate more recent multiscalar politics brought about by globalization, (d) to shed light on current practices and challenges *within* the classroom—in relation, for example, to pedagogical practices and the implementation of policies for inclusion of students with disabilities, (e) to problematize the widespread—yet insufficiently understood—practice of private tutoring,

an issue which affects countries across Southeast Asia and the world, (f) to characterize and explain the phenomena of student dropout, repetition, and continuation between primary school and the completion of lower secondary school, a phase during which students in Cambodia (and many developing countries) have historically left school in large numbers, and (g) to unpack the challenges facing the Cambodian education system in preparing new teachers to meet the demands of its growing education sector.

Outline of the Book

The book is organized as follows. Chapters 2 and 3 provide context for the subsequent discussion. In Chapter 2 Ogisu and Williams provide an overview of formal education in Cambodia. The chapter begins with a historical look at the education system, which can only be understood in light of the early years of development and destruction during the 1970s. In the aftermath of recovery, the chapter details a number of core aspects of the contemporary education system, including the system's structure and organization, enrollment trends for different levels, teacher preparation and deployment, available measures of student learning, policies designed to improve access and quality, and challenges facing the system.

Edwards and Brehm, in chapter 3, look outside the system itself, tracing the emergence of civil society within the arena of educational governance in Cambodia. They focus on the historical and political geography that one coalition of nongovernmental organizations had to navigate in order to successfully obtain a seat at the decision-making table for education policy. As they discuss, within the context of globalization, educational governance has been rescaled to include actors other than nation-states such as civil society organizations and transnational advocacy networks, resulting in reconfigured formations of power. This "new global geometry of power" within the space of educational policymaking further complicates the dynamics of "global governance" and "complex multilateralism." Previous research on global educational governance has suggested that successful recognition of civil society within educational policymaking depends on human and financial capital and the persuasion strategies adopted by the organization. While these factors are important in the emergence of civil society on national and global scales, the case of Cambodia highlights the necessity of actors being sensitive to historical and contextual geographies of power and acting accordingly. Based on a qualitative evaluation of the impact of the Civil Society Education Fund within Cambodia conducted during July and August 2012, this chapter argues not only that material

and strategic considerations affect the geometries of power of educational governance but also that historical and cultural forces shape the geography of where and how decisions are made.

The next major section of the book examines K-12 schools. Ogisu, in chapter 4, looks at the lived experiences of teachers and students in the classroom. The author provides a snapshot of how student-centered pedagogies—widely circulated across the globe—are understood and enacted in some primary classrooms in rural Cambodia. Importantly, the author also details the ways in which this pedagogical approach conflicts with—and is complicated by—historically entrenched teaching norms. Based on lesson plans, classroom discourse, student work, and reflection comments by the teachers, several lessons are reconstructed to understand the extent to which everyday teaching and learning practices shape, and are shaped by, the idea of student centeredness. This chapter thus provides a contextualized understanding of the active engagement of local actors in pedagogical reform initiatives. The chapter concludes with implications for more bottom-up, locally relevant, and collaborative ways of improving quality of teaching and learning.

Hayashi and Edwards, in chapter 5, turns to recent, ongoing international discussions on the post-2015 agenda related to educational equity and inclusion. The focus is on those groups who continue to be vulnerable and excluded. This chapter examines the level of policy commitment of the government of Cambodia to achieving equity and inclusion for marginalized children, considering five areas of systemic and/or cultural disadvantage: gender, ethnicity, disability, poverty, and rural/urban location. The chapter examines Cambodia's policy frameworks from the four perspectives of equity of access, equity of resource inputs, equity of learning outcomes for educational quality, and diversity. A secondary purpose is to examine the implementation of equitable and inclusive policies in Cambodia's education system and to identify gaps in practice, despite policy intentions. Finally, the chapter addresses some of the pathways forward to implement locally efficient and effective inclusive education with a particular focus on children with disabilities in Cambodia.

Brehm's chapter 6 examines shadow education, one of the prominent features of schooling in Cambodia and elsewhere. In many developing countries, shadow education is linked to corruption when public school teachers and officials provide examination tutorial services to students after school hours for a fee. This logic is complicated in Cambodia because the main form of shadow education, *Rean Kua*, is not used to prepare students for examinations so much as a service to complement the formal school curriculum. Examinations are not high stakes, since the vast majority of students pass, and shadow education is not typically used as a means

to prepare students for national examinations, because answer guides can easily be purchased. Nevertheless, high-stakes testing has not escaped the commodification of education, suggesting a particular overlapping of corruption, privatization, and shadow education. In this chapter, the convergences and divergences of corruption, privatization, and shadow education are analyzed through the system of high-stakes examination in mainstream education. The chapter concludes by arguing for complex understandings of the commodification of education processes.

Chapters 7 and 8 focus on dropout. In chapter 7, Zimmermann and Williams examine parental expectations as an important factor in explaining student retention in schools, generally and by gender. The chapter examines a longitudinal set of household data collected from 220 students completing their final year of primary school and parents in a rural Cambodian province. Parents' educational expectations were found to be an important factor in explaining student persistence. Social influence processes play an important role in determining parents' educational expectations for boys and girls, but the determinants of parents' educational expectations vary according to the gender of the student.

In chapter 8, Edwards, Zimmermann, Chhinh, Williams, and Kitamura use narrative (or life history) research methods to understand from an in-depth, emic perspective the challenges faced by individual families and their children in school in urban, rural, and remote communities as they transition from primary to lower secondary school in Cambodia. The sources for this research are semistructured interviews conducted in June 2011 and December 2012. Analytically, the chapter is grounded in complexity theory, chosen for its ability to guide attention toward the ways that development "problems" (e.g., student dropout) are embedded in a web of influences that can propitiate or stifle positive change, often unpredictably. Results take two forms: Individual family narratives on the factors of continuation and the identification of a series of themes around which family experiences tend to group.

Chapters 9, 10, and 11 focus on Cambodian higher education. Williams, Kitamura, and Keng, in chapter 9, provide an overview of the expansion of higher education in Cambodia. Even in a global context of expansion in higher education, Cambodia's higher education system is remarkable for its rate of expansion over the past 30 years. Utilizing a unique database of higher education statistical yearbooks, this chapter looks at the growth of the system from its low in 1980 following the Khmer Rouge to its current size, almost 100 times greater. The chapter traces the emergence of new and diverse institutions, growth in numbers of students from increasingly diverse family backgrounds, and their fields of study. Virtually all of the growth can be accounted for by increases in the number of fee-charging

institutions as well as in the number of fee-paying options in public institutions. The chapter concludes with implications for quality and equity.

In chapter 10, Williams, Kitamura, Ogisu, and Zimmerman look at the teaching force. As a legacy of the targeting of teachers during the Khmer Rouge regime, Cambodia has been challenged to develop an adequately trained, professional corps of teachers. Utilizing a survey of 1,500 teachers in training as well as potential teachers in 15 higher education and teacher training institutions in Cambodia, the chapter examines the socioeconomic backgrounds of individuals seeking careers in teaching, as primary career and as a fallback job. The chapter also considers the match of individual backgrounds and aspirations with institutional location and characteristics. From these analyses, a portrait of the newly emerging teaching force emerges, shaped by the available opportunities in the education and job markets, opportunities that are affected by the social background of students.

Finally, in chapter 11, Kitamura, Umemiya, Hirosato, and Dy examine the quality of education and research in higher education institutions in Cambodia. Because of the rapid development of the higher education system, there has been a growing awareness of the importance of improving both teaching and research in tertiary institutions, despite the increasing teaching load of academic staff. This chapter thus looks into the work and the workplace of the professoriate in this changing environment. It does this by presenting the results of a survey of: the quality of available resources, teaching-research preferences, teaching load and style, research load, research content, and research productivity. Importantly, the chapter provides an analysis of the relationships among these issues.

In the concluding chapter, Chhinh begins from the premise that contemporary developments in the formal Cambodian education system have been significantly shaped by the availability of finances, the presence of technical expertise, and political will. As he makes clear, these three elements are intimately enmeshed and require a multipronged approach for positive change to occur. With this in mind, and expanding on the evidence of the previous chapters, this concluding chapter discusses the educational achievements of the nation and the challenges that currently face the process of educational system reform in addition to providing some practical suggestions to put the system back in order to ensure the intended learning outcomes of the learners across the school system. In so doing, this chapter discusses, first, issues related to access and quality and, then, staff development and management practices that help to ensure the former two issues. Then, after critically appraising the reform agenda of the current Minister of Education, he ends the chapter with a few comments on the way forward for education in Cambodia.

Notes

*Some of the studies presented in this book were supported by the Japan Society for the Promotion of Science and by the Ministry of the Environment, Government of Japan.

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Part 2

Context

Chapter 2

The Back Story of Education in Cambodia

Takayo Ogisu and James H. Williams

Cambodia, which won its independence from France in 1953 as The Kingdom of Cambodia, went into a 20-period of civil war after the *coup d'état* of 1970. An uneasy peace returned in 1991 with the signing of the Paris Peace Agreement. The civil war finally ended in the late 1990s. During these years of strife, the country's name was changed by the government in power, first to "Khmer Republic" after the 1970 *coup d'état* by General Lon Nol, followed by "Democratic Kampuchea" in the Khmer Rouge era of the Pol Pot regime in the late 1970s. Looking at the recent decades of Cambodian history, while we see a distressing amount of blood and tears, the country remains a highly attractive place, with its rich cultural heritage exemplified by Angkor Wat and elegant classical dancing as well as the rich blessings of its land thanks to the Mekong River and the Tonle Sap Lake.

After the Paris Peace Agreement in 1991, national reconstruction went into full swing in Cambodia with the aid of the international community. The country managed to overcome the ill effects of the Asian currency crisis of the late 1990s and is now on the path of steady economic growth. Having said that, a wider view of the socioeconomic development of Cambodia undeniably reveals the dark shadows of the damage inflicted by civil war.

Even now, the major sectors for growth in Cambodia—agriculture, textiles, and tourism—have no great need for highly skilled or educated human resources. As a result, perhaps, the country's human resources

are relatively undeveloped. However, enriching the human resources quantitatively and qualitatively is essential if Cambodia is to achieve an economic future centering on the service industry and manufacturing of commercial products, both of which require advanced skills. Developing human resources is particularly urgent at this time, as Cambodia will soon be facing greater economic competition from countries in the Association of Southeast Asian Nations and given its aspirations to become a middle-income country (Royal Government of Cambodia 2013). Cambodia needs to enhance the quality of its education system. As a fundamental foundation for such reforms, making quality basic education universally available is critical, but it is extremely challenging for Cambodia.

The economic infrastructure and the legal system are still inadequately developed, and the country has not succeeded in attracting sufficient domestic or overseas investment. Furthermore, taxes are not collected properly, leaving government finances in a fragile state. In addition, the civil war took its toll on the population structure, leading to a shortage of working age workers, a problem manifesting itself in all aspects of society. Such is the situation that the Cambodian government confronts as it struggles to reduce national poverty and foster social and economic growth through aid received from donor nations and agencies.

Historical Background

In Cambodia, where Theravada Buddhism is the state religion, education was traditionally provided in small religious institutions operated by monks. Colonization by France brought the modern French education system into the country, but mainly to segments of the population residing in urban areas. Following Cambodia's independence, declared by King Sihanouk in 1953, as much as 20 percent of the national budget was committed to education for the purpose of nation building (Ayres 2000). These policies popularized primary and secondary education to a certain extent. However, the civil war during the subsequent Lon Nol regime and, following withdrawal of US military from the region, the genocide under the Democratic Kampuchea (Pol Pot) regime (1975–1979) totally destroyed the fledgling education system. The genocide had a devastating impact on education: most teachers were killed or fled the country, and school buildings were either closed down or destroyed.

Vietnam invaded and ousted Pol Pot in 1979, and Vietnamese-connected Heng Samrin took power. While the civil war against the Pol Pot faction continued, progress was gradually made toward the country's reconstruction, resulting in, among other things, the expansion of primary education and quantitative improvements in the education system, although it was still greatly understaffed and under-resourced.

Following the end of the Cold War, Vietnamese forces withdrew from Cambodia in 1989, and the Paris Peace Agreement was signed in 1991. The Agreement led to a general election in 1993 under the supervision of the United Nations Transitional Authority (UNTAC), and a new constitution was adopted. Development of the country's education system, largely assisted by donor countries and nongovernmental organizations (NGOs), was mostly donor driven. Support projects mostly followed the intentions of the sponsoring organizations, and there was little coordination among projects. In 1995, with cooperation from donor countries, a five-year education plan (1995–2000) was drawn up, with a significant portion of the budget dedicated to textbooks, infrastructural development, and teacher training. However, due to social unrest and a series of military conflicts throughout the 1980s and 1990s, the percentage of population receiving primary education or continuing on to higher levels of education remained low.

To remedy this situation, in the late 1990s the Ministry of Education, Youth and Sport (MoEYS) initiated reforms within the framework of the government-led sector-wide approach (SWAP). During the initial period of reforms, government-endorsed donors took the lead. A number of major donors including United Nations (UN) agencies and donors of bilateral assistance offered active support. The sector-wide approach marked a shift from a period of numerous uncoordinated projects to that of a full-scale government-led campaign for adoption of a comprehensive education policy framework and for coordinated aid projects. At present, Cambodia is working to improve and expand basic education with assistance from the international community, notably the Global Partnership for Education (formerly the Education for All—Fast Track Initiative).

Trends and Issues in the Education Sector

In order to provide context for the later chapters, the remainder of this chapter provides an overview of Cambodia's education system, its current status, and key issues that need to be addressed in the coming years. The

school system comprises three years of preprimary education in principle for three- to five-year-old children, six years of primary education starting from age six, three years each of lower and upper secondary education for children ages 12–17, and higher education. The Education Law promulgated in 2007 sets nine years of basic education (primary and lower secondary education) as compulsory (Article 23). Government policy ensures all children the right to access quality education of at least 9 years in public schools free of charge (Article 31).

Preprimary Education

The most recent decade showed a significant improvement in access to education services at all levels. Enrollment in preprimary education doubled from 65,295 in 2000/2001 to 139,195 in 2012/2013. Such expansion can be attributed to the increasing number of preprimary schools (from 915 to 2,813) and teachers (from 1,992 to 4,152 during the same period). Still, more serious commitment is necessary to address the low enrollment ratios, which are around 15 percent as of 2012/2013 (MoEYS 2013).

Basic Education

Access to Primary Education

Enrollment in primary education has also increased greatly over the last decade. The number of students grew from 2,248,109 in 2000/2001 to 2,772,113 in 2003/2004, thanks to various measures including a ban on the collection of school fees in addition to enrollment campaigns. However, the number of students decreased to 2.2 million in 2012/2013 most likely due to a drop in the birth rate. The gross enrollment rate in primary education increased from 106.3 percent in 2000/2001 to its peak at 134.5 percent in 2007/2008, and then slightly decreased to 124.2 percent in 2012/2013 (Figure 2.1). During the same period, the net enrollment rate has continued to increase, growing from 83.8 percent to 96.9 percent, indicating that Cambodia is close to achieving universal access to primary education.[1]

UNESCO Institute for Statistics (UIS) data also indicate the improvement of gender equality in primary education, from GPI (Gender Parity Index) 0.89 in 2000/2001 to 0.97 in 2012/2013, where 1.0 indicates complete equality. Cambodia Child Labor Survey data suggest that gender difference becomes conspicuous in the third year of primary education, reaching about a 10 percent difference by the end of primary school (World Bank 2005b).
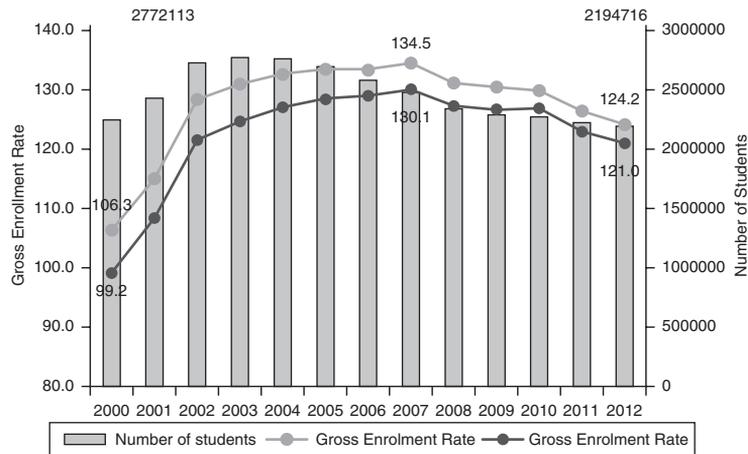
Figure 2.1   Number of Students and Gross Enrolment Rate in Primary Education.

Source: UNESCO Institute for Statistics database.

Access to Lower Secondary Education

Enrollment in lower secondary education has also jumped during the last decade from 234,813 in 2000/2001 to its peak 644,450 in 2008/2009, then decreasing to 552,515 in 2012/2013 (Figure 2.2). The decrease is most probably due to the drop in the birth rate and drop in primary school enrollment, noted. The gross enrollment rate jumped from 22.3 percent in 2000/2001 to 62.6 percent in 2012/2013, while the gender gap largely closed. Although geographical disparities still exist—mainly due to the lack of school buildings in remote areas—disparities in enrollment rates between urban and rural areas have been shrinking. Such inclusive expansion of lower secondary education is possible, thanks to the introduction of scholarships and other measures targeted to female students and rural areas.

Overage Enrollment

Increased access to basic education through the mid-2000s was due, in part, to the inclusion of many overage students who had previously delayed enrollment, as indicated by a survey conducted by the World Bank.[2] However, while this extent of delayed enrollment is higher than desirable, in Cambodia, delayed enrollment is not so much a temporary phenomenon following rapid expansion of the school system as a result
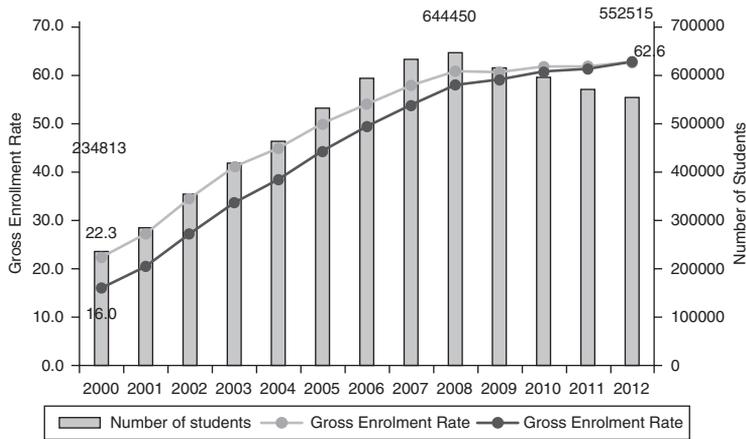
Figure 2.2 Number of Students and Gross Enrollment Rate in Lower Secondary Education.

Source: UNESCO Institute for Statistics database.

of sociocultural beliefs by which six-year-old children are often thought of as too young to go to school. In addition, the percentages of overage students increased from 23.7 percent in primary (11 years old or older) and 38.4 percent in lower secondary (14 years old or older) in 2000/2001 to 26.4 percent and 43.5 percent in 2005/2006. To address this issue, a series of enrollment campaigns targeted to six-year-old children have been launched over the past ten years. As a result, overage enrollment figures have significantly decreased to 19.3 percent and 29.4 percent, respectively (MoEYS 2013).

Still, overage enrollment is still one of the biggest challenges facing Cambodian basic education. Delayed enrollment is associated with high dropout rate (for more on dropout, see chapter 8, this volume). Students entering school later than the normal age usually have more difficulty adapting to a classroom environment shared with younger children and are thus more likely to drop out. Additionally, older students are more likely to drop out since, given their ability to earn money for their family outside of school, the opportunity costs of education increase for them with each passing year. On the whole, it is difficult to retain overage students in primary education and even more difficult to get them to advance to the next higher level of education. This problem is particularly severe at the lower secondary education level.

Incomplete Schools

In Cambodia, "incomplete" schools, which do not offer all the grades in primary education, have been another barrier to enrolling and retaining students through the basic education cycle. Incomplete schools have tended to disappear as the total number of primary schools have increased, but they still amount for 13.8 percent of the total (Education Management Information System of MoEYS 2013). Most of them are located in rural areas. This is one reason enrollment is lower in higher grades in primary schools in remote areas. In fact, most primary schools located in the poorest areas are reported to be incomplete.[3]

Dropout

Despite the challenges of overage enrollment, gross enrollment rates are relatively high. Yet Cambodia does not retain its students well, particularly at the lower secondary level. Enrollment statistics, while useful in broad terms, do not provide a nuanced understanding of exclusion from basic education (Lewin 2007). Lewin identifies six "zones of exclusion" from basic education, as follows:

Zone 1—never enrolled (in primary)

Zone 2—primary dropouts

Zone 3—at risk primary (overage, low attenders, and low achievers)

Zone 4—primary leavers (those who drop out after completing primary school)

Zone 5—lower secondary dropouts

Zone 6—lower secondary at risk

Enrollment statistics, though often representing the best available information, fail to capture these nuances. Dropout, in particular, is a focus of several chapters in this volume, and this section spends some time discussing factors associated with dropout in Cambodia.

According to official figures, primary level dropout rates hover around and slightly below 10 percent for grades 1, 2 5, and 6. Grades 3 and 4 are lower. Dropout rates increase dramatically in grades 7–12, especially in rural areas. Urban dropout rates are also substantially higher in grades 7 and 9 than in earlier or later years.

The word dropout may suggest a singular event, a decision made by the student and/or his/her family to leave school and not return. In actuality, dropouts do occasionally return to school, sometimes the same school,

but often a different school if the family moves. Research suggests that dropout is best understood not as a singular event but as a process— "of events, situations and contexts which work together to produce drop outs…Evidence suggests it is an interplay of factors which pushes children out of school." (Hunt 2008, 4). Research has identified a number of correlates or risk factors for dropout as well as precursors that appear to precede dropout in Cambodia—late enrollment, low achievement, absenteeism and temporary withdrawal from school, and repetition (No, Sam, and Hirakawa 2012).

Dropout is a function of multiple factors and events, related to supply and demand-side issues as well as their interaction. Family decision making plays the primary role in dropout, but family decisions are affected in complex ways by the costs of schooling, economic opportunities or lack thereof, student success in school, the availability and quality of schooling, and other factors (Hossler and Stage 1992).

Dropout rates vary, in part, in relation to supply-side factors such as the structures of schooling—entry and exit points, examinations and other gatekeeping mechanisms, both of which may vary by level of schooling, and the availability and cost of schools. Some national systems are characterized by high early dropout rates, when students first encounter schooling or during their early years. Other countries enroll and retain students relatively well during the early years, but begin to see higher rates of dropout in secondary school, often at major transition points. In Cambodia, dropout is higher in lower secondary school, as children encounter more difficult curricular expectations, generally greater distance from home to school, as children's academic performance levels and the prospects for long-term academic success become clearer, as direct and opportunity costs increase, and as children's work becomes more economical.

In poor countries such as Cambodia, with many families in poverty, a cluster of factors associated with dropout in primary and lower secondary school relate to household income and the family's financial circumstances. The fees associated with schooling, as well as indirect costs such as uniforms, transport, and so on, may tip the cost side of family calculus. In Cambodia, fees associated with after-school tutoring may play an important role in family decision making about dropout or continuation, since success in secondary school becomes increasingly linked with participation in such tutoring activities (see Brehm, chapter 6, this volume). Decisions to stay in school are likely related to the extent of after-school tutoring, the importance of tutoring to academic success in the particular school and beyond, and the access an individual student has to such tutoring, absolutely and relative to others.

Additionally, school children may find themselves needing to work to help support the family, inside and/or outside the home. Alternatively, poor families may be more likely to migrate in search of livelihood, thus disrupting schooling. Interestingly, however, No, Sam, and Hirakawa (2012) found neither poverty nor child work were significant predictors of dropout in their sample. Dropout is a complex, and perhaps family-specific matter.

The contexts of particular households bear directly on decision-making vis-à-vis dropout. The survival and wellbeing of parents and caregivers are obviously important factors, as are the health and disability status of family members. The educational levels and experiences of family members play an important role, too. All things being equal, more educated parents are more likely to see greater benefits to schooling for their children. Family decision making weighs these benefits in light of costs. Perceptions of benefits for a given child may vary according to the educational levels of other children, especially in families where education must be rationed. Number of siblings, gender, and the order of birth of a particular child may affect dropout decisions.

The benefits of schooling depend in large part on the child's likely success in schooling and later work, as evidenced by achievement and reports from the teacher and school. Family decision making is also affected by gender (see chapter 7, this volume). Location, as in urban/rural/remote areas, is a major factor in Cambodia both in terms of nearby access to schools and to schools of high quality as well as in terms of economic opportunities, present and future, for family members and young people. Membership in a minority group makes a student more likely to drop out. Relationships with teachers and fellow students may play an important role in students' decisions to dropout or stay in school along with personal motivation and self-esteem. Edwards, Zimmermann, Chhinh, Williams, and Kitamura discuss many of these issues in chapter 8, this volume.

Perhaps the greatest supply factor associated with dropout is the availability of nearby schools. In line with its national commitments to Education for All, Cambodia has built primary schools and lower secondary schools throughout the country. In rural and particularly remote areas, however, lower secondary schools may be a distance from some children's homes. In such cases, transport and the associated costs in time and cash to school may be a major factor in school participation. No, Sam, and Hirakawa (2012) found that dropout patterns varied from school to school in the primary schools sampled, a result the authors of this volume found for sampled rural lower secondary schools. Higher student–teacher ratios and lack of teachers experience were both associated with higher rates of dropout. In terms of resources, rural and remote schools are more likely to

suffer from lack of resources such as trained teachers. No and colleagues found that the predictors of dropout changed in higher grades. Overage entry for example or membership in the Cham minority were more likely to lead to dropout in grade 5 than in grade 1, where self-esteem was important. Interestingly, in some cases the schools themselves seemed to have an independent effect on dropout net of the effects of other variables. It would be useful to understand what factors at these schools affected dropout, but this is an under researched area.

Quality

Improving quality of education has been one of the major policy priorities since the 1990s. The Education For All National Plan 2003–2015, for example, lists "improving all aspects of the quality of education and ensuring excellence of all" as one of the three priorities in basic education, in order to ensure "recognized and measurable learning outcomes are achieved by all, especially literacy, numeracy and essential life skills" (39). This section provides a brief overview of the quality of education particularly focusing on cognitive learning outcomes as measured by standardized assessments. Closely related to this are teacher-related issues, which we address in the following section.

MoEYS, with technical support from the Cambodia Education Sector Support Project (CESSP), launched standardized assessments in grades 3, 6, and 9 in the 2005/2006 school year. These assessments were conducted in both Khmer language and mathematics in order to obtain reliable information on the quality of education for use in policymaking. The results of these assessments have been circulated as Student Achievement and Education Policy reports. The following discussion is based on the data presented in the reports circulated in 2006–2009 (Cambodia Education Sector Support Project, 2006, 2007, 2008, 2009).[4]

The results from the 2005/2006 assessment for grade 3 students were particularly shocking: students answered correctly only 40.9 percent of the items for Khmer and 37.5 percent of those in Math, both of which require only minimum skills that should have been acquired by grade 3. Students in large urban schools scored the highest percent correct in both Khmer language and mathematics, and those in small rural schools scored lowest. It was similarly very troubling in the 2005/2006 assessment that grade 3 had only limited pedagogical content knowledge (PCK) in mathematics. In the assessment, teachers were asked to answer the same questions to which their students responded as well as additional items that asked teachers to analyze examples of student errors and diagnose problems. It turned out that most of the grade 3 teachers

had lower-order knowledge (they answered correctly on 90.1 percent of the questions), but their PCK level was assessed as 3.4 points on average out of a maximum of 6 points. More than 10 percent of teachers were unable to provide any responses. Although the report found only weak correlations between teachers' PCK and students' test scores, these results ended up posing critical questions about the effectiveness of teaching and learning.

The grade 3 assessment conducted three years later (2008/2009 academic year) allows us to compare students' performance in common test questions over time. In Khmer language, it turned out that the percentage of correct answers increased significantly on seven out of eight common items. Similar levels of improvement were observed regardless of location. Improvement on one item was more than 20 points. Overall, however, the average was still only 54.1 percent. Moreover, the tendency for students in urban schools to score higher than students in rural schools continued.[5]

Although it is difficult to make simple comparisons, grade 6 students did relatively better in the 2006/2007 assessment. They responded to nearly 70 percent of the items correctly in Khmer and 53 percent in mathematics. [6] In grade 9 (conducted in 2007/2008), the average reached 65.4 percent and 33.7 percent in the same subject areas, respectively. These figures suggest that students in grades 6 and 9 have at least minimum skills in Khmer but not in mathematics, especially in grade 9. According to the report, low achievement in mathematics is due to the struggle that students have with the curriculum and limitations in teachers' mathematical knowledge.

The geographical gap between urban and remote schools in learning outcomes is noteworthy at all grade levels. In grade 3 (as of 2005–2006), differences between large urban and small rural schools represented 0.33 standard deviations in Khmer language and 0.37 in mathematics. This gap seems to grow, rather than shrink as students progress through the system, in both subject areas (the average difference was 0.41 standard deviation in Khmer language and 0.62 in mathematics in grade 6). Students in large urban schools, in particular, did much better than the rest. This tendency continues in the grade 9 assessment, in which students in urban schools again outperformed those in rural and remote schools in both Khmer language and mathematics. The average difference between urban and remote school students was about 0.48 and 0.42 standard deviations in Khmer language and mathematics, respectively. The geographical gap in learning outcomes appears by grade 3 and widens in later grades, to around one-half standard deviation in both subjects.

Although empirical evidence is necessary to effectively improve the quality of education, data on students' learning outcomes have become available only recently and are still very limited.

Teaching Force

Failure to recruit and retain good teachers is one of the greatest barriers to achieving education of high quality. Cambodia's student–teacher ratio in primary education has deteriorated for some time, as teacher appointments have not been able to keep up with the growing enrollment. In 2004/2005, however, the ratio improved to 53.5:1 following the reassignment of teachers to remote areas and then to 50.8:1 in 2005/2006. It further improved to 48.5:1 in 2012/2013, but still remains below the Education Strategic Plan (ESP)/Education Sector Support Program (ESSP) target of 45.5:1. In lower secondary education, the ratio changed from 19.9:1 in 2000/2001 to 31.7:1 in 2005/2006, and again shifted to 19.8:1 in 2012/2013. The percentage of schools adopting a two-shift system decreased from 81 percent to 75 percent in primary education and from 41 percent to 18 percent in lower secondary education between 2005/2006 and 2012/2013.

The current education system offers teaching certificates for the primary level to those who complete two years of training at provincial teacher training centers (PTTCs). Preparation at the PTTCs focuses primarily on upgrading student-teachers' content knowledge in the subject areas in which they teach. Effectively, this means that primary schoolteachers typically have content knowledge up to the upper secondary level when they start teaching. Teacher surveys reveal that teaching is not necessarily the preferred employment option for many students in teacher training programs. In fact, most student-teachers enroll in teacher training programs because they fail university entrance exams (Benveniste, Marshall, and Araujo 2008). (Chapter 10 examines those who go into teacher preparation with more comprehensive data.)

With regard to teacher qualifications, at present, graduation from an upper secondary school is required in addition to two years of training—with that training being in a PTTC to become a primary schoolteacher and in a Regional Teachers' Training Center (RTTC) to become a secondary schoolteacher. This qualifying system has been relatively recently adopted. Due to repeated policy changes in the past, the country's present-day primary and secondary schoolteachers have been through various training programs under different qualifying systems. As a result, in 2013/2014 academic year, 38.2 percent of primary schoolteachers have completed the equivalent of lower secondary school or less. This includes more than 3 percent who have only primary education or less (MoEYS 2014b).

Moreover, training programs implemented thus far are inadequate because the preparation focuses on upgrading student-teachers' content knowledge and pedagogical knowledge with which they teach students, but rarely on deepening their understanding about how they can convey the content or use the pedagogical knowledge.

Retaining qualified teachers may be more difficult than attracting students to the teaching profession, mainly due to low teacher salaries, with a starting salary as low as US$50 per month. To put this amount in context, teachers are paid just 60 percent of that received by an average Cambodian worker with similar qualifications (World Bank 2014). As a result, many teachers have second or even third jobs to maintain sufficient income.

Due to low salaries, Cambodian schoolteachers often offer private lessons outside the formal school hours in exchange for fees (see chapter 6, this volume). In many cases such private lessons are virtually compulsory since teachers cover important subjects only in private lessons, and students are forced to take them if they wish to pass examinations. The Cambodian government banned the collection of all school fees including those for private lessons. However, one survey later revealed that the ban has not been well respected, especially in urban areas and among students in the sixth year of primary education and the third year of lower secondary education, who prepare to take exams to move into higher levels of schooling (Bray and Bunly 2005). The survey also showed that the ban on fee collection was not generally respected in lower secondary education. Moreover, according to a recent survey that explored the demographic characteristics of preservice and in-service teachers, a significant portion of teachers continue to try to earn a bachelor's degree, not for professional development so much as for the opportunity to obtain a better job outside teaching (see chapter 10, this volume).

Upper Secondary Education

As Figure 2.3 shows, upper secondary education also experienced rapid expansion during the last decade. Although at the beginning of the 2000s, access to upper secondary education was limited to 11.5 percent of the student age group, with a 63 percent transition rate from lower to upper secondary education, access increased to 27.4 percent in 2012/2013 with a 70.2 percent transition rate. It should be noted that the national exam held at the end of lower secondary education (grade 9) is the greatest barrier to students pursuing upper secondary education. Given that producing a certain number of well-educated upper secondary graduates is necessary to prepare the future teaching force and thus maintain the education system
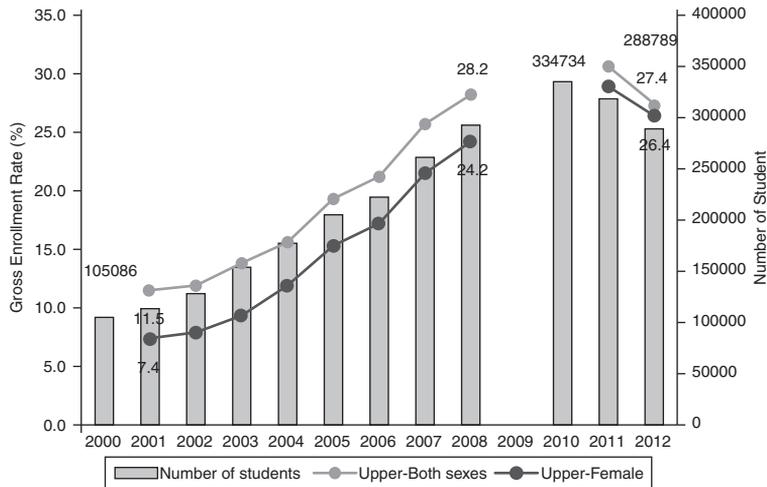
Figure 2.3   Number of Students and Gross Enrollment Rate in Upper Secondary Education.

Source: UNESCO Institute for Statistics database.
Note: Data for 2009/2010 is not available.

as a whole, expanding access to upper secondary education must be considered a priority.

Higher Education

The last ten years has seen a rapid expansion of higher education, as shown in Figure 2.4. Recent expansion of higher education has been possible primarily by increases in the number of newly founded private universities.[7] Still, there are challenges relating to the quality of what is being taught and the unbalanced distribution of students in different academic fields. MoEYS started to implement quality assurance measures in higher education under the Accreditation Committee of Cambodia (ACC), discussed in chapter 11. The distribution of students in various academic fields is another challenge. As of 2012/2013 academic year, more than half of the students in higher education majored in social sciences, business, and law, compared to only 2.4 percent in engineering, manufacturing, and construction, where the demand for highly qualified labor force is growing (UIS database).[8]
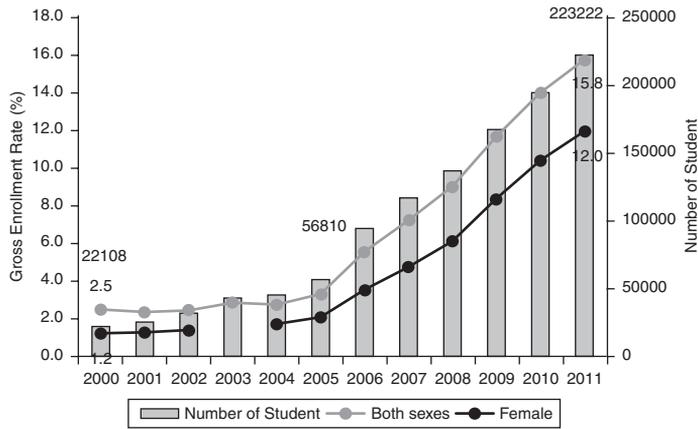
Figure 2.4   Number of Students and Gross Enrollment Rate in Higher Education.
Source: UNESCO Institute for Statistics database.

Recent Policy Developments

Cambodia's education policy has evolved considerably in recent years. Educational development has been the most important area for improvement of the social infrastructure after the Civil War and still remains a priority for the Cambodian government. The government has set the goal of becoming an upper-middle income country by 2030 and a high-income country by 2050 (Royal Government of Cambodia, 2013). In this context, human resource development is identified as key to ensure competitiveness with ASEAN integration in 2015. The government's strong commitment to human resource development is also attested by the fact that it is one of the four components of the Rectangular Strategy.[9] The National Strategic Development Plan (NSDP)[10] 2014–2018, drawn up in line with the Vision 2030 and the Rectangular Strategy, examines the issue in greater detail. According to NSDP 2014–2018, the government will target "capacity building (without gender discrimination), in terms of developing knowledge and know-how, entrepreneurship, skills, creativity and innovation, specifically in science and technology" (177).

Cambodia's educational policy, which attaches importance to basic education, is specified in ESP, ESSP, and the Education for All (EFA) National Action Plan 2003–2015 (which indicates the country's long-

term strategies until 2015), within the framework comprised of a series of national development plans including the Rectangular Strategy, NSDP, and the Cambodia Millennium Development Goals (CMDG).

The basic strategy in Cambodia's education sector is a five-year plan called ESP. Since 2000, five five-year plans have been adopted: (1) 2001–2005, (2) 2004–2008, (3) 2006–2010, (4) 2009–2013, and (5) 2014–2018. To implement these ESPs, five-year programs called ESSP have been drafted (the five-year span coincides with the ESP). Of the whole education sector, the EFA National Action Plan 2003–2015 focuses on issues in basic education.

The ESP specifies mid-term policy measures and strategies for a five-year period. Based on the prioritization of these measures and strategies, the ESSP presents a more detailed and practical implementation plan for each year. Originally, the ESP was to be reviewed every five years by assessing the status of achievement of the targets. However, as noted, it has already been revised four times, in 2004, 2006, 2009, and 2014, as the country's education situation has evolved rapidly. The ESSP is designed as a rolling plan, which is jointly reviewed by the Ministry of Education, aid donors, and NGOs and readjusted each year in view of the current situation. The original draft ESP and ESSP and their later revised versions were primarily assembled by consultants and by the Planning Bureau of the MoEYS to be finalized with approval and advice from the high officials of the Ministry of Education, the concerned donors and NGOs, and others involved in the education sector. In what follows, we identify key policy changes, particularly those focusing on the comparison between the latest ESP (2014–2018) and its previous version, ESP 2009–2013.

ESP 2014–2018 identifies three key policy areas: (a) insuring equitable access to all to education services; (b) enhancing the quality and relevance of learning; and (c) insuring effective leadership and management of education staff at all levels. Compared to the previous five-year plan,[11] which focused on increased access to education, the first policy area puts stronger emphasis on the completion of 12 years of education to equip students with "good knowledge and reasoning and logic skills" (MoEYS 2014a, 13). Although the primary focus is still on basic education, early childhood education and postsecondary education are emphasized in ESP 2014–2018. The second policy also emphasizes the quality of learning, not the quality of education services, and states that all children should have a relevant and quality learning experience so that they can contribute to achieving the socioeconomic goals of the country. The term decentralization is removed from the third policy, which stresses results, accountability, and transparency.

Overall, EPS 2014–2018 emphasizes the results and outcomes of education. This is a substantial shift from the previous ESP, which focused on inputs (such as textbooks, school buildings, qualified teachers, etc.). The new ESP further clarifies measures to better link results to financial resources and introduces sub-sector programing instead of the thematic programming employed in ESP 2009–2013.[12] Fifty-one programs are developed based on the following seven subsectors: (a) early childhood education; (b) primary education; (c) secondary and technical education; (d) higher education; (e) nonformal education; (f) youth development; and (g) physical education and sport. The budget for education will be allocated based on these subsectors. It is projected that the educational budget will amount to more than US$800 million in 2018—6.4 percent, 45.7 percent, and 33.6 percent of which will be allocated to early childhood education, primary education, and secondary education subsectors, respectively. Strong emphasis on results is evident in the design of the programs. For example, one of the programs in primary education subsector is Quality Improvement Program, whose components include the implementation of Early Grade Literacy and Mathematics Assessment (EGRA and EGMA) and achievement tests.

In summary, the results and outcomes of education have became a central concern in the 2014–2018 ESP, compared to previous plans that focused primarily on inputs. This shift matches with the global trend toward standardized testing and the growth of international assessment tests, such as PISA and TIMSS, but we wonder whether it will bring substantial changes at the classroom level. It is important to examine how global forces impact policymaking processes (see chapter 3, this volume) as well as classroom practices (see Part 3 of this book, chapters 4 and 5 in particular).

Conclusion

Considering Cambodia's future social and economic development, the need for higher-quality labor and for engaged and critical citizenship is obvious. We therefore hope that the number of young Cambodians who have received basic and higher education will steadily increase. Accordingly, the Cambodian government, led by the MoEYS, has introduced a range of education policy measures aimed at improving and expanding basic and postbasic education. Nevertheless, Cambodia still has numerous challenges to overcome, as discussed above, and in later chapters in this volume.

NOTES

1. According to UIS, gross enrollment rate refers to "number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education," whereas net enrollment rate refers to "total number of students in the theoretical age group for a given level of education enrolled in that level, expressed as a percentage of the total population in that age group"(UIS website). Gross enrollment can exceed 100%, with enrollment of overage and under-age children.
2. World Bank. 2005a, 14–15.
3. Ministry of Education, Youth and Sport (2004), *Paper 4: Incomplete Primary Schools: A Strategic Analysis.*
4. More comprehensive analysis of learning outcomes in recent years is provided in chapter 6.
5. For more detailed discussion, see Jeffery H. Marshall, Ung Chinna, Puth Nessay, Ung Ngo Hok, Va Savoeun, Soeur Tinon, and Meung Veasna (2009) "Student achievement and education policy in a period of rapid expansion: Assessment data evidence from Cambodia," *International Review of Education, Vol. 55,* No. 4: 393–413.
6. This gap suggests, according to the report, that students in grade 6 were those who had been able to "survive" and thus were a more select group than those in grade 3 (CESSP, 2008). It implies that primary education especially before grade 3 does not succeed in equipping all students with the knowledge and skills necessary to successfully complete primary school.
7. Higher education institutions can be classified basically into three types—the Royal Academy, universities, and colleges specializing in particular fields.
8. Recently, MoEYS took measure to disallow establishment of new higher education institutions, especially those in social sciences and humanities.
9. The three other components are: (1) improvement of the agricultural sector, (2) infrastructural construction and reconstruction, and (3) the development of the private sector and employment creation; at the center of the four components is "good governance."
10. NSDP was drawn up as a national plan integrating and replacing the Socio-Economic Development Plan (SEDP) II and the National Poverty Reduction Strategy.
11. The three policy areas stated in ESP 2009–2013 are: (1) ensuring equitable access to education services; (2) improving the quality and efficiency of education services; and (3) institutional and capacity development for educational staff for decentralization.
12. ESP 2009–2013 identifies five programs: (1) Development of general education and nonformal education; (2) development of education, technical training, higher education, and science research; (3) development of physical education and sport; (4) development of youth; and (5) program support, education management, and good governance.

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Part 3

Schools

Chapter 3

Getting to the Decision-Making Table in Educational Governance: The Emergence of Cambodian Civil Society within the New Global Geometry of Power*

D. Brent Edwards Jr. and William C. Brehm

This chapter focuses on the emergence of civil society as a central pillar in Cambodian educational governance. By retracing how the NGO Education Partnership (NEP), a federation of education nongovernmental organizations (NGOs), became a recognized actor in national education policymaking, this chapter documents the rescaling of educational governance through the internal politics and transformations of one organization and its connections to the Global Campaign for Education (GCE), a transnational network of civil society organizations. Through an in-depth case study, this chapter details how NEP not only navigated the globalization of educational governance in Cambodia but also impacted the structures of national educational governance by becoming an active member in policymaking. This chapter shows how NEP made it to the proverbial "decision making table" in Cambodian educational governance by strategically using its global connections while tactically navigating the historical and political context.

The detailed look at NEP offers a case study of the "new global geometry of power" influencing education policy (Rizvi and Lingard 2010, 172).

Within contemporary globalization, the geography of the state has been rescaled and, as such, is continuously in contact with international actors and objects (Lingard and Rawolle 2011). As national education policies are influenced by nonstate, multinational, and transnational actors, "the boundaries between state, economy, and civil society . . . [have become] blurred; there are new voices within policy conversations and new conduits through which policy discourses enter policy thinking; and there is a proliferation of policy networks nationally and globally" (Ball 2012, 9). What was once solely the responsibility of the nation state is being rescaled to include actors and processes that are simultaneously nonstate and nonnational.

The chapter progresses as follows. First, we discuss our methods, including the morphogenetic analytic approach that we employ. Second, we present our findings on the emergence, engagement, and impact of Cambodian civil society. We then reflect in the penultimate section on the nature of—and the lessons from—changes to educational governance structures and processes in the case of civil society emergence in Cambodia. We conclude by discussing implications and by suggesting future avenues for research.

Methods

Data Collection

The present chapter is based on research conducted in Cambodia during July and August 2012, and was funded by the GCE. The research evaluated the impact of the GCE's Civil Society Education Fund (explained later) within Cambodia. Our findings stem from 36 interviews, conversations, and focus groups with 38 different individuals. Interviewees included staff and leadership of NEP, Cambodia's national coalition of education-related NGOs; the GCE Leadership Committee; representatives of NEP member organizations; representatives of multi- and bilateral development partners (e.g., The United Nations Educational, Scientific and Cultural Organization [UNESCO], World Bank, Japan International Cooperation Agency [JICA], and Asian Development Bank [ADB]); international NGOs; policymakers; leadership from the Ministry of Education, Youth and Sport (MoEYS); representatives of media (radio and TV stations); and members of academia. In addition, internal NEP documents were reviewed and analyzed.

Analytic Framework

We employ the work of Margaret Archer (2010a, 2010b)—that is, her morphogenetic approach to social change—because it provides a way to examine the dynamic interaction of structure and agency over time, just as we intend to do in this chapter. Specifically, the morphogenetic approach perceives that "the broader context conditions the environment of actors whose responses then transform the environment with which the context subsequently has to deal, the two jointly generating further elaboration as well as changes in one another" (Archer 1982, 476). In this way, the morphogenetic approach artificially constructs a static moment within an otherwise dynamic environment in order to analyze the changes within social structures by actors and/or vice versa. The value of the morphogenetic approach is thus its ability to incorporate chronological time into the analysis of structures and agents that are co-constitutive and constantly evolving.

The key is to begin with the notion that structures and agents develop and evolve over chronological time such that structure always predates action that attempts to transform it. By extension, emergent structures—that is, what results from "structural elaboration" (Archer 2010b)—postdate action. This recognition of a temporal difference between structure and agency within the morphogenetic approach is captured in Figure 3.1 where "T" stands for time in a chronological sense.

Because the morphogenetic sequence separates the development of structure and agency over time, it is necessary to understand the "structural conditioning" that predates the action under investigation. Then, during "social interaction," agents relate to other agents who interact with the "structural conditioning." Principally, two outcomes can result from

Previous Sequence

Structural Conditioning

Time 1

Social Interaction

Time 2   Time 3

Structural Reproduction and/or
Structural Elaboration

Time 4

Focus of analysis

Adapted from Archer 2010b

Following Sequence
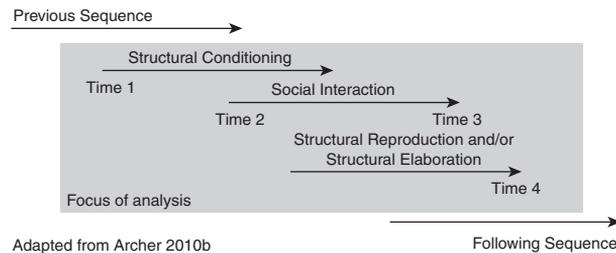
Figure 3.1   The Morphogenetic Sequence.

Adapted from: Archer (2010b).

this process of interaction (i.e., social relation). On the one hand, there is structural reproduction of the social order (i.e., "morphostasis"), while on the other hand the social order experiences some degree of modification through structural elaboration (i.e., "morphogenesis"). In both cases, with the passage of time and action, a new structure results within which future moments of agential (non)change happen. Thus, with reference to Figure 3.1, T_4 in first sequence becomes T_1 in the next sequence. This is how the morphogenetic approach opens for analysis the cycle of events and actions that relationally constitute the structures and spaces in which subjects act, a cycle that would otherwise remain analytically inaccessible.

In terms of the present chapter, the morphogenetic approach is useful because it provides a manner in which to examine the dynamics of global education governance. In employing it, we are tasked, first, with identifying the structural conditions within which actor agency is embedded, second, with unpacking the social interaction and processes through which actors attempt to change those structural conditions and, third, with what the outcome of the process of change or nonchange is.

The Cambodian Case of Civil Society in Education

Structural Conditioning

The contemporary Cambodian context is the result of a particular set of circumstances and developments that began under French colonialism and proceeded through multiple systems of governance, genocide, international isolation, and then an international/Western effort to rebuild, liberalize, and democratize the country (Ayres 2000). One must begin by mentioning the interplay among multiple structural forces that led to the genocidal atrocities of the Khmer Rouge in the 1970s: the emergence of a socialist movement in rural Cambodia in the 1960s that had global connections (albeit mainly with Vietnam), the official state neutrality during the Cold War, and the escalation of the US war in Vietnam that resulted in a "secret" bombing of Cambodian territory (see Vickery 2010). The devastation of the country cannot be understated when the Khmer Rouge lost control of governance in 1979:

> [Cambodia] had no currency, no markets, no financial institutions and virtually no industry. There was no public transport system; no trains ran and

the roads were damaged and unrepaired. There was no postal system, no telephones and virtually no electricity, clean water, sanitation or education. (Mysliveic 1988, 11)

In the post-Khmer Rouge period, Cambodia (known at this time as the People's Republic of Kampuchea) was internationally isolated between 1979 and 1989 because the West perceived the Vietnamese liberation of Cambodia from the Khmer Rouge as an invasion of communism supported by the Soviet Union (Kiernan 1982). This resulted in an economic and political blockade by the West, leaving the Soviet Union and Vietnam to provide the only development assistance during this time (Vickery 1986; for education see Clayton 2000). After the transitional period from 1989 to 1993, which resulted in an international effort to conduct elections in 1993, the Kingdom of Cambodia was recognized within international organizations and institutions.

Politically, Cambodia has remained under the tight control of a single ruler, Hun Sen, since 1985. He came to power with the Vietnamese occupation and has remained there through strategic alliances (e.g., with the Soviet Union, during the Cold War). Although there was social unrest during and after the 1993 and 1998 elections, Hun Sen has solidified his political power with each passing election through the politicization of the civil service, the military, and the police. It was only in the 2013 election that his political party, the Cambodian People's Party, saw its lowest election rate to parliament since the 1998 election, when his party won majority control. Nevertheless, Hun Sen's power remains near absolute. As one interviewee noted, the longevity of Hun Sen's rule has meant the continuation of "authoritarian thought" because the current elite rose to prominence during the time of Vietnam's occupation (CAM10, 2–3).[1]

One result of this "authoritarian thought" has been that criticism of the government and of politicians is not well tolerated and is often accompanied by harsh consequences. Freedom of the press is minimal, especially considering that political parties control most Khmer-language newspapers.[2] This leads many people and organizations to be cautious when it comes to critiquing the actions and performance of those in power.

Another salient aspect of the contemporary political economy is that, since the early 1990s, NGOs and other development partners have had a significant degree of latitude to operate (Dy and Ninomyia 2003; Bandyopadhyay and Khus 2013). Given that the education sector was reestablished in the 1980s and that the capacity of the central government was extremely low at that time, these organizations were able to pursue their projects freely. One interviewee commented:

> Ten years ago certainly. It was so easy. You run a small NGO, you get
> some money from wherever and you can do whatever you like, you know?
> Because you are sitting on this bag of money and everyone wants to have
> your money. And that time also the government capacity was just so weak.
> (CAM3, 33)

Although the capacity of the government has increased significantly over the course of the previous two decades, as many interviewees attested, the government still relies on the capacity and technical expertise of international organizations. A prime example is that an education specialist from JICA works inside the Planning Department of MoEYS directly with the Director of Planning on key issues. International aid also continues to account for half of Cambodia's annual budget (Springer 2011).

There has generally been an adversarial relationship between the government and NGOs, as the latter have frequently confronted and pressured the former on a range of issues. Due to this, and the fact that the Cambodian government does not tolerate criticism well, it has tried to control the NGOs—a difficult task given the total number of NGOs is estimated at 3,492 (Bandyopadhyay and Khus 2013). A recent attempt by the government has been the creation of an "NGO law," known as the Law on Association and NGOs, that would have allowed the government to dissolve any NGO that it felt was harming (or not upholding) Cambodian culture and morality (CAM16). This effort produced a strong backlash, both domestically and internationally, and has been tabled by parliament. Nevertheless, it indicates the government's stance toward NGOs generally. That said, NGOs in the education sector generally have a better relationship with the government for two reasons: (a) because these NGOs tend not to be as confrontational and critical (as, e.g., labor unions or NGOs working on corruption, human trafficking, etc.) and (b) because the government sees education NGOs as key to providing a vital public service and as helping to meet international development targets, such as those in the Education for All (EFA) initiative and the millennium development goals (MDGs).

Despite the progress made since the end of the Khmer Rouge, Cambodia's education system continues to face formidable challenges. Student dropout and the transition from primary to secondary levels of education are key challenges (Chinnh and Dy 2009). Although the Education Management Information System, which is a database derived from schools and commonly used by MoEYS, reported a net enrollment rate of 96.4 percent in 2011, other data sources depict a different story: the Commune Database, which is a database compiled by commune offices, reported the enrollment at 87.9 percent, and the Cambodian Socio-Economic Survey, which

is a national survey of households, reported the net enrollment rate at 84.3 percent (UNICEF 2013).[3]

Another challenge is educational finance. The share of recurrent expenditures for MoEYS has decreased between 2007 and 2012 (with the exception of 2011, which saw a slight increase from the 2010 budget), despite the fact that the Cambodian economy has steadily increased since 1998 (Brehm, Silova, and Tuot, 2012). As a percentage of GDP, Cambodia's MoEYS receives less than half the world average (2.3 percent in 2012 compared to 4.8 percent) and less than the average for East Asia (3.8 percent; Edwards 2012). Relatedly, corruption and the levying of unofficial fees are both deeply engrained in the education sector (Springer 2011). Though the government has promised reform in this area, the extent of its action appears to be limited to rhetoric. Students continue to confront fees for educational services, including: registration and enrollment, classroom materials, examinations, lesson handouts, and exam papers (see Brehm, chapter 6, this volume, for more).

Within the larger historical context, the structural conditioning of educational governance has been dominated by MoEYS and the development partners. These two groups of actors have, since the 1990s, developed a structure of educational governance that responds to each other. For instance, when the United Nations Children Fund (UNICEF) prioritized nonformal education in its international reform agenda, MoEYS responded by beginning a Department of Non-Formal Education within its organizational structure. Likewise, the Joint Technical Working Group (JTWG, defined below) provides an avenue for the development partners to support the education sector plan developed by MoEYS. The two structures are intertwined and somewhat dependent on each other, and often actors participate across spaces. For its part, policy advice from nonministry, civil society actors is generally noncritical if it is to be taken seriously by MoEYS. Evidence-based research and engagement through government-sanctioned processes are both acceptable practices, while pursuing openly critical and confrontational advocacy strategies are not. With this structural conditioning in mind, we now turn to the new actors and spaces that have entered and impacted educational governance in recent years.

Social Interaction

The evolution of Cambodia's education system in the postconflict epoch has occurred in parallel with—and has been impacted by—the globalization of education policymaking (Burbules and Torres 2000; Rizvi and Lingard 2010). Consequently, a range of actors and ideas have been

circulating within Cambodia and influencing the system's development. This is not to suggest, however, that actors within MoEYS have been ineffectual. To the contrary, interviewees repeatedly asserted that the most important person in the realm of education is MoEYS Secretary of State, Nath Bunroeun, whose biographical history suggests he is invested in the improvement of the education system. To be sure, he has placed much emphasis on channeling all available energies (from the government, development partners, NGOs) in order to meet the MDGs and the goals of the EFA initiative. Having attended the 1990 conference on EFA in Jomtien, he has been a leader in the MoEYS for over two decades and thus a conduit through which the global circulates.

Numerous international organizations have also been present in upstream policy discussions with the government, particularly UNICEF, the Swedish International Development Cooperation Agency, and the European Commission. UNESCO, for its part, participates in processes of educational governance and advances particular interests, but is limited by a relatively small budget. In contrast, the World Bank, which has a comparatively large budget and a strong connection with the government, acts more independently by not engaging with formal processes to harmonize development partner assistance. Finally, the US Agency for International Aid (USAID) and JICA primarily dedicate themselves to project implementation. Close relationships between the government and the development partners, as well as among the development partners themselves, can be attributed to the fact that many have been working in Cambodia for over two decades.

The civil society organization examined here—NEP—is thus a relatively new entrant to the politics of educational governance. This organization, which represents and works on behalf of all education-related NGOs, originated in 2002 with its *raison d'etre* to channel civil society feedback and interaction through a single organization. Both the government and the development partners were in favor of this, as the number of NGOs had grown exponentially and become unwieldy. With continued financial and technical support from international and national organizations alike, NEP has managed to survive (though at times barely, at least before 2009) and to grow from a coalition of 12 to 118 members by 2012.

As of 2012, NEP employed 15 personnel spread across four organizational areas: Research and Advocacy, Educational Programming, Finance and Administration, and Membership and Communication. These areas are overseen by a Director and a Board of Directors, the latter of which has seven (inter)national members and is responsible for approving the budget, setting the direction for NEP, and approving policy changes. The director implements policy and oversees day-to-day operations. NEP's purpose is

to engage with the government on education policy issues (particularly around quality and access), to advocate for civil society, and to augment the capacity of its members. Noticeably, however, prior to 2009, NEP was struggling both financially and in terms of its own capacity. On this latter point, the leadership style of the previous director of NEP (who served until early 2008) was drastically different from that of the director who took over in 2009. For example, the former director did not engage in collaboration with MoEYS, did not establish a common understanding between NEP and MoEYS regarding important issues and how they should be addressed, and did not develop a clear plan of action for NEP. Instead, this director brought critical feedback to policy discussions with the government (CAM8, 1). Not surprisingly, NEP was not only failing to affect education governance processes more generally but was also failing at realizing its own mission. It was marginalized and ineffective in education governance, and it "almost disappeared," save for intervention by its board of directors, which managed the organization for about six months during mid-year 2008 (CAM6, 13).

Subsequently, NEP hired a new, politically savvy director, who engaged MoEYS in a culturally sensitive manner, unlike his predecessor. This director served from 2008 until 2014. In addition, the new director was able to use the funds provided by GCE, as well as the (inter)national legitimacy that comes with a transnational partnership, to create new spaces within and outside NEP that it was able to leverage to gain a seat at the decision-making table of educational governance. We detail and further discuss these actions in later sections.

An additional issue here is that education policy in postconflict Cambodia has been influenced by the Sector Wide Approach (SWAP) to development, where the government and national and international stakeholders come together to plan and harmonize educational priorities, policies, and strategies (Brown, Foster, Norton, and Naschold 2001). This has meant the creation of two working groups. The first is the Education Sector Working Group (ESWG). This group meets monthly and counts among its members UN and bilateral aid agencies as well as a few international NGOs. UNESCO began to chair the ESWG since November 2011 (prior to that, it was chaired by UNICEF). Through the ESWG, its members come up with direct feedback for the government on issues that are being discussed at the moment (usually those issues that the government prefers to discuss). Prime examples include the annual operating plan of the government or the Education Sector Plan. The second group is the JTWG, which can be defined as the ESWG plus the government. The Minister of Education chairs it and there are two vice-chairs—the MoEYS Secretary of State and the chair of the ESWG. There are subtechnical

working groups under the JTWG for specific issues. In addition, there are two major events in the education sector held each year. There is the government's annual education retreat, which is a high-level event held over the course of a few days with a group of 20 stakeholders from within and outside government. There is also the annual education congress attended by MoEYS, development partners, and NGOs to look at "what works, what doesn't, and what should be improved" (CAM13, 7).

For our purposes, however, the most important point regarding the above is that NEP was awarded (during the first quarter of 2012) a permanent seat in both groups, attends the annual education retreat, and helps plan the education congress. NEP has, subsequently, been able to create and strategically use these new spaces to influence education governance processes and the making of education policy. Indeed, NEP often meets with directors from within MoEYS (e.g., directors of Primary Education and the Planning Department) to provide feedback on the specifics of certain policies and to share its own reports, which have been perceived as valuable (CAM5, CAM7). In view of these recent achievements, one can conclude that NEP has, especially considering Cambodia's authoritarian context, evolved from an organization on the fringe to one that has a voice and a place in educational governance. Put differently, NEP has succeeded in effecting structural elaboration by becoming both a key actor within—and an essential component of—the structures of education governance in Cambodia. We address how this happened below.

Global Civil Society in Cambodia

GCE has been integral to NEP's transformation. The former organization, in addition to being a transnational advocacy organization, is also "the globally recognized voice for civil society actors on the issue of Education for All" (Mundy 2012, 17). Having itself begun in 1999, the GCE has "grown enormously . . . [and now] has affiliated members in over 100 countries, including the participation of major international and regional non-governmental organizations" (p. 17). From this position, the GCE decided in the mid-2000s to enhance its support of national-level education advocacy coalitions through the creation of the Civil Society Education Fund (CSEF), funded at USD\$17.6 million by the Fast Track Initiative. From 2009 to 2012 the funding was distributed to participating national coalitions, among which NEP was one. In terms of Archer's morphogenetic sequence (Figure 3.1), 2009 corresponds with T_1 and 2012 corresponds with T_4.

NEP's participation in CSEF meant, in the first place, that its budget immediately doubled.[4] Thus, not only did support by GCE lend NEP

symbolic legitimacy in that the latter had the endorsement of an influential transnational actor, but GCE's financial support meant that NEP could bolster its core capacity. Indeed, NEP utilized the majority of the CSEF to cover the salaries of its key personnel and to hire three additional staff members in the areas of research coordination, advocacy, and financial management. Beyond this, however, CSEF also entailed the support of regional organizations linked with GCE. Given its geographic location, NEP has worked with the Asia South Pacific Association for Basic and Adult Education (ASPBAE)—with assistance being in the form of monitoring, coaching, and regional workshops where, in the case of the latter, information, lessons, and strategies are shared with and among national coalitions from across the region.

NEP has taken the financial and institutional resources afforded by CSEF and carefully used them to expand its strategic activities in the areas of research, campaigns, and policy engagement. Importantly, over the course of CSEF, by initially concentrating its energies on research and campaigning, it has later been able to access and create spaces where policy engagement with the government and development partners occurs. A key point is that, with assistance from GCE in the form of the CSEF, NEP was able to sufficiently elevate its stature such that it was recognized as a relevant actor in relation to education governance. This would then be followed by strategic social interaction aimed at structural elaboration.

In terms of research, CSEF not only made it possible to hire a research coordinator in 2009, but also increased NEP's ability to carry out its own studies, from which it produces two to three reports annually. The reports' foci are intended to overlap with NEP's top advocacy priorities but are nevertheless influenced by non-national actors through its regional and global connections from the GCE. Notably, the importance of NEP's research has increased since 2009 and has resulted in NEP working with international organizations like Volunteer Service Overseas to find international volunteers to build the capacity of its research department.[5] In terms of NEP's legitimacy, the fact that it has the consistent ability to carry out policy-relevant studies has placed the institution in a positive light and has contributed to its rising profile. Relatedly, when NEP now researches an issue, it adds to the gravity of that particular issue among stakeholders in the education sector both inside Cambodia and on the global scale through GCE. For instance, NEP's report on informal fees was published by ASPBAE as part of its Asian South-Pacific Education Watch initiative (NEP 2007). Even though NEP's research is not on par with development partners' larger and more expensive studies, the fact that NEP is researching an issue adds weight to it because doing so shows that civil society is aware of and focused on certain problems (CAM11, 29). Finally, NEP's

research has helped to reinforce and elevate its position in the ESWG and JTWG. Studies on school fees and teacher motivation were particularly impactful in this regard (CAM19, int2).

Campaigning is the way that NEP highlights certain issues, with events and actions being targeted at the government itself and/or the general public. These events and actions tend to relate to themes that have been established by GCE. NEP has gained recognition for hosting well-executed promotional and informational events for representatives of the government, development partners, and civil society groups, as well as for the public at large. Examples include media productions (e.g., television segments about inclusive education, radio programs about teaching for gender equity); student enrolment campaigns; and special events for World Teacher Day, Literacy Day, and Global Action Week (GAW). Specifically, for 2011's GAW—which focused on gender marginalization, per GCE's choosing—NEP organized a launch event for 174 education stakeholders (including high-level members of the MoEYS and development partners), held workshops for civil society organizations, created and distributed 10,000 posters on education-related gender issues, and produced a book of personal stories on gender discrimination. It has gotten to the point where multiple TV stations will now cover NEP's special events. Moreover, NEP is now able to recruit the MoEYS's Secretary of State and other top education officials to speak at ceremonies.

The aforementioned research and campaign (or general advocacy) activity during 2009–2011 garnered respect and credibility for NEP, which in turn has helped to open more doors for policy engagement at new levels. That is to say, in addition to attaining—during the first quarter of 2012—a permanent seat on the ESWG and JTWG, which constitute the formal mechanisms through which NEP regularly participates to contribute feedback and share its research findings, NEP's involvement has extended to other spaces. These can be summarized as follows:

1. *Annual Government Retreat*: The Education Retreat is a high-level event that is held over the course of two to three days once per year outside of Phnom Penh by a small group of 20 stakeholders from within and outside government who attend in order to have formal and informal discussions on salient education issues. NEP is able to solicit feedback from its members that it attempts to incorporate in both the Education Retreat and the Education Congress (see below). Taking place in September, the topic is the state of the education sector. One purpose is to plan the annual education congress (in March). By virtue of its attendance in this event, NEP is able to communicate directly, and often informally, with the small group of

high-level education officials who are in attendance. NEP is recognized as having provided very good feedback at this event (CAM6). NEP attended in 2009 and 2011; no retreat was organized in 2010.

2. *Annual Education Congress*: The congress is held in March. Here, the purpose is to look at "what works, what doesn't, and what should be improved" (CAM13, 7). NEP is involved in the planning and delivery of the education congress. The result of the congress is a report with analysis on the progress made in the education sector during the previous year. Yet, some assert that very little analysis and genuine discussion occur at this forum because it is more of a "political celebration of the sector" attended by 1,000 people (CAM3, 30/31).

3. *Research Dissemination Events*: NEP has begun to host high-profile events at which they present the results of their research. A prime example of this is when, on May 8, 2012, NEP held an all-day conference-style event to present the results of research that it had done on early childhood care and education. The event was held at the Phnom Penh Hotel, a five-star hotel and one of the nicest in the country. It was attended by 150 stakeholders from the government, development partners, and the education sector. NEP has also met with the minister of education to discuss research directly.

4. *Individual work with MoEYS Departmental Directors*: NEP often meets with a few of the directors from within the MoEYS (e.g., directors of Primary Education, the Planning Department) to provide feedback on specifics of certain education policies and to share its own reports. Interviews with the directors of both the Primary and Planning Departments indicated that they value the ground-level, practical knowledge and suggestions that NEP contributes (CAM5, CAM7).

These various accomplishments suggest that initial social interaction in the form of research and advocacy enabled NEP to engage in additional forms of social interaction that brought it into close and consistent contact with the existing actors and structures of education governance. Thus, during this time (which we can think of as spanning T_2 and T_3, which represent periods of social interaction), NEP's agency worked through education governance processes and structures that were facilitated by the global (i.e., GCE) and constrained by the local (i.e., the position of NGOs vis-à-vis the government).

Following on this strategic and purposeful engagement, NEP finally, and crucially, attained a permanent seat on the ESWG and JTWG. That is, through its ability to consistently demonstrate its relevance and usefulness

with regard to research, analysis, and policymaking, which was in turn made possible in part through its connections with GCE, NEP became a fixture of the education governance spaces and processes that impact education politics and that facilitate education policy formation in Cambodia. To state this more directly: By 2012 (T_4), NEP had been formally integrated into the official structure of education governance, thereby modifying that structure in the process.

Having identified the sequence of events that lead to structural elaboration, we further discuss in the next section the tensions that were evident between morphostasis and morphogenesis and how NEP responded to them in order to achieve structural change.

Morphogenesis in the Geometry of Cambodian Educational Governance

Analytically, the emergence of civil society in the education sector in Cambodia reveals, first, that the transition from social interaction to structural elaboration (or morphogenesis) is mediated by historical structures and, second, that civil society actors, or any new entrant, must often accommodate this structure before it can modify it, particularly in repressive contexts like that of Cambodia. Put differently, in the case of Cambodia, while NEP has more recently been able to push, in its own way, for structural elaboration, it first had to demonstrate its ability and willingness to serve the interests of the status quo (structural reproduction). NEP had to do this because other approaches—such as confronting the government or working outside the development partners—would only have resulted in NEP's continued marginalization, as was the case for NEP under its director prior to 2009.

By NEP's own admission, they purposefully became a nonthreatening complement to the machinery of educational governance. To that end, NEP's director commented: "[Advocacy—] it's a little bit about strategizing, especially because in the past, you know, we say, 'okay the government wants to do something,' and then we do advocacy based on that" (CAM19, int1). One outcome of this approach has been the government's inclination, in turn, to engage with NEP. For example, whereas the government previously declined offers to join in NEP's research planning activities, they now participate. Of course, as a result of these dynamics, NEP ran the risk of only reproducing the government's perspective; yet, NEP had

to first engage in this way in order to access and then to become part of the existing structures, for only then could it pursue a strategy of being tactfully critical.

Since 2009, NEP has positioned itself as an extension of the official structure of educational governance and, over time, gained the trust of MoEYS. NEP was able to gain this trust by responding appropriately to the structural conditions of the context within Cambodia and by strategically employing the resources made possible through its relationship with GCE. In elaborating on the relationship that has resulted between NEP and MoEYS, NEP's director echoed an observation made by numerous interviewees:

> For example, like teacher policies, they [the MoEYS] put the name of NEP in the small working group as well as in the technical working group…In the retreat, they [MoEYS] say, "okay, NEP has to be there." In the committee they formed to prepare for the education congress, they also have NEP there. And the midterm review…they also invite NEP. So every time they have meeting or consultation or develop any new policy or revise policy or something—the name of NEP always appears in the list of invitations. (CAM19, int1, 21)

To continue, NEP's service to the structure is further evident on two accounts. First, MoEYS sees NEP as the coordinator and filter for education NGOs—as evidenced by the fact that, when a local NGO attempted to communicate directly with the MoEYS, that NGO was told, "No, don't talk to us, talk to NEP. NEP will talk to us" (CAM11, notes). Secondly, MoEYS utilizes NEP as a means to reach out to other education NGOs across the country (CAM7, 1).

NEP has thus cooperated with MoEYS on its initiatives and has served as a conduit through which the government can access the capacity and knowledge of education NGOs more broadly. Because NEP has acted as a facilitator of "practical" information from those areas of the country where the government has difficulty monitoring (there are over 6,449 primary schools), it is seen as a "good partner" by the government and has become one of the three main pillars of the education sector, along with development partners and MoEYS.

Only once reaching this point, where NEP was considered one of the three pillars of the education sector, could NEP be formally incorporated into the structure of education governance, an act that was made official by its attainment of a permanent seat in the ESWG and JTWG during the first quarter of 2012 (CAM19, int2, 8–9). The importance

of this result should not be understated, for these two spaces represent the pinnacle of Cambodian education politics. Subsequently, from this position, NEP has been able to shift from structural reproduction to structural elaboration.

To that end, for example, it could begin to focus on raising its concerns and pushing to change both the dynamics of educational governance as well as the content of education policy itself, though this has had to be done in ways that are sensitive to the nature of the context. As one representative of NEP stated, "[We] want to convince the government in a way that won't upset the government" (CAM10, 02). This often means working closely with the technical departments of MoEYS and voicing feedback in the form of suggestions. NEP's director explained the dynamic this way:

> We [(NEP)] try . . . to make sure that we include as much input as possible from the other side [(i.e., MoEYS)] into the draft policy developed by development partners. . . . For example, . . . child friendly schools . . . we work with the Department of Primary Education. We raise our concern, you know, we raise them together. And sometimes we also invite them to conduct a presentation for us, and during that time [NGO] members can make some suggestions and ask some questions and so on. So this is another way, you know, to provide input through the technical department. (CAM19, int1, 12–13)

Yet the clearest evidence of NEP's growth and changing role came from the development partners themselves. Whereas NEP previously had to work through the development partners, they can now push for change on their own. On this point, the words of an education specialist from ADB are particularly revelatory:

> Before [a] couple years ago [MoEYS would] . . . not consider the point raised by NEP . . . [unless] the donors support that point. So, basically, I told NEP, if you find anything interesting, you have to convince DP [development partners] and DP will . . . I mean donors like ADB, World Bank, [those] more influential to the government – send through them, if they support. But now they [NEP] can even do it. You know they can say "hey government! What I have done, we have a team of professionals . . . This is evidence-based, . . . I just want to let you know—and if . . . you need justification, you need any information from this finding, . . . they are ready." You know, they say "Take it, this is my recommendation. Take it." You know, you are not feeding the government, but make the food available if they want to eat, and you know they have choices. (CAM8, 4)

Clearly, then, by integrating itself into the structural conditioning of educational governance over time NEP can now separate itself a bit. It can now plan its own initiatives and strategies for engagement with the government, such as research dissemination events and work with MoEYS departmental directors. The morphogenetic sequence thus begins anew.

Conclusion

As the newest member at the educational policymaking table in Cambodia, NEP is evidence of morphogenesis caused by the new geometry of power in educational governance. The fact that NEP now comprises one of the three pillars of educational governance signals that the structure has, in fact, been modified, which will necessarily affect the agency of all those involved in educational governance just as the initial structural conditioning affected the agency of NEP. Into the future, it remains to be seen whether NEP can engender further structural elaboration.

NEP's ability to become part of the structure of educational governance in Cambodia was significantly influenced by the GCE generally and the CSEF in particular. The organizational agency that produced morphogenesis would have been impossible without GCE's transnational support of NEP through the CSEF, which provided more than simply financial infusions. As noted, it also allowed members of NEP to learn from and to increase its capacity through regional and international meetings of civil society, such that it could more effectively engage with the MoEYS and development partners' structure in Cambodian educational governance.

It should be remembered that although NEP finds itself in a position to influence education policymaking, which was mainly the result of the rescaling of actors and spaces in global educational governance, it may nevertheless legitimize and reproduce state power. As NEP navigates the politics of policymaking going forward, it may find itself agreeing with MoEYS more often than challenging it. Since the government has a history of repressing critical voices in various sectors, it is likely NEP will confront a moment when it has to weigh its institutional survival as a pillar of educational governance with effective policy reform that may be critical of MoEYS. A critical assessment of the impact of NEP on policy is a future topic of research to see if NEP can engender genuine change or whether it becomes a conduit through which state power is reproduced.

Notes

*The present chapter is a revised and shortened version of Edwards and Brehm (2015).

1. Acronyms follow direct quotes from interviews conducted during fieldwork, and are intended to preserve the anonymity of the interviewees.
2. According to Reporters without Borders' World Press Freedom Index 2014, Cambodia ranks 144 out of the 180 countries included (https://rsf.org/index2014/en-index2014.php).
3. See Brehm and Edwards (2014) for further discussion and examples of how the MoEYS manipulates such statistics.
4. For details see Edwards (2012).
5. Volunteer Service Overseas is an international federation of nongovernmental organizations that recruits skilled volunteers to work in developing countries for two years.

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Part 3

Schools

Chapter 4

Pedagogy in Cambodian Schools
A Logic That Governs Teaching and Learning*

Takayo Ogisu

As discussed in the previous chapters, Cambodian primary education has experienced rapid expansion of access in the last decade. As a result, one priority for policy in the primary education subsector shifted from quantitative expansion in 2000s to qualitative improvement in 2010s. One of the measures taken by the government in cooperation with development partner is to improve classroom practices by replacing traditional, "chalk-and-talk" practices with modern, student-centered pedagogies, which are now elaborated and incorporated in a comprehensive framework called Child Friendly School (CFS).[1] Having been piloted since 2002, CFS became a national policy in 2007, thereby implying that all primary schools should employ child friendly approaches. Indeed, reforming teaching and learning is the second dimension of CFS framework and the most important challenge to many primary schools (Table 4.1).

The preferable teaching approach is called Effective Teaching and Learning (ETL). Instead of teachers depositing knowledge into children's minds, ETL advocates more interactive ways of teaching and learning that are based on a constructivist approach to knowledge. They emphasize creative and critical thinking as the most advanced level of learning that will equip students with skills and attitudes necessary to reach their fullest potential. ETL, in short, is not only to change how teaching and learning

Table 4.1   Six dimensions of Cambodian Child Friendly School

Dimension 1	**All children have access to schooling (schools are inclusive)**
Dimension 2	Effective teaching and learning
Dimension 3	Health, safety, and protection of children
Dimension 4	Gender responsiveness
Dimension 5	The participation of children, families, and communities in the running of their local schools
Dimension 6	The national education system supports and encourages schools to become more child friendly

Source: Kingdom of Cambodia (2007). *Child Friendly School Policy*, pp. 5–6.

is actually organized but also to change fundamental ideas about knowledge and how knowledge can be acquired.

However, it has been well reported that changing teaching practices is a challenging mission that involves social, political, and cultural processes. Extensive evidence testifies to the persistence of traditional practices, both in Cambodia and in other contexts (Cohen 1990; O'Sullivan 2002, 2004; Wheeler 1998). This evidence suggests that pedagogies are so deeply embedded both in national and local contexts that it is impossible to simply transplant foreign pedagogy—such as student-centered pedagogies—without intervening in local contexts (Brodie, Lelliott, and Davis 2002; Vavrus and Bartlett 2013). In the case of ETL, as Cambodia tries to make fundamental changes to teaching and learning, it is necessary to understand the logic that governs local practices in order to examine whether or not ETL brings the changes that it intends. Therefore, this chapter aims to (a) unpack the nature of classroom practices and (b) examine how ETL is enacted, especially in early grade classrooms.

Literature Review

It is now widely acknowledged that pedagogy—both the theory of knowledge and the act of teaching—cannot be separated from political, social, and cultural contexts because the latter contain fundamental assumptions about education. Although pedagogy has not been a major topic of comparative inquiry, there exists a line of research that explores how pedagogy is culturally embedded. For example, *Preschools in Three Cultures* is an innovative comparative study that unveiled the extent to which culture, which

is implicit and unconscious, informs day-to-day practices in the United States, China, and Japan. It examined culture as an alternative to "social and political forces" in explaining each nation's systems of early childhood education (Tobin, Hsueh, and Karasawa 2009, p. 224). Employing the so-called video-cued multivocal ethnography, they revealed an "implicit cultural logic" (p. 19) that shapes national characteristics of early childhood pedagogies.

Alexander's (2001) famous book, *Culture and Pedagogy*, is another attempt to unveil the contingency between a pedagogy and its broader contexts by examining primary education in five countries (England, France, India, Russia, and the United States). His comprehensive analysis revealed "cultural models of pedagogy" (p. 556) that are a creation of political, historical, social, cultural, and organizational characteristics. For example, he characterized primary education in Russia as competitive yet collaborative, in England as both individualistic and collaborative, and, in France, teaching was seen as individualistic.

Shedding light on the "logic" or "model" that governs local practices not only helps us understand the national characteristics of a pedagogy, but also allows us to explore the ways in which local actors make sense of and enact a globalized teaching approach. For example, in her study about reading lessons in Guinea, France, and the United States, Kathryn M. Anderson-Levitt (2004) clarified that lesson structures are deeply rooted in national cultural differences even though the local teachers in three countries have similarly adopted global mixed method in reading lessons. Informed by this line of research, I explored a logic that governs discourses about education as well as the act of teaching in Cambodian classrooms.

Data

The discussion that follows is based on the data I collected through ethnographic fieldwork in Prey Veng province during 2012–2013. Prey Veng is located about 90 miles away from Phnom Penh, surrounded to the south by Kampong Cham, Kandal, and Svay Rieng provinces, in addition to Vietnam. With a population of nearly 950,000 within a 1,885 square-mile area, Prey Veng is one of the most populated provinces in Cambodia. The province has worked closely with United Nations Children's Fund (UNICEF) since the 2001/2002 academic year, when UNICEF launched a CFS pilot project in 3 out of 12 districts in this province. It achieved 100 percent CFS coverage in its public primary schools in 2009, just two years after the CFS policy was issued. In this sense, Prey Veng is where

one could observe the direct influence of ETL in classrooms. Out of 34 clusters[2] in the province, I selected Prey Veng cluster in Prey Veng district, which is the provincial capital. I selected this cluster because it allows me to conduct horizontal comparison due to the diversity it entails. Although the cluster is located in the capital, it consists of ten primary schools that represent a wide range in size from a city school with nearly 800 students to a remote school with little more than 100 students.

In order to understand how ETL is enacted in practice, I observed the teaching practices of teachers who taught in grades 1 and 2 in the cluster. Because some teachers allowed me to observe their classes several times, I could observe 32 lessons (27 Khmer and 5 Mathematics lessons) taught by 13 teachers from all 10 schools in the cluster. I also conducted in-depth interviews with all the teachers whose classes I observed. In addition to the classroom practices, I also observed cluster-level teacher meetings, where teachers from nearby schools work together every month to reflect about their practices, prepare lesson plans, and generate teaching aids. In cluster meetings, when teachers were divided into grade groups, I stayed with the teachers from grades 1 and 2.

For the purpose of triangulation, I interviewed actors at international (those from donor agencies), national (those from the Ministry of Education, Youth and Sport [MoEYS]), and subnational (those from provincial and district education officials as well as school principals) levels.[3] Informants are represented with the combination of a letter and a number, such as I9, meaning informant no. 9 from international level, or T2, informant no. 2 from teachers. The letters used are defined as follows: I as international, N as national, S as subnational, and T as teachers.

Logic That Governs Local Practices

Paccekteeh, a Cambodian word meaning technique or technical (Headley 1977, p. 473), is both one of the most frequently heard terms in discussion and, at the same time, the one that troubled me most during the field-work. Participants in my study held that teaching is a technical process to transmit knowledge from teachers to students. The term *paccekteeh* has its root in *paccek*, a Pali word that means single, different or individual, used in words such as *paccek-piek*, meaning separate or individual parts. In the context of teaching, it means similar to repertoire but *paccekteeh* particularly focuses on problem solving. For example, one of the young-est participants in this research mentioned, "I have difficulties to manage

my kids. I need to have *paccekteeh* to make my kids be quiet and listen to me" (Interview, T15). *Paccekteeh* is a set of legitimate steps that lead you to arrive at the solution to the problem.

Paccekteeh as a Means to Transmit Knowledge

In order to unpack the idea of *paccekteeh*, I need to touch upon the importance of religions (Hindu and Buddhism) in the history of Cambodian education. From earlier than the late thirteenth century until the French colonial occupation, children of the laity were educated by monks at temples in Cambodia. Written texts were stored in temples and monks orally transmitted written poems and proverbs. As a result, temples monopolized written texts and played "a significant role in determining what texts were worth knowing" (Ayres 2000, p. 14). This tradition defines education as "predominantly moral enterprise" rather than equipping people with basic literacy and skills that are applicable to people's daily lives (Reimer 2012, p. 289). Oral transmission of knowledge also defined the proper teacher–student relationship as the storyteller and the audience (Needham 2003), in which the audience was expected to receive and recite information correctly. In this context, *paccekteeh* is a set of techniques to enable effective knowledge transmission. This type of thinking is still in effect among many of the participants in this study.

The question about what counts as knowledge is a question of power. In the precolonial Cambodia, monopoly of knowledge, together with an oral mode of teaching, perpetuated the hierarchical social order having a God-King at the top (Ayres 2000). Currently, the national curriculum defines knowledge that is worth teaching. According to a MoEYS official, "The national curriculum states what should be taught in schools. You can find more detailed knowledge and skills to be taught in the curriculum standards. All teachers must teach based on these standards" (Interview, N1). The curriculum embodies knowledge and teachers throughout the country are supposed to teach it as it is. Actually, in Cambodia, "Very little outside the taught curriculum has value as learning" (Pearson 2011, p. 14). In this system, teachers are expected to transmit predefined knowledge in the curriculum effectively and correctly.

At the same time, possessing legitimate knowledge is regarded as power. According to Pearson (2011), teachers try to prevent others from acquiring the same or higher level of knowledge by taking the "know 10, teach 7" approach, as in the Cambodian adage (p. 14). Per this adage, teachers are associated with power because of their possession of both legitimate knowledge (e.g., the national curriculum) and *paccekteeh* to transmit such

knowledge. It follows, then, that teaching everything they know would cause a reduction in their legitimacy.

Paccekteeh and the Teaching Occupation

Teachers are assigned technical (*paccekteeh*) or even mechanical roles in this system. Pearson (2011), reflecting on her experience of working with teacher trainers, described Cambodian teaching culture as follows:

> Trainers expect, indeed are hungry for, new tools, techniques, and materials, but their expectations are of a conveyor belt approach, within which they will receive new content or rules from someone who already knows it and then they will transfer it to others in the same way. There is no perceived need to analyze, or practice the use of, learning in order that delivery be based on real understanding and practical experience. (p. 14)

Teachers are expected to be like a "conveyor" that does not have creativity and flexibility.

This theory of knowledge has implications for the preferred relationship between the teacher and the students. A member of the District Training and Monitoring Team (DTMT) defined the roles of teachers and students as follows: "Teachers give (*aoy*) knowledge to students. Students receive (*totuul*) knowledge" (Interview, S1). According to one consultant, in this context,

> Parents would say, children go to school to learn from the teacher, not from their peers . . . [in] child friendly school, student-centered approach, students feel they don't learn anything from the teacher. They go to school to learn, not to share information among their group. . . . Teachers are supposed to teach students. (Interview, I14)

With the traditional theory of knowledge that is quite different from constructivist epistemology, people may feel it is useless to organize discussion among children who do not possess legitimate knowledge or the techniques to transmit knowledge.

The theory of knowledge also has implications for teacher learning and development. A ministry official described Cambodian teacher training as equipping teacher candidates with *paccekteeh* to teach. By comparing it with Japanese teacher education, this official said,

> We have quite different pre-service training from Japan, because in Japan you train teachers at universities, right? But in Cambodia, no. We train

teachers at teacher training centers. This is quite different because we call in Cambodia, teacher training, not teacher education like you do in Japan....teacher education and teacher training are quite different. In Japan, you use teacher education because, before teaching in the classrooms, the candidates apply to the universities to become a teacher. In the university they don't focus on the teaching techniques, but mostly focus on upgrading their [content] knowledge. What we do is teacher training, so we don't focus so much on [content] knowledge, but we focus more on techniques to teach, so that they can teach after two years [of training]. (Interview, N3)

The comment by the official cited above reflects his critical perspective on the current teacher training system, which does not necessarily succeed in deepening and widening student teachers' content knowledge,[4] and which mostly focuses on *paccekteeh*. Contrary to our understanding of "pedagogical knowledge" and "pedagogical content knowledge" (Shulman 1987) as important knowledge domains that teachers need to develop, this official does not count teaching techniques (*paccekteeh*) as knowledge. *Paccekteeh* is a set of techniques to enable transmission of knowledge effectively, which teacher candidates need to be trained during their preservice stage.

Professional development is also organized based on *paccekteeh*. In-service teachers have school- and cluster-based professional development opportunities where teachers get together in their own school or in the school cluster. These teacher meetings are called *procham paccekteeh* (technical meeting). The primary objective of this meeting is to provide professional development opportunities more frequently and closer to classrooms, and to nurture collegial relationship among teachers. During the meeting, teachers are supposed to reflect about their teaching experiences and exchange ideas about teaching and learning (MoEYS n.d.). Usually technical meetings are organized without having someone who can provide professional consultation, and teachers rarely have opportunities to observe each other's classrooms. Therefore, technical meetings tend to work as a platform where familiar *paccekteeh* is transmitted from experienced teachers to novice teachers (Wheeler 1998).

Investigation of the discourse about knowledge and teaching makes it clear that *paccekteeh* is a logic that provides a basis for the fundamental assumptions about education. It is not just rooted in the local culture, but also in the power structure and the norms of social relationships. *Paccekteeh* is, in some sense, a means to maintain existing power structure where those who control knowledge are at the top, those who possess legitimate

knowledge in the middle, and those have less access to knowledge are at the bottom. It also sustains and strengthens existing social relations such as that of teacher and students.

Paccekteeh in the Act of Teaching

The technical (*paccekteeh*) view toward teaching and learning is also apparent in the other aspect of pedagogy, that is, the act of teaching. The three vignettes below illustrate how this logic underlies actual practices.

Vignette 1: Professional Development Day

After I observed a cluster-level technical meeting, in which teachers created exam problems, I noted in my journal,

> It was a complete division of labor, one teacher worked on Khmer, the other on Math, and the other three teachers on Science/social studies....three teachers started working on creating a Science/Social Studies exam. Because the textbook is written in open-ended style, the teachers must create their own questions that are accessible to their kids. It seemed that teachers found this quite difficult and they discussed it a lot. They were quick to choose the topic/unit that they wanted to put in the exam. The topic they chose was about chicken. But the problem was how they could make exam questions out of the topic. A teacher first wrote an open-ended question, "What do chickens eat?" and showed it to the leader teacher. The leader teacher said, "This might be too difficult. We should give choices so that students can choose the correct one. How about putting like, A: Chickens eat worms and grains, and B: Chickens eat meats." The three teachers agreed and started writing them on the paper. But still they found it difficult to format these choices and finally created two "true" statements! (Observation, May 30, 2013)

Technical meetings were officially institutionalized in 1993, along with the organization of the cluster school system. Although teachers were paid a daily allowance when they participated in this meeting before 2009, MoEYS stopped providing monetary incentives because the participation became a mandate. This negatively affects the motivations of teachers to bother to spend a day in school, when they could earn money elsewhere. As a result, only about two-thirds of teachers in the cluster actually showed up in both of the two meetings that I observed.

Usually DTMT organizes technical meetings on the last Thursday every month in one of the schools in the cluster, and all other schools are closed for the entire day. It lasts about three hours, in which all teachers

first get together to share the day's schedule and information, then they work in grade-level groups, and finally they come back to the whole group to wrap up. In the grade-level groups, teachers are supposed to develop a "teaching program" for each subject that provides a rough idea about what content they should cover during the following month. Sometimes teachers need to work on other tasks, such as generating exams, in addition to teaching programs, or need to participate in training sessions provided by DTMT.

The vignette described above is from the scene where grade 2 teachers just finished generating teaching programs and worked on an additional task to generate exams that would be used in all grade 2 classes in the cluster at the end of the semester. The name "technical" is a perfect descriptor of what I observed—teachers worked on practical tasks (in this case creating exams) by division of labor most of the time. They talked about the questioning techniques, such as multiple choice or open-ended. What they might have learned in this meeting was procedural techniques to convert statements in the textbook to exam questions.

What surprised me most during the meeting was that there were very limited interactions among teachers. One of the teachers worked on preparing a Khmer exam completely by herself, although other teachers were physically in the same room. She did not even check whether others were okay with the topic she chose. She passed her draft to the leader teacher for check, and left the room without waiting for the other teachers to finish. No group discussion that involved all five of the teachers was initiated when they were working. Although teachers engaged in more casual chatting when DTMT members distributed lychees for a snack, the topic was mostly about the election scheduled in July. In the end, teachers did not talk about their own teaching or about their students at all.

Even when they interacted, the discussions centered around procedures (how to) rather than on the content (what) or the purpose (why) of the exam. The three teachers who prepared the Science/Social Studies exam did not discuss, for example, what knowledge and skills of their students they want to assess with this exam, what certain questioning techniques allow students to think about, or why understanding chicken's feeding behavior is important for the students. All the questions they created were what they call "memory questions" to make students recall what they have been taught. No possibilities were discussed to include "critical thinking" or even "understanding" questions—which is one of the most significant assets to the ETL. It was as if completing the task—creating exam questions—was more important than thinking about what the task itself means to students as well as to teachers themselves.

Such a technical view toward teaching and learning is woven into their daily classroom practices, which I now turn to discuss. The following two vignettes are from math and Khmer classes. One is based on a more traditional teaching approach mainly based on lecturing, whereas the other is more activity based and includes ETL techniques. But both vignettes equally illuminate how much procedures are emphasized in the daily practices.

Vignette 2: A Math Class

The teacher (T3), a young male teacher, who taught 29 students in his grade 2 class, first wrote an exercise problem from the last period:

$$\begin{array}{r} 456 \\ -456 \\ \hline \end{array}$$

This problem includes what we call "borrowing" twice. For example, in order to calculate six minus eight in the ones digit, we borrow one from the tens digit (one from five) to make it sixteen minus eight. We must do the same in the tens digit.

The teacher asked the students to solve this problem by themselves on their slates (there were around eight students who did not have their own slates and they worked it out in their notes).

Although students had been taught how to "borrow" in the previous classes, some students forgot to reduce one when they borrowed from the tens digit or the hundreds digit. Even when they correctly borrowed, many students used their fingers, or wrote bars on the slate, in order to calculate subtractions between two-digit and one-digit numbers, such as $16 - 8$ and $14 - 7$. Because in doing 16 minus 8, students need to write 16 bars and cross 8, and then count the remaining, some students got confused in the process. Students around me, therefore, did not get correct answers at first.

After a while, the teacher asked the students to put up their slates so that he could see whether they got correct answers or not. He looked around the classroom and nodded, then appointed a girl, Neth (a pseudonym) to come up to the blackboard and show what she got.

$$\begin{array}{r} {}^3\mathcal{A}\,{}^{14}\mathcal{5}\,{}^16 \\ -2\ \ 7\ 8 \\ \hline 1\ \ 7\ 8 \end{array}$$

The teacher started to explain the procedures step by step while posing short questions:

TEACHER:	"Okay, thanks Neth. Do you remember how to solve this? Where should we look first? From left or right?"
UNKNOWN (STUDENT):	"From right."

T:	"Correct. So at first, we should calculate 6 minus 8. Can we subtract 8 from 6?"
UNKNOWN (MANY STUDENTS):	"No!"
TEACHER:	"No, so we should borrow one from 5. We should change 5 to 4. Now we have 16. 16 minus 8 equals?"
STUDENT (IN THE FRONT):	"Eight."
TEACHER:	"Okay, so I write 8 here. Next, can we subtract 7 from 4? No. So we should borrow one from 4. Here we should change 4 into 3, because we borrowed one, and now we have 14. What is 14 minus 7?"
STUDENTS (IN THE FRONT):	"Seven."
TEACHER:	"Yes, so we write 7 here. Now we subtract 2 from 3 and get 1. So the answer is 178. Clap your hands for Neth!"
TEACHER:	"Okay, before moving on to other exercise problems we should tackle, I want to make sure that you know how to calculate this problem. I explain the procedure once again, and you should repeat after me. I start from the right."
ALL STUDENTS:	"I start from the right."
TEACHER:	"Eight cannot be subtracted from six. I borrow one from five and change it into four."
ALL STUDENTS:	"Eight cannot be subtracted from six. I borrow one from five and change it into four."
TEACHER:	"Now I calculate 16 minus 8 and I get 8."
ALL STUDENTS:	"Now I calculate 16 minus 8 and I get 8."
TEACHER:	"Seven cannot be subtracted from four. I borrow one from four and change it into three. Now I calculate 14 minus 7 and I get 7."
ALL STUDENTS:	"Seven cannot be subtracted from four. I borrow one from four and change it into three. Now I calculate 14 minus 7 and I get 7."
TEACHER:	"Now I calculate 3 minus 2 and I get 1. My answer is 178."
ALL STUDENTS:	"Now I calculate 3 minus 2 and I get 1. My answer is 178."
TEACHER:	"Very good! Now we are moving on to other exercise problems. You cannot solve these problems unless you follow the steps we just learned."

This class was one of the most traditional in terms of how the content was delivered. Tables were arranged in rows and students sat directly facing the

blackboard, where the teacher stood most of the class time. But a clear and logical link existed between the purpose (students become able to calculate subtractions between three-digit numbers) and the flow of the lesson (review and exercise), which I did not see in many more activity-based classes. The teacher succeeded in making a good classroom atmosphere by praising students and letting students praise others. He also involved students in the process by posing a lot of questions.

It was intriguing to see that the teacher made the students verbally express all the steps they should take in calculation. It was very strange for me at first because it sounded like a song and the students murmured it while calculating other exercise problems. But after I spent some time in various classrooms, I learned that this is a quite popular strategy found across grade levels and subject areas. This practice is called *sourt*, to recite or to chant, which consists of the core of teaching method used in temples known as *soutrien*, meaning to learn by heart (Needham 2003). An informant cynically pointed out that Cambodians learn chants to access the highest knowledge, Buddhism, but in many cases people chant a mantra without knowing what it means.

The perspective that underlies the practice of chanting is that knowledge is best transmitted verbally. Needham (2003) pointed out that repetition, memorization, and verbal performance are the norms of classroom practices, based on her ethnographic study about Khmer literacy lessons. She observed "recital elicitation" as the dominant form of learning activities, in which "students are called on to recite an extended portion of the lesson by repeating after the teacher" (Needham 2003, p. 33). Although this observation is about Khmer literacy, it also applies very well to the Math teaching described above. The teacher spent almost half of the lesson hour (about 20 minutes) for the recital elicitation about calculation procedure, which was much longer than the time students actually worked on exercise problems.

The chant also indicates the centrality of procedural knowledge in doing mathematics. As Gu, Huang, and Marton (2004) contended after examining Chinese mathematics teaching, teaching through repetitive procedures is not necessarily the same as doing a rote drills when it involves "procedural variations" (p. 322).[5] The chant involved procedural variations that help "students arrive at solutions to a problem" (Gu, Huang, and Marton 2004 2004, p. 322). It transformed a challenging problem (456 minus 278) into a set of familiar problems (such as 18 minus 8) through the use of small steps (*paccek*) that guide students to arrive at solutions to the problem. Yet it is limited in its ability to develop students' conceptual understanding because no explanation was provided in the chant (and in the lecture) about why the problem should be calculated from the right to

left. It also left no room for the students to think, or be aware of, other possible approaches to calculate 456 minus 278. Therefore, the chant reduced the amount of mathematical thinking that is required to solve the problem by dividing the procedure into small steps.

Vignette 3: A Khmer Class

A female teacher (T2) in her late 30s taught her 36 students in one of the two grade 1 classes in the school. Below is an excerpt from my notes of one of her Khmer classes.

> The class worked on composing words in groups. They worked on creating a word with given cards, on which letters (sometimes a combination of a consonant and a vowel, or a consonant alone) were written. Each group got three cards that are necessary to create a word.
>
> The students were divided into three groups, each group with more than 10 students. Students got together around a table, which was too small for 11 or 13 students, and they had only one set of cards.
>
> In one group, which worked on the word book, *siavpau*, students started identifying the cards one by one:

> STUDENT 1: "Is this consonant / vou /?"
>
> STUDENT 2: "That is / vou /. This one is consonant / so /."
>
> STUDENT 3: (looking at the letter table) "Vowel / ia /. Consonant / so / and vowel / ia /, / sia /. What is the next one?"
>
> STUDENT 1: "Consonant.../ pou /?"
>
> STUDENT 3: "And vowel.../ au /."
>
> STUDENT 1: "So / pau /. Isn't it / siavpau /?"

> Students succeeded in identifying all the cards and the word they were making. They started to look for the word on the blackboard and in the textbook, so that they could know where the consonant / vou / fits in.
>
> After each group successfully figured out what the word was, the teacher asked them to read the word aloud.
>
> After class

> TAKAYO: So, what were the things that you wanted them (students) to learn in the game you did today?
>
> TEACHER: The game I used today was to make sure that my kids are able to decompose combinations of consonants and vowels in order to read words.

TAKAYO: How do you evaluate it?

TEACHER: It was good. Good, because they enjoyed it and all of them could
           read words in the end. They like to study in that way and also
           learn a lot when they are happy, you know.

Managing a relatively large class, compared to 27.4 students per class on
average in Prey Veng city, the teacher succeeded in creating an organized
but warm learning environment in her room. The teacher employed one
of the ETL methods—working on a game in groups—and led the stu-
dents to practice what they had learned. In the group I was with, at least
some of the students initiated discussion and worked together to figure
out the word.

Because Khmer language has a phonologically based writing system
with 67 letters including 21 vowels, early grade Khmer reading instruction
is generally based on phonics teaching. Students first learn the shape and
sound of each of the consonants and vowels, and then learn combinations
of them (Needham 2003; Courtney and Gravelle 2013). Students followed
the steps they had been taught—first to decode letters into sounds, and
then combine them together—and finally figured out the word *siavpau*.
Things thus happened as the teacher intended.

Furthermore, even though vignette 3 looks a lot different from the
vignette 2, in terms of grade level, subject matter, and teaching approach,
the core ideas about teaching and learning are surprisingly similar:
Procedures were at the center of teaching and learning. The game was
designed to establish procedures to read words that involve decoding let-
ters and combining sounds. This fits very well with the overall objective of
this lesson, which was "to make sure that students are able to read words
that contain consonant-vowel combinations," according to the lesson plan.
Students were to follow the steps to construct a word and read it, relying
on their memory about letters (or a letter table). In fact, the game left no
room for thinking and discussions even though it took the form of group
work. This parallels what I observed in the math class (vignette 2) as well
as in many other classes.

Another important aspect of the vignette 3 is the teacher's high evalu-
ation of the activity. As noted, there were many students who could not,
or did not, join the discussion during the group work. It was partly due to
the lack of the cards that the teacher prepared by herself. She "wanted to
prepare additional card sets," at least for five or six groups, but she could
not because she did not have the necessary materials. As a result, each
group had more than ten students including various levels of students. In
the group I was with, three students dominated the discussion and others

just observed. But the teacher still concluded, "All of them [students] could read words in the end."

The above three vignettes sharply illuminate the fact that the logic of *paccekteeh* (technique) underlies local practices. Creating exams (vignette 1), doing subtractions with three-digit numbers (vignette 2), and reading words (vignette 3) were all divided into small steps (*paccek*). It also allows teachers and students to arrive at solutions without using higher-order thinking. Such techniques, often presented as the only effective and thus correct method, make teaching and learning predictable and even mechanical process.

Making Sense of ETL with the Logic of Paccekteeh

Paccekteeh is a logic that provides a basis for the fundamental assumptions about Cambodian education. This logic also worked as a hidden frame of reference within which ETL could be understood and practiced at the local level. Interestingly, local actors are the ones who most strongly engaged in what they think as student-centered principles and thus seriously engaged in what they think ETL is, compared to international and national actors. They held the idea that student-centered teaching involves a lot of questions, activities and games, and group work that is based on a well-written lesson plan. It is also to ensure that students know (*ceh*) the basics: "Before we just cared about whether teachers cover the content, but [in student-centered teaching in Khmer subject] we care more about whether students know how to read and write" (Interview, S2). Student-centered teaching was placed at the opposite end of the continuum in comparison to teacher-centered teaching.

Ironically, the way local actors enacted ETL in practice was so fundamentally based on the logic of *paccekteeh* that they ended up sustaining, not changing, their pedagogies (both theoretically and pragmatically). In particular, both discourse about teaching and learning and the act of teaching indicate that local actors constructed ETL as (1) a set of techniques that automatically led them to student-centered teaching and (2) additional tasks rather than alternatives to their familiar practices.

Local actors understood that ETL is a set of techniques. According to a district education official, "ETL helps teachers. It helps teachers identify problems in their teaching and also gives them *paccekteeh* to improve their

teaching" (Interview, S6). Teachers further connected ETL techniques to student-centered teaching. For example, one of the participants evaluated her teaching as student centered because she has known "how to use ETL techniques for many years" and has "completed all the items on the checklist already[6]" (Interview, T7).

In relation to the first point, local actors also perceived ETL as additional techniques. This meaning is expressed in the following excerpts from interviews: "Now that we have ETL, we have to implement all the items on the checklist. We have more things to do but get the same amount of money" (T3), "I try to use different types of games at least once per day. Sometimes I cannot, especially when I am behind the schedule" (T11). These comments suggest that teachers perceived ETL as techniques that they need to add to their day-to-day workload, which is already quite heavy, rather than replace their familiar teaching.

Local actors constructed these meanings of ETL fundamentally based on the logic of *paccekteeh*. They focused more on the procedure and small steps rather than on a conceptual understanding of ETL or on multiple ways to arrive at student-centered teaching. This is because, for the most part, teachers and other local actors themselves have been taught about and are supposed to implement ETL in a way that is characterized by small steps and by formal procedures, as exemplified by the checklist with more than 180 items. The checklist does not require teachers to think about what ETL is and why they do it; they can just focus on completing the listed items one by one. DTMT and school principles also check the items given in the checklist. For them, completing the checklist is equal to student-centered teaching. This type of logic is surprisingly identical to what underlies the mathematics lesson I discussed in vignette two. As a result, although local actors embraced what they think of as student-centered teaching, they ended up sustaining and strengthening the transmission approach rather than replacing it with a transformative approach.

Conclusion

In this chapter, I have explored the logic that underlies the local discourse and practice of ETL. I highlighted how the logic of *paccekteeh* constitutes the core of Cambodian pedagogy in terms of both discourse about teaching and learning and the act of teaching. I argued that the logic of *paccekteeh*, which is rooted in a traditional theory of knowledge and in social structure, governs how teaching and learning can

take place in Cambodian classrooms. Also, the logic of *paccekteeh* hinders teaching practices that promote students' critical and higher-order thinking. If the current practices that emphasize procedures over critical thinking (or simply thinking) continue, Cambodian education may fail to prepare citizens who can fully contribute to the social and economic development of the nation. I am not arguing teaching procedures are bad and Cambodians must abandon *paccekteeh*, but I do argue that it is necessary to tackle the political, cultural, and social structures that sustain the logic of *paccekteeh* if MoEYS seriously wishes to bring substantial changes in teaching and learning.

Notes

*This chapter is based on the author's dissertation, *How Cambodian pedagogical reform has been constructed: A multi-level case study* submitted to Michigan State University.

1. The original framework of CFS was developed by UNICEF and widely circulated in Southeast Asia during the 2000s (UNICEF 2009).
2. Cambodian primary schools have been grouped into clusters that usually constitute five to nine nearby schools, with one core school and others being satellite schools. Schools in a cluster share resources and organize joint professional development meetings.
3. Interviews were conducted by the author with assistance from native Khmer speakers.
4. According to my observations at PTTC and RTTC in Prey Veng, most of the "content classes" focused on reviewing the textbooks that student-teachers were going to use to teach, rather than introducing underlying theories or concepts to develop a more comprehensive understanding of the content.
5. Teaching with procedural variation introduces multiple methods to solve a problem in order to help students "form a hierarchical system of experiencing process through forming concepts or solving stages of problems" (Gu, Huang, and Marton 2004, 324).
6. MoEYS prepared a checklist that contains more than 180 items to assess to what extent a teacher implements ETL.

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Part 5

Higher Education

Chapter 5

Policy Intention versus Policy Implementation

Disparities in Equity and Diversity in Inclusive Education in Cambodia

Makiko Hayashi and D. Brent Edwards Jr.

Introduction

Since the launch of the movement of Education for All (EFA) in Jomtien (Thailand) in 1990 and the adoption of the Dakar Framework for Action in 2000, many governments have been actively committed to achieving the six EFA goals. In tandem with this initiative, the promotion of inclusive education has been incorporated into the international agenda, and issues of equity and diversity in education have been discussed in numerous government policy documents and international conferences. Implementing inclusive education practices through national policies into education systems is essential not only if countries wish to achieve EFA but also if they hope to continue to meet the needs of their student population in the coming years. Within the discourse of the most recent international discussions directly linked to EFA and the scope of the post-2015 agenda, it is noteworthy to mention here that The Muscat Agreement—adopted in May 2014—highlights keywords on "equity and inclusion" (UNESCO 2014). It is important for developing countries to

seek out innovative ways to achieve inclusive education in low-resource settings, thereby paving the way to educational equity and diversity for all children, but particularly for those who experience marginalization due to their gender, ethnicity, disability, poverty and rural/urban location. This chapter examines Cambodia's policy intentions and level of implementation with regard to both issues of equity and diversity. It does this through an in-depth analysis of the country's inclusive education policies for children with disabilities.

As discussed in chapter 2, Cambodia is a developing country still in the midst of recovery from nearly three decades of violent conflict and the tragedies of the genocide carried out by the Khmer rouge, with political stability returning only in 1991. The long and turbulent history of political and economic instability in Cambodia has created devastating consequences for its people. One result is the large number of landmine and combat victims of all ages who have different types of disabilities and who experience multiple psychological and health conditions. This history also left the majority of Cambodians suffering from starvation and malnutrition in a developing country scarce on resources and human capacity. Yet, despite its challenging socioeconomic and political environment, Cambodia has made progress thanks to strong policy champions and through noble policy intentions for individuals with disabilities and for other vulnerable groups (Powel 2005; Kalyunpur 2011). Indeed, Cambodia is unlike many other developing countries where the tendency is for children with disabilities to be left behind and overlooked completely (Kalyunpur 2011).

In what follows, we will explore the policy intentions of the Cambodian Ministry of Education, Youth and Sport (MoEYS) with regard to various social groups that can be characterized by their disability status, gender, ethnicity, income level, and rural/urban location. The level of commitment implied by policy language will be benchmarked using a pilot rubric on equity and inclusion. The relevant policy documents themselves will be identified through a thorough review of the government's national laws, legislation, policies, administrative frameworks, plans, programs, projects, and budget reports. Such an investigation is conducted using the authors' research framework on equity concepts and equity indicators for better policy development. Furthermore, this chapter will explore whether what has been investigated at the policy intention level reflects the reality of practice at the level of policy implementation. Lastly, the chapter discusses where and why there exist disparities between the two levels of intention and implementation.

Disability in Cambodia

Official statistics on the percentage of persons with disability vary within the country; here, we will make note of official data released in 1999, 2004, and 2008 by the Cambodia Socio-Economic Survey (CSES), undertaken by the National Institute of Statistics (National Institute of Statistics, 2009). According to the official data released in 1999, 2 percent of the total population had disabilities of which 11.4 percent was caused by landmines, 10.8 percent by war, 32.5 percent by diseases, 5.5 percent by traffic accidents, 7.2 percent by other accidents, 20.5 percent from birth, and 12 percent by other sources. In 2004, CSES records 4 percent of the total population having a disability, while the 2008 CSES indicates that 1.4 percent of the total population has a disability. Although these percentages may seem small, they reflect a serious challenge for the government, especially since "98 percent of CWDs (children with disabilities) in developing countries don't attend schools" (UNESCO 2009, pp. 7–8), and since less than 10 percent of them have access to any form of education.

Research Framework

Tracing back the academic literature on equity and education, firstly, the concept of "equity" contains various connotations including parity, equality, justice, fairness, and inclusion. Thus, studies of "equity" can be understood from different perspectives and angles. As stated by the World Bank (2006), "it is a difficult concept, with a history of different interpretations, varying by country and academic disciplines" (p.18). However, when the issue or degree of equity is discussed through the measurement of inequality, there are typical works conducted by Bourdieu and Passeron (1977), Rawls (1972), and Oxenham (1985). These authors discuss the ways in which inequalities are reproduced in schools and how schools can help to overcome those inequalities.

Figure 5.1 visually depicts the relationship between various conceptions of equity, on one hand, and various types of indicators related to policy, on the other hand. In this figure, the various conceptions of equity listed above the blue box at the bottom of the figure are defined in terms of the degree of policy language directed at insuring equity in terms of opportunity (access), process (quality of education assessed through inputs), and internal results (quality of education measured through outputs, outcome
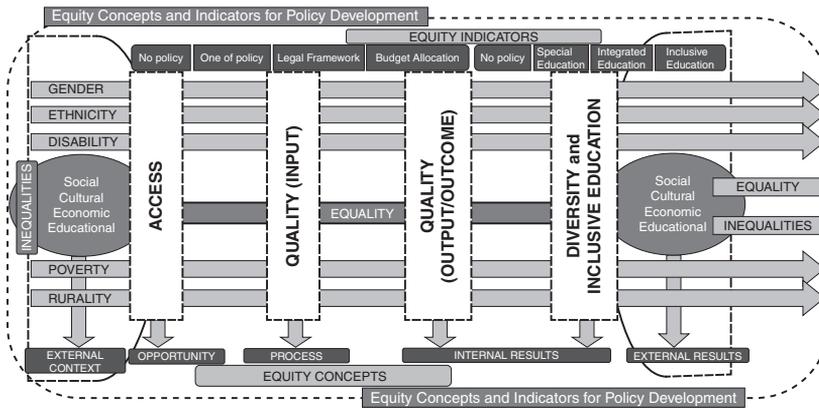
Figure 5.1 Equity Concepts and Indicators for Policy Developments

Source: Authors.

and diversity, and inclusive education). These aspects of equity can be found in the red boxes that run along the lower part of the figure. To continue, this figure shows that these equity concepts can be assessed using the "equity indicators" found in the red boxes that run along the top of the figure. These indicators (or labels) are "no policy," "recognized as a national policy," "legal framework is in place," and "there is allocation of the budget." In order to measure how diverse and inclusive the education is, another set of "equity indicators" including "no policy," "special education," "integrated education," and "inclusive education" is included in the red boxes on the right half of the figure at the top. Also depicted in this figure are those social, cultural, economic, and educational inequalities that exist outside of the school environment, meaning the external context. Depending on how those inequalities interact with the internal context of the school—that is, through the quality of education provided—they may be reproduced or the school may contribute to more equal outcomes. Before proceeding, it should be noted that this figure has been developed by one of the authors (Hayashi) in order to introduce how the resultant concept of equity labeled "diversity and inclusive education" is added as a fourth core pillar and to position this dimension in relation to the three existing pillars when it comes to conceptions of equity.

In suggesting the fourth core pillar here, in addition to looking at equity in terms of the outputs and outcomes of education quality, which is a common approach, the concept of equity that is proposed here also links equity to diversity and inclusive educational practices. This new concept of

equity signifies or is based on the assumption that all children should have access to and quality of education in a diversified and an inclusive educational environment, in contrast to research studies that assume children with special educational needs should be educated in special settings. To explain more in detail, quality of education (when measured only by outputs and outcomes) refers strictly to the cognitive skills that result, at least in part, from the internal characteristics of schools. They are often assessed through school grades and national exams. On the other hand, the other aspect of a school's internal results—the aspect that relates to diversity and inclusive education—is measured through noncognitive skills. This aspect goes beyond acquiring cognitive skills of being able to read, write, and count. Noncognitive skills complement cognitive skills and include social skills (communication) and life skills (vocational training) as well as competencies to make use of those noncognitive skills. Importantly, these noncognitive skills and competencies can instill common values and attitudes that help to ensure equitable treatment of each other and the acceptance of diversity.

Methodology

The main methodology consists of using a standardized benchmarking tool—that is, a rubric—which has been developed by the JICA Research Institute (Dr. Kazuo Kuroda, Dr. Takako Yuki, and Makiko Hayashi) as part of an original pilot activity in an attempt to contribute to the World Bank's SABER (Systems Approach for Better Education Results) domain on "Equity and Inclusion." This rubric will be used as a pilot tool—in the sense that it is the first attempt for use—in order to evaluate education policies according to evidence-based global standards and best practices. It will help countries to systematically examine and strengthen the performance of their inclusive education system. With regard to evidence-based education policies, this framework helps to investigate and assess whether issues related to inclusive educational equity and diversity are addressed in diverse policy-related documents that are developed at the international and national levels, or, in the present case, by the government of Cambodia. We hope that the usage of such a rubric will encourage countries around the world to identify policy shortcomings related to different kinds of disadvantages and various equity and diversity concepts.

Table 5.1 illustrates the example of taking "gender" and assessing whether or not the special needs of those marginalized groups within this category are addressed appropriately in policy documents. In the pilot SABER

Table 5.1 Pilot SABER Rubrics for Equity and Inclusion

A. Three Equity Concepts/Perspectives[a]			
Pattern 1	Pattern 2	Pattern 3	Pattern 4
No government policy for gender equity of access.	Gender equity of resource inputs for quality of education is recognized as one of the national policy goals.	Legal and administrative frameworks are structured to promote and achieve learning outcomes for quality of education in gender. (including international conventions)	Allocation of the national budget is assured to promote and achieve gender equity of access. (Or gender equity of access is already achieved.)

B. Diversity and Inclusion[b]			
Pattern 1	Pattern 2	Pattern 3	Pattern 4
No policy discussions on special classrooms vs. inclusive classrooms.	Special classrooms are chosen by the policy to promote equity (protection of rights) of gender in education (special education).	Integrated classrooms are chosen by the policy to promote equity (equal opportunity) of gender in education. (integrated education).	Inclusive classrooms are chosen by the policy to promote equal opportunity. Regarded as a positive promotion of diversity and quality of education for all children, both boys and girls (inclusive education).

Source: Created by authors based on Pilot SABER Rubric for Equity and Inclusion.
[a] Used for the three equity concepts related to access, inputs, and outputs/outcomes.
[b] Used for the one equity concept on diversity and inclusion.

rubrics, note that there are four patterns, one for each column, and that these patterns correspond to three different perspectives on equity. These perspectives (or patterns identified in looking at policy documents) can be adapted to any of the five categories of socially disadvantaged groups. Moreover, it should be noted that these perspectives on equity of education build on each other. For instance, in Box A, "Three Equity Concepts/ Perspectives," pattern one represents no government policy; in pattern two, there is a national policy; in pattern three, not only is there recognition in national policy goals but, furthermore, there are legal and administrative strategies in place. And lastly, with pattern four, allocation of the national budget is assured. In Box B, "Diversity and Inclusion," there are also four patterns, but in contrast to Box A, the characteristics are illustrated at a different level, that is, through the lens of the notion of diversity and inclusion or inclusive education. Thus, this dimension is evaluated for the extent to which it should be characterized as either no policy, special education, integrated education, or inclusive education. To differentiate the three types of education, firstly, special education refers to the type of schooling for only those with special needs such as disability. Secondly, integrated education refers to the type of schooling where children with special needs are physically integrated into the same school as those with children without special needs but are in separate classrooms with special education. Thirdly, inclusive education is the type of education where both children with and without special needs share the same classes together and education.

For data collection, all available policy documents were gathered related to inclusive equity, diversity, and inclusive education in Cambodia. In the end, a total of 130 documents were compiled for desk review using the rubrics described above. The types of the policy documents collected were (a) Cambodian legal documents (e.g., education law of Cambodia and Constitution of Cambodia), (b) UN reports (e.g., EFA Assessment country reports), (c) policy documents on child-friendly schools, bilingual education, education of children with disabilities, etc., and (d) budget documents, and more.

The pilot-SABER framework was also rearranged into a questionnaire to facilitate interviews and focus groups with relevant stakeholders involved in the supply and demand sides of inclusive education. Actors on the supply side included MoEYS policymakers, provincial and district office of education officials, school directors, teachers, community representatives, parents or guardians, and students. On the demand side were parents and students, including parents with and without children with disabilities and students with and without disabilities. In all, 88 actors were interviewed from Phnom Penh Thmey, Takeo, and Kampot. Across these interviewees, five schools were represented (one special school with primary to secondary levels, one integrated school with only the primary, and three inclusive schools, one with primary education and two lower secondary schools).

Findings

In this section, part one will consist of findings based on the desk review of collected documents in Cambodia using the pilot rubrics on equity and inclusion. It assesses four types of equity concepts (equity of access, equity of inputs, equity of outcomes, and diversity and inclusion) along four dimensions (national constitution and law, national policies and plans, administrative frameworks, and allocation of the national budget). Having conducted a thorough review of the documents, we explore the degree and level of policy language relevant to achieving the four pillars of equity concepts in order to benchmark polices of Cambodia for better policy development. To be more specific, the equity indicators look at whether marginalized groups (as defined by their gender, ethnicity, disability status, income level, and geographic location) are mentioned in the policies and, if so, whether there is mention of it in the National Constitution and the Education Law as well as other legal frameworks and, further to that, whether there is any type of budget allocation provided. Then, in part two of this section, we examine—based on interviews and school visits—the extent to which the identified policies are put into practice.

Part One: Policy Intentions Related to Inclusive Equity, Diversity, and Inclusive Education in Cambodia

The collected documents have been classified into national laws, legislation, policies, administrative frameworks and plans, programs, projects, and budget documents.

Area 1: Equity of Access in Legislation, Education Systems, and Budget Allocation

International conventions already ratified by Cambodia include the following:

1. The International Covenant on Economic, Social, and Cultural Rights
2. The International Covenant on Civil and Political Rights
3. The Convention against Torture and Other Cruel, Inhuman, or Degrading Treatment or Punishment

4. The Convention on the Rights of the Child
5. The Convention on the Elimination of All Forms of Discrimination against Women
6. The Convention Relating to the Status of Refugees and Its 1969 Protocol
7. The Convention on the Elimination of All Forms of Racial Discrimination
8. The Convention on the Suppression and Punishment of the Crime of Apartheid
9. The Convention on the Prevention of the Crime of Genocide
10. The Supplementary Convention on the Abolition of Slavery
11. The Slave Trade and Institutions and Practices Similar to Slavery
12. The Convention for the Amelioration of the Condition of the Wounded and Sick in Armed Forces in the Field
13. The Convention for the Amelioration of the Condition of the Wounded, Sick, and Shipwrecked Members of Armed forces at Sea
14. The Convention Relative to the Treatment of Prisoners of War
15. The Convention Relative to the Protection of Civilian Persons in Time of War
16. The Convention on the Rights of Persons with Disabilities

Cambodia has ratified quite a large number of international conventions, indicating a desire to follow and maintain international human rights rules and regulations. The government of Cambodia assures equity of access to educational rights under the umbrella of international conventions, at least in policy documents.

National Constitution and Law

According to the Constitution of Cambodia (Kingdom of Cambodia, 1993) and the Education Law of Cambodia (MoEYS, 2007), primary and lower secondary education are free and compulsory. Moreover, the Constitution states, "The State shall provide free primary and secondary education to all citizens in public schools," meaning that the provision of education should also be free for diverse groups of students that can be defined by their gender, ethnicity, disability status, income level, and geographic location. The Education Law of 2007, Article 39 states that "disabled learners have the same rights as able learners." Moreover,

> disabled learners of either sex have the right to study with able learners if there is sufficient facilitation in the study process. Disabled learners who are

AQ: Please check if the change to Kingdom of Cambodia, 1993 is OK here.

not able to learn with able learners, even with facilitation, have the right to receive special education in separate special classes at community schools in their locality. (MoEYS, 2007, Article 39)

Thus, per these foundational documents, it can be seen that equity of access is legally guaranteed for nine years.

National Policies and Plans

As a result of Articles 38 and 39 of the Education Law, the MOEYS developed in 2008 the National Policy on Education for Children with Disabilities (MoEYS, 2008) to ensure the equal rights of all children with disabilities to an equal education with nondisabled children. Another policy—the Policy on Non-Formal Education—is also key in this area. It states:

The Royal Government is concerned about...All people of both sexes and all races living in the Royal Kingdom of Cambodia who don't have access to public school (the formal education system): poor people and those living in difficult circumstances, working children and youths and the out-of-school, ethnic minority children and youth, adults aged 15 to 45 years. (Kingdom of Cambodia, n.d., p. 2)

Moreover, for groups defined by gender, income level and geographic location scholarship programs for primary and lower secondary students have been documented not only in the Cambodia Education Sector Support Project, launched in May 2005 with financial assistance from the World Bank (World Bank, 2005), but also in the 2006–2010 plans of the MoEYS, as presented in the Education Sector Support Program for that period (MoEYS, 2005). In addition, for ethnic minorities, bilingual education programs are run in primary schools, according to the Policy for Bilingual Education (MoEYS, 2013). For disability, a World Bank prevalence study on students with low vision was conducted in 2010 and, subsequently, a support program was piloted in 2010–2011. Following from this, the MoEYS plans to provide low vision and hearing supports for three years (2014–2017) with trust funds from the Global Partnership for Education, according to a representative of the World Bank. And, lastly, in the Education Sector Plan 2014–2018, inclusive education is stated to be a priority area. Overall, then, it is clear that various policies and plans have been developed to promote equity of access to inclusive education and schooling for every Cambodian child.

In particular, special policies and plans have been developed to further progress the educational access of particular disadvantaged groups of children.

Administrative Frameworks

In the Primary Education Department of MoEYS, there is the Special Education Office, which is in charge of inclusive education. In the Secondary Education Department, there is the scholarship office. Also, there is the Department of Non-Formal Education, and at the provincial and district levels, there is the Provincial Office of Education and the District Office of Education. However, there is no division or unit at the subnational levels of education administration in charge of diverse groups of students.

Allocation of the National Budget

In terms of budget allocation, the government has in fact dedicated funds—though the amount is unknown—for scholarships (mentioned above).[1] Apart from this example, however, the only other clear instance in which the government has directed at least some resources—though, again, to an unknown extent—to address equity is in relation to bilingual education, though here it should be noted that the government has again worked with an international organization, namely, CARE, an international humanitarian relief agency. While the bilingual education program has not yet reached all types of ethnic minorities, it is being expanded to cover the remaining groups.

Ultimately, allocation of the budget to ensure equity of access to education is an area where much progress is needed. This is particularly so in that the budget as a whole still is very small, and most of the policies and programs in this area depend heavily on international donor aid and the support of nongovernmental organizations.

Concretely, document review indicated that less than 1 percent of the program budget of the Primary Education Department is being allocated for disability initiatives in the years 2012 and 2013. Moreover, 0 percent of the program budget is allocated for bilingual education and accelerated learning for this same time period. Furthermore, in terms of overall budget, for the year 2013, the total financing for the Primary Education Department was US$36,078,245, excluding teachers' salaries and operational costs. From this total, US$11,347,550 is from the government with the remaining US$24,730,695 coming from development partners and nongovernmental organizations.

Area 2: Equity of Resource Inputs for Quality of Education in Legislation, Education Systems, and Budget Allocation

National Constitution and Legal Provision

The national constitution includes a statement that relates to equity of resource inputs for quality education for diverse groups of students defined by gender, ethnicity, disability status, income gap, and geographic location. Specifically, the constitution states: "The State shall protect and upgrade citizens' rights to quality education at all levels and shall take necessary steps for quality education to reach all citizens" (Constitutional law: Article 65). Moreover, the Education Law includes the following language: "The State shall promote the quality of education to satisfy the basic education and professional needs for the careers of the learners to better improve their capacity and to enable the learners to efficiently participate in the development of the country" (MoEYS, 2007, Article 21).

Also, in 1996, the Ministry of Social Affairs, in cooperation with Cambodian Disabled People's Organization and Disability Action Council, drafted the Law on the Protection and the Promotion of the Rights of Persons with Disabilities (MoEYS 2009). The Cambodian National Assembly adopted the law on May 29, 2009. The goal of this law is to protect and promote the rights of persons with disabilities within the Kingdom of Cambodia. Article 28 of the Law on the Protection and the Promotion of the Rights of Persons with Disabilities states: "The State shall develop policies and national strategies for the education of pupils and students and disabilities such as: 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" (MoEYS, 2009). Article 29 of this document then states:

> The Ministry in charge of education shall develop programmes for educational establishments to provide accessible facilities for pupils and students with disabilities such as buildings, classrooms and study places, sign language and Braille, educational techniques and pedagogy corresponding to the types of disabilities, study materials or other equipment to assist pupils and students with disabilities. Training and teaching materials for teachers or professors and others corresponding to the actual needs of each pupil and student with disabilities. (MoEYS 2009)

The overarching point here is that, according to a number of important texts, Cambodia has indicated its high level of policy intentions when it

comes to equity of resource inputs for quality education for marginalized groups.

National Policies and Plans

In terms of national policies and plans, equity of resource inputs has been targeted through various policies and plans, such as the Child Friendly School policy[2] as well as newly developed teacher training manuals on inclusive education for children with disabilities in 2012. Through these few examples, it can be inferred that the Government of Cambodia has taken some meaningful action—or has allowed partner organizations to take such action—related to adopting policies and plans to facilitate the development of better-quality education for all children in the country. That said, future research should further investigate whether these and similar actions are being financed with the government's funding or with funding provided by other actors, and with what implications.

Administrative Framework

Administratively, although the Special Education Office and the Scholarship Office—both located at the central level—receive funds annually to perform their planned activities, there are no structures at the subnational level to make progress in this area. The Ministry of Women Affairs and the Ministry of Social Affairs are two responsible ministries other than the MoEYS in charge of equity of resource inputs for quality of education for diverse populations defined by gender, ethnicity, disability status, income level, and geographic location. Further research should be done not only to investigate the subnational structures employed by these ministries but also to assess the lessons that could be learned from the ministries for MoEYS.

Allocation of the Budget

The budget is allocated based on the previous year's allocations; the problem, currently, seems to be that the resources do not cover the entire scope of needs of those target groups defined by their gender, ethnicity, disability, poverty, and rural/urban. Thus, although it can be said that the government and donors favor allocation of the budget to ensure access to schooling for individuals coming from socially disadvantaged groups, when it comes to insuring their quality of education, this is not yet an area where the government or donors direct their attention.

Area 3: Equity of Learning Outcomes for Quality of Education in Legislation, Education Systems, and Budget Allocation

In this particular area, our review shows that hardly any policy work has been done. Although National Assessment Tests on mathematics and the Khmer language have been conducted regularly for grades 3, 6, and 9, there are no set initiatives yet to manage and monitor the progress of student learning outcomes for socially disadvantaged groups. Furthermore, the Special Education Office in charge of inclusive education for disability groups, ethnic minorities, and those children in need of accelerated learning does not manage the relevant data directly, which makes it difficult to assess the performance and growth (or decline) in performance of these students.

Area 4: Diversity and Inclusion for Quality of Education

The review of documents revealed no statements related to how schools and/or classrooms should be separated according to each diverse groups of students defined by their gender, ethnicity, disability status, income level, and geographic location. That is to say, neither in the constitution nor in the laws, policies, plans, and administrative structures of the government did we find mention of how groups should be treated in an isolated fashion.

Similarly, in terms of the budget, there is also no allocation specifically for the development of schools and/or classrooms only for disadvantaged groups defined by gender, ethnicity, disability status, income level, and geographic location. However, in line with the concept of integrated education, the government has in fact allocated some of the budget (though the amount is unknown) for the development of schools where children with special needs are physically integrated into the same school as those with children without special needs, but are in separate classrooms with special education. In addition, and in line with the concept of inclusive education, there is government budget allocation (though, again, an unknown amount) specifically for the development of schools and/or classrooms that should incorporate diverse groups so as to promote equity in education (equal opportunity) and also to promote diversity and quality of education for all children, both for those with and without special education needs. The takeaway here is that Cambodia is trying, at least to some extent, to create inclusive equity with diversity, meaning that it is trying to either

integrate or include both children with and without special education needs into one classroom setting.

Part Two: Policy Implementation of Inclusive Education for Children with Disabilities in Cambodia

As has been indicated, the Government of Cambodia is guided to some extent by the principle of either integrated or inclusive education based on its national constitution, law, policies, plans, administrative framework, and budget allocations. This section moves on to discuss the extent to which these policies related to inclusive education are implemented. Moreover, as for the implementation of inclusive education for children with disabilities, it is found that various interpretations exist with regard to whether inclusive education should be implemented for those with disabilities, as will be discussed. Lastly, it should be noted that the types of disabilities addressed here are limited to deaf, blind, and those with light to moderate intellectual disabilities including autism and learning disabilities. The present study is restricted to investigating these types of disabilities in practice because they are the only types of disabilities for which inclusive education programs currently exist.

Implementing Inclusive Education in Cambodia

Inhibiting Factors

The implementation of inclusive education has been examined through interviews with actors from both the supply and demand sides of education. In terms of the former, the school directors have questioned the desirability of inclusive education implementation in the following way: "the class arrangement . . . I arrange that in one class allow only three disabled students to study with non-disabled students. And the purpose is in order to reduce the burden to the teachers in teaching the disabled students" (school director P). Also,

> the burden on the teachers is high as some teachers have to note down or print out the lesson in triple size in order to enable the students to see clearly. This means that the teacher has to do extra work and there are not enough support from the government including budgetary allocation as well. (school director P)

As for the schoolteachers, "if I have the choice to choose which class to teach, I would prefer to choose to teach only the non-disabled students" (schoolteacher A). She goes on to say,

> It is more easy to teach just the non-disabled students, but it is the guideline or recommendation from the ministry of education that I have to teach both of them together, so I just follow the policy and gives more effort to try and teach both non-disabled and disabled students. (schoolteacher A)

On the demand side, some of the children without any disabilities have spoken about some of the negative aspects of being included in the same classrooms as their disabled peers. For example, "I think it is better to separate the blind and deaf students in another class, because then they can learn more better with the special teachers." Furthermore, "some of the deaf students fool around during class time and some of us cannot concentrate much" (student without disability T). Such evidence shows that students without disabilities find it difficult to study with their disabled peers. In other words, it implies that there are certain barriers to implementing inclusive education from the perspective of nondisabled students.

Facilitating Factors

On the other hand, positive views were expressed by actors from both the supply and demand sides of education. For example, as one school director stated:

> The solidarity in the friendship between students disabled and non-disabled has been enhanced because the normal students have special care for the disabled students. Especially during class, when they sit next to each other, and when the teacher read some lessons and when the disabled students cannot catch up, then they can ask their non-disabled friends to explain to them and then the non-disabled students are kind to tell them. (school director P)

As for the schoolteachers and parents of those children without disabilities, there are multiple examples of their positive perspective on inclusive education. For example, one schoolteacher stated,

> Inclusive education and inclusive policy is really from the Ministry. And even that we have diversity, it is a good environment to the students and to the teachers because for the students, it showed that we don't discriminate the disability students and also to enable them between disabled and non-

disabled students to help each other and to show about the communication between the two of them and instead if we keep or separate the disabled and non-disabled students, I think it will show about the discrimination and isolate them from the society. (schoolteacher M)

Other teachers and parents expressed similar perspectives to schoolteacher M:

It's kind of the encouragement, the external encouragement to the other non-disability students to study more harder. (schoolteacher C)

But in Cambodia, it is a kind of difficulty for the teachers to put them [the students] together, but it will also show some kind of non-discrimination. If we put them in a different class, it seemed a little bit to discriminate between the two of them. (schoolteacher C)

I told my children to not discriminate against them and always be friendly with them. (parent H)

We are human beings, the same, but the thing is that, physically, they are not fully functional. For me, I am fine that my child is studying with the disabled children. (parent K)

We are human, we have equal right, the same right. (parent K)

I advise the children to see them as a model and I explain to my children that some of your classmates are disabled, they should try to study hard, they can learn and get a good score and how about you? You are normal, why don't you try to study? (parent T)

I observe some changes with my children toward their behavior and attitude at home, they have more critical thinking than before, and also feel more pity to disabled students. (parent Y)

The above quotes from schoolteachers and parents of those without disabilities tell us that, although it may be difficult to realize inclusive education for children with and without disabilities, they all believe it is a positive approach to education. Not only is it positive, but the schoolteachers all agree that despite the difficulty that exists, they need to give it their best effort to implement inclusive education on the ground.

As for those children with disabilities, their perspectives were also positive regarding inclusive education. For example:

I prefer to study with the normal students because they can help me to read the lesson for me. (student with disability M)

I am happy to study here because I can have more friends and also learn more experiences from the non-disabled students. (student with disability S)

> I have no difficulty because I have a good friend who is one of the non-disabled students who sits behind me and always helps me to read what the teacher wrote on the black board. (student with disability T)

> I prefer the current educational setting to study with the non-disabled students because it can increase my quality of learning because I can get support and help from the non-disabled students to read the lesson for me. And when I studied in the special school only with the blind students the same as me, disabled classmates cannot help him in reading the lesson. It means that we are the same blind and cannot help each other and cannot get any support from the other non-disability students. It provides me with the experiences of life to be living together with the non-disabled students, and I expect that when I have a job in the future, I will work with non-disabled people. So, I think that it is good that I have experience already with the non-disabled students. (student with disability H)

In the above statements, students with disabilities all express their strong willingness to study in an inclusive educational setting. They are very hopeful about studying together with their nondisabled peers. This evidence suggests the significance of promoting and creating inclusive educational settings.

Discussion and Conclusion

In conclusion, in terms of policy intention, the equity concept of access is assured for all social groups defined by gender, ethnicity, disability status, income level, and geographic location. The policy intention is there for various socially disadvantaged groups to ensure access of education and schooling as an opportunity for all children of Cambodia. However, as we move from equity in access to equity in inputs, outputs, and outcomes, we observe that equity is not assured for all social groups. Equity concepts related to process (inputs) and internal results (outputs/outcomes) are not reflected in Cambodia's current policy intentions. As for policy intentions related to diversity and inclusive education, equity is also limited, this time to social groups defined by their disability and ethnicity (or, more specifically, their first language). Overall, then, we see that policy intentions related to equity on diversity and inclusive education are not targeting all social groups of children.

In terms of policy implementation, we observe similar trends to that of policy intention, though the targeted social groups are fewer here. The findings in this area suggest to us that the relevant policies are not being implemented as they should. First of all, across the board, groups defined

by their disability status and ethnicity are the only ones targeted for policy implementation. That is, for each form of equity discussed here (i.e., access, inputs, student outputs and learning outcomes, and diversity and inclusive education), there is a clear gap between stated policy intentions for access and that which is the focus for policy implementation.

Thus, it seems difficult for the government of Cambodia to maintain a focus on all four equity concepts simultaneously. One reason for this is because the government places the highest priority on the equity concept of access, and is not currently prioritizing equity of inputs, outputs/outcomes and diversity, and inclusive education. This is, in turn, a result of issues related to both the budget and sensitivity on the part of the Government of Cambodia. In terms of the budget, because the Government of Cambodia considers access the most important for all social groups, it has not yet shifted its resources to other aspects of equity. This is closely related to—or is perhaps a consequence of—the issue of "sensitivity," meaning that, in this context of ongoing postwar recovery, the Government of Cambodia has consciously decided that the realization of various equity concepts for each and every social group is not high on its agenda, given the situation of the country and the fact that it has many other issues and challenges to tackle other than the socially disadvantaged groups. In the context of competing demands for resources, the issue of inclusive education for all social groups is still an emerging topic.

Going forward, one issue to address is the problem of the communication at and between the central and the local levels, including the provincial offices of education and other actors from both the supply and demand sides of education. By communication problems, we refer, for instance, to the fact that, while the central government understands equity concepts in certain ways, as the levels change from the central level to the local level, there are obstacles to the dissemination of information about equity concepts. Thus, not only are there challenges when it comes to communicating information, but there will be additional challenges related to ensuring that all actors arrive at the same understanding of the various forms of equity. These challenges will need to be addressed in the future in order to make progress related to equity in education for all social groups.

At the same time, it should be noted that there are issues around communication going from the local to the central levels. Here, we do not mean the local level from the eyes of provincial and district offices of education, but rather from the perspective of actors who constitute the supply and demand sides of inclusive education. In particular, students and teachers have expressed their perspectives on the challenges related to implementing inclusive education. At the same time, though, the desirability of putting forward inclusive education has been challenged on the grounds

of how difficult it is for both the teachers as well as the students to study in one classroom setting. As noted, some students without disabilities have expressed concerns when it comes to studying with students with disabilities, especially the deaf students. These perspectives need to be communicated to the district, provincial, and central levels of the education system. Only then can the relevant governmental actors create information campaigns, professional development programs, and/or other responses in order to address the resistance that is present at the school level.

Finally, a few additional hurdles exist for the Government of Cambodia. First, for children with disabilities, there is lack of reliable data on disabilities. The government's Education Management Information System, for example, does not currently classify the different types and levels of severity of disabilities. Secondly, and importantly, there is limited capacity and expertise in the area of disabilities within MoEYS. This makes it difficult to address the limitations highlighted in the current chapter. It also makes it hard to identify and to implement sustainable, scalable, and affordable inclusive education models. Third, there is a lack of health screening at the school level, with implication being that children with disabilities are under-identified and thus are not receiving appropriate support. Fourth, and as already discussed, there is limited budget for nationwide inclusive education expansion, not just for teacher training and monitoring but also for service delivery at the school level.

In terms of recommendations that could be made for the Government of Cambodia, the following are suggested. These suggestions flow from the above discussion of obstacles. First, and most basically, there is a need to increase budget for education for children with disabilities. Second, the data for children with disabilities should be published through the Education Management Information System with clear disaggregation by age, type, and severity. Third, in addition to hiring additional staff and specialists to work with various marginalized groups, the government should also invest in training and degree programs for these staff. Fourth, in terms of the issue of miscommunication between the central and provincial and district levels, more training should be conducted for provincial and district offices of education to advocate the concept of inclusive education, and this should be accompanied by adequate dissemination of information. Fifth, and lastly, the government should identify and adapt a replicable model for serving students with disabilities. In the future, by increasing funding, enhancing capacity, improving data collection, strengthening communication, and revising policy, the government would be able to make great strides in its provision of services—and in the realization of equity—for marginalized groups.

Notes

1. In part, it is difficult to ascertain the amount of government funding directed at such initiatives because, even where project documents mention financing, it is often not clear how the resources contributed by the government are allocated to the various program components. For example, in the case of the Cambodia Education Sector Support Project, there were numerous objectives that included decentralization, school construction, and the development of a national assessment monitoring system, in addition to scholarships (World Bank 2005a). Thus, while documents indicated that the government would contribute US$2 million to go along with the US$28 million received in grants and loans from the World Bank, it is not clear what percentage of the funding was ultimately directed for each aspect of the project.

2. The Child-Friendly School model is one that has been promoted by the United Nations Children's Fund since the early 2000s. The idea is to complement and build up on students' background while at the same time helping children to overcome those barriers that would prevent them from enrolling or remaining in school. In practice, this means, for example, developing school feeding programs and promoting inclusiveness and gender sensitivity, as well as developing national policies that ensure free enrollment, prevent corporal punishment, facilitate the use of local languages in schools, and that help disabled and nontraditional students to complete their education (UNICEF 2010). In Cambodia, the implementation of this model is supported by a number of nongovernmental organizations (UNICEF, n.d.). It is now understood that the Child Friendly Schools Policy for Basic Education is the fundamental approach to strengthening the quality of education in Cambodia for all students in primary and lower secondary schools, through at least 2018 (MoEYS, 2014).

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Chapter 6

The Structures and Agents Enabling Educational Corruption in Cambodia

Shadow Education and The Business of Examinations

William C. Brehm

Because we are too poor to pay for extra lessons, we did not do well [on the examination.]

—Student (grade 12)[1]

Teachers will always help their students [pass the examination] because if lots of students fail the exam, it's the teacher's fault. But the teachers don't usually tell everything that's on the exam; they just tell some points for students to learn.

—Teacher (grades 7–9)[2]

A central feature of the contemporary education system in Cambodia is the perceived necessity of extra classes in order for students to pass monthly, semester, and national examinations. Although this perception is not always correct because sometimes more students pass exams than take extra lessons, it does nevertheless highlight the issue of educational corruption in and through a system of shadow education.

Shadow education is a general concept that refers to extra classes such as private supplementary tutoring. Extra classes in the Cambodian context, referred to as *rien kuo*, are the type of shadow education that is broadly

defined as fee-based educational activities that "elaborate…on regular schooling" (Bray and Kwo 2014, 1).[3] The term "elaborate" can take different meanings, ranging from teachers providing remedial help on concepts not adequately understood during mainstream schooling to selling examination answers to students (Brehm, Silova, and Tuot 2012).

The latter meaning of the word "elaborate" is where educational corruption enters the shadow education system. Research on educational corruption in shadow education has typically been conceptualized in two ways. The first way focuses on teachers as behaving in ways that abuse their publicly entrusted power for private gain (Heyneman 2009, 2011). This perspective blames teachers for individually corrupting the system of public education. The second way focuses on the system and context in which teachers operate that force them into corrupt actions (Johnson 2011). This perspective blames the system of education and the broader political-economic structures it is embedded within for creating the circumstances where corruption is a routine behavior. In both cases, the act of corruption is generally agreed upon: teachers who take money from students and reward them with better grades or examination questions in advance are *corrupting* the public education system. It is the cause of this problem that is debated: either it is individual behavior or it is socially determined.

The quotes at the beginning of this chapter are typical in Cambodia and highlight the different ways to understand the causes of corruption vis-à-vis shadow education. Many students believe they must attend their public schoolteacher's extra classes after school hours in order to do well on examinations; and teachers feel pressure from principals, government officials, and/or parents and students to ensure students pass examinations, even if that means providing answers at times. Cutting through these experiences are fees. Students often have to pay fees to attend extra classes, and teachers, who often claim their government salary is insufficient, rely on this extra income. These dynamics support the proposition that the cause of corruption results from both individual behavior and a socially determined outcome of the system.

There have been mixed reactions to educational corruption. Recognizing deficiencies like low teacher salary, overcrowded classrooms, and double shift schooling in the education system, a common strategy by nongovernmental organizations (NGOs), is to provide scholarships (i.e., money to pay teacher/school fees) to students in order for them to attend extra classes. Although this perpetuates the system of shadow education, many NGOs justify the scholarships in the language of equal opportunity. Even some teachers allow poor students to attend extra classes for free or do not mandate a fee at all and instead ask for a contribution,

indicating they too understand the structural inequality that results from a necessary fee-based shadow education system and high-stakes testing. On the other end of the spectrum, students who are too poor to afford the fees of extra lessons—and do not receive NGO scholarships—often blame teachers for unfairly providing help and/or answers to students who do attend extra lessons. The government too faults teachers for extra lessons, citing purposefully inefficient teaching during mainstream school hours as the reason for extra lessons.

In this chapter, I expand on the educational corruption and shadow education research by combining both conceptualizations of the reasons for the phenomenon. Neither succumbing to individualizing behavior (*blame the teachers!*) nor social determinism (*it's the system!*), this chapter conceptualizes educational corruption as an emergent property of social relations within both the structures and agents comprising an education system in specific spaces, places, and times. The historic structures of education at a given time produce certain vested interests, opportunity costs, and situational logics of action, mainly routine, habitual action, within which teachers and students must act. Out of these structures emerge the possible condition of action that could be labeled "educational corruption." But corruption is not a given state—something that is to be predetermined. Agents have the choice to act in different ways within particular conditions, sometimes (re)producing corruption but sometimes not. As such, agents sustain and/or transform preexisting structures through their actions and interactions with other agents over time, which is mediated through reflection (i.e., the mental consideration by an agent of themselves in relation to his or her social context). Educational corruption from this perspective emerges out of different types of agential behaviors that can reproduce/sustain or change/transform the structures that allow for the possibility of corruption. From this conceptualization, educational corruption is a complex social phenomenon that emerges from structures, contexts, agents, and reflexivity, which are bounded by space, place, and time.

The chapter proceeds by first setting the scene in contemporary Cambodia by drawing on a range of research studies, including the author's extensive research on this topic (Brehm forthcoming). The focus is on the trends in the shadow education and examination systems in Cambodia. With the Cambodian context in mind, the chapter next discusses educational corruption and shadow education more generally, separating studies between individual behavior and socially determined conceptualization of corruption. The following section lays out an alternative conceptualization of educational corruption and shadow education that connects individual behavior and social structures in more nuanced

and complex ways than the research studies reviewed in the previous section. The chapter concludes by suggesting that the reconceptualized notion of educational corruption requires different context-specific pre-scriptions to it by policymakers.

Shadow Education

Cambodia is an interesting case of shadow education because households spend a large percentage of income on education, particularly extra les-sons taught by government schoolteachers after formal school hours. Bray (1996) first uncovered this finding in a multicountry comparison of educational financing. Out of nine countries in Asia, Cambodian house-holds financed nearly 80 percent of educational resources compared to the government's 20 percent. Vietnam was the second highest country in the sample with over 50 percent of education costs financed by households. In the remaining countries, household financing accounted for no more than 30 percent of total educational expenditures.

The high household costs to education have mainly been attributed to structural deficiencies—low education expenditures by the government (and therefore low teacher salaries), large class sizes, and too few teach-ers—caused, in part, by nearly 100 years of colonialism and 30 years of civil war (Brehm and Silova 2014a). This has resulted in teachers perform-ing various "tricks" to extract additional money from students for a variety of services in order to supplement low salaries (Dawson 2009). Shadow education is also used to teach the government curriculum, and is said to contribute to socioeconomic class divisions within society (Brehm Silova, and Tuot 2012).

Since 1994, research studies in Cambodia have addressed shadow edu-cation, specifically *rien kuo thoeumda*, or regular private tutoring. Regular private tutoring is fee-based classes taught by mainstream schoolteachers. My ongoing research into this phenomenon suggests this type of tutoring emerged in the late 1980s or early 1990s and likely did not exist previously. It is considered "regular" (*thoeumda*) because extra lessons look similar in terms of class size and student makeup to mainstream classes and are a common feature in many—if not most—schools.

Previous studies have looked specifically at this type of shadow edu-cation. They found student participation in shadow education increases with grade level. In 1999, 22 percent of the schools sampled had shadow education in grade 1 (Bray 1999). This increased to 51 percent in grade 6. Bray and Bunly (2005) likewise observed an increase in shadow education

participation in a school in Kampot province from 0 percent in grade 1 to nearly 80 percent in grade 6.

Another trend has been that participation rates have generally increased over time. In Bray (1999), the median rate of shadow education participation was 36.5 percent; in Bray and Bunly (2005), the median rate was 52.5 percent; and in Dawson (2009) the median rate was 71 percent. This trend does not hold, however, in a study completed in 2012. Brehm and colleagues (2012) found that 41 percent of grade 6 students attended private tutoring, which is a decrease from Dawson's (2009) data and closer to the median rate in Bray and Bunly (2005).

The divergence in data reported in 2012 requires a closer look at Dawson's (2009) study, which was conducted in 2008. Why was there a spike at this time? Notwithstanding the differences caused by methodological variation across the studies, the divergence needs to be contextualized in the global political economy.

A global food and financial crises occurred at the time Dawson collected data (*c.* 2008). Global food prices began rising in the early 2000s and hit a peak between 2007 and 2008 (Johnston, Kay, Lerche, and Oya 2010). At the same time, interest rates increased during the global financial crises of the late 2000s because of Cambodia's duel currency (Riel and US dollar) economy (CIA World Factbook 2011). In Cambodia, the increase in demand for food, coupled with low global stock, high oil prices, and the depreciation of the US dollar, meant food prices skyrocketed (Sombilla, Balisacan, Antiporta, and Dikitanan 2011). As food prices increased, the effect was devastating, particularly on urban families who did not own farmland. The government likewise was unable to meet its budgeted needs in education: from 2007 to 2011 the Ministry of Education, Youth and Sports (MoEYS) spent less on education than was budgeted (Brehm Silova, and Tuot 2012, 13). As a result, households likely had to fill the gap in educational expenditures during these precarious economic times, restabilizing when Brehm and colleagues collected data in 2011.

The crises affected urban and rural household differently. During the global food and financial crises, teachers, like everyone else, had to spend more money to buy the same amount of food as precrisis times. In urban settings where farming is less likely a second profession than in rural settings, teachers often conduct tutoring as a means to increase their salary (Benveniste, Marshall, and Araujo 2008, 57). Teachers may have therefore forced more students to attend private tutoring through the various "tricks" (e.g., withholding content from mainstream schooling). Dawson (2009) reported in order to generate more income. In rural areas, by contrast, some farmers saw an increase in profit as food prices increased. Compared to urban households, rural families in general spent a smaller proportion

of household expenditures on food in 2009 than in 2004 (NIS 2011, 9). It is possible a decrease in the proportion of household expenditures spent on food in rural areas in 2009 corresponded to an increase in household expenditures on education, not through teacher "tricks" but through greater household demand. Since private tutoring is the largest household expenditure on education (NEP 2007), it likely increased as a consequence of the exogenous socioeconomic factors beginning in 2007.

At higher levels of schooling, the participation rates of tutoring are not as well reported across time as is tutoring in primary school. In secondary school, the participation rate in private tutoring appears to be higher than in primary school. Brehm and colleagues (2012) observed that 68 percent of sampled grade 9 students attended private tutoring compared to the 41 percent of students in their grade 6 sample. Ley Dalen, et al. (2012) likewise reported that 94 percent of grade 12 students sampled in Phnom Penh attended private tutoring. These studies indicate that tutoring likely continues to increase with grade through secondary school, peaking in grade 12 before the national high school exit examination. Although more research is needed to capture the participation rates across time and in different places in the future, it is clear that shadow education is a common phenomenon across all grades. It is possible to conclude that most students today know about *rien kuo thoeumda* and have likely participated in it at some point.

Examination System

High-stake examinations have been connected to shadow education as a major driver of demand (Bray and Lykins 2012, 23). Examinations are considered high stakes when achievement results are the sole—or one of a few—factors for advancement to higher levels of schooling. In systems with high-stake examinations, shadow education is perceived by families as a way to "invest...to secure an edge in the competition" (Bray and Lykins 2012, 23).

In Cambodia, there are different types of examinations. Each month, students take subject examinations, which are developed and graded by students' own teachers. The scores on the monthly examinations together with attendance determine if a student passes or fails a subject and, collectively, a given grade level. Teachers create the monthly examinations and have historically sold photocopies of it to students (at least since the 1990s). This happens because most schools do not have photocopy machines. When teachers charge more than the price to photocopy each sheet, profit

is generated. This practice has been banned since January 2014 (Channyda 2014b), forcing teachers to write the examination on the board and students to copy them into their notebooks.

There are also semester examinations held twice a year. These examinations take place for students in grades 6, 9, and 12. These examinations are developed by the provincial and district offices of education and graded by students' own teachers. The semester examinations determine if a student transitions from primary (grades 1–6) to lower secondary school (grades 7–9). Students must score a 50 percent on semester examinations to pass (UNESCO 2008). The transition from lower secondary school to high school (grades 10–12) and the completion of grade 12 are based on a national examination. National examinations are developed by MoEYS and graded by teachers other than the students' own. There are also entrance examinations for public higher education institutions.

In a system of multiple high-stakes examinations, shadow education in Cambodia partly serves the purpose of preparing students.[4] Recognizing the multiple purposes of shadow education at the primary and secondary level, the NGO Education Partnership (NEP) found: "Some of the focus of the private lessons is preparation for exams and students who cannot pay for private tutoring invariably do poorly on the exams and are often required to repeat the grade" (NEP 2007, 16–17). This was confirmed by Brehm and colleagues (2012) who found that "across all subjects, students who attended private tutoring scored on average twice as high as students who did not attend private tutoring" (28). Since teachers-*cum*-tutors are heavily involved in the examination structures (from preparing students to developing examinations to grading them), teachers can unfairly reward students who attend private tutoring classes with higher grades. The elimination of the grade 6 national examination suggests MoEYS understood this dilemma. Nevertheless, "policies which eliminated sixth grade exit examinations in Cambodia had little effect on reducing the corrupt practices of private tutoring by public school teachers" (Dawson 2010, 22).

There is a range of practices involved in examinations that could be considered corrupt. These can be separated into three different categories of time in relation to the examination: before, during, and after the examination. Before the examination, students can attend private tutoring lessons in hopes of obtaining examination questions in advance or possible answers. As a result, there is a spike in attendance during the weeks or months leading up to an examination. There is also the belief that teachers grade examinations more leniently for students who have given money to the teacher prior to the examination. Indeed, some teachers keep meticulous track of money received during private tutoring and by whom.[5] There is also the common practice of students photocopying various types

of cheat sheets (which range from miniature copies of full textbooks to supposed answers obtained through some sort of leakage in the supply chain of examinations) prior to the examination. It is not uncommon to see students crowded inside a photocopy center days or hours before an examination.

During the examination, students can pay money to teachers and proctors directly, work in groups, copy answers from other students, or obtain cheat sheets on their phones or thrown in through the window. The *Cambodian Daily* reported a grade 12 student saying, "We bribed [proctors] in order to turn a blind eye when we copied from answer sheets" (Naren 2004). A 2012 survey of grade 12 students in Phnom Penh found that nearly seven out of ten sampled students paid money to proctors during the examination (Ley et al. 2012). The same number of students reported seeing or participating in channeling examination answers by throwing or receiving cheat sheets through classroom windows.[6] Half of the students reported that cheating took place through the use of smart phones or by the proctor of the examination.[7] Almost 80 percent of students reported they could copy answers from their neighbors during the exam.

After the examination, it is possible for students to purchase higher grades. In this scenario student names are detached from their scores, allowing for the manipulation and commodification of scores without altering (i.e., making up) scores. Some students are forced to pay upward of US$300 in order to receive their score. For instance, if a student who scored a 90 percent on the examination could not afford to pay extra money after the examination, then his or her grade could be sold to a student who had failed the examination but was able to pay. The prevalence of such a practice is unknown, but it has been reported and indicates a host of possibilities of cheating *after* the examination.

With such a high prevalence of cheating, it is to be expected that there is a high rate of passing. In 1994, 70 percent of students who took the grade 12 examination passed. This number increased to 79 percent in 1998 (UNESCO 2008, 15). In 2002, the number plummeted to 39.9 percent after MoEYS implemented a more difficult examination and attempted to stop bribery and cheating (Samean 2002). By 2007, the number increased to 72.7 (Channyda 2008). In 2009, the results reached 77.8 percent (Channyda 2009), climbing to 81.9 percent in 2010 (Chansy 2010). More recently, over 90 percent of grade 12 students passed the 2014 semester exams (Channyda 2014a).

There are multiple reasons to question the efficacy of cheating. One reasons is that the passing rates are often dependent on factors other than a student's knowledge, preparation, or cheating. In 2005, for instance, the grade 9 examination was retooled to be easier (Naren 2005). Prior

to 2005, the grade 9 examination was scored out of 500 points. Passing grades required half, or 250 points. Starting in 2005, however, the number of points needed to pass the examination reduced to 220 and 210 points. This equates to passing grades of 42–44 percent. The reason for the retooling of the examination was because each province was pressured by MoEYS to obtain a passing rate of least 85 percent. In the end, 89 percent of students nationwide passed the grade 9 examination. This has stayed relatively consistent since then (e.g., in 2010, 90 percent of grade 9 students passed; Naren 2010).

Upward and Downward Conflation of Educational Corruption

As noted in the introduction, educational corruption is often conceptualized between two extremes: individualized behavior and social determinism. The former conceptualizes society as an aggregation of individuals (upward conflation) and the latter neglects agency (downward conflation). This section will briefly outline these two perspectives, offering a critique of both.

Blame the Teacher! Upward Conflation

The most common explanation of educational corruption locates blame at the individual level. Teachers are common targets because they hold power (over grades, attendance, etc.) in systems of education at the local level. Parents and students know when a teacher is acting in ways that are unfair and/or corrupt. For instance, the first example of educational corruption offered by Chapman (2002) is of "an underpaid teacher, to make ends meet, charges students a 'paper fee' in order for them to take the end of year national examination for their grade. Students must pass this test in order to progress to the next grade" (22). In this hypothetical situation, which is common in the Cambodian case, students, who may understand the socioeconomic conditions of the teachers, nevertheless experience the burden of corruption because they must pay paper fees directly to the teacher in order to progress through the education system. Corruption is located in the student's relation to the teacher.

Heyneman's (2009) categorization of education corruption places the onus squarely on individuals. He categorizes corruption into four main types. First, there is corruption in educational functions (bribery

or extortion by individuals). Second, corruption can be found in the supply of education goods or services. Third, professional misconduct can lead to corruption (e.g., withholding content during mainstream school to force students into private tutoring). Last, there is corruption in the use of educational property for profit making. These various forms of corruption prevailed and likely increased through the decentralization and privatization reforms in education during the 1990s. For Heyneman, Anderson and Nuraliyeva (2008) educational corruption increased when systems of education broke down: when "the central authority in education broke down and the various agents (ministry officials, rectors, faculty, and staff) no longer acted in concert" (Heyneman, Anderson, and Nuraliyeva 2008, 1–2). The actions by agents deteriorated the quality of education "because individual rent-seeking behavior by agents increased" (Heyneman, Anderson, and Nuraliyeva 2008, 2).

The portrayal of educational corruption by Heyneman and colleagues (Heyneman, Anderson, and Nuraliyeva2008; Heyneman 2009) locates it as an individual behavior while contextualizing that behavior. In the various post-Soviet country cases, it was the "economic transition" that led "agents" to behave in corrupt ways (Heyneman, Anderson, and Nuraliyeva 2008, 1). In this perspective, it is the breakdown of educational systems that cause individuals to behave corruptly. Properly functioning education systems cannot, by implication, be a cause of educational corruption. This is similar to Bray (2003), who emphasizes the lack of government accountability structures that create an environment where teachers can misuse their monopoly power. As such, Bray (2003, 28) locates corruption as monopoly power by individuals who choose to act in a system without accountability. From this perspective, teachers may "slow down their pace of delivery in order to ensure that they have a market for the after-school supplementary classes" (Bray, 1999, 55). These individual actions are possible partly because there are no systems of accountability to prevent corrupt behavior.

When it comes to educational corruption and private tutoring, teachers are often the culprits because of the power they wield inside the education system. In a 2006 study, Silova, Johnson, and Heyneman (2007) labeled teachers who undertake private tutoring practices as "monopoly suppliers of tutoring services to potential university students" (p. 15). The concept of "monopoly" relates to the "misuse of public power" (Karklins 2005). Within the Cambodian context, Hayden and Martin (2011) have claimed "making attendance at private tutorial classes [is] the only way of acquiring knowledge that is essential for passing examinations" (p.13), thus placing a great deal of power in the hands of teachers.

The main problem with conceptualizing corruption as an individual behavior is that casual efficacy is only granted to individual agency. The structures of society, in this perspective, are constructed through the aggregation of individual behavior. This is methodological individualism, conflating individual agency with social structures. This is called "upward conflation" (Archer 1995) because it explains social structures through the aggregation of individual behavior. As such, corruption is perceived to result from "individual decision-makers, who are not only regarded as their own 'sovereign artificers' but are also credited, along with others like them, with making their society too—through the aggregate effects of their decisions" (Archer and Tritter 2000, 7). This conceptualization sidesteps the interdependence between social structures and human agency. Habitual, routinized behaviors—not to mention altruism—are not given credence in this approach. Nevertheless, Heyneman (2011) conflates the agency of individual teachers who tutor their own students with the structures that make such a scenario possible when he argues that "a classroom teacher should not be the tutor of the same pupil enrolled in the regular class. This conflict of interest is contrary to the professional standards of educators and should be punished with a fine and/or loss of teaching license" (p. 186). Upward conflation leads to individualized policy solutions to the perceived "problem" of educational corruption: if all individuals behaved ethically, educational corruption would disappear.

It's the System! Downward Conflation

An alternative conceptualization of educational corruption understands it as a result of particular circumstances that are out of the control of individual teachers. Blame, in other words, is placed on the context and the system, not the individual. Johnson (2011) captures this by saying, "blame the context, not the culprits" (p. 254). This perspective derived from Johnson's (2008) study in Kyrgyzstan where he found that "most [students surveyed and interviewed] believe that the reason for teacher corruption is systemic (the government, economy, or society), not the failings of an individual" (p. 190). This account is similar to Rose-Ackerman's (1999), who referred to corruption as "a survival strategy" (p. 72).

The causal explanations of education corruption derive from some sort of systemic failure. When it comes to tutoring, Biswal (1999) suggested the main reasons for teacher-supplied tutoring are related to (1) low salaries from governmental schools and (2) weak accountability and monitoring systems. In the Cambodian context, Brehm Silova, and Tuot (2012, 14) and Dawson (2009, 71) point to low teacher salary, overcrowded

classrooms, and double shift schooling as the factors causing corruption. Furthermore, Dawson (2009) claims, "The danger is that national and international actors have missed a window of opportunity to increase salaries earlier to avoid the institutionalization of corruption throughout the national civil service" (p. 65).

Corruption as "institutionalized" suggests it is not necessarily the fault of an individual teacher but rather is a natural part of the system. With the right policy interventions, the calculus of corruption could be alerted and eliminated. By implication, educational corruption is socially determined.

The main problem with viewing educational corruption as socially determined is that causal efficacy is granted only to social structures. In other words, agency is denied to teachers who are simply robotic actors performing habitual, routinized actions without subjectivity. This approach is downward conflation because "agency is explained *in terms of* structure" (Sibeon 2004, 97). In this view, the main reason for educational corruption derives from structural deficiencies, which if corrected would fix the education system by removing the conditions necessary for educational corruption to thrive. Teachers in this account have little if any ability to change the education system within which they teach and work.

A Critical Realist Approach

The two ways to understand corruption do not account for the "two-way interplay between" social structures and human agencies (Archer 1998, 74). Upward conflation emphasizes agency over structure and downward conflation emphasizes structures over agency. An alternative view starts with the assumption that individuals and society "do not constitute two moments of the same process. Rather they refer to radically different things" (Bhaskar 1989, 33). As such, "agents and structures are ontologically different, but they are intertwined and together they account for the state of social affairs at any time and place" (Archer 2014, 26–27).

From this critical realist perceptive, educational corruption is transfactual. That means educational corruption is enduring in all systems of education and not fleeting. In some specific cases, individual teachers can engage in (or "activate" in critical realist terminology) educational corruption, while in other instances it can be left dormant. Likewise, systems of education can be structured in ways that are more likely to result in the activation of educational corruption than others. There are various generative mechanisms (i.e., the underlying processes that account for an observable event) that "combine to generate the flux of phenomena that

constitute the actual states and happenings of the world" (Bhaskar 1978, 47). It is therefore important to look at specific cases and carefully examine the interplay between social structures and human agency to determine when and where educational corruption is activated.

The Cambodian education system, which is marked in part by its high-stake testing regime and underpaid teachers, has a transfactual property for educational corruption that is typically (but not always) activated through private tutoring by a student's own teacher. Either by students' demand or teachers' supply, a teacher-*cum*-tutor may emerge as an empirical reality. When this happens, educational corruption is possible because the power relationship between teacher and students can take on new features—such as providing money in exchange for answers.

Despite the potential for educational corruption within systems of education marked by high-stakes testing and underpaid teachers, the transfactual property of educational corruption by teachers who are tutors may never be realized. It is an enduring property, but must be activated by specific generative mechanisms. These generative mechanisms may be "possessed, unexercised, exercised, unactualised, and actualised independent of human perception or detection" (Bhaskar 1989, 16). In other words, some teachers in systems of education that have high-stakes testing and underpaid teachers may never exhibit the property of educational corruption; some teachers may tutor his or her own students without exchanging examination answers for money. Although the property of educational corruption is present, it is not always and necessarily activated. The property of educational corruption is context specific and emerges under certain conditions.

In searching for generative mechanisms, it is important to look at social structures and human agency as distinct features although interdependent of each other. As such, human agents make the structures creating systems of education where corruption is transfactually possible, but agents are also made by those very structures that predate action. From this perspective, structures constrain, enable, and/or motivate agents. Structures produce specific vested interests, opportunity costs, and situational logics of action. These change across time and context. In addition, agents sustain and transform structures by their actions and interactions. As such, "there was no time when individuals were solely the cause of (or solely responsible for) their own social situations" (Archer 2014, 29).

Vested interests, opportunity costs, and situational logics of actions indicate there is a history to social structures. Teachers enter a schooling system not of their own making. Tutoring and corruption are social phenomena that predate a teacher's own agency. As such, the situational logic of teachers in Cambodia conditions the possible types of action

by a single teacher. In fact, there are situational logics for all actors in the education system: in Cambodia, students understand that "you learn 50 percent in a government school and 50 percent in private tutoring" (cited in Brehm and Silova 2014b, 166) and as such make decisions within this logic in response to the perceived necessity of tutoring. These actions can be habitual and routinized—that is, commonly and unconsciously practiced by students—or deliberate—that is, the acknowledgment that going to tutoring may provide some sort of advantage. Situational logics provide "directional guidance for action" (Archer 2014, 34). In Cambodia, guidance is toward private tutoring and examination cheating.

Various actors have vested interests in the maintenance of the Cambodian system of education. Vested interests "arise out of scarcity, through social processes of unequal distribution" (Archer 2014, 31). Some teachers are able to seize upon the structural deficiencies (e.g., short school day caused by double shift schooling) to increase their salaries through tutoring. Likewise, principals may be able to charge rent for the use of classrooms by teacher-*cum*-tutors after school hours. Students and households may also have vested interests in the current education system because achievement can, in some cases, be purchased. This is an opportunity for some families who have disposable income and place value on educational achievement. NGOs also have a vested interest in maintaining the current educational system. That many give scholarships to students to attend private tutoring classes suggests that if the system of education were to change, then NGOs may lose a program for donors to fund. This could threaten the work of the NGO.

The government too has vested interests that sustain the system of private tutoring. The Cambodian government is dependent on donors (e.g., 32 percent of the 2013 budget came from donors; MoEYS 2014). As such, the government is under pressure to comply with international standards advocated by donors like the World Bank. One example related to the discussion here is that the World Bank views private tutoring as mainly a positive feature of educational systems. A report by Dang and Rogers (2008) for the World Bank highlights the different benefits of private tutoring. They believe private tutoring can "provide more individualized instruction than is possible in public schools, using a more flexible delivery mechanism" (p. 163). As such, the Cambodian government has had to balance the interests of the donor community, which, at least in part, views private tutoring positively, with the negative consequences experienced by teachers, students, and parents in order to maintain donation levels.

Opportunity costs relate to the cost or benefit of acting on a vested interest. In Cambodia, educational corruption derives from the need to supplement teacher salaries in a system with limited accountability. Many teachers must work a second job to supplement their income. The choice as to which job is most valuable presents different opportunity costs to teachers. In urban settings, since teachers cannot farm, they may see their best option for a second job as a tutor. Indeed, in most studies in Cambodia, there is a greater rate of tutoring in urban areas than rural. In rural settings by contrast, teachers may be able to farm and therefore be able to forego tutoring as a second job. There are noneconomic opportunity costs as well. Teachers in rural areas likely live in and know the entire community where the school is located. This makes tutoring for a fee undesirable by some teachers because extracting money from relatively poor households may cause bad relations between the teacher and community. These social opportunity costs play out differently in urban settings where teachers often do not interact with students' parents on a regular basis.

Students also have opportunity costs that may reproduce structures enabling corruption. These include the realization that attending private tutoring is a valuable opportunity for future prospects like university enrollment or employment. Therefore, foregoing private tutoring to help on the farm or work a job may be a bad choice when compared to potential future earnings. These students would therefore be reproducing the structures of the education system that produces the necessary conditions to activate educational corruption.

Vested interests, opportunity costs, and situational logics of action are features of a social structure that condition human agency. The structures are, in other words, sustained by human action. These features do not always dictate action, however. Human agents have the potential to transform structures by their actions and interactions. There is a degree of freedom to act in ways other than the spatial-temporal specific vested interests, opportunity costs, and situational logics would suggest.

Agents have properties and powers that create degrees of freedom. These degrees of freedom range from "agentive...to, more deeply, freedom as emancipation" (Bhaskar and Norrie 1998, 570). Agentive freedom is the capacity by an actor to do otherwise while emancipatory freedom is the ability of an agent to radically transform society.

Agency is mediated by reflexivity. Archer (2007) defined reflexivity as "the regular exercise of the mental ability, shared by all normal people, to consider themselves in relation to their (social) context and vice versa" (p. 4). Reflexivity is the basis for action, but not all reflexivity is the same.

Some enables degrees of freedom while others sustain and reproduce the very structures in which the agent exists. Archer (2007, 93) classifies four types of reflexivity:

Communicative reflexives: Those whose internal conversation requires completion and confirmation by others before resulting in courses of action.

Autonomous reflexives: Those who sustain self-contained internal conversations, leading directly to action.

Meta reflexives: Those who are critically reflexive about the impact of structure on their actions.

Fractured reflexives: Those whose internal conversations intensify their distress and disorientation rather than leading to purposeful courses of action.

Notwithstanding the problem that these categories imply that people occupy static positions instead of emphasizing the ability of people to occupy different reflexivity positions in different situations and times (Dyke, Johnston and Fuller 2012), they do nevertheless shed light on the ways that actors engage in educational corruption. "Robin Hood" teachers found in Kobakkhidze's (2014) study on teachers-*cum*-tutors in Georgia could be classified as meta-reflexives when they allow poor students to attend extra lessons for free. Similarly, many teachers who sustain the system of private tutoring and activate educational corruption may do so because they are communicative reflexives; there is a community of agents acting in similar ways because they have discussed their circumstances, situations, and responses to it. An instance of autonomous reflexivity can be located in rural areas during the food/financial crises. Although the situational logic of rural areas encouraged less tutoring by teachers for both economic and extra-economic reasons, the global crises may have created the situation where both students/parents and teachers decided to act in ways other than would be logical within the historical situation of rural tutoring. As circumstances changed, human agents acted in different ways and likely transformed the situational logic as such.

Conclusion

Educational corruption cannot be reduced to individual behavior or social determinism. It requires a complex understanding of the social mechanisms that produce the possibility of corruption within certain spaces and at specific times. This chapter has argued that the explanation for

educational corruption comes from the interplay between structures and agents. As such, a particular language of situational logics and reflexivity was detailed as a way to explain the activation of educational corruption, which transfactually exists in all systems of education.

In Cambodia, the system of private tutoring is one site where educational corruption is activated. Educational corruption in these cases is neither the fault of individual teachers nor the system itself. Rather, the phenomenon can be better explained through an understanding of the structures that produce particular vested interests, opportunity costs, and situational logics, and the multiple forms agency can take, which are mediated through different modes of reflexivity.

Policymakers would therefore do well to understand that combating educational corruption does not happen in closed systems where all effects derive from the same cause. Teachers are not the problem because they are conditioned to act, just like students, parents, government officials, and donors, in particular ways. Moreover, the space through which educational corruption is activated is an open system subject to exogenous (and endogenous) forces that can cause unintended outcomes. The question policymakers must struggle with is this: Under what circumstances does the transfactual property of educational corruption remain dormant more often than it is activated?

Notes

1. Quote from Channyda, 2014a.
2. Quote from author's research on shadow education (Brehm forthcoming).
3. There are multiple types of extra classes in the Cambodian context (see Brehm forthcoming).
4. Examination preparation can happen outside of private tutoring. Preparation can happen in tutoring centers like Chey Thay, which is located in Phnom Penh and caters to students preparing for the national high school exit and university entrance examinations.
5. This was the case for one teacher who provided data to Brehm and colleagues (2012).
6. This practice has existed since the 1950s–1960s. During classroom observations of an examination, I witnessed students throwing pieces of paper through windows. This practice is so common that it is the reason police officers surround school buildings during national examinations.
7. I met a student who had his smart phone broken by a teacher after he was caught looking at pictures of examination answers on Facebook.

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Part 4

Dropout

Chapter 7

Does Students' Gender Matter? Parents' Educational Expectations, Their Determinants, and Consequences in Explaining Students' Dropout in an Area in Cambodia

Thomas Zimmermann and James H. Williams[*]

Introduction

Cambodia has experienced remarkable educational expansion at all levels since the fall of the Khmer Rouge in 1979 (Ayres 2000), yet provision of basic education[1] to all children remains challenging (Chhinh and Dy 2009). Two major obstacles hamper the provision of basic education to all children: (a) low transition rates from primary to lower secondary school,[2] and (b) high dropout rates[3] in grades 7–9. According to Ministry of Education, Youth and Sports (MoEYS) statistics, 76.8 percent of all promoted 6th graders in 2012/13 transferred to lower secondary school; 21.2 percent of lower secondary students dropped out each grade (MoEYS 2014).

Parents' expectations have received considerable attention in educational research to explain students' educational success in school (Yamamoto and Holloway 2010). Many studies have found that high parental expectations are positively related with students' academic achievement (Fan and Chen

2001; Jeynes 2005, 2007), retention (Rumberger and Lim 2008; Hannum, Kong, and Zhang 2009; Yamamoto and Holloway 2010), and other outcomes such as student educational aspirations (Williams 1972; Hossler and Stage 1992).

Parents' educational expectations have shown to be positively related with their educational background (Hossler and Stage 1992; Wood, Kaplan, and McLoyd 2007; Spera, Wentzel, and Matto 2009a; Lawrence 2014) and student achievement (Wood Kaplan, and McLoyd 2007; Mistry, White, Benner, and Huynh 2009b; Spera, Wentzel, and Matto 2009b; Goldenberg, Gallimore, Reese, and Garnier 2001b). Additionally, student educational aspirations (Williams 1972), teacher expectations (Mistry, White, Benner, and Huynh 2009b), and aspirations of parents' social reference groups (Stocké 2010) are positively associated with parents' educational goals for their children. Some studies have found that these factors vary by the gender of the student (Williams 1972; Zhang, Kao, and Hannum 2007).

Gender differences in transition to and dropout rates within lower secondary school have noticeably diminished in Cambodia since the 1990s (NEFAC Secretariat General 2007). Now, girls show slightly higher transition and lower dropout rates than boys. Other countries have experienced similar developments (Buchmann, DiPrete, and McDaniel 2008; Diefenbach 2010; DiPrete and Buchmann 2013). In countries such as the United States, these developments can be attributed to changes at the individual, family, school, and national level (see Buchmann, DiPrete, and McDaniel, 2008 for a review). Unfortunately, these questions have not been fully pursued in Cambodia. Previous qualitative work has focused solely on explaining the disadvantages facing girls in basic education, identifying in particular rigid gender socialization and poverty (Velasco 2001, 2004). Consequently, virtually nothing is known about gender-related differences in the determinants of parents' educational expectations and their consequences in contemporary Cambodia.

This chapter aims to broaden knowledge of determinants of parents' educational expectations and their consequences for dropout, and to shed new lights on gender-related differences in these determinants and consequences. We draw on the Wisconsin Model of Status Attainment (Sewell, Haller, and Portes 1969; Sewell, Haller, and Ohlendorf 1970) and hypothesize that (a) social influence processes directly affect parents' educational expectations for student; (b) parents' educational expectations help explain the effects of parents' social background on dropout and contribute, net of the effects of social background, to an explanation of dropout; and (c) determinants of parents' expectations differ according to the gender of the child. Data we collected in southern Cambodia are ideal to test these

hypotheses since survey data related to dropout are drawn from a variety parents, students, and teachers. Importantly, these data draw on parents' social networks as well as direct measures of teachers' expectations for students and student aspirations. Understanding the social determinants and consequences of parents' educational expectations from multiple sources will help clarify educational stratification and possible driving factors of parents' decision making in Cambodia.

Working Definitions

Differentiation between educational aspirations and expectations is internationally established (Haller 1968; Goldenberg et al. 2001b; Alexander and Cook 1979; Becker 2010). Yamamoto and Holloway (2010) describe educational expectations as a realistic assessment of students' future educational success. Such assessments are based on realistic evaluation of factors that foster or hamper educational success such as academic achievement or family resources. In contrast, educational aspirations describe educational goals a person or the family wishes for. Aspirations do not result from realistic assessment but are the result of norms and values. Aspirations are closely related to an individual's position in the social strata, and the norms and values persons closely related to this person hold vis-à-vis education (Yamamoto and Holloway 2010).

Theoretical Framework

Educational sociology emphasizes the importance of attitudes, norms, and values in explaining educational success. In particular, persons from lower socioeconomic status (SES) are understood as disadvantaged. Low SES people have more pessimistic attitudes toward the possibilities for social mobility than people from higher SES backgrounds. These attitudinal differences hamper the educational success of persons of low SES individuals (Hyman 1966). The Wisconsin Model of Status Attainment (Sewell, Haller, and Portes, 1969; Sewell, Haller, and Ohlendorf, 1970), an extension of the Blau and Duncan model (Blau and Duncan 1967), assumes that both parents' social background and students' ability affect not only the school performance of students but also the expectations significant others have on them. Students' educational goals are mainly the result of social influence processes by which significant others, persons such as

parents, teachers, and peers "who exercise a major influence on students' attitudes" (Woelfel and Haller 1971, 75), affect student goals. Significant others affect students' own educational goals by either encouraging students to achieve (definer) or serving as a role model (modeler) (Woelfel and Haller 1971). Finally, goal levels specific to social background emerge and relate to educational attainment of the student. Wisconsin assumes that these specific goal levels mediate the effects of social background (or SES) on educational attainment. The Wisconsin study focused on the goals of 17-year-old high school students. In Cambodia, most students are aged 14 by the end of primary school. In the case of younger children, parents' educational goals for their children should arguably be the focus of interest because these goals are more important in explaining the actual decision making at early stages. Consequently, we adapt the argumentation of the Wisconsin model (which focused on an explanation of students' aspirations) by focusing on an explanation of parents' expectations.

As noted, the research study also aims to broaden understanding of gender differences in the determinants and consequences of parents' educational expectations. Industrialized countries such as the United States have extensive literature on gender differences in the determinants of educational expectations. Much less literature is available on these issues in less developed countries and non-Western cultures such as China (Zhang, Kao, and Hannum 2007). Virtually no literature exists for Cambodia. However, we know from the literature that explanatory variables such as social background and academic ability/achievement affect the educational goals and the educational attainment of male and female students and parents differently (Sewell and Shah 1967; Williams 1972; Alexander and Eckland 1974; Marini 1978). Several studies found that the effects of academic achievement exceeded the effects of social background on educational goals for boys, whereas for girls the effects of social background exceeded academic achievement. Alexander and Eckland (1974, 669) argue that "female attainments appear to be more closely tied to ascribed criterion of family background status; while those of males are more strongly related to the presumably functional criterion of academic ability." Some authors refer to differences in sex role socialization for explaining these findings (Alexander and Eckland 1974).

We follow this argumentation in the international literature since the Cambodian literature on the disadvantages of girls in education highlights the importance of differences in sex role socialization as well (Velasco 2001, 2004). We expect that the social background of parents bears a greater influence on parents' educational expectations for girls. Moreover we assume that boys' academic performance has a greater effect on parents' educational expectations than does girls' performance. We assume also

that all parents seek social recognition from their environment. Whereas for boys, Cambodian society shares a common norm regarding the importance of education, this norm is less clear and widespread for girls (Velasco 2001, 2004). Therefore, we expect that, in the case of consistently high expectations for students in the network of the parent, these expectations have a stronger effect on parents' educational expectations for girls than for boys. In summary, we set the following predetermined hypotheses:

H1. Families' educational expectations for their children vary according to social background (SES). Families with a higher SES are more likely to have higher educational expectations.

H2. Effects of social background on parents' educational expectations vary according to students' gender. Social background effects on parents' educational expectations are more pronounced for girls than for boys.

H3. Children's school performance directly affects their parents' educational expectations. Parents of high-performing students are more likely to have high educational expectations than parents of children who perform less well.

H4. Effects of children's school performance on parent's educational expectations vary according to the gender of the students. The effects of student academic performance on parents' educational expectations are greater for boys than for girls.

H5. Significant others' expectations contribute positively to explanations of parents' educational expectations and mediate the effects of parents' social background and students' achievement on parents' educational expectations.

H6. Effects of significant others on parents' educational expectations vary according to the student's gender. High educational expectations and aspirations of significant others have a stronger effect on parents expectations for girls than for boys.

H7. Parents' educational expectations partially explain the effects of parents' social background on dropout and contribute to the explanation of dropout, net of the effects of social background. Effects of social background on students' retention in school are mediated by parents' expectations.

Methods

Analyses are based on data from the first wave of *Staying in School*, *a longitudinal study of transition, dropout, and retention – from primary to secondary school in Cambodia*. The research project was carried out in one province

of southern Cambodia. While space limitations preclude complete discussion of methods (please contact the authors for details), vital components of *Staying in School* are the standardized personal interviews with students and their parents/legal guardians[4] and self-administered questionnaires for teachers and school directors. Instruments were developed in close cooperation with Cambodian team members and were pretested in Phnom Penh and with the target population.

In December 2010 the status of students (enrolled/not enrolled) was verified by a research assistant with information from teachers/classmates and registry data at the primary and lower secondary schools. The enrollment status of students was verified one more time in December 2012 by phone and face-to-face interviews with parents.

Sample

The analysis is based on purposively sampled data from 6th graders, their parents and class teachers in eleven primary schools in one Province of Cambodia. Selection criteria for this purposive sampling were: (a) geographical location (three urban schools, five rural schools and three remote schools),[5] (b) high and low dropout rates, and (c) poverty levels of surrounding neighborhoods.[6] All contacted schools agreed to participate in the research study. At each school only one class of 6th graders existed. In total 290 students were enrolled in these classes in 2011. Out of these 290 students 222 got interviewed. Additional 6 observations were excluded from the analysis since the parent was not available at the day of the interview and consequently the necessary consent for the child was missing. In the end, 216 observations (74 percent of the total population) were available for analysis.

Instruments

Dependent variables are *Parents' (or legal guardians') Educational Expectations for the student* and *Retention*.

Parent's Educational Expectations for the Student,[7] a dummy variable (M = 0.70, SE = 0.04), was coded 1 if the participating legal guardian expected the student to complete Upper Secondary School or University level of schooling and 0 otherwise.

Retention was coded 1 if the student stayed in school between May 2011 and October 2012 (M = 0.80, SE = 0.04). The variable was coded as missing (n = 5) if verification was impossible. The main independent variables

according to the Wisconsin Model of Status Attainment are *Socioeconomic background (SES)*, *Academic Performance,* and *Expectations/Aspirations of Significant others.*

Socioeconomic background (SES) is a variable calculated with principal components analysis (M = –0.02, SE = 0.06) of Highest Level of Education (parent) and Highest Occupation (parent) (Korupp, Ganzeboom, and Sanders 2002). Mother's and father's education were coded in terms of highest education level achieved, ranging from 1 "never attended school" to 11 "Master/ Doctoral degree." The occupational variable was coded by using a five-category scheme. The original German scale from (Hoffmeyer-Zlotnik 2003) was modified version for the Cambodian context. Cambodian experts confirmed their validity.

Student *Academic Performance* is the teacher-reported monthly grade point average from May 2011 (M = 6.85, SD = 1.14). The variable was z-standardized (M = 0, SD = 1) on the class level.

As indicators for significant others' expectations and aspirations, we utilized the following variables:

Students Aspirations are students' self-reported educational aspirations.[8] The variable was transformed to years in education[9] (M = 13.31, SD = 2.53) and z-standardized (M = 0, SD = 1).

Teachers Expectations are teachers' self-reported educational expectations[10] for each student. This variable was also transformed into years of education (M = 10.85, SD = 2.37) and z-standardized (M = 0, SD = 1) it.

Significant others' Expectations is a composite measure. First, the parent or legal guardian was asked to list up to three people (family members, friends, coworkers, etc.) whose advice he/she valued with regard to education. This is a modified version of the Burt-Network generator (Burt 1984). On average, 1.33 persons were mentioned. The parent was then asked to note his/her educational expectations[11] for the student. All three variables were coded as the variable *Parents' Educational Expectations for the Student.* Finally, the values of all variables were summed and divided by the number of network members. The resulting composite measure, Significant others *Expectations,* represents the share of persons in the parent's social network with Upper Secondary or University expectations for the student. The mean of 0.79 (SD = 0.39) represents the average proportion of persons in the parents' network who expects the student to complete Upper Secondary or University education. The variable was z-standardized (M = 0, SD = 1).

Female, a dummy variable (M = 0.59, SE = 0.04), was coded 1 if the student was female and 0 otherwise.

A control variable, student's age (M = 13.81, SD = 1.32). was used and was z-standardized (M = 0, SD = 1).

Missing Values and Analytical Strategy

Multiple imputation (Rubin 1976; Allison 2001) and specific chained equations were used to deal with missing values. All analysis variables and a smaller number of auxiliary variables were included in the imputation model (White, Royston, and Wood 2011). A total of 100 datasets were generated. After imputation all cases where the dependent variable was missing before imputation were excluded from further analysis (von Hippel 2007). Imputation and data analysis were carried out using Stata 12.1.

The two dependent variables of interest, Parents' *Educational Expectations for the Student* and *Retention*, were coded as binary variables. Consequently, we utilized regression models for binary outcomes (Long and Freese 2014). Several models were calculated for each outcome. First, the simultaneous effect of student's age and gender on the outcome variables was estimated. Second, the social background variable and then the academic performance variable were added. Additional models for each outcome tested various interactions between gender and independent variables of interest. The goal was to evaluate the magnitude by which social background and academic performance variables were mediated by other covariates and to assess differences in the determinants of both outcomes due to the gender of the student.

In binomial logistic regression the change of our variable of interest, social background, over models is the result of confounding/mediation due to other variables and rescaling. Rescaling occurs since the estimated coefficients in binary logistic regression models depend on the error variance in the models. By adding variables to the model the error variance declines which finally influences the coefficients as well. In other words, it is not possible to attribute the change of coefficients over models in logistic regression solely to confounding or mediation as in ordinary least squares regression (Karlson, Holm, and Breen 2012). In order to deal with this problem we adapted a method proposed by Karlson, Holm, and Breen (2012) and used the user-written program *khb* (Kohler and Karlson 2013) which implements their approach into Stata (Kohler, Karlson, and Holm 2011).

Results and Discussion

Table 7.1 examines determinants of parents' educational expectations and possible differences in these determinants by student gender. Furthermore, we inquire if significant others' expectations mediate the effects of parents'

social background and student achievement on parents' educational expectations. We built nine models.

Model 1 shows the effect of control variable, student age, and female on parents' educational expectations. Student age is negatively correlated with parents' educational expectations, which is supported by previous research (Kaplan, Liu, and Kaplan, 2001). Differences according to students' gender were not detectable. Model 2 includes parents' social background. This model tests H1 that parents' educational expectations vary according to their social background. The significant and positive effect supports H1. Parents whose social background is one standard deviation above the mean are 1.62 times more likely to expect a minimum of Upper Secondary School degree as parents with social background around the mean ($e_{Social\ Background}^{0.482} = 1.62$). This result also confirms previous findings (Alexander, Entwisle, and Bedinger 1994; Davis-Kean 2005; Wood Kaplan, and McLoyd 2007; Stocké 2010; Lawrence 2014). Additionally, we checked an interaction effect between female and social background (not shown in table 7.1) in order to test hypotheses H2. Contrary to our expectations, we found no significant interaction effect. Parents' educational expectations were not more pronounced for girls.

Model 3 examined H3 that children's school performance has a direct effect on their parents' educational expectations for them. Contrary to expectations and earlier research (Wentzel 1998; Goldenberg, Gallimore, Reese, and Garnier 2001; Wood Kaplan, and McLoyd 2007; Mistry Mistry, White, Benner, and Huynh 2009a; Spera et al. 2009a; Stocké 2010), students' marks had no significant effect on parents' expectations. Seginer (1983) pointed out that such results are not uncommon in the research literature, due perhaps to demographic stratification by gender. As a result, Model 4 examined H4, which assumes differences in the effects of explanatory variables according to student gender. Our results show that only the higher academic performance of boys has a positive effect on parents' expectations.[12] This indicates some support for H4.

The last five models (models 5–9) test H5 and H6 (that significant others' expectations/aspirations mediate the effects of parents' social background and student achievement on parents' educational expectations, and that the influence of significant others differs by student gender). In the case of students' aspirations (model 5) and teacher's expectations (model 6), the analysis found no significant effects. Additionally, we analyzed interaction effects between students' gender and students' aspirations and teachers' expectations (not shown here). Again no significant effects on parents' educational expectations were found. We also tested for an interaction between frequency of teacher–parent interactions and teachers' expectations (not shown here) since it can be argued that in the case of

Table 7.1 Binary Logistic Regression of Parents Expectations for a Upper Secondary School Degree or Higher on Social Background, School Performance, and Significant Others Influence

	(1) Parents Expectations	(2) Parents Expectations	(3) Parents Expectations	(4) Parents Expectations	(5) Parents Expectations	(6) Parents Expectations	(7) Parents Expectations	(8) Parents Expectations	(9) Parents Expectations
Age	-0.649***	-0.605**	-0.590**	-0.601***	-0.584**	-0.554**	-0.608**	-0.618***	-0.616*
	(0.175)	(0.188)	(0.181)	(0.164)	(0.179)	(0.183)	(0.192)	(0.173)	(0.243)
Female	-0.116	-0.208	-0.222	-0.254	-0.201	-0.202	-0.0192	-0.0417	0.0655
	(0.320)	(0.302)	(0.321)	(0.335)	(0.331)	(0.327)	(0.363)	(0.388)	(0.403)
Social background (Edu. + Occ. parents)		0.482**	0.468**	0.453*	0.455*	0.403*	0.470*	0.454*	0.470*
		(0.171)	(0.178)	(0.182)	(0.183)	(0.172)	(0.216)	(0.224)	(0.236)
Marks			0.112	0.339+	0.0972	0.0260	0.0153	0.290	0.0192
			(0.127)	(0.208)	(0.131)	(0.149)	(0.136)	(0.241)	(0.182)
Marks*female				-0.452				-0.577	
				(0.475)				(0.501)	
Students aspirations					0.130				
					(0.203)				
Teachers expectations						0.238			
						(0.234)			
Significant others Expectations							0.619**	0.644**	-0.366
							(0.240)	(0.243)	(0.473)
Significant others Expectations*female									1.580*
									(0.634)
_cons	1.001***	1.109***	1.120***	1.152***	1.108***	1.111***	1.094***	1.131***	1.263***
	(0.269)	(0.298)	(0.299)	(0.297)	(0.300)	(0.305)	(0.299)	(0.305)	(0.354)
% Δ=$\beta_{EdOcc(model-i)}$ − $\beta_{EdOcc(model-2)}$			-3.83	-5.10	-7.36	-18.52	-9.33	-10.83	-18.54
N	181	181	181	181	181	181	181	181	181

Standard errors in parentheses.
Clustered for schools.
+ $p \leq 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

teachers' expectations the frequency of interactions between the parents and the teacher is important. However, also this interaction was not statistically significant.

Models 7 and 8 investigate the influence of persons in parents' social networks. The expected positive relationship was found. A one standard deviation increase in significant others' expectations centered from the mean makes it 1.86 or 1.90 times (models 7 and 8, respectively) more likely for a parent to expect a minimum of a upper secondary/university degree for student ($e_{SOE}^{0.619}$ = 1.86/$e_{SOE}^{0.644}$= 1.90). This confirms the importance of significant others' influence in parents' educational expectations for their children (Stocké 2010). However, in neither model 7 nor model 8 do significant others' expectations significantly attenuate the effects of parents' social background and student marks. Model 9 tests H6 that the effect of significant others on parents' expectation differs by gender of the student. Our findings indicate a significant positive interaction between student gender and significant others' expectations for the student, thus supporting H6. The effect for females is 1.214 (1.580+/−0.366). In other words, one additional unit of significant others' expectations for a female student is associated with 3.37 times the odds that parents' expectations for their daughters' education will reach or exceed Upper Secondary Education, holding other factors constant ($e_{SOE\ female}^{1.214}$ = 3.37). In contrast, significant others' educational expectations for male students had no effect on parents' educational expectations. Also here and contrary to our expectations, significant others' influence did not significantly attenuate the effects of parents' social background on parents' expectations (last row of Table 7.1).

Table 7.2 investigates the consequences of parents' educational expectations for students' retention in school. In addition, we want to see if parents' educational expectations for students mediate effects of parents' social background on students' retention (H7). To test this hypothesis we built 5 models.

Model 1 of Table 7.2 introduces our control variable, student age, and the variable female. The significant and negative effect of student age on school retention confirms the importance of age as a control variable for student retention, found in numerous studies in the United States(Rumberger and Lim 2008) and other developing countries (Hunt 2008). Not surprisingly, we found no significant effect of student gender on school retention, in line with official data from Cambodia, girls show only marginal advantages in educational attainment (NEFAC Secretariat General 2007; MoEYS 2014).

Model 2 adds parents' social background to see if student retention depends on parents' social background. The positive and significant

Table 7.2 Binary Logistic Regression of Students' Retention in the School System on Parents Social Background, School Performance, and Parents Expectations for a Upper Secondary School Degree or Higher

	(1)	(2)	(3)	(4)	(5)
	Retention	**Retention**	**Retention**	**Retention**	**Retention**
Age	−0.942***	−0.905***	−0.866***	−0.884***	−0.836***
	(0.166)	(0.179)	(0.189)	(0.194)	(0.231)
Female	−0.141	−0.212	−0.259	−0.356	−0.256
	(0.385)	(0.383)	(0.411)	(0.420)	(0.426)
Social background (Edu. + Occ. parents)		0.487*	0.479+	0.438+	0.342
		(0.244)	(0.256)	(0.250)	(0.237)
Marks			0.205	0.550*	0.499+
			(0.175)	(0.234)	(0.270)
Marks*female				−0.613	−0.539
				(0.389)	(0.424)
Parents expectations (≥ Upper Secondary)					1.197*
					(0.528)
_cons	1.649***	1.778***	1.813***	1.908***	1.103*
	(0.285)	(0.341)	(0.360)	(0.399)	(0.528)
% Δ=$\beta_{EdOcc(model-i)}$ − $\beta_{EdOcc(model-2)}$			−4.54	−9.99	−27.71*
N	211	211	211	211	211

Standard errors in parentheses.

Clustered for schools.

+ $p \le 0.1$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

effect of parents' social background underlines its importance and is consistent with previous research (Hunt 2008; Rumberger and Lim 2008). A one standard deviation higher level of social background is associated with a 1.63 times greater likelihood that a student will stay in school ($e_{\text{Social Background}}^{0.487} = 1.63$).

The effect of student school performance on school on retention was tested in model 3. Here as in the analysis of parents' expectations, we were surprised to find no effects of school performance on student retention. We also checked for gender differences in school performance and added one interaction term (labeled "marks*female") in model 4. Only the conditional effect of male students becomes significant. This indicates that student performance matters only for male students. A one standard deviation higher level of student marks is associated with a 1.73 times greater likelihood likely that student will stay in school ($e_{\text{Marks}}^{0.550} = 1.73$).

Finally, we tested H7 in model 5 and added parents' educational expectations for their children as an explanatory variable. The results confirm H7 as expected. Students whose parents have high educational expectations for them are more than 3.3 times as likely to stay in school ($e_{\text{Parents Expectations}}^{1.197} = 3.31$) as parents who have lower expectations for their children. This result supports previous findings in the literature (Rumberger and Lim 2008; Hannum et al. 2009; Yamamoto and Holloway 2010; Zhao and Glewwe 2010). Moreover, the social background effects on student retention can be largely explained by parents' educational expectations and student performance. Parents' educational expectations and student performance reduced the size of the social background coefficient significantly by 27.71 percent from model 2 to 5 (last row).

Conclusion

This study analyzed the determinants and consequences of parents' educational expectations and possible gender differences for students at the end of primary school in one area of Cambodia. Central to our analysis was the assumption that student achievement in school and the expectations and aspirations of significant others in parents' social networks play an important role in explaining parents' educational expectations for their children, and that parents' educational expectations help explain student retention. The study also investigated assumptions in the Wisconsin Model of Status Attainment regarding the determinants of students' educational expectations and the consequences of parents' expectations.

Considerable insight has been gained with regard to the determinants of parents' educational expectations in Cambodia. This study finds that determinants of parents' educational expectations differ by student gender. Whereas student achievement shows a positive effect on parents' educational expectations for boys, only significant others' expectations positively influence parents' educational expectations for girls. Moreover, results indicate that the sources of influence are limited to significant others in the parent's networks. Student aspirations and teachers' expectations of students were not related to parents' expectations for their children. Despite the positive effects of significant others' expectations on parents educational expectations, those expectations did not attenuate the effects of parents' social background on parents' educational expectations. Taken together, these results would seem to suggest (a) that gender differences in the determinants of parents' educational expectations, which can be seen as an anticipated educational decision, persist even as gender differences in educational attainment have virtually disappeared, and (b) that there must be other important factors to explain differences in parents' educational expectations according to their social background.

The most significant finding is that parents' educational expectations for their children and student achievement explain student retention and mediate the effects of parents' social background on student retention. This highlights the importance of parents' educational expectations in explaining student retention. It also reminds us that further investigations into the determinants of parents' educational expectations are needed. Future work should concentrate on factors suggested by competing theories such as rational choice theory.

Finally, a number of potential limitations need to be considered. First, we considered only the educational expectations of one parent for the student. In the majority of cases, this parent was the mother. Further analysis should consider the expectations of both parents and investigate possible differences in their determinants as well as effects on students' educational attainment. Second, significant others' educational expectations for the student were subjective perceptions of the parent about the prevailing expectations for the student in the parent's network. Actual expectations may have less effect than subjective perceptions. Moreover, it is possible that these perceptions are contaminated by parents' expectations for their students, since parents may project their expectations on to those of others. If this is the case, then parts of the effect cannot be attributed to social influence processes. Only self-reported expectations of significant others can rule out this possibility (Stocké 2010). Third, given a nonrandom sample from a geographical limited area with a small sample size, caution must be exercised in interpreting results. It is possible that some effects were not

detectable due to the limited power of the sample. Consequently, there is the need for a replication of our findings with random samples of larger sizes and geographical less bounded areas. Fourth, the findings are based on cross-sectional data. Consequentially, it is difficult to assess causal direction of observed effects. It is possible that in some cases a reverse relationship or a bidirectional relationship exists. Research on this topic should consider this limitation and adapt more sophisticated analytical methods to assess the causal nature of the effects.

Notes

1. General education in Cambodia includes grades 1–6 of primary education, grades 7–9 of lower secondary education, and grades 10–12 of Upper Secondary education. Basic education comprises of primary and lower secondary education (grades 1–9) (Education Law 2007).
2. The total number of students entering grade 7 of lower secondary schooling in a given year, expressed as the percentage of the total number of students enrolled in grade 6 in the previous year (Ministry of Education, Youth and Sports 2014).
3. Drop-out rate = 100% – (Promotion Rate + Repetition Rate) (Ministry of Education, Youth and Sports 2014).
4. The overwhelming part of the students lived together with their parent(s). However, in several cases (n = 12) no parent lived together with student. In this case, the legal guardian(s) of student (grandparents, siblings, etc.) got invited.
5. According to Greeves and Bredenberg (2005) the Ministry of Education, Youth and Sports (MoEYS) "defines 'remote' as located in isolated areas where communication with and transport to the schools is difficult and where population density is less than 10 people per square kilometer." Schools located in large towns or cities are considered as urban schools. Rural schools are all other schools.
6. The selection criteria of the communes based on a poverty mapping of the World Food Programme in Cambodia (WFP Cambodia 2011).
7. Question: "Given your family`s situation (income, employment, etc.) and your child's current achievement in school, etc., what level of schooling do you think he/she will be able to complete?" Answer: (1) Primary, (2) Lower Secondary School, (3) Upper Secondary School, (4) University, (5) Don't know.

8. Question: "What level of education would you like to achieve?" Answer: (1) Primary School graduation, (2) Lower Secondary School graduation, (3) Upper Secondary School graduation, and (4) University.

9. Primary Education = 6 years of education; Lower secondary school = 9 years of education; Upper secondary school = 12 years of education and university degree = 16 years of education.

10. Question: "Considering this student's present school achievement and his or her development since the beginning of the school year, what do you think is the highest level of education he/ she will be able to achieve?" Answer: (1) Primary School graduation, (2) Lower Secondary School graduation, (3) Upper Secondary School graduation, (4) University and (5) Don't know.

11. Question: "As far as you know, how far in school do you think (each of these persons) expect (name of the student) to go?" Answer: (1) Primary, (2) Lower Secondary School, (3) Upper Secondary School, (4) University, (5) Don't know.

12. This conclusion must be interpreted with caution as the criterion for statistical significant was permitted to rise to 0.10 due to the small number of cases.

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Chapter 8

The Complexity of Continuation

A Narrative Perspective on Student Transition and Dropout from Primary to Lower Secondary School in Cambodia*

D. Brent Edwards Jr., Thomas Zimmermann, Chhinh Sitha, James H. Williams, and Yuto Kitamura

Introduction

Around the world, but particularly in developing countries, educational access and enrollment have steadily risen in recent decades. Not surprisingly, this has occurred in tandem with increased attention over the past 25 years from development practitioners and governments in order to meet the targets contained in the Millennium Development Goals and the Education for All initiative. Yet, as these rates increase, dozens of countries struggle to insure that children stay in school. In recognition of this trend, The United Nations Educational, Scientific and Cultural Organization (UNESCO) used the 2012 edition of its Global Education Digest to highlight the severity and urgency of student dropout and retention. This report—titled, *Opportunities lost: the impact of grade repetition and early school leaving*—found that, as of 2010, there were approximately 31.2 million early school leavers (i.e., students who drop out before attaining the compulsory level of education for their country) worldwide (UNESCO 2012). While the highest concentrations of early school

leavers were found in South and West Asia and sub-Saharan Africa, it remains an issue that affects countries in each world region—particularly as students transition from grade 1 to 2 and from primary school to lower secondary school (LSS).

Despite the high-profile nature of early school leaving, a search for literature on the topic suggests that the call to action by UNESCO's Global Education Digest 2012 seems not to have resulted in a surge of additional research on the topic. Moreover, a review of the literature indicates that researchers have more often than not endeavored to understand this phenomenon through quantitative studies that employ surveys and econometric approaches (see, Hunt 2008). Relatedly, as Hunt (2008) observes, prior literature, but especially that on developing countries, has tended neither to dedicate significant attention to how key actors (such as students) understand the pressures they face nor to account "for the complexities of access, and the interactive, dynamic nature of factors which may contribute to dropping out" (p. 5). In response, the present chapter attempts to make a contribution by presenting results from a qualitative study on the process of student transition from primary to LSS in Cambodia. In so doing, the goals of the chapter are to present student and parent perspectives on this transition and to offer policy-relevant suggestions for addressing obstacles to student continuation.

However, before proceeding with a discussion of results and implications, the initial sections of this chapter include discussion of: the context of student transition and dropout in Cambodia, relevant previous literature, the theoretical orientation of the study (i.e., complexity theory), and the research methods employed.

The Context of Student Transition, Dropout, and Retention in Cambodia

The phenomena of student transition, dropout, and retention in Cambodia occur within a certain country, one that has faced significant challenges. Families today are still recovering from the murderous regime—known as the Khmer Rouge—that held power during 1975–1979 and which forcibly resettled people to rural areas in an attempt to create a utopian, agrarian society. This was followed during the decade of the 1980s with isolation by the West because it interpreted the liberation of Cambodia by Vietnamese forces—followed later by support from Russia—as the advancement of communism (Kiernan 1982). The years 1989–1993 were

then characterized by a transitional government that was run by the United Nations Transition Authority, which facilitated democratic elections. Since that time, the Cambodian economy has continued to liberalize, and has developed a sizable garment industry—one of the few options for employment aside from agricultural work for those students who dropout out (Springer 2011).

As for the education system, while the Khmer Rouge contributed to its destruction, the Cambodian government has sought to rebuild it, especially since transitioning back to a democracy in 1993 (Ayres 2000; see also chapter 2 of the present volume). The last ten years in particular have witnessed significant progress toward reaching universal primary education.[1] Recent data from the Education Management Information System show an increase in net enrolment[2] from 77.8 percent in 1997/1998 to 95.0 percent in the primary level in 2009/10. Despite these extraordinary results, the Kingdom still faces challenges in reaching its goal of universalizing nine years of basic education by 2015.[3] One of the primary reasons for this is the low transition rate[4] from primary to lower secondary level—78.4 percent for the Kingdom (ranging from 60.5 percent in remote areas to 76.0 percent in rural and 92.6 percent in urban areas)—in addition to high dropout rates of 20 percent in grades 7, 8, and 9, respectively (Ministry of Education, Youth and Sports [MoEYS] 2008/2009). Household surveys such as the Cambodia Socio-Economic Survey from 2012 estimate that only 25 percent of Cambodians over the age of 18 have finished at least lower secondary education (National Institute of Statistics 2014).

Previous Research[5]

Extant research on Cambodia has not attempted to understand transition, retention and dropout behavior from a holistic, qualitative perspective that places students in their family, school, and community contexts. Instead, what research does exist has examined, for example, the influence of the supply of education. On this point, although the MoEYS had increased the number of LSSs to 1,122 by the 2008/09 school year (up from 367 in 2000/2001), proximity to LSSs is still an issue (Ang and Conochie 2014). Benveniste, Marshall, and Araujo (2008) found that 15.9 percent of villages in the highest income quintile have an LSS while only 8.4 percent of those in the lowest quintile do. Benveniste, Marshall, and Araujo (2008) also found that the average distance that a student must travel to arrive at school ranges from 3.1 to 7.7 kilometers, for the highest and lowest income quintiles, respectively. Moreover, where schools are present, Velasco (2004)

found that those in rural and remote locations tend to have poorer infra-structure than those in urban areas, particularly when it comes to sanitary facilities for female students. Finally, teacher absenteeism in LSSs has been reported to be an issue that can influence student performance and, hence, dropout (Benveniste, Marshall, and Araujo 2008; No, Sam, and Hirakawa 2012).[6]

Research has also looked at student and family demand for education (Bray and Bunly 2005; Benveniste, Marshall, and Araujo 2008). Here, attention has been drawn, for example, to how direct costs (i.e., direct school fees) jump in the transition from grade 6 to 7—from a low of 107,000 Riel/year in rural areas to a high of 379,000 Riel/year in urban areas (Bray and Bunly 2005).[7] Second, the cost for supplementary tutoring—which, in reality, is more of a necessity for student success on key tests than a "sup-plementary" service—becomes the most significant cost aside from pocket money for food (Bray and Bunly 2005). And since tutoring expenses are excessive relative to the budgets of the poorest families, many students do not participate in this activity, thereby affecting their achievement levels and thus the decision (or ability) to continue on to higher grade levels (see Brehm, chapter 6, this volume).

The opportunity cost of children's time is another aspect of family demand that has been considered. Not surprisingly, many students start school late (or dropout early) to contribute to their family by working, both outside and within the home, though the latter is more common for female students (Velasco 2004; National Institute of Statistics 2009). As of 2001, it was found that 50 percent of children (7–14 years of age) were eco-nomically active (Velasco 2004). Importantly, there is a compound effect where students who start late due to economic activity are also more likely to drop out at lower grade levels, since opportunity costs increase once students reach their teenage years (Bray and Bunly 2005; No, Sam, and Hirakawa 2012).

A more recent study has looked at student, family, and school charac-teristics not directly related to economic factors. In this study—by No, Sam, and Hirakawa (2012)—it was found that student self-confidence and relationships among students were important, since Cambodian children are easily intimidated and will dropout if they do not have friends to sup-port them. Separately, relative student achievement and parental education were also statistically significant predictors of student retention between grades 1 and 5.

On the whole, then, previous research has identified a number of vari-ables, which are associated with student continuation. To summarize, these include school proximity; school infrastructure; teacher absenteeism (itself influenced by teacher–student ratios and low teacher pay); direct, indirect,

and opportunity costs; student achievement; parents' education levels; student self-confidence; and student relationships at school. Prior research has thus helped to identify a range of specific issues that affect whether or not students remain in school. In the present chapter, we attempt to make a contribution by moving beyond associations among individual factors, considering instead dynamics among multiple issues and contexts.

Analytic Orientation: Complexity Theory

As the literature review above has made clear, a number of issues must be taken into account when attempting to understand the reasons for and challenges to student retention. The present study responds to the nature of the experience under study by drawing on complexity theory, which, as Nordtveit (2010) argues, could be used by "development practitioners or theorists…as a tool for better understanding the processes of change in poor communities" (p. 111). As will be made clear, our interest in engaging complexity theory stems from its ability to guide our attention toward the ways that development "problems" (e.g., student dropout) are embedded in a web of influences that can propitiate or stifle positive change, often unpredictably (Nordtveit 2010). By extension, our purpose in the present chapter does not include a critical engagement with complexity theory; more modestly, we employ it to enhance how we understand and discuss the phenomenon of student dropout and retention in Cambodia.

Although a number of scholars have written about complexity theory, we draw here primarily on the work of Mason (2009) and Nordtveit (2010), who have applied this approach directly to the nexus of education and development. To that end, and for purpose of understanding a particular phenomenon, we highlight four central tenets of this approach. First, one must consider systems holistically, with attention to how the initial conditions of the system will influence the way specific elements impact each other. Put differently, one must be attentive to where and how the initial conditions reveal path dependence, meaning the ways that "the inertial momentum of a particular phenomenon will sustain its direction and speed along a particular path…[until] a competing phenomenon results in a redirection of that path" (Mason 2009, 119–120).

Second, one must understand "human cultural settings and institutions as…complex and dynamic by nature" (Nordtveit 2010, 111). That is, "Individual human beings (local participants, donors, administrators, service providers) as well as associations of individuals (institutions and associations) are multi-dimensional, non-linear,[8] interconnected, far from

equilibrium and unpredictable" (p. 111). These characteristics stem from the fact that "the successive addition of new elements or agents to a particular system multiples exponentially the number of connections or potential interactions among those elements or agents, and hence the number of possible outcomes," where outcomes can be understood as emergent properties or behaviors (Mason 2009, 119).

Third, complexity theory "emphasizes the need of understanding each actor's motivation and bounded rationality" because "a small change in the initial conditions of a system may exert great influence on the subsequent behavior of each added factor of change." (Nordtveit 2010, 113). The point is that understanding bounded rationality provides an indication of how conscious actors perceive and thus may respond to the environments—or "contingent complex wholes" (Mason 2009, 119)—in which they are located and the interventions to which they might be exposed in an attempt to create new connections that lead to alternative outcomes.

Fourth, and relatedly, it is necessary to achieve a localized understanding of the systems being investigated, since "the agents for change do not interact in [exactly] the same way [across locales]; the bounded rationality of each actor is not the same, and the possible outcomes of each added factor are therefore variable according to the initial circumstances" (Nordtveit 2010, 114). Importantly, this localized understanding can shed light on the ways that positive feedback can best be provided—something that is important because it contributes to self-reinforcement and, over time, the development of an "auto-catalytic chain of events in the field," or what can be described as the "lock-in" of a new self-sustaining phenomenon (Mason 2009, 120).

This way of approaching research in development contexts is useful because it encourages us to be attentive to how numerous, contextually sensitive, and interconnected factors impact (i.e., may facilitate or impede) various processes and outcomes. Departing from such an approach is ideal for the study of student retention because the issue of interest—that is, the phenomenon of students transitioning or not to LSS—is at the nexus of multiple, overlapping systems and contexts that relate to the family, school, community, and region, as well as the organization of various sectors (e.g., economy, health, and education). Moreover, the adoption of this general theoretical perspective is appropriate because, in the present study, we seek to understand not only how students and parents view the transition from primary to LSS but also the web of pressures, connections, and obstacles that they experience when anticipating and engaging in the process of transition itself.

Methodology

Data Collection

The data on which this chapter is based were collected in a single province in the south of the country during June and July 2011, though additional information has been gathered at regular intervals (roughly each six months) in the same communities and with the same participants. Ten student–parent pairs[9] from ten different communities were interviewed in an in-depth fashion using a semi-structured interview protocol which was guided—though not constrained—by the series of factors found in previous research to influence educational decision making at the family level, including, for example, issues related to the family, community, school, child and school relationship, parental perspectives on education, tutoring, work/education aspirations for the child, perceived requirements for success, and the participants' conception of the good life (Maaz, Hausen, McElvany, and Baumert 2006). The focus of the interviews was the interviewees' experiences and perspectives with these issues as the participating student for each family approached the end of grade 6 and faced the transition from primary school to LSS.

Data Analysis

The research approach that guided both the conduct of interviews and data analysis was narrative methods. As Moen (2006) states, "Narrative research is…the study of how human beings experience the world,…narrative researchers collect…stories and write narratives of experience" (p. 2). This approach was selected because of the value of narrative research in grasping such a phenomenon as family educational decision making, which, as discussed, is a complex process impacted by a range of individual, familial and contextual variables (Maaz, Hausen, McElvany, and Baumert 2006). Indeed, as Riley and Hawe (2005) state, "Narrative inquiry attempts to understand how people think through events and what they value" (p. 229). Ultimately, "we can see and understand how a person makes sense of the world" (p. 230). The understanding at which we arrive, moreover, is "neither reductionistic nor not static" because the narratives told by participants link them to their context (Moen 2006, 4). Moen (2006) explains this latter point well:

> As individuals are telling their stories, they are not isolated and independent of their context. On the contrary, it is important to remember that the

> individual in question is irreducibly connected to her or his social, cultural and institutional setting (Wertsch 1991). Narratives, therefore, capture both the individual and the context. (p. 5)

Clearly, and importantly, narrative research complements our underlying theoretical orientation of complexity theory in that it helps to achieve each of this theory's goals, as discussed above.

Through repeated analysis of the data, we were able to elaborate narratives for each family that depict the various systems, contexts, and sectors in which the student participants are nested. The strategy employed reflects what Lieblich, Tuval-Mashiach, and Zilber (1998) label a "categorical-content" approach (p. 23). Per this strategy, individual statements and remarks are "extracted, classified, and gathered" into categories and groups (p. 23). In accordance with prior research on student dropout, we focused on such categories as family, community, school, child and school relationship, parents and education, tutoring, work/education aspirations for the child, elements of success, and the good life (Maaz, Hausen, McElvany, and Baumert 2006). In writing each narrative, we sought to produce "an integrated whole" which connected the participants to their contexts, that is, to their "social, cultural, and institutional setting" (Moen, 2006, 4–5). In so doing, we follow the suggestions of established narrative theorists and researchers, such as Clandinin and Huber (2010), who write that narratives should reflect temporality, sociality, and place.

Findings

In order to provide insight to a variety of family perspectives on student transition from primary school to LSS and beyond, each of the three narratives below is drawn from a different geographical category—urban, rural, and remote. The narratives presented were chosen, first, because they reflect and embody issues that students and their families face in relation to the process of transition from primary school to LSS and, second, because they help to illuminate the ways that various, overlapping systems impact the transition process. In Cambodia, the urban label is given to schools located in large towns or cities, whereas the remote label is given to those schools located in "isolated areas where communication with and transportation to the schools is difficult and where population density is less than 10 people per square kilometer" (Geeves and Bredenburg, 2005, 30). The rest are rural schools.

Case One: Urban Community

The community in which Sok San and his daughter, Sok Mina, live con-
nects with a provincial city in a southern province in Cambodia.[10] Most
families in this community are farmers and intermittent laborers, many
of whom generate "income by climbing the mountain to cut down the
bamboo and trees for selling" (LHP1).[11] As for the father of Sok Mina, he
doesn't "have any real job" and is willing to do anything, "such as being a
laborer, whenever anyone hires [him]" (LHP1). At times he has worked as
a waiter in wedding ceremonies; other times, he too farms and chops down
bamboo and Rattans to sell. His wife, on the other hand, is a housewife,
without formal employment. Sometimes, in the rainy season, she works
in the rice fields. In the past, she has found employment during the dry
season in wedding ceremonies, where she washes dishes and cooks.

Life has not been easy for this family since arriving in this community
more than two decades ago, though the older of their two sons is able to
help augment the family income now and then. He is 22 years old, single,
and, while he does not have a steady job, he finds construction work when
he can, in addition to helping the parents in their rice field. The second son
(16 years old and single) does not bring in any money because "he is too
young" to do anything besides stay home and look after the cows (LHP1).
The father is concerned: "I don't know what I should do...I cannot earn
much in the community. I work based on my ability and eat based on the
income I earn" (LHP1).

Neither the parents nor their two sons advanced very far in school. The
father explains his situation:

> I was in some difficulty because I didn't have a father and lived with only
> my mother. She wanted me to study hard, but our living standard was in
> trouble, and the school was so far away, at the [city] market, in the provin-
> cial capital, so it was difficult for me to go on foot both in the morning and
> afternoon for several years. My mother didn't have money to buy a bike for
> me to go to school, so I stopped studying. (LHP1)

The same fate later befell the younger of the two older sons, who stopped
after 6th grade because the family did not have resources to purchase a
bicycle. Lack of transportation was the only thing holding the son back.

The daughter's primary school is located nearby, about 3 kilometers
from the family's house, while the LSS, in contrast, is a full 10 kilometers
away. Whereas Student 1 is currently able to walk 30 minutes to school,
she will need a bicycle next year to travel to school, a problem that is com-

pounded by the recently completed train track which endangers students walking along the path to school.

From the perspective of the family, the quality of the community's primary school is "neither so good nor so bad, but medium" (LHP1). And although the teachers teach those who show up, when students do drop out, they "do not say or do anything" (LHS1).

Importantly, Sok Mina has a good relationship with the school and her education. As the father says, "My daughter likes school so much. She likes studying" (LHP1). The daughter's success—she is ranked 5th out of 36 students—is a result of the fact that she applies herself and is given reinforcement by her parents, who, despite being farmers, want badly for their daughter to continue to in school. The father shared the following: "My two sons stopped studying, and I have only one daughter, so I want her to try hard to study to get knowledge like the others. I don't want it to be difficult for her to find a job when she grows up because she is a girl. If she [learns a lot], she can work and find a job" (LHP1). To support this, the parents are committed to buying her a bicycle so that she can make the trek to LSS next year. Moreover, both the father and the daughter express a desire for Sok Mina to become a teacher, though neither of them is sure which level of education is required to obtain such employment.

After school, Sok Mina receives tutoring for English, which is not offered during the day. The tutoring takes place at the school itself, 5 days/week, 1 hour/day, from 3 to 4 pm. These extra classes are offered by a monk, who works for donations, and while the family gives what it can, the cost of tutoring is a burden. Despite the hardship, learning English is seen as important by the parents for economic reasons because it will help the daughter communicate with foreigners.

Going forward, the family's economic predicament threatens Sok Mina's progress. The father says: "Nowadays, we have a lot of difficult problems because we lack money to back our living standard. However, we have to try to overcome and struggle to help our youngest daughter to continue her study because we have only one daughter. How difficult it is, we have to struggle" (LHP1). If the family can scrounge up the money necessary, they will be able to purchase basic materials and services that the daughter would need, like clothes, a bike, and tutoring.

Case Two: Rural Community

In a rural community near a national road, So Samphors lives with her grandfather, grandmother, and younger brother. So Samphors's family came to this community in 1984, when there was still conflict between

Khmer Rouge and the government. Although So Samphors and her younger brother have lived here since they were born, their parents (and others from the community) are currently living elsewhere—along the Thai-Cambodian border, where they are agricultural laborers—because there are no employment opportunities here outside of rice farming and a few informal jobs, such as chopping down trees and cutting and collecting grass.

The grandfather—Ouk Chan—completed grade 3, while each of his five children completed at least grade 9, with two continuing on to finish high school. So Samphors is currently in grade 6, while her brother is in grade 4. The members of this family are above the community average when it comes to their level of education, as "most students here do not complete grade 9" (LHS4). Reportedly, students stop because they don't have basic school materials, because they must help their families earn income, because of the itinerant nature of their family context, and because they don't have transportation. To combat student dropout, the grandfather actively shares his belief in the importance of education with community members, telling them:

> With education, [the children] will have a better future, because without education one might have to become a blue collar worker....To work as a merchant or a civil servant, one requires having education....If this level is high, the living standard is also high, and their professions are also quite good because they are well-educated. (LHP4)

The grandfather previously convinced an organization to donate 17 bicycles to the community in order to help the "small children who left school because they did not have a way to get to school and were...cutting grass to get pay" (LHP4). He adds that he felt "sympathetic to those children because they want to study, but they didn't have enough means of transport, good clothing, stationary, etc." (LHP4). The bicycles were distributed one per household so that two or three children could share. However, as it is not possible to put more than three students on one bicycle, some children bring their brother or sister to school and then go back to bring the rest.

The quality of the community primary school is perceived to be good. For the grandfather, this is because of the quality materials out of which the school buildings were constructed, while for the student this is because her teacher takes time to explain things to her, and because he speaks in a friendly way. Notably, parents only visit the school when they receive a formal invitation or when they return from their distant jobs. The parents

of So Samphors, for example, come to the school once per year, just before the Khmer New Year, when they return to the community for a visit.

Although So Samphors performs well in school—she is ranked 4th in math, her favorite subject—it is often difficult for her to concentrate "because she misses her parents who are far away from her" (LHP4). Other students in the community also experience distractions and disruptions. For them, the issue is a lack of sustenance, as the grandfather describes: "The living standard of the people is not good…they don't have enough food…This problem affects the children's feelings; consequently, they might miss their class one or two times. Some might no longer come to school" (LHP4).

Participating in private tutoring outside of the normal school day is a common strategy for families in this community to supplement students' learning and to help them make the transition to LSS. So Samphors used to take English classes from another school's teacher, though these classes have been suspended due to the teacher's additional responsibilities as assistant principal. When offered, So Samphors attended in the afternoons from 1 pm to 3 pm (though sometimes she stayed until 5 pm) and paid 500 Riel daily (though the price later rose to 700 Riel/day).[12] The student was particularly interested in taking these extra classes because "in the future, any job needs English in addition to the main skills she has" (LHP4).

Looking to the future, Ouk Chan, the grandfather, has hopes of So Samphors being either a teacher or a banker, though he recognizes that it ultimately depends on her decision and abilities. So Samphors herself expresses the desire to become a doctor, though she does not understand what level of education that requires. Neither is her self-concept in line with a desire to become a doctor. In her own words: "I don't have the capacity to reach university. . . . It's not because I want to stop studying, but just because I think I cannot reach it. Nobody tells me that I don't have the capacity" (LHS4). It may be the case that her confidence and sense of self-efficacy have been negatively impacted by the absence of her parents over multiple years during a crucial period of personal development— compacted by the fact that her grandfather is usually busy and is not home very much.

Despite the family's currently precarious economic situation, Ouk Chan will do what he can to improve the likelihood that his granddaughter can continue. This includes giving advice to So Samphors's parents to periodically save money and to buy cattle for the future, so that they can sell them when they need money for her education. If they do this, they will be able to cover the fees and other costs that accompany higher levels of education, such as the purchase of a bicycle. Otherwise, the only

hope for So Samphors, as her grandfather points out, is that she either receives a scholarship from the government or is sponsored by an outside organization.

Case Three: Remote Community

Chan Vorleak has grown up in a remote community with her large, eleven-member family, though only six members remain in the house at the moment. Among these eleven members, there are two parents and nine children, the latter of which range from 14 to 28 years. They have also completed a wide range of levels of education: One did not study at all while another went as far as grade 9 before stopping. The only two children still studying are Student 10, in grade 6, and her older sister, Chan Dyna, currently in grade 12.

Five of the nine children can be found elsewhere currently. Four of them are already married and have their own families, and the other moved to Phnom Penh to work in a factory, a common option for students from the provinces seeking employment. Although these siblings live apart, they still help the family. It also bears mentioning that, though the 12th-grade student is still a member of the household, she only comes home once per week because her school is far enough away (about 10–20 km) that she must stay with a friend.

Many of the older siblings stopped going to school because of the difficult situation in which the family has found itself. For the past 10–15 years, the father has been sick and cannot work. This has meant that a number of the children have to raise the cows and work in the rice field in order to sustain the family. More recently, the mother fell down and broke her hand when going to check on the rice; now she cannot farm either. According to Chan Vorleak, "Her hand does not work. She can cook, but she cannot carry heavy things" (LHS10). In response, the older siblings have stepped in and taken over much of the housework. Because of the assistance provided by all the (especially older) children, the family has everything that it needs, though they are not rich.

In this community, where the family has been located for nearly 20 years, not many employment opportunities exist. Most villagers are engaged in rice farming as well as planting fruits and vegetables to sell. Outside of those avenues, a number of people (but especially adolescents) leave the community in order to find work in the Phnom Penh factories, alongside Chan Vorleak's sister, because they are "sorry to see their parents farming" (LHS10). Out of economic necessity, many students leave school to assist their families either by farming or by working in the capital. Based

on these sources of income, the standard of living in the community is "good, but some people are very poor" (LHP10).

As for the primary school, it is about 6 kilometers away from Chan Vorleak's house, making their house among the furthest away from among those who attend the school. Over the years, the school's quality has improved, mostly as a result of personnel changes. As the older sister explains: "When I studied there, the teacher was not good because he was cruel and he drank wine, and we didn't study much. But he was changed. I think the teachers now are good because they know a lot and because they have finished their university degree, unlike the previous teachers, who were also old" (LHP10). Chan Vorleak adds that the current teachers are good because they explain things clearly.

Community members and parents visit the school at times, but above all when there are parent–teacher meetings or information sessions. The latter of these have focused on various aspects of education, health, and sanitation. Otherwise, contact between the school and family is limited to when teachers call Chan Vorleak's parents to check on her when she is absent or arrives late, which is becoming more frequent because her household responsibilities are increasing.

Chan Vorleak not only likes school but is also an excellent student who consistently ranks among the best in her classes. In grades 4 and 5, for example, she was the number 1 student; presently, in grade 6, she is ranked 3rd.

Outside of regular classes, Chan Vorleak attends private tutoring for both math and English. She goes every day at the same time, from 11 am to 12 pm, though the topic (e.g., math vs. English) alternates each day. With a teacher from her school offering these classes, the cost for math is 300 Riel/hour, while the hourly cost for English is 500 Riel. Such rates make it "difficult" for the family to provide Chan Vorleak with this extra preparation.[13] Despite starting with 10–20 students, the classes may not continue for much longer, however, because the number of students who show up keeps decreasing. Hopefully, for the sake of Chan Vorleak, this doesn't come to pass, for, as her sister, Chan Dyna, mentions, "If we don't study in extra class, we will not understand, [because, as it is,] we cannot understand much in public class" (LHP10).

In the future, while Chan Dyna has thoughts of being a doctor, the family wants Chan Vorleak to work as a teacher—either at the primary or LSS level. In part, the latter is true because family cannot afford her continuing past grade 12, which she should be able to attain because "she is the youngest child, and because she has her brothers, sisters, and mother to earn money to support her" (p. 21). As with other families, Chan Vorleak's

parents are eager for her to obtain government employment because it is seen as a stable job that provides a middle-class income.

Cross-Case Discussion

First and foremost, the cases presented here provide insight into how different systems, contexts, and sectors overlap and are inseparably linked not only to each other but also to student continuation. For example, a lack of economic opportunities in many communities (outside of agriculture and the informal economy) combines with poor schools (especially with regard to facilities and resources) and a lack of access in the education sector, particularly in more rural and remote areas, which can contribute to student dropout and immigration to urban areas, which in turn places more stress on city schools over time. Or, as the rural case showed, a lack of economic opportunities can lead students' parents to migrate to other countries in search of employment, which can affect students' mental and emotional state and, thus, their ability to perform well in school. Moreover, given the unavailability of social-psychological services in the health sector or from schools in particular, student performance can continue to suffer, thereby raising the likelihood of dropout, above all in LSS and beyond as the pressure increases to perform well in order to be able to continue. Our cases thus demonstrate how the characteristics of economic, educational, and health systems, for example, are linked (or aren't) in ways that make dropout more probable. This is reflective of when Mason (2009) writes that "weaker educational institutions or systems...compound the failure of their students, thereby further weakening themselves in an endless and vicious cycle," unless or until momentum is sustained in a different direction (p. 120).

Additionally, in the remote case, we saw how the characteristics of the health and economic sectors also intersected with the family system in a particular way. On top of the family subsisting via the farming of rice, both of the parents were rendered unable to work through either sickness or injury. The family is thus caught in a situation where—in their geographic locale—neither formal economic employment nor basic health care is an option. While this predicament clearly had implications for their nine children, it also reveals the importance of the family system in the face of these sector-wide deficiencies. That is, we saw how the size of a family and a child's location within that family both affect how the family responds and the likelihood that each child will be able to continue in school. While the older children are pressured to leave school early in order to take over the

economic activity and to take care of the parents, the middle and younger children are able to remain in school, though the middle and youngest children are treated differently since the family may—depending on each student's abilities—decide to invest most in the educational potential of a middle child, in order to receive the economic benefits of that additional education as soon as possible. Consequently, families often direct their occupational aspirations for their children toward the government sector, where jobs as civil servants and teachers are seen as a source of stable and middle-class incomes.

Outside of family systems, another system that merits further scholarly attention is the system of tutoring that is currently in place. This study found that each of the three participating students partake in private tutoring sessions outside of the regular school day; in addition, these students went so far as to comment that these tutoring sessions are necessary because it is difficult to understand what is going on in class without them.[14] These comments align with previous studies on private tutoring in Cambodia, which have found that, without the supplemental instruction offered by teachers for a fee, students cannot pass the monthly examinations, thereby lowering their class rank and their chances of continuation (see, e.g., Brehm, Silova, and Tuot 2012). To that end, it will be essential that reforms geared toward improving student retention keep not only the issue of tutoring in mind, but also the system of patron–client relationships that has historically characterized community dynamics (Pellini 2005), and which increasingly shapes the provision of governmental services more generally (Springer 2011). The point here is that the patron–client relationship between teachers and students—which often manifests in the form of students paying teachers for access to or practice with important curriculum material—may well serve as a link between the family and school systems that thwarts other attempts, such as those discussed below, at working toward student retention.

Student Retention in Cambodia: Implications and Conclusion

To be sure, the larger, sector-wide challenges that impinge on student retention and dropout are daunting. Nevertheless, the narratives presented here can be useful, particularly if we think of them as a baseline or starting point for targeted action. As complexity theory suggests, "A small change

in the initial conditions of a system may exert great influence on…subsequent behavior" (Nordtveit 2010, 113).

Departing from this study's narratives, the potential issues to consider for policy response are various. First, in two of the three cases, the lack of a school-family connection emerged, since the participating families only visit their children's schools when they receive a formal invitation. In addition, it was shared that teachers may choose not to contact students' homes when they drop out. Enhancing this connection may be one way to positively impact student retention. That said, from the perspective of complexity theory, the engagement of parents with their student's schools may be a particularly intractable issue because of ingrained hierarchical cultural norms (Pellini 2005). These norms, which teach respect and promote deferential behavior toward those in positions of authority, including teachers, thus act as "lock-in" mechanisms—or systemic inertia—that would require concerted and sustained intervention in order build momentum toward alternative forms of school–family interaction. Given this dynamic, it seems more promising to incentivize teachers reaching out to parents. Most basically, the idea is to develop positive feedback loops that encourage more and closer connections between families and schools, which in turn may indirectly contribute to student retention.

Second, it was shared by the participants from the urban case that basic materials—such as uniforms and school supplies—represent significant costs for families. These costs—and others, such as transportation and money for food—increase as students progress, and they are likely felt even more intensely by families in rural and remote areas, where economic opportunities are fewer. A key issue for the MoEYS is to ensure that students do not experience either formal or informal fees for such basic materials (including school day nutrition). Although a commitment has been made by the government to provide educational services free of charge, more must be done—particularly as regards the provision of transportation (i.e., bicycles), the lack of which represents a central challenge to student continuation during and beyond LSS. Indeed, while the grandfather in the rural case was able—in a move that illuminates the unpredictability of students' local contexts—to convince a nongovernmental organization to donate 17 bicycles, not all students live in such a community context. Within the aid-dependent education sector, it may be possible to designate or direct funding from international organizations to procure and provide basic schools supplies and bicycles to students (Morton 2014). Though such acts seem minor, they could actually combine to significantly alter family decision making with regard to student continuance in school—allowing a student to remain in school rather than dropping out to help with income-generating activities or household tasks, for example. In this

way, engaging "complexity at lower levels of the system" can contribute to different outcomes, in this case, in the form of student retention (Mason 2009, 120).

Relatedly, it was found through the case of the remote family that the absence of accommodations near the LSS can negatively affect the decision to stay in school. This is an important point, since it may not be practical or possible for students from remote communities to travel long distances and then return home each day. In these cases, the availability of lodging would have a direct impact on student and family decision making. Analytically, while the provision of student housing near schools could serve as an additional connection between the family and school systems, the challenge would be to ensure that the connection serves as a "positive interaction" that adequately responds to the "self-organized and non-formal relationships between the community members" in those communities where the housing would be based (Nordtveit 2010, 114). To that end, in the context of Cambodia, it may be wise to work with or learn from the system of Buddhist pagodas found in communities across the country. These pagodas have historically been a source of social capital and have often worked with communities in various ways to facilitate the provision of education (Pellini 2005).

Fourth, it stood out that parents and students were unaware of the education required to realize their occupational aspirations. The urban family hopes that their daughter will become a teacher, while the rural family wants their daughter to work as a doctor, but neither was able to communicate the necessary level of education to occupy these positions. It follows, then, that some discussion in schools and with parents of various careers and the educational attainment required would be beneficial for students and families, for example, in terms of adjusting their aspirations and planning for family investment in the schooling of their children. On the one hand, such awareness campaigns are important because, as Mason (2009) points out, when working with systems of "conscious agents," it is essential to "take account of...expectations" that guide their behavior (p. 119). On the other hand, raising awareness in this way is likely to change parental and student decision making in unpredictable ways. For example, rather than keeping a child in school, a family may decide that dropout is the best option once they learn the level of education required to gain access to certain careers, particularly if other supports, such as scholarships, are unavailable.

Lastly, we note some larger issues and more ambitious options to address and consider. These include poor infrastructure (specifically, the need for safe paths for travelling to school), health services (e.g., counseling and school nurses), and targeted government scholarships (e.g., for a family's

first child, girls, children from remote communities, or other subgroups that are disproportionately impacted due to particular circumstances). Scholarships for girls may be a particularly promising action in light of family tendencies to prioritize the education of boys.

Given the range of obstacles that threaten the education system generally, and student progression specifically, each of the strategies mentioned here holds the promise of positively impacting student retention. Taken together, however, and if complexity theory is correct, the cumulative effects of these steps may be nonlinear, or more than the sum of their individual parts. Put differently, student retention will be more significantly impacted in a positive direction if multiple strategies that span and connect multiple systems (e.g., the family, health, education, and economic systems, to name a few) are enacted simultaneously. To the extent that positive interactions and positive feedback loops can be developed at multiple levels, the greater the likelihood that students across geographic locales will remain in school (Nordtveit 2010). Ultimately, the idea over time is to build momentum toward the emergence of a new auto-catalytic state, meaning, in this case, that student retention through the end of secondary education, for example, becomes the new norm, one which is achieved by all students in Cambodia with the help of the kinds of policies, strategies, and actions discussed here—all of which, in concert, can serve to slowly shift the system's inertia away from outcomes such as student dropout.

Notes

1. Primary Education in Cambodia includes grades 1–6.
2. The net enrolment ratio (NER) is "the ratio of the number of children of official school age in school to the number of children of official school age in the population" (National Institute of Statistics 2009, p. 10).
3. Basic Education in Cambodia combines six years of Primary Education and three years of Lower Secondary Education.
4. The transition rate is the percentage of children who successfully complete primary school and enroll the next year in lower secondary school.
5. For literature on dropout outside of Cambodia, see Hunt (2008).
6. It should be noted, however, that, as No, Sam, and Hirakawa (2012) suggest, lower teacher effort was related to high teacher–student ratios and the need (or requirement in rural and remote areas) to teach two shifts.

7. These amounts would be approximately equivalent to US$29 and $102, respectively, using exchange rates from 2005.
8. O'Shea (2007) has usefully and succinctly defined the nonlinearity of systems as when "they are more than simply the sum of their component parts," that is, when the behavior of the system is "not only determined by the individual behavior of the parts, but also by the 'interaction' of the parts" (p. 637).
9. In some cases, someone other than the student's parent was interviewed, such as a grandparent or older sibling, depending on the parents' availability.
10. The names used throughout are pseudonyms.
11. The parenthetical citations following the quotes contain acronyms that indicate the source of the quote. LHP1, for example, corresponds to Parent 1, while LHS4 corresponds to Student 4.
12. Since at least 2011, approximately 4,000 Riel has been equivalent to US$1. Respectively, then, 500 and 700 Riel would be equivalent to approximately 12.5 and 17.5 cents.
13. See footnote 12 for the Riel-USD exchange rate.
14. Brehm and Edwards (2014) discuss the various types of private tutoring in which students engage.

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Chapter 9

Higher Education in Cambodia
Expansion and Quality Improvement[1]

*James H. Williams, Yuto Kitamura, and
C. Sopcheak Keng*

The Government of Cambodia has recognized the importance of higher education and has taken a number of steps to expand access. At the same time, awareness is growing of the importance of improvements in quality, particularly given the rapid expansion of the system[2]. This chapter describes the expansion of higher education[3] in Cambodia over the past 30 years. The chapter relies primarily on a unique dataset of institution-level statistics assembled from data collected over the past 30 years by the Ministry of Education, Youth and Sport (MoEYS). In addition, the chapter draws on data from the United Nations Education, Science and Culture Organization (UNESCO), both from its published sources and from the Institute for Statistics' online data. Cambodia is not alone in facing issues of expansion and quality. Nor is it alone in facing the challenges of developing its system in a context of intense globalization. Still, relatively few education systems in the world have been as debilitated as was Cambodia's 30 years ago.

Historical and Policy Context

Higher Education in Cambodia

The inception of the modern system of higher education in Cambodia can be found in the establishment of the National Institute of Law, the

National Institute of Politics, and the National Institute of Economic Sciences in 1947, several years prior to the end of nearly a century of French colonial rule. These institutions were under the strong influence of the higher education system of the suzerain state, France. The first institution that would be recognizable as a university in the Western sense was established in Phnom Penh in 1960, the Khmer Royal University. Thereafter a rapid period of expansion followed. In 1965, six higher education institutions were created: the Royal Technical University, the Royal University of Fine Arts, the Royal University of Kompong Cham, the Royal University of Takeo-Kampot, the Royal University of Agricultural Science, and the People's University (MoEYS 1971, cited in Pith and Ford 2004). By 1966, tertiary enrollment had reached 7,360 (Ayres 2000). However, as Pith and Ford (2004) point out, these universities provided education of extremely low quality.

In some sense, the current rapid expansion might be seen to mirror the initial expansion of higher education in the 1960s, a process that Ayres (2000) has characterized as the "brainchild of Prince Norodom Sihanouk," who sought to expand tertiary education so that "students could obtain almost all higher education within Cambodia" (p. 50). Unfortunately, there was little planning for "how the new institutions were to be financed, staffed, and resourced" (Ayres 2000, 50).

The Government of Democratic Kampuchea, which was led by Pol Pot and ruled the country from 1975 to 1979, abolished the entire education system and destroyed many educational facilities. More than three-quarters of all university teaching staff and a phenomenal 96 percent of students were massacred by the Khmer Rouge (Chealy 2005). Higher education in Cambodia was thus ripped apart. Though the quality of university education was low before, the destruction of the Pol Pot era rendered the system incapable of imparting the knowledge and experience that had been accumulated up to 1975. A large part of the intelligentsia was lost. The legacy of the virtual destruction of the entire system remains to this day.

In 1979, the pro-Vietnam People's Republic of Kampuchea was established with the help of the Soviet Union. Numerous experts from Russia and Vietnam came to Cambodia and proceeded to set up a higher education system on the Soviet model. This period saw the reopening of the Royal University of Phnom Penh and other universities that had been established before the Khmer Rouge era. From the late 1980s to the early 1990s while Cambodia had transitioned out of Vietnamese control and to democracy and capitalism, the Royal University of Phnom Penh fell prey to an internal power struggle, with the ultimate result that the faculties of economics, law, and education became autonomous. These faculties formed the basis, respectively, of the National University of Management,

the Royal University of Law, and Economics and the National Institute of Education. The current system of 14 government ministries individually managing relevant universities is resulted from the public administration system created during the socialist regime of the 1980s. Strong criticism persists that the management and supervision of higher education institutions is too decentralized to different ministries and this must be a cause of inefficiency in the university governance.

The Paris Peace Agreement was signed in 1991. In 1993, a general election was held, monitored by the United Nations Transitional Authority in Cambodia (UNTAC). As peace was finally restored in Cambodia, higher education resumed its expansionary course. In the process, the socialist influence on the higher education system in Cambodia, which had spread from Russia, Eastern Europe, and Vietnam in the 1980s, gradually eroded, and the strong influence of the United States, Australia, and Western Europe began to prevail. With the introduction of market forces, the idea that universities can generate potential commercial gain became widely accepted. National universities officially came to be called public administrative institutions and were transformed into semiautonomous institutions (Pith and Ford 2004). Furthermore, in 1997, private capital was allowed into university management. This gave rise to the birth of many private universities and a mushrooming in the number of higher education institutions. The first private university in Cambodia was Norton University, established in 1997 in the wake of these policy changes. As of the end of 2014, there are 105 higher education institutions (39 public and 66 private)[4].

Higher education institutions of Cambodia today can basically be classified into three types—the Royal Academy, universities, and colleges specializing in particular fields. Notably, the Royal Academy is expected to play the role of a think tank, transcending institutional boundary distinctions. Sadly, lack of human resources has meant that the Academy does not serve its original purpose, but offers educational programs like other higher education institutions. It has virtually no capacity to engage in research or provide expert advice (Chealy 2009). Many higher education institutions in Cambodia only run programs in specific areas of specialist fields. Few multifaculty universities offer instruction over a broad range of fields.

Demand for higher education has risen dramatically in recent years. In response, many private higher education institutions have been founded. Following Norton University, mentioned earlier, the Institute of Management Science and the Institute of Technology and Management were founded in 1998, the International Institute of Cambodia in 1999, and then a steady stream of private universities thereafter (Chealy 2009). Meanwhile, even before the establishment of these private higher education

institutions, national universities, whose tuition is free in principle, were offering fee-paying courses. These courses are essentially the same as the regular courses for the students who do not pay fees (i.e., scholarship students); moreover, fee-paying students can take the same classes as scholarship students. These fee-paying programs are considered necessary for public higher education institutions to generate needed financial resources, especially to pay teaching staff.

Private universities comprise a very large proportion of higher education institutions offering four-year educational programs. While playing an important role in meeting demand for higher education, there are many problems relating to the quality of what is being taught and the variety of programs on offer. Issues with quality are not limited to private universities; national universities also confront a number of challenges. In this respect, it is extremely important to understand the quality assurance mechanisms in place, chiefly through the accreditation system.

Efforts to Raise the Quality of Higher Education

As universities and other higher education institutions began to admit large numbers of students, especially from the late 1990s, the problems of low quality became widely recognized. High-caliber students were obviously needed to meet Cambodia's new labor market demands. If the quality of Cambodian higher education was not improved, Cambodian students would turn to higher education markets in surrounding countries.

The Education Strategic Plan (ESP) 2014–2018 prioritized quality assurance, quality improvement, and improved management at all levels of education and in all educational institutions. The previous ESP 2006–2010 transformed the Department of Higher Education to meet rapidly changing needs in the sector. The Department used to simply play a management role of the higher education sector in the MoEYS. It is now intended more to focus on monitoring, analysis, and formulation of policy. The Plan designated the chief roles of the Department of Higher Education as: (a) creation of policies and strategies for the higher education sector; (b) approval of administration of higher education institutions[5]; (c) support in development of necessary subject programs and management tools to assist in fulfilling accreditation criteria for higher education institutions; and (d) improvement in the quality and efficiency of higher education throughout the country. For the Department of Higher Education to achieve these functions, it must switch from its

past role of carrying out designated set tasks within the MoEYS to its new role of chief planner for the future direction of Cambodian higher education. To this end, it is essential to improve the expertise and capacity of staff, an issue that the Department of Higher Education has been making efforts to address by providing training opportunities to their staff (Hirosato and Kitamura 2009)

To meet the demands of the changing labor market and to promote greater coherency within the system, the Foundation Year Study was introduced as an important reform. From 2005, all undergraduate students have to take the Foundation Year Course Program (FYC) as a compulsory part of their course of study during the first year of their bachelor's program. The intention is to provide all students with broad knowledge in the humanities, mathematics and natural sciences, social sciences, and foreign languages.

Playing an extremely significant potential role in recent higher education reform is the Accreditation Committee of Cambodia (ACC), established in 2003 by Royal Decree (No. NS/RKT 03/03/129). According to the Decree, all higher education institutions in Cambodia, whether run by a Cambodian or foreign organization, have to obtain accreditation from the ACC in order to confer degrees. As a result, many higher education institutions carried out a curriculum and instructional review as part of the process for receiving accreditation, for example by instituting the Foundation Year Study or drawing attention to their quality improvement efforts. The ACC issued its accreditation criteria, which has resulted in many higher education institutions beginning self-assessment processes. Thus, the official inauguration of ACC opened a new chapter in Cambodian higher education (Chealy 2005).

The accreditation process designated quality criteria in nine areas: (a) mission; (b) management, administration, and planning; (c) course program, (d) lecturing/teaching staff; (e) students and student services; (f) learning resources; (g) facilities and equipment; (h) financial management and financial planning; and (i) information dissemination. However, lack of staff within ACC with expertise in these areas has meant that the ACC was slow to certify institutions (Chealy 2009).

At the same time, there have been certain efforts made by ACC. From 2006 to 2012, the focus of accreditation by ACC had been primarily on the assessment of the FYC. The accreditation of FYC has been considered as the first step to improve the quality of higher education in Cambodia. Then, the following accreditation criteria have been set: (a) Establishment of the Department of Foundation Year Course Program; (b) Foundation Year Strategic Plan; (c) Foundation Year Course Curriculum; (d) Teaching

Staff in Foundation Year Course Program; (e) Physical Facilities and Learning Resources; and (f) Student Admissions. After the seven years of accreditation on FYC, the change in understanding the culture of quality improvement and self-assessment have been widely recognized by various stakeholders in the higher education sector. Improvement of qualifications and experience of faculty members and management/administrative staff have been reported to ACC, and clearer and more result-oriented plans for most of the accredited program have been introduced at higher education institutions (Khieu 2011).

Another significant attempt to reform the system was introduction of the credit award and credit transfer system in 2004 by ACC (Accreditation Committee of Cambodia 2004). In place of a system whereby academic achievement was certified at the end of each academic year, a new credit-based system allows flexibility in fulfilling course requirements. Credits earned through study at other universities can now be recognized. This means, for example, that part-time students can make flexible plans in their academic pursuits. However, the credit system was also slow to be fully implemented. Systems in individual universities were still inadequate and many staff and students were slow to understand the new system. In these and other ways, the higher education system can be seen as needing to improve management and administrative capacities to handle its growing size (Chealy 2005).

As another example, the National Commission on Doctoral Studies was established in 2009 under the Council of Ministers, because there were an increasing number of PhD students and this subsector was not well regulated. At the Education Congress in 2009, prime minister criticized this phenomenon of allowing universities to grant doctoral degrees too easily. (There has been no regulation by the State on the granting of doctoral degrees. Only the written regulation is to limit the entrance of doctoral program for those who hold a Master's degree.)

Such being the reality of Cambodian higher education, a number of foreign agencies and organizations provide external finance and technical support. These agencies and organizations include the Japan International Cooperation Agency, the World Bank, the Commission on Higher Education and the Office for National Education Standards and Quality Assessment of Thailand, Ministry of Higher Education National Accreditation Board of Malaysia, the National Assessment and Accreditation Council of India, the Embassy of the United States, Phnom Penh, Cambodia and the Fulbright Senior Research Fellowship Program, and the Asia-Pacific Quality Network.

It is in this context and at this point that the expansion and development of higher education in Cambodia should be understood.

Statistical Portrait of the Development of Cambodia's Higher Education System

The previous section outlined the history of higher education in Cambodia, noting the great expansion of the system and discussing efforts of the Cambodian government to improve quality. This section quantifies the expansion, drawing on higher education yearbooks prepared by MoEYS as well as statistics of UNESCO Institute for Statistics.

Institutional Expansion

Among the first dimensions of expansion is the dramatic increase in the number of institutions, from the single Royal University of Phnom Penh in 1979 to over 70 institutions in 2009. Until 1997 all higher education institutions were public. Changes in policy allowed establishment of private institutions of higher education, as explained in the previous section. As a result, the number of institutions increased rapidly, particularly after 2000.[6]

As noted, a somewhat unique feature of Cambodian higher education is that many higher education institutions are not under the authority of MoEYS, but other ministries.[7] Parallel with growth in the number of institutions was a proliferation of branch campuses. By 2008, there were approximately 134 main and branch campuses nationwide, 33 associated with public universities and 101 with private universities. The majority of these private institutions were established by Cambodians, such as successful businessmen, former senior public servants, etc. A number of these private institutions are operated as profit-making ventures, others serve particular populations such as the poor or girls/women who cannot come to Phnom Penh for their advanced studies. Under current regulations, it is difficult to distinguish the criteria for more and less legitimate profit-making and nonprofit educational organizations.

Growth in Enrollments

Participation in higher education in Cambodia has fluctuated with politics, as already discussed. In 1970, UNESCO statistics reported tertiary enrollment of 9,228 students. By 1980, this had fallen to 702. Since then, the system has grown quite rapidly.[8] Though enrollment did not catch up to 1970 levels until the 1990s, the pace of expansion is remarkable.

According to UNESCO statistics, enrollments increased by a factor of 4 between 1990 and 2000. Between 2000 and 2005, enrollments grew by 260 percent according to the UNESCO Institute for Statistics. MoEYS statistics, which utilize figures reported by universities and thus include multiple enrollments, show even higher rates of growth.[9]

To put these numbers in perspective, it may be useful to examine tertiary enrollment rates in Southeast and East Asia over the same time period. We examined tertiary gross enrollments rates (GERs) from 1970 to 2005 for ten Southeast and East Asian countries (UNESCO Institute for Statistics). It should be noted that these figures include enrollment in two-year colleges and postsecondary technical colleges (ISCED level 5b)[10] as well as four-year colleges and graduate programs (ISCED levels 5 and 6, respectively). According to these figures, South Korea overall has expanded access to higher education the most, from a tertiary GER of 8 percent in 1970 to 91 percent in 2005.[11] Japan provides second greatest access at 55 percent in 2005, up from less than 18 percent in 1970. Interestingly, the Philippines started slightly above Japan's level in 1970, but grew to only 28 percent by 2005. Thailand expanded tertiary access rapidly from less than 3 percent in 1970 to 46 percent in 2005. Most remarkable of all was China's growth from 0.06 percent in 1970 to nearly 20 percent in 2005. Malaysia grew as well. At the bottom in terms of actual access are Vietnam, Laos, and finally Cambodia.

Comparing the three countries of the former Indochina, Cambodia and Laos show the most growth, depending on whether one starts in 1970 or 1980. In 2005 Cambodia's tertiary system was six times larger than in 1970, and 81 times larger than in 1980. Lao's system was 112 times larger in 2005 than in 1970 and 41 times larger than in 1980. Even Vietnam's system grew ten times in the 25 years between 1980 and 2005. In absolute numbers, of course, Vietnam is by far the largest system of the three.[12]

Growth in Private Provision and Fee-based Enrollment

The majority of new higher education institutions in Cambodia are private (see Figure 9.1). From a single institution in 1997, the private system has grown dramatically. Within six years after 1997, the number of private institutions exceeded the number of public institutions.

Enrollments show a similar pattern. Since private enrollment was first permitted in 1997, private tertiary enrollments have grown by a factor of 86.5 to 2008. During the same period, public tertiary enrollment grew 4.8 times. It is interesting to note that private sector of higher education has expanded significantly in many countries since 1990s, and Cambodia is
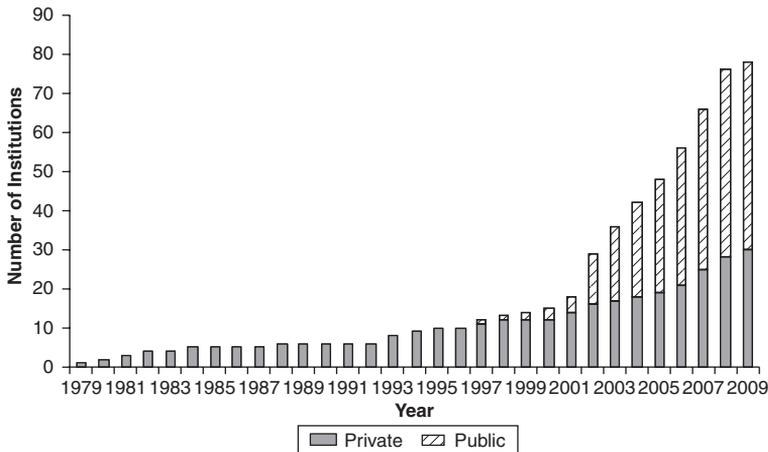
Figure 9.1   Number of Higher Education Institutions, 1979–2009, Cambodia.

Source: MoEYS, Statistics of Higher Education Institutions, various years (2002, 2003 figures interpolated).

no exception. Such trends may be interpreted as an influence of neoliberal globalization, which promotes market-driven competition.

As noted, alongside policies permitting private establishment of universities, policies were put in place allowing students to enroll in public universities on a fee-paying basis (in addition to those students winning scholarships). To further complicate the picture, some private universities offer scholarships as well. The cumulative effect has been to open the system dramatically, but mostly to fee-paying students. As such, the majority of Cambodians who attend higher education today pay tuition. Once policies permitting fees and private higher education were put in place, the Cambodian higher education system shifted in two years—during 1996–1998—from a system in which the majority of enrollments were free to one in which the majority were on a fee or private basis. By 2008, almost 90 percent of enrollments were on a fee-paying basis.

Social Origins of Students

Given the average low incomes in Cambodia and the increasingly fee-based nature of Cambodian higher education, questions might be raised about the social origins of university students. Unfortunately, statistics are available only for 2000. In that year, data on the parental occupations

of students enrolled in higher education are included in the yearbooks. Children of government workers accounted for the largest number of tertiary students, followed by young people whose parents were traders, farmers, and laborers.[13]

Questions might also be posed about which institutions served which groups of young people. In 2000, when public universities still enrolled the majority of students, children of farmers and laborers relied almost exclusively on public institutions. A relatively larger proportion of children of traders enrolled in private universities as compared with children of government workers.

Although this situation may have changed slightly since 2000, it is still likely that the majority of rural farmers and laborers have faced major obstacles to enrolling their children in higher education because of limited financial capacities and geographical location.[14]

Geographic Origins of Students

Similar questions might also be posed about the geographic origins of students. Do students from urban areas, particularly Phnom Penh, capture most of the seats, or are university enrollments well distributed across the country? Drawing on 2000 statistical yearbooks for available data, figures suggested 51 percent of the enrollments were from Phnom Penh, 47 percent from rural provinces outside Phnom Penh, and 2 percent from the remote provinces.[15]

Relatively higher proportions of students from rural and remote provinces (slightly more than one-third) are scholarship recipients as compared with students from Phnom Penh (less than one-fourth). Almost 80 percent of Phnom Penh enrollments are in public institutions (79.4 percent) as compared with 75.8 percent of rural provincial enrollments and 73.6 percent of remote enrollments. Demand for higher education in rural and remote provinces would appear to be high enough that greater proportions of students from those areas are enrolling in private institutions, despite their greater cost. This situation seems to be due to the limited number of public institutions established outside Phnom Penh.

Gender

Finally, one might ask whether the rapid rate of expansion favored both male and female enrollments. As in many countries, male enrollments are higher than female enrollments in Cambodia's higher education system.
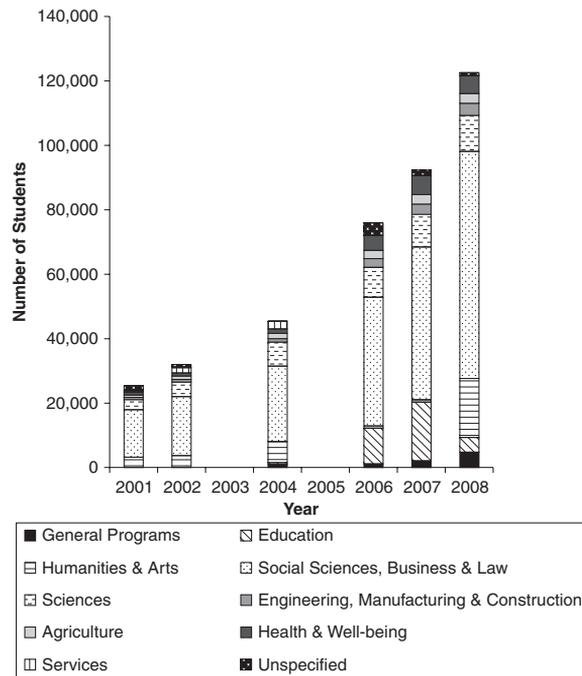
With expansion, women are enrolling in greater numbers, but so are men.[16] The trend is toward greater equity, but the differences are substantial.

To see how this relates to neighboring countries, we compared gender parity indices (GPI) across the ten Asian countries examined earlier. Of the ten countries, Cambodia has the lowest GPI, that is, the greatest imbalance in favor of male enrollment. In contrast, Malaysia, the Philippines, and Thailand have a gender imbalance favoring women, though the total imbalance is greatest in Cambodia (albeit in the other direction). Interestingly, Malaysia moved from essential gender parity in 2000 to 29 percent more females than males in 2005. Cambodia, while lowest in terms of gender parity showed a 50 percent reduction in disparities in GPI between 2000 and 2005.

Curriculum

One of the potential problems of private provision of higher education is that private institutions may respond in ways that reflect the needs of the economy or the human resource needs of an ambitious development agenda. Private institutions, particularly those in developing countries, tend to concentrate on cheaper academic programs requiring little scientific equipment and more generally available expertise rather than highly specialized advanced technical knowledge. Such problems are likely to be especially severe in a rapidly expanding system such as Cambodia's, where much of the expansion has come from the private sector. To investigate this, we examined enrollments by field for the 2001–2008 period. As can be seen in Figure 9.2, higher education enrollments in Cambodia are concentrated in the social sciences, business, and law.

Though growth figures are dependent on the starting point, looking at changes in enrollment by field suggests that the greatest growth was in education, humanities and arts, engineering, manufacturing, and construction. enrollments in education were 13.8 times higher in 2008 than in 2001, while growth of enrollments in other fields was less than half this rate (for instance, 6.3 times more in humanities and arts, 5.2 times more in engineering, manufacturing, and construction). This situation can be understood as a result of government policies favoring the training and upgrading of in-service teachers and the government has encouraged teachers to receive further training. Also for some teachers, they are motivated to receive further training because having higher degree may make them possible to change their working places from public schools to private schools in which they can receive higher salary.

140,000

120,000

100,000

80,000

Number of Students

60,000

40,000

20,000

0

2001 2002 2003 2004 2005 2006 2007 2008

Year

■ General Programs	◨ Education
⊟ Humanities & Arts	⊡ Social Sciences, Business & Law
⊡ Sciences	▨ Engineering, Manufacturing & Construction
▨ Agriculture	■ Health & Well-being
⊞ Services	▨ Unspecified

Figure 9.2   Tertiary Enrollment in Cambodia by Field of Study, 2001–2008.

Source: UNESCO Institute for Statistics database.

Quality: Faculty Qualifications

Relatively little information is available about quality. However, for some years there are data on the educational backgrounds of faculty. In 2008, the average higher education instructor had 5.4 years of postsecondary education in public higher education institutions and 5.5 years of postsecondary training in private institutions. The gap between education of faculty in public and private institutions appears to have narrowed between 2005 and 2008, from half a year of postsecondary education to one-tenth of a year. More importantly, in both cases, average education levels have increased over the four years. This is especially so in public institutions. However, the data show that most faculty have had very limited academic training at the graduate level, possibly one to two years of graduate studies after finishing their undergraduate degrees.[17]

It seems obvious that such limited training is insufficient to enable faculty to teach effectively at the tertiary level much less carry out research, which is necessary to improve the quality of higher education institutions. Moreover, many higher education institutions, particularly private ones, have hired very limited number of full time teaching staff. At these institutions, a majority of teaching staff are part-time lecturers, and the institutions have not provided appropriate and sufficient training opportunities and support to these part-time lecturers.

Reflections on the Growth and Development of Higher Education in Cambodia

The dramatic growth of Cambodia's education system in terms of institutions, branch campuses, and student enrollments suggests an extremely high demand for higher education. Such high rates of growth would be remarkable in any context, but especially so in a country where the education system was effectively destroyed less than 35 years ago. The public system has grown almost fivefold since 1997. Even so, most of the growth has come in the private sector and among fee-paying students. Demand is such that students often enroll in multiple degree programs simultaneously. Perhaps as many as half of students do so, in order to try to increase the possibility of getting better jobs in their future. For this same reason, many students prefer to enroll in more practical programs related to technological training, English, and Accounting, in addition to programs related to traditional majors. Though urban areas are favored, students appear to be enrolling from all parts of the country. Students whose parents work in government or trade are most likely to enroll in higher education. Men are more likely enroll in higher education than women, 2005 figures suggest that the odds are 2:1 in favor of men. The gap narrowed by 50 percent between 2000 and 2005, and so the gap may have narrowed since then. However, the higher education statistics yearbooks suggest even greater gender disparities may exist in terms of overall degree program enrollments, as opposed to individual students enrollments. This may be an artifact of under-reporting of female enrollment, or of a possible greater propensity on the part of male students to enroll in multiple degree programs.

Enrollments are concentrated in social sciences, management, law, and the arts and humanities, which comprise 72 percent of 2008 enrollments, as opposed to the sciences and engineering/manufacturing/ construction,

education, health, or agriculture. The average Cambodian higher education instructor has the equivalent of five and a half years of postsecondary education, up approximately one-quarter of a year from 2005.

Despite this extraordinary growth, Cambodia's enrollments are still low as a proportion of the population, lowest in fact among ten ASEAN (The Association of Southeast Asian Nations) and East Asian countries examined. Given these low levels of tertiary participation, increases in enrollment are a necessary step. However, as the government has understood, enrollment is not sufficient condition for full development of a higher education system. Under conditions of high unmet demand, expansion of enrollment is among the easier dimensions to manage—all that is required is for regulations to permit private sector provision and for there to be sufficient means and entrepreneurial activity for the private sector to do so. This was certainly the case in Cambodia. Even so, rapid increases in enrollment require corresponding inputs—at a minimum, classrooms, instructors, administrators, and so forth. And providing these inputs can present a considerable challenge. However, more difficult to recover or construct in the first place are the deeper aspects of higher education—wise policy, well-organized quality assurance structures, a culture of research, a cadre of trained researchers, an organized and effective professoriate, effective government and peer professional oversight, finance mechanisms, and perhaps a core of elite institutions to provide leadership for the sector.

By applying Martin Trow's classification to higher education systems in East Asia and major ASEAN countries, it is obvious that most countries in the region were in the "elite" (or at least "small") stage in 1970 (Trow 1974, 2006). Only Australia, Japan, New Zealand, and the Philippines had transitioned to mass education. By 1980, Hong Kong, Korea, and Thailand had grown to the mass higher education stage. By 1990 Malaysia and Indonesia had also become mass systems, leaving only China and the nations of Indochina with elite systems. By 2000, Australia, Korea, and New Zealand had moved to universal higher education, China and Vietnam had grown mass systems, and only Laos and Cambodia had small elite systems. By 2005, Cambodia and Laos remained with "elite" systems.

The pace of expansion of higher education in Cambodia, and in several Asian countries can be seen by comparing enrollments in different countries over roughly similar timeframes within periods of rapid growth. Germany, Britain, and Russia, for example, expanded higher education substantially during the late 1800s. In 1900, Germany enrolled 2.8 times as many students in higher education as in 1860. Russia grew slightly faster, increasing its enrollment 3.3 times. Britain grew almost twice as fast as Germany, with a system in 1900 5.3 times larger than in 1860. Over

the same period, the US system grew 7.9 times. In contrast, India, between Independence in 1947 and 1987, expanded 18 times. Over a 25-year period from 1980, Vietnam expanded its system 10 times. Cambodia's system was six times larger in 2005 than in 1970, but 81 times larger than in 1980 after the destruction of the Khmer Rouge period. Laos has shown a steady increase, also starting from a low base in 1970, with a system 119 times larger in 2005.

Still, the experience of other countries may be only partially instructive. In much of Asia, higher education institutions did not develop organically from the local cultural and economic environment but were transplanted and adapted from Western institutions. Universities are not native to many non-Western countries and do not have the extended history that they do in Europe and the Americas. Just as importantly perhaps, higher education systems were mostly established by governments, and so the governance and traditions of quality adherence have a different history than in parts of the West, where government came later to the picture.

The challenge of improving quality may be even more difficult in Cambodia's system given the near complete destruction of the system in the 1970s and the lack of a long tradition of elite institutions. Structurally, higher education in Southeast Asia has been able to expand relatively easily, once the market was allowed to meet popular demand. Improving quality, however, meeting the needs of the economy, and developing advanced research capabilities are more difficult, requiring a government role and different institutional arrangements. This may be especially so in substantially preindustrial contexts, where industry may not play an active role in promoting research and development. We hypothesize that the features and modes of organization effective in facilitating rapid expansion are unlikely to make for system-wide improvements in quality.

Finally, Trow's (2006) discussion of elite systems of higher education is grounded in analysis of education systems with long-standing elite institutions. But in Cambodia and maybe some other systems, higher education was elite primarily in the sense that only a tiny fraction of the population could gain access. Cambodian higher education is not a traditional institution with the "shaping of the mind and character of the ruling class" (Trow 2006, p.243) as its primary function. It has not had the time or the resources for unimpeded development, nor has there been the "institutional capital" to guide rapid development of the system much yet beyond the quantitative expansion.

Cambodia's expansion and quality improvement efforts are being undertaken in a context of intense globalization. Globalization means both Cambodia's access to global markets and resources (including higher education markets outside the country) but also global players' access to

Cambodia. Globalization may mean the Cambodian higher education system is integrated into the global system before its institutions have time to develop internally. Globalization provides both a shifting set of challenges and opportunities, requiring nimble institutions and a competitive market able to respond quickly. For all these reasons, the importance of a wise, informed, and facilitative public role is clear.

Further Questions

This research has attempted to document both the impressive achievements and some of the challenges facing Cambodia's higher education system at the second decade of the twenty-first century. Cambodia has grown its system dramatically, and has taken steps to develop a policy framework with the potential to enhance quality in the system. Still, there is much to do. The quality improvement policies that have been developed have only been partially implemented.

Basic system statistics, even for this chapter, are difficult, sometimes impossible to find, because they were often not properly collected by the governmental authorities in the past. It is impossible to know at this point, for example, how many individual students there are in the system, as opposed to how many degree enrollments, due to the phenomenon of multiple enrollment explained in this chapter. Other systems have grown quickly during periods of rapid expansion. However, it is doubtful that any faced the level of destruction that Cambodia faced in 1979. Moreover, many systems grew from a foundation of historically elite institutions and during a time when institutions could develop with less pressure from globalization.

A number of questions remain, questions we hope can be addressed in future research. Specifically, it would be useful to understand the current social makeup of higher education. Are students being drawn from all sectors of society and from all regions? Are scholarships reaching those in greatest need, or are some groups gaining greater access to financial assistance? Are students enrolling in higher-quality institutions and degree programs according to merit, or by accident of birth and upbringing? To what extent do faculty qualifications vary according to institution? To what extent is a full university curriculum available to students in the provinces? To what extent do the fields of study being offered correspond to labor market needs, or national development requirements?

In policy terms, how can the current policies best be implemented? How can capacity of the Department of Higher Education be developed? What indicators of quality should be utilized in a country such as Cambodia? What are acceptable and unacceptable levels of quality? How can quality improvement be fostered beyond measurement and certification? How can the development of higher institutions best be fostered, internally and externally, through international cooperation, academic exchange, and development assistance? What lessons can be learned from other countries that have undergone rapid expansion?

Higher education in Cambodia still faces great challenges in terms of access, equality, quality, relevance, funding, and management and administration. Also, these challenges somewhat differ between public institutions and private institutions. The takeup of higher education in Cambodia is undeniably low by international standards. However, where academic disciplines offered by higher education institutions are concerned, enrollment is heavy in certain areas, mainly management science. In terms of equality, analysis of those attending higher education institutions reveals a considerable gap between urban and rural areas and between the genders.

Above all, from among these numerous issues, that of the quality of education is the gravest. As this chapter has outlined, the creation of a system for quality assurance is not properly underway. Accreditation has only just started. The credit system is not in full use because of limited capacity of universities' management and administration, even where the system has been introduced. In the context of these challenges, the fact is that graduates of the higher education institutions of today are completing higher education without necessarily acquiring the knowledge and skills required by the labor market.

While it is impossible to change this situation overnight, improvement must be made by gradual means, policy by policy. To this end, the government, which is responsible for the higher education system, first of all must step up its effort in designing a quality assurance system. The higher education institutions on their part must strengthen their management and administration capacity. It is important as well for them to make strong efforts to build the capacity of their teaching staff. In tackling these challenges, the accreditation system and credit system are areas where concrete progress can be made. Therefore, we hope to see the Cambodian government and higher education institutions invest further effort into these areas as its immediate next steps.

Notes

1. The original version of this chapter was published in *Higher Education Forum*, published by Research Institute for Higher Education, Hiroshima University, Japan. The authors would like to express sincere appreciation to Mr. Khieu Vicheanon, Deputy Secretary General at the Accreditation Committee of Cambodia, who kindly provided insightful comments on the draft manuscript.

2. Recently, as of late 2014, Ministry of Education, Youth and Sport has been limiting the establishment of new higher education institutions, especially those focusing more in social sciences and humanities.

3. For purposes of this research, we define higher education in terms of institutions offering at least four-year postsecondary degrees. In addition, we use tertiary education and higher education interchangeably.

4. This number excludes those vocational and technical centers and institutes under the supervision of the Ministry of Labor and Vocational Training. For the latest status of vocational and technical training centers and institutes, the reader is referred to UNESCO-UNEVOC International Center for Technical and Vocational Education and Training (2015).

5. Essentially, this means that MoEYS has given the responsibility of administering the university to the university governing body (e.g., Board of Trustee, etc.), but the university governing body must report to MoEYS regularly (e.g., once per year).

6. The number of institutions is calculated from Statistics of Higher Education Institutions (various years) published by MoEYS.

7. In 2009, these included the Ministry of Health; the Ministry of Agriculture, Forestry, and Fisheries; the Ministry of Culture and Fine Arts; the Ministry of Cults and Religions; the Ministry of Labor and Vocational Training; the Ministry of National Defense; the Ministry of the Interior; the Ministry of Public Works and Transport; and the Council of Ministers; as well as the Ministry of Education, Youth and Sports (MOEYS).

8. Data obtained from the database of UNESCO Institute for Statistics.

9. Again, enrollments exceed numbers of students because of the tendency to enroll in multiple degree programs.

10. The International Standard Classification of Education (ISCED), developed by UNESCO, facilitates comparisons of education statistics and indicators across countries on the basis of uniform and internationally agreed definitions. For more details, the reader is referred to the website of UNESCO Institute for Statistics (http://www.uis.unesco.org/Education/Pages/international-standard-classification-of-education.aspx [Accessed January 10, 2015]).

11. Statistics of tertiary enrollment rates in South Korea actually refer to not only to enrollment in four-year colleges and universities but also enrollment in two-year junior colleges and technical colleges. Approximately 39 percent of higher education enrollment in South Korea 2000–2008 was in two-year programs.

UIS statistics suggest that enrollment in four-year programs as a proportion of overall tertiary enrollments ranged from 47 percent to 100 percent in 2008 (UIS).

12. Data obtained from the database of UNESCO Institute for Statistics.
13. MoEYS, *Statistics of Higher Education Institutions*, 2000.
14. For instance, Resource Development International—Cambodia (RDIC), a nonprofit organization, has reported the average annual household income of rural Cambodians is around US$135. For the information, refer to the website of RDIC (http://www.rdic.org/farmingpage.htm).
15. Data obtained from MoEYS (2000). *Statistics of Higher Education Institutions.* The remote provinces are Preah Vihear, Kratie, Steung Treng, Mondulkiri, Ratanakiri, Bantey Mean Chey, and Oddor Mean Chey. Although the authors are aware that the data we have relied on are outdated, there have been limited data available to analyze these situations.
16. Data obtained from the database of UNESCO Institute for Statistics.
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Chapter 10

Who Wants to Teach in Cambodia?

*James H. Williams, Yuto Kitamura, Takayo Ogisu,
and Thomas Zimmermann**

In many countries, teaching is a challenging but rewarding occupation, desired for its flexibility and the ubiquity of schools and thus potential jobs, but avoided for its low pay and variable working conditions. Teaching in Cambodia is doubly challenged as a consequence of the policies of the Khmer Rouge regime, which targeted teachers. Estimates are that 80 percent or more of the teaching force was killed or left the country (Ayres 2000). Although considerable time has passed, development of a well-trained and motivated teacher corps has been difficult because of constrained budgets, lack of training capacity, and the relatively low priority given to teaching as a profession by high school graduates. Teacher salaries are low—as low as 60 percent of the employees in other sectors with comparable qualification, and so many teachers survive by offering tutoring for a fee after school hours (see Brehm, this volume). At the same time, many teachers are inspired by the importance of their work. In our anonymous survey discussed in this chapter, very high percentages of teachers in training gave service as their primary reason for joining the profession. Yet many of them did not see themselves staying in the profession for the duration of their working lives. Teaching has always provided a way into postsecondary education and white-collar work for young people from low-income families as well as a Plan B for those of more affluent families, in case more lucrative opportunities fail to materialize. Because of both the high cost of training teachers and their importance in economic and social development, issues related to teacher recruitment, training, and deployment are a

critical concern to educational leaders and planners. This chapter reports on a survey of teacher trainees carried out in 2012. The survey was carried out with permission from educational authorities and funded by the Open Society Foundation.

The chapter provides a brief background on the history and structure of teacher preparation in Cambodia and the postsecondary institutions involved in preparing teachers. The chapter then outlines the research questions and survey methodology used to query teacher trainees about their background, career aspirations, and motivations as well as their assessment of the adequacy of preparation they are receiving. The chapter concludes that teaching as a career in Cambodia is closely related to the social background of students, that teaching is not a highly desirable occupation, and that up to one-third of teacher trainees may be expected to leave teaching after a few years.

Background

As discussed in earlier chapters, the country's education system was broadly destroyed during the Khmer Rouge period from 1975 to 1979. Most teachers at all educational levels were either killed by the Khmer Rouge, sent to forced labor in rural areas, or fled the country as refugees. After the collapse of the Khmer Rouge regime, to respond to the immediate needs for reestablishing its education system, teachers were recruited from everywhere—city streets and village pathways—to be trained through a wide variety of short-term training courses lasting between one week to a month (Nath 1999). Through tremendous effort, about 32,300 teachers were trained with various qualifications by the academic year 1982/1983 (Nath 1999). Despite massive obstacles, in-service training was launched and preservice training was improved.

When the education system reopened in 1979, teachers were (re) employed on the principle of "those who have more education teach those with less" (Nith, Wright, Hor, Bredenburg, and Singh 2010). Thus, teachers who had completed third grade could teach students in grades 1 and 2. Those who had completed junior high school could teach students in the upper grades of primary school, and those who had completed some high school grades could teach in the junior high schools.

In the 2013/2014 academic year, there were 45,482 primary school teachers and 39,386 secondary school teachers in Cambodia (lower and upper secondary). Thirty-seven percent of primary school teachers had a lower secondary level of formal education or less, and more than

25 percent of secondary school teachers had only a secondary level or less formal education.

New teachers are posted according to their total score on the placement examination (Benveniste, Mashall, and Araujo 2008), and deployment of new teachers is decided by the MoEYS in collaboration with the provincial offices of education. Many new teachers prefer to be posted either in Phnom Penh or urban areas near their hometown, because of better conditions and/or family ties. These dynamics create problems in allocating teachers in rural schools. The challenges that result can be seen by looking at overall student–teacher ratios, which vary considerably by location. At the primary level, student–teacher ratios average 33:1 in urban areas and 50:1 in rural areas. At the secondary level, there are an average of 17 students per teacher in urban areas and 22 per teacher in rural areas (MoEYS 2014). Although the situation has improved from earlier years, there are still serious gaps in provision of teachers between rural and urban areas.[1] Not surprisingly, results of national assessments and other research have found poor learning outcomes (seechapter 2, this volume).

Teacher Training

To help improve the number and the capacity of teachers, 18 Provincial Teacher Training Centers (PTTC) have been established to prepare primary school teachers and six Regional Teacher Training Centers (RTTC) have been set up to prepare lower secondary school teachers. The basic requirement for admission to teacher training centers is the completion of grade 12, but there are wide variations in admission procedures. For upper secondary school teachers, candidates with bachelor's degrees are expected to enroll in a one-year teacher training program at the National Institute of Education (NIE). Preschool teachers are trained at a Preschool Teacher Training Center (PSTTC) (World Bank 2014).

In addition, the MoEYS has adopted a variety of complementary strategies. These include: (a) the use of contract teachers, (b) revitalizing summer programs during which teachers teach students who have fallen behind for three additional days per month, (c) paying relocation allowances, (d) organizing double-shift schools, and (e) granting teacher allowances for those who work in remote areas (Nith, Wright, Hor, Bredenburg, and Singh 2010). Moreover, the MoEYS has initiated a fast-track teacher education program to train teachers to work in underserved areas. The fast-track program is preservice teacher education requiring the completion of grade 9 plus two years of training (as opposed to the usual requirement of

grade 12 plus two years of training). Thus according to the present qualifying system introduced in the early 2000s, primary school teachers can be qualified to teach in public schools with graduation from an upper secondary school followed by two years of training at a PTTC. Under the current system, lower secondary school teachers must enroll in an RTTC.

Due to a number of initiatives and changes in the past, Cambodia's primary and secondary school teachers have been trained in a variety of programs under different qualifying systems. As the system was trying to catch up, as late as 2004, there were no less than 14 schemes by which teachers received training (*Japan PHRD Project Preparatory Technical Assistance, 2005, 37)*. The new PTTC, RTTC, and NIE system should bring a greater standardization of training over time (MoEYS 2010); however, many of the teachers trained in earlier schemes remain in place.

At the same time, some current teachers who received different types of training in the past have recognized the need to upgrade their knowledge and skills. Universities, both public and private, offer them various training programs, including both degree and nondegree programs. Recently the trend seems to be for teachers to seek a bachelor's degree to qualify themselves for a better position and thus better salary (CITA 2010; Keng 2009). Such upgrading of skills does not, however, translate into higher salaries for those who remain in the same position.

In addition to the preservice system, there are several in-service teacher training initiatives. The Department of Teacher Training at MoEYS is formally responsible for the training of in-service teachers (Benveniste, Mashall, and Araujo 2008). Additionally, the Departments of Primary and Secondary Education provide short-term capacity-building workshops. There are two types of in-service teacher training: (a) courses organized to introduce new textbooks to teachers and (b) school-based training facilitated by specialized trainers, usually aimed at developing a vision of an effective school, school grant development, and implementation or introduction of child-centered methodologies. Courses of the first type are usually organized at the provincial level with the lead subject teacher of the school attending, and presumably returning to train teachers under his/her direction. Courses typically last one week per grade. The second type of training has mostly been financed through NGOs or international partner funds (Benveniste, Mashall, and Araujo 2008). In-service teacher training in Cambodia often takes place during school vacation, with follow-up training at monthly technical trainings. Workshops and meetings are also sometimes held for in-service teachers at the teacher training centers; the duration of training can range from three days to one week, depending on the focus of the training program (Nith, Wright, Hor, Bredenburg, and Singh 2010).

Regarding teacher appointments, MoEYS has implemented several policy measures in conjunction with the Priority Action Program (PAP)[2] to assign highly competent, newly trained teachers to rural and remote areas. It is generally understood that experienced and highly educated teachers are better at keeping students from dropping out and that such teachers attract students to schools, helping to ameliorate the problem of delayed student enrolment. Although steps have been taken to reduce student–teacher ratios in rural schools, highly qualified teachers generally tend to shy away from posts in rural and remote areas. Training centers for most teachers are found in more urban areas, and graduates prefer to stay there. Moreover, a teacher's salary is insufficient to live with one's family in a rural area with extra housing and transportation expenses required. The situation is further worsened by the fact that teachers are paid only half their salaries in their first year of teaching because they are considered to be in training.

The level of remuneration for teachers at the time of data collection was low: US\$50/month base salary for primary school teachers, \$75/month for lower secondary school teachers, and \$100/month for upper secondary school teachers (CITA 2010, p.12). Even after the implementation of a 20 percent base pay increase in January 2010, the pay for teachers has still fallen behind increases in the cost of living since 2005 (CITA 2010). Delays in payment are frequent, prompting many teachers to take up side jobs, which in turn often leads to deterioration in the quality of teaching. Observers say that the salary system must be reexamined since it does not take teachers' experience and abilities into account (CITA 2010). As a result, salaries do not increase with greater experience, training, or skill in teaching.

Research Questions and Data Collection

The overarching question posed by the study was whether recent developments in the broader teacher preparation system are likely, on balance, to promote access, equity, and the development of a cadre of motivated and professional teachers. To do this, we posed the following research questions: (a) What are the key demographic and background characteristics of teacher trainees? (b) How can students' experience and outlook with education and teaching be characterized? (c) How can the institutions involved in teacher training be usefully classified according to key student background and institutional characteristics? (d) How do teacher aspirations and career choices differ? (e) How do costs to students vary? (f) To

the extent possible, how does quality vary across institutions and institutional types?

The first question asks about teacher trainees' background characteristics, particularly socioeconomic characteristics. The second question provides descriptive information about the sample, in relation to teacher trainees' career aspirations, assessment of their training, understanding of teaching as a desirable career, etc. The third question develops a typology of institutional types according to students' socioeconomic characteristics (i.e., parental education), kind of institution (i.e., teacher training—public–private), and curriculum (i.e., language/other). This typology of institutional types, we argue, more accurately represents the Cambodian reality than a simple public–private binary. The last three questions ask how aspirations and career choices, costs borne by students, and institutional quality vary across these types of institutions, including student perceptions of the quality of teacher preparation they have received.

In considering Cambodia's teacher education system, it would be possible to focus exclusively on the credentialing programs offered by the NIE, RTTCs, and PTTCs. However, doing so would miss at least three groups of students:

1. Teachers who are "upgrading" their skills by enrolling in 4-year bachelor's programs at public and private higher education institutions;
2. Foreign language students in public and private universities, whose training typically includes pedagogy, and who often teach in private schools; and
3. Undergraduate students who are preparing themselves to be teachers or considering teaching as a career, who receive their academic training (as opposed to pedagogical training) at public and private universities.

Thus, while teacher credentialing is carried out by government institutions, a number of institutions—private and public—are involved in the larger preparation of teachers. Institutions were purposively sampled after careful discussion with Cambodian counterparts, so as to broadly represent the types of institutions and students involved in the larger teacher education system, as defined here. We selected the premier national university and its semiautonomous language training division, the Institute for Foreign Languages or IFL; the NIE, one RTTC, and one PTTC each in a provincial capital; private universities in Phnom Penh and in three provincial centers as well as a public university outside Phnom Penh.[3]

We collected data on four groups of students and institutions: (a) last-year students at institutions providing direct teacher training; (b) last-year

students in language programs at both public and private institutions (see above); (c) last-year students in degree programs that prepare prospective teachers for their one year of post-BA training at NIE; and (d) current teachers enrolled in bachelor's degree programs.

Rather than establishing a procedure for selecting among eligible students, we surveyed all students who were: available on the day of our visit, which had been announced; willing; and who fit any of the categories 1–4. Table 10.1 shows the numbers of sampled students and institutions of each type. Use of a purposive rather than random sample precludes clear generalization to all institutions.[4] Similarly, selection of all available, willing students in relevant subjects at those institutions prevents us from generalizing to all Cambodian teacher trainees. However, the surveys do provide a fairly clear picture of the perceptions, backgrounds, and aspirations of the sampled students, and thus an initial picture of teacher educators in training in Cambodia.

Data obtained from students was straightforward. Obtaining reliable information from the institutions themselves proved more challenging. Sharing information outside the institution or even systematically maintaining a range of institutional data is not common among Cambodia's higher educational institutions. Government requires some data, but as far as we could tell, does not utilize or publicize the data beyond publication of an annual higher education statistics yearbook.[5]

Table 10.1   Numbers of Institutions and Types of Students Sampled

Types of Teacher Trainee	Number of Students Surveyed	Number of Institutions
Students in formal teacher credentialing institutions (PTTC, RTTC, NIE)	605	NIE, 1 RTTC, 1 PTTC, all public
Foreign language students	353	6 private higher education institutions 2 public
4th year undergraduates in subjects taught in upper secondary school	190	1 public higher education institution
TOTAL	1,369	8 private, 6 public (of which 3 solely prepare teachers) = 14 all together

Source: OSI Cambodia Teacher Privatization Data.

Student surveys asked a range of questions related to students' background, their current and past studies, their plans for the future, costs and scholarships, their reasons for going into teaching, and their commitment to the field. In addition, students were probed as to the perceived quality of their instructional program. Teacher trainers were asked similar questions as well as questions about their students and the institutions in which they teach. Institutional representatives were asked about enrollments, fields of study, facilities, numbers, and academic backgrounds of faculty and staff. Copies of the survey instruments are available on request. Given our objectives of understanding the perceptions and characteristics of teacher trainees as a group and by type rather than, for example, predicting a particular outcome, we relied largely on descriptive and bivariate analyses to address the research questions.

Results

Demographic and Background Characteristics of Teacher Candidates

Our sample consisted of 43 percent women and 57 percent men, a slightly higher proportion of men than found in the teaching population as a whole. The average age was 23.8, but this average masked differences across the four types of students. Students in teacher credentialing programs averaged 23.4, undergraduate students 23.8, and upgrading programs 24.6. All but one respondent identified themselves as Khmer. Only 2.3 percent checked the box indicating a disability. Forty-one percent each said they had held and not held a previous job (defined as 50 percent or more time), 19 percent indicating that the question was not applicable, presumably because they had only been students. Forty percent indicated they were working 50 percent or more time now; 60 percent were not. Eighty percent of those who indicated they were working now indicated that they were teaching. Sixty-nine percent indicated they were earning less than US$100 per month. Eighty-one percent were married, 20 percent had children, and almost half had two or more children. Of those who answered that their children were in school, 77 percent were sending their children to public school, 23 percent to private school.

As indicators of socioeconomic status (SES), we used parents' education and occupation. The levels of parental education of future teachers were modest at best: out of 1,227 participants, 578 (47 percent) had one or both

of parents with primary education or less; 536 (44 percent) had one or both parents with at least some secondary education. From a different angle, 91 percent of the students were better educated than one or both of their parents. Education is a good predictor of occupation. Of 830 parents (of students in the sample) who had "unstable jobs" (farming or small private enterprises), 534 (64 percent) had primary education or less, compared to only 44 (or 11 percent) of 397 parents who had "stable" jobs (civil servant, teacher, or medicine) with similarly low levels of education. Of those parents who had secondary or postsecondary education, the percentages of parents who had unstable jobs falls to nearly half and less than a quarter respectively.

Classification of Institutions by SES

Based on our study of the expansion of higher education in Cambodia especially among private institutions (see chapters 9 and 11, this volume, as well as Williams, Kitamura, and Keng 2013, and Chamnan and Ford 2004) as well as preliminary conversations with university faculty and teacher trainees, we suspected that there was a certain amount of institutional differentiation by social background of students, and that students of different social backgrounds brought different expectations and aspirations to their training as teachers. To examine this idea, we classified institutions in our sample into seven types according to their public/private nature and the average educational background reported of the students' parents. (For details on the classification, see Williams, Kitamura, and Zimmermann, 2012.)

In terms of parental education of students in sample attending each institution type, private institutions enrolled the highest SES students in language programs (public and private), as well as the lowest SES students in several regional private universities. The SES of sampled students in public institutions and a group of large private institutions was higher than that of students training to become upper secondary school teachers, who were enrolled in the NIE, RTTCs, and PTTCs.

These institutional types were closely related to several factors. Not surprisingly, students in high or moderately high SES institutions were more likely to be children of civil servants or business. By way of contrast, 77 percent of students in RTTCs and PTTCs and 59 percent of students in NIE came from farming backgrounds (as compared with 11 percent and 15 percent of those in language studies. Twenty-eight percent of students in language studies programs planned to teach for the rest of their careers as compared with 67 percent and 68 percent of sampled students

in RTTC/PTTCs and NIE and 71 percent of students in low SES private institutions. The higher the average SES of the institution, the lower the percentage of sampled students who indicated a desire for their son or daughter to become a teacher. Most teacher trainees aspired to teach at the upper secondary or even postsecondary level, regardless of the level of schooling they were being prepared to teach. We conclude that private postsecondary institutions provide options for students beyond the limited number of places in public institutions, at both the high end of SES and the low end. By and large, teaching is more attractive to those from lower SES backgrounds. Additionally, few teachers in training aspire to teaching at the primary level.

Students were also asked about their career plans. Reflecting the nature of this research, 1,160 (85 percent) participants, including 94 percent of teacher trainees, said teaching was their first career choice. Even so, 14 percent, 66 percent, and 20 percent of teacher trainees, undergraduate students, and current teachers, respectively, said that teaching was not their first career choice. Once they became teachers, 775 (67 percent) said they wanted to teach for their whole careers, whereas 51 (4 percent) were planning to quit after one to three years. Thirty percent of students said they want to teach in Phnom Penh. Also, 40 percent indicated a desire to teach in public schools, 11 percent in private schools, and 45 percent indicated that either or both would be fine.

Not surprisingly, teacher trainees and current teachers are the ones who plan to teach longer: nearly 80 percent of them plan to teach for the rest of their careers. Among undergraduate students, in contrast, 44 percent plan to leave the profession after several years, and 7 percent said they plan to teach for only one to three years. Again, students' SES is also related to their prospects. Two-thirds of low SES students want to teach for the rest of their careers, whereas nearly half of high SES students said they would leave the profession after several years. Student majors matter as well. This is especially so for students who study linguistics and social sciences (including management), who generally have more employment opportunities in the private sector, planned to stay shorter in teaching occupation compared to students in other majors. Interestingly, 64 percent of the pedagogy students indicated that they planned to quit teaching after several years. This may mean that they may want to assume administrative positions after several years of teaching. It may also mean that a teaching credential is a way into higher education for those without means. Once the credential is earned, teachers may look to see what opportunities outside teaching may be available. Even so, we can infer that the teaching profession is likely to lose one-third of newly trained teachers after several years, and the teachers most likely to leave are those from higher SES

backgrounds, students prepared in undergraduate programs rather than in teacher training centers, and those studying linguistics or social sciences.

Students' Experience and Outlook on Education and Teaching

Aside from students' background characteristics, surveys asked a range of questions about students' educational experiences and their ideas about the teaching profession.

Students' Experiences in Teacher Training Programs

It became clear that students in teacher education programs generally live very busy lives: as stated above, nearly 40 percent of respondents were working more than half time at the time of our research. In addition, of the 363 participants to whom the questions were posed, 47 percent were enrolled in higher education institutions aside from their teacher education programs. Even for those in upgrading programs, who were basically working full- or half-time as teachers, 29 percent studied in other institutions as well. Moreover, 85 percent of those who studied in other institutions majored in areas different than teacher education. Although 92 percent majored in one of the social sciences, no one majored in education in other institutions. These facts suggest that students enroll in other institutions may do so less to deepen or strengthen expertise in their majors, but to widen their career options beyond teaching, to areas such as management and finance.

AQ: Do you mean "part-time"?

It is also useful to understand how teacher candidates experience teacher training programs. Our surveys included questions regarding faculty members' teaching styles and training areas. Regarding teaching styles, participants were asked to rate five aspects with Likert's 7-scale point (1: Strongly disagree; 7: Strongly agree). Students provided positive ratings for all items, but lower for "Teachers prefer discussion to lectures." This suggests that lecturing still persists as a major teaching approach across program types. We asked teacher trainees and undergraduate students who were earning degrees to upgrade their skills to evaluate their experiences in three areas of teacher training: psychology, pedagogy, and subject content with 5-scale points (1: very poor; 5: outstanding). Students evaluated their training experiences in subject content significantly higher than in psychology by 0.40 point ($t = 6.69$, $df = 923$, $p < 0.001$) and pedagogy by 0.44 points ($t = 2.77$, $df = 924$, $p < 0.05$).

A t-test was conducted for both learning environment and training areas in order to see if students' evaluations differed between credentialing

and undergraduate programs. It turned out that differences of means are statistically significant in all areas but lecturing. More interestingly, students in undergraduate programs gave higher scores to teaching styles but lower scores in training areas than those in credentialing programs. In other words, students in credentialing programs were not as satisfied as their peers in undergraduate programs in terms of learning environment, whereas they were more satisfied with their training areas including subject content.

The teaching practicum is another important component of teacher training. Of 735 students in credentialing and undergraduate programs who had completed the practicum, 473 (64 percent) rated their experience as very useful. Evaluations by undergraduate students were 0.13 points higher than that of students in credentialing programs. This may be because students in undergraduate programs reported receiving more institutional support during the practicum as compared to those in credentialing programs. Teacher credentialing programs aim primarily to train students to teach. Thus they tend to provide students with more specific practical knowledge and skills necessary for teaching. In contrast, teacher preparation is not the primary objective of university-based programs, although they generally offer better learning environments. Additionally, the teaching practicum is almost the only opportunity for students in undergraduate programs to acquire practical experience, and thus they may appreciate such opportunities more than students in credentialing programs.

Factors Contributing to Students' Decision to Teach

Participants were asked to rank the importance of each of nine factors in deciding to teach. Using Likert 5-scale (1: not important; 5: extremely important), teacher candidates ranked all items relatively high, ranging from an average of 3.79 for job opportunities in urban areas to 4.72 for contribution to country.

In order to distill the underlying factors in teacher candidates' decision to teach, we carried out a principal components analysis. The nine factors were reduced to three. We named them based on their shared characteristics: (a) Intrinsic motivation; (b) Extrinsic motivation; and (c) Collateral factor. These three factors explain 61 percent of the variation in students' decisions to teach. Although internal reliabilities are not high (α = 0.749, 0.671, 0.444 respectively), these factors provide a rough picture of the perceptions of trainees. Most significantly, teacher candidates give more weight to intrinsic motivational factors, such as contribution to country and community, and interaction with children and youths, than extrinsic factors, such as salary or ease of getting a position. Although teacher

candidates did not select "collateral" factors as often as other two factors, still 41 percent of participants responded that having second job opportunities is extremely important in their decision-making. This is likely because of low teacher salaries, which teachers feel they need to complement with other jobs.

In order to examine differences in student ratings of these factors by student type, we carried out a one-way factorial analysis. Undergraduate students scored lower than teacher trainees and current teachers on all of the factors. Teacher trainees were relatively more optimistic about their teaching careers as compared to current teachers, who valued collateral factors higher than the other two groups. However, current teachers also rated intrinsic motivational factors higher than teacher trainees and undergraduate students did. This suggests that current teachers who were trying to upgrade their teacher certificate attached greater importance to non-monetary aspects of teaching. However, they also faced practical needs to increase their income, by increasing their chances of being promoted as a result of a better certificate, by finding second or third jobs to complement their salaries, or by changing jobs with their newly earned degrees. Actually, 43 percent of them hoped for a salary increase (i.e., a better position) after upgrading their qualifications.

Factors Contributing to Better Preparation
and Retention of Teachers

Based on these findings, we explored possible factors that might better prepare teacher candidates, encouraging them to stay longer in teaching. In order to do so, we first categorized students into four groups based on their responses to their career prospects and perceived preparedness. One hundred and twenty-nine students (12 percent participants), responded that they feel very well prepared and that they want to teach for the rest of their careers and were placed in Group 1. Concerningly, 82 percent of those who plan to teach for the rest of their careers actually felt that they were not sufficiently prepared. These facts suggest that Cambodian teacher education system in general does not effectively prepare teachers with both confidence and motivation to stay in the teaching profession long-term.

There are no significant differences among four groups in terms of their demographic and socioeconomic backgrounds. However, only 30 percent (36 students) received scholarships in Group 1, significantly lower than other groups. As these are merit-based scholarships, we can assume that scholarships are a signal of student ability. If this is the case, these figures suggest that there are not as many "good" students in Group 1 as in other groups.

Aside from background, the practicum appears to be an important factor in better preparing and retaining teachers. We observed no significant differences in other components of teacher preparation, that is, daily teaching styles of their teachers and learning content. In contrast, students who felt well-prepared and had longer term plans for teaching (Group 1) were more likely to have had a better experience and better institutional support during their practicum than other groups.[6] Those who had experienced the practicum, regardless of whether they liked it or not, rated intrinsic motivational factors an average of 0.40 points higher than those without such experience.[7] Although these results do not tell us what types of practicum and institutional supports are more effective, it is possible to assume students became more aware of the joys and psychological rewards of teaching through practicum experiences, and thus became more confident and motivated to stay in the profession. However, these results also suggest that, except for the practicum, Cambodian teacher preparation does not appear to have a significant impact on future teachers' perceptions of career preparedness and plans to stay in teaching.

Conclusions

Our survey of teacher trainees in Cambodia paints a complicated picture of teacher preparation in Cambodia. On the one hand, teaching represents a stable occupation, with many opportunities for work. Teaching is attractive to some because of the opportunities it provides to serve—nation and community—and to work with young people. At the same time, teaching, particularly at the primary and preprimary levels and in the first year of teaching, does not pay well enough for a family to live comfortably. And so many teachers seek extra income to supplement their salaries.

Although teaching credentials are offered only by the PTTCs, RTTCs, and NIE, universities are involved indirectly in teacher preparation in several ways: Universities offer bachelors' degrees and thus a way for current teachers to upgrade their skills and become eligible to apply for higher level positions. A four-year degree is required for admission to NIE and thus teaching at the upper secondary school level. And language study, though not a formal credential, often offers pedagogical training and a degree that leads to work in private schools or higher education. In these ways, the development of higher education has implications for teacher training. Looking at family background as well as the aspirations and career plans of teachers in training, it is clear that teaching, especially at primary and lower secondary levels, is most sought-after as a career by children from

working-class families. Public institutions prepare students from a range of family backgrounds, while private institutions tend to enroll students at the socioeconomic ends, those who are either well-off or poor relative to the general postsecondary population.

By and large, teacher trainees were satisfied with their training, at the same time that many did not feel adequately prepared to teach. Those who took part in the practicum, however, were more confident than those who did not. Trainees varied in the time extent they intended to teach. As noted, results here also suggest that Cambodia is likely to lose about one-third of its newly trained teachers within a few years of graduation. Especially at risk are those from better-off family backgrounds and students in language and the social sciences (particularly management studies). Despite the lack of salary increases for those who have upgraded their qualifications, the teachers we talked with—admittedly those already enrolled in degree programs—were quite eager to continue their schooling, albeit in fields outside education.

There are several implications for policy: Teaching does not appear to be a highly desirable occupation in Cambodia, particularly at the primary level. Those with means often prefer to pursue other occupations. At the same time, as in many countries, teaching provides opportunities for low SES students to acquire postsecondary education and a stable position. Postsecondary institutions involved in different aspects of teacher preparation in Cambodia are stratified by SES. Language studies appear to be an attractive option for many. The country stands to lose approximately one-third of its teacher trainees within a relatively few years of teaching. Teacher trainees appreciate the training they do receive, but are not fully satisfied with it. In particular, they would like more practical training. Attracting and retaining highly qualified teachers, particularly at the primary level, is likely to involve increases in salary and working conditions, along with greater opportunities for career advancement and increases in salary corresponding to increases in qualifications (World Bank 2014).

Notes

1. It should be noted that education statistics must be examined with great care since it is believed that in some cases of on-site data collection librarians and clerical employees are counted as teachers due to an unclear distinction between teachers and nonteaching school employees. Behind this phenomenon is the reality that it is difficult to hire and retain nonteaching school employees

without treating them as teachers due to their low salaries and long working hours. Improvement is required in this regard (EC Technical Advisory Team, 2006).

2. The PAP framework was developed to deliver resources to prioritized education subsectors in a timely manner according to the education sector strategy. However, it did not function well, and later Program Budgeting was introduced to reorganized priority areas set in PAP. For more details, please refer to Keng (2009).

3. To the extent possible, we have tried to maintain the anonymity of institutions we worked with. This is not possible with the lead national university, or for example, the NIE. However, other institutions were not named.

4. It is unclear whether a representative sample of institutions would accurately portray the institutional situation in Cambodia. It would be difficult to talk credibly about Cambodian higher education without including the Royal University of Phnom Penh, for example, much as teacher education could not be discussed without reference to NIE or the RTTCs and PTTCs.

5. This yearbook is not widely disseminated. Indeed, the authors had difficulty obtaining copies of even the current year. They were not available at the RUPP library, nor easily obtainable at MoEYS headquarters or online. This is in contrast to Educational Management Information System (EMIS) data on the K-12 system, which is widely available in electronic and paper form.

6. Better experience ($t = 2.20$, $df = 107.21$, $p < 0.05$) and better institutional support ($t = 3.91$, $df = 708$, $p < 0.001$).

7. ($t = 4.12$, $df = 334.11$, $p < 0.001$).

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Chapter 11

Quality of Education and Research in Cambodian Higher Education Institutions

Yuto Kitamura, Naoki Umemiya, Yasushi Hirosato, and Sam Sideth Dy

Introduction

In the past two decades, most Asian countries overcame the financial crisis in the late 1990s and have been realizing significant economic growth. Along with economic expansion, many Asian countries have developed their higher education sector, in both quantitative and qualitative respects. Because of drastic expansion in the higher education sector in many Asian countries, the relationship between universities and the government has changed, and the governance reforms have been inevitable to cope with rapidly increasing demand for higher education. One of the main features of such governance reforms, heavily influenced by neoliberal ideology, has been the introduction of decentralization policy, which has promoted a more autonomous status for universities, including proliferation of private universities. Cambodia has been no exception.

The higher education sector of Cambodia has been continuously expanding since the late 1990s, following changes to regulations around higher education in 1997, which enabled the establishment of private universities, as already discussed in chapter 9 of this book. Since the 2000s

especially, the number of higher education institutions has been growing rapidly, particularly as regards private universities (see Figure 9.1 in chapter 9). The expansion of this sector can also be attributed to the growing demand for better-educated human resources in the Cambodian labor market, under global economic influence. For this reason, Cambodia's economic development is a factor that cannot be overlooked: it has expanded the country's middle class, whose growing youth population has begun to manifest greater needs and expectations regarding further educational opportunities.

Under these circumstances, the importance of qualitative improvement in the education offered by higher education institutions has come to be widely recognized (Chet 2009). Nevertheless, this task has proven quite challenging in today's Cambodia, due to several factors. Cambodia's higher education has a relatively short history, having once been completely annihilated together with rest of the country's entire educational system in the mid-1970s under the Pol Pot-led regime of the People's Republic of Kampuchea (i.e., the Khmer Rouge). Later, in the 1980s, the nation commenced gradual reconstruction of its higher education sector, which has not been an easy process. It should be also noted that although the governance reform influenced by neoliberal ideology has realized significant expansion of higher education sector since the late 1990s, to the best of the authors' knowledge, no empirical research has been conducted in order to reveal how such rapid expansion has impacted on the quality of education and research in higher education institutions in Cambodia.

In view of this background, the study presented here seeks to clarify the current quality of education and research in Cambodian higher education institutions. To that end, ten representative higher education institutions in the country were selected, and a survey was administered to a wide range of faculty members at these universities regarding the quality of their education and research. The survey results were analyzed in terms of faculty members' research achievements, involvement in education, working conditions, degree of satisfaction with their current post, etc. The objectives of the analysis were to derive a better understanding of the current status of research and education in Cambodian higher education—which is still in its developmental stage—and to gain insights for future development.

Survey Overview

For this study, a survey was conducted in 2011, with permission from the Ministry of Education, Youth and Sport of Cambodia ("Ministry of

Education") and in collaboration with the Japan International Cooperation Agency (JICA). This survey was conducted as a part of the international comparative research led by the Research Institute for Higher Education at Hiroshima University in Japan.[1]

The survey, addressed to academic staff of the country's major public and private higher education institutions offering bachelor's and postgraduate courses, consisted of questions regarding the current status of university faculty members. The questionnaire sheets, written in Khmer and English, were distributed in November 2011 via the concerned offices of the selected universities. At the end of February 2012, completed survey questionnaire sheets were collected from a total of 539 respondents, eight of whom submitted two sets of survey questionnaires and were therefore discarded from the sample. Ultimately, the survey questionnaire sheets of 531 respondents were analyzed (Table 11.1).

Of all the respondents, males comprised 85.1 percent and females 13.4 percent, male instructors thus comprising the majority. The gender of the remaining 1.5 percent was unidentified. These percentages correspond well to the ratios of male and female faculty members at the higher education institutions in Cambodia, as confirmed by the concerned offices of the universities covered in the study and the Directorate General for Higher Education of the Ministry of Education. Some 65 percent of the respondents were relatively young, at or below 40 years of age. This distribution of respondents by age can also be considered as reflective of the nationwide composition of university faculty members by age.[2]

As already noted, in the People's Republic of Kampuchea, led by Pol Pot (1975–1979), the country's formal educational system was dismantled, and many educational institutions were closed. With regard to higher education, it is reported that during the same period, the Khmer Rouge massacred 75 percent of university faculty and over 95 percent of the university students in the country (Ayres 2000). After the collapse of Pol Pot's regime, Cambodia remained in an unstable situation, with civil wars and conflicts frequently breaking out up until the mid-1990s. Consequently, it was extremely difficult for higher education institutions to train academic staff. This historical background is reflected in the small percentage of academic staff in their 40s and 50s.

Survey Results

With regard to Cambodian university faculty working conditions and degree of satisfaction with their posts, the study revealed four important

Table 11.1 Higher Education Institutions Selected for Survey and Numbers of Respondents

Name	Established[a]	Type	Location	No. of respondents (%)
Royal University of Fine Arts[b]	1918	Public	Capital	51 (9.6%)
Royal University of Law and Economics[b]	1949	Public	Capital	25 (4.7%)
Royal University of Phnom Penh	1960	Public	Capital	99 (18.6%)
Royal University of Agriculture	1964	Public	Capital	65 (12.2%)
Institute of Technology of Cambodia	1964	Public	Capital	64 (12.1%)
Norton University[b]	1996	Private	Capital	95 (17.9%)
Pannasastra University of Cambodia	1997	Private	Capital	44 (8.3%)
Cambodia University of Specialities	2002	Private	Capital	44 (8.3%)
Svay Rieng University	2005	Public	Province	15 (2.8%)
University of Battambang	2007	Public	Province	29 (5.5%)
Total				531 (100.0%)

[a] "Established" indicates the year in which each higher education institution was first established as such, and not necessarily as a "university": some were initially established as a "public institute" and were later recognized as a university, often following merger with, or separation from, another establishment.

[b] The Royal University of Fine Arts, the Royal University of Law and Economics, and Norton University were recognized as universities by the Cambodian government in 1965, 2003, and 1997, respectively.

Source: Created by authors.

areas. Firstly, public university faculty enjoy better working conditions and educational/research environments, and show a higher degree of satisfaction with their current posts, as compared to their counterparts at private universities. In particular, faculty at public universities located in the capital of Phnom Penh maintain a relatively good balance of professional activities and show excellent records of academic achievement.

To continue, Table 11.2. indicates the weekly average number of hours that faculty at different higher education institutions in Cambodia devote to their professional activities both during the academic term and outside the academic term.

Table 11.2 Hours Devoted to Professional Activities by University Faculty during and Outside the Academic Term (Weekly Average)

	Public (Capital)		Public (Provinces)		Private		Total	
	During	Outside	During	Outside	During	Outside	During	Outside
No. of respondents	304		44		183		531	
Education	13.3	9.85	13.14	6.64	17.78	11.79	44.22	28.28
Research	12.44	12.86	9.85	4.25	10.05	11.13	32.34	28.24
Social service	7.93	6.6	10.83	15.33	10.61	6.79	29.37	28.72
Administration	11.12	10.69	23.73	12	7.16	5.18	42.01	27.87
Other	6.28	3.98	5.5	10	7.5	5.11	53.1	40
Total	51.07	43.93	63.05	48.22	53.1	40	167.22	132.15

Source: Created by authors.

This table shows that private university faculty devote more hours to educational activities[3] both during and outside the academic term. Presumably, this is mainly because private university faculty members are often required to teach in special programs, such as summer programs, organized by their universities when regular classes are not held, and because faculty members often teach part-time at establishments other than their universities.

At public universities located in the provinces, faculty devote many hours to their university administration even during the academic term. This is probably because many faculty members are mobilized to participate in institutional design and development at universities which have been more recently established, and whose institutional aspects, in many cases, have not yet been fully completed. Moreover, instructors at public universities in the provinces devote many hours to social service outside the academic term, with less time spent on research than during the term. On the other hand, the working hours of faculty at public universities in the capital are evenly distributed among education, research, and administration, with many hours dedicated to research, even outside the academic term.

Academic achievements by university faculty during the past three years were examined. In this area, those at public universities in the capital registered the most academic achievements in terms of the number of books, papers, and reports published as well as the most presentations at academic conferences. Private university faculty, on the other hand, had more achievements in terms of the number of contributions to newspapers, computer programs, works of art, films, etc.

The degree of faculty satisfaction with their current posts at different types of higher education institutions was also analyzed. On the whole, public university faculty are relatively more satisfied than private university faculty. Interestingly, faculty at public universities in the provinces show a high degree of satisfaction. This finding is quite unexpected, considering the disadvantageous conditions under which they work: universities in the provinces are inferior to those in the capital in terms of education and research environment. As indicated in Table 11.2, faculty members at universities in the provinces devote many of their working hours to activities such as administration and social service rather than to educational activities and research. Moreover, they have fewer secondary sources of income, since there are many fewer universities in the provinces, unlike in the capital where university instructors can earn additional income by lecturing at educational establishments other than their own universities. This situation can explain the small number of hours dedicated to education, as shown in Table 11.2.

Although it was not possible to precisely discern the reasons for the high degree of satisfaction mentioned above, the other surveys and interviews that the authors and others conducted[4] point to a few important factors. These were the following: universities in the provinces, having been more recently established, have newer facilities and equipment, and living costs in the provinces are not as high in comparison to the capital, which makes their public university salaries sufficient to maintain a decent standard of living. Public university faculty members in the capital, in contrast, would have difficulty in this regard were it not for secondary income earned by lecturing at other educational establishments. Also, there is not much dissatisfaction among faculty members in the provinces, since there is only a small number of peers—who are all in a similar situation—with which to compare themselves, given the small number of universities in the provinces. Further study and verification are necessary to determine the extent to which these factors actually affect faculty's sense of satisfaction, and to learn if there are other reasons as well.

Secondly, the study reveals that younger university faculty members have long working hours, mainly devoted to educational activities, and that this contributes to their low degree of satisfaction with their current posts. The number of working hours per week that faculty dedicate to education were examined. While a large percentage (42.7 percent) of all age groups combined (from their 20s to 60s) spend up to ten hours per week on education, younger faculty members tend to spend more time. Among those in their 20s, particularly, faculty members who spend 11–20 hours per week on education comprise the largest percentage (46.3 percent), with some spending over 51 hours per week on teaching.

One question asked of full-time and part-time instructors was what their working hours were at the educational institution of their main affiliation and at other institutions. The responses revealed that, in comparison to full-time instructors, part-time instructors, many of whom tend to be relatively young, work longer hours at educational institutions that are their secondary place of employment and shorter working hours at the educational institutions of their main affiliation.

There are certain tendencies and traits across different age groups in terms of their working hours for each activity. The study compared working hours of university faculty during and outside academic terms. During the academic term, weekly work of university faculty members in their 20s averaged 58.68 hours, the most of all the age groups. Instructors in their 20s seem to vigorously dedicate themselves to educational activities (30.8 percent) and research (24.6 percent), while at the same time devoting a considerable portion of their working hours (23.8 percent) to university administration. Those in their 30s spend a relatively large portion of their working hours on education (27.3 percent), but less on research (19.8 percent) and more on social service (16.6 percent) than do those in their 20s. Faculty members in their 40s actively engage in social service (26.1 percent), working with the government, international organizations, and nongovernmental organizations (NGOs). This seems to be linked with less time on education (22.6 percent). Instructors in their 50s spend less time on social service (13.8 percent), while education (32.0 percent) and research (24.4 percent) become their main activities. Those in their 60s are focused on education (53.3 percent) with smaller portions of their working hours dedicated to research and other activities.

Outside the academic term, faculty members in their 20s spend more time on education (31.5 percent) than during the term, presumably because they work in summer programs organized by their universities or teach part-time at other educational institutions during the holidays. On the other hand, they spend less time on university administration (20.2 percent) than during the academic term. Instructors in their 30s devote far more time to research (29.1 percent) than during the academic term. Those in their 40s spend as large a portion of their working time on social service (23.9 percent) as they do during the academic term. Moreover, time devoted to university administration (22.9 percent) increases outside the academic term. Faculty members in their 50s and 60s spend less time on education and focus more on their research.

These tendencies regarding working hours for different age groups reveal that younger faculty members, primarily those in their 20s, spend relatively long hours mainly on education and university administration during the academic term, and markedly longer hours on education

outside the academic term, as compared to their older peers. Those in their 50s and 60s clearly shift their focus and working hours devoted to different activities, depending on whether regular classes are in session or not at their universities. In other words, they devote distinctly more time on education during the academic term and on research and social service outside the academic term. Such a balanced distribution of time among professional activities seems to be reflected in the degree of satisfaction with their current posts and is discussed below.

Moreover, the study analyzed the degree of satisfaction that university faculty classified by age feel about their current posts. The percentage of instructors who are "extremely satisfied" with their current posts comprise 75 percent among those aged 60 or older and 58.1 percent among those in their 50s. The degree of satisfaction clearly drops with the instructor's age: 37.5 percent among those in their 40s, 39 percent among those in their 30s, and 20.9 percent among those in their 20s.

One reason for these results is probably that, as suggested above, young faculty members are rushed with teaching and related tasks, whereas older and more experienced instructors manage to distribute their working hours among different activities in a more balanced manner. Furthermore, it is surmised that younger faculty members tend to accumulate dissatisfaction with their academic posts which do not necessarily pay well despite their high social status. Moreover, this dissatisfaction is perhaps being exacerbated by the growing gap between academic posts and private corporate jobs, in terms of income level, especially among the younger generations, and particularly against the backdrop of Cambodia's marked economic development in recent years. Furthermore, these factors seem related: low income levels force many young faculty members to teach part-time in addition to their full-time job at their home university. Therefore, they have increased their working hours spent on education, which in turn negatively affects their sense of satisfaction.

Thirdly, the study finds that faculty members in the fields of engineering and agriculture show a particularly low degree of satisfaction with their posts and experience challenges when it comes to qualitative improvement of education and access to scientific journals. The degree of satisfaction with the current posts of university faculty members classified by area of specialization was examined. Large percentages of those specializing in social sciences, natural sciences, health sciences/medicine, and fine arts are highly satisfied with their current posts. In contrast, the percentage of those highly satisfied in the fields of engineering and agriculture are 17.5 percent and 23.8 percent, respectively, markedly lower than the others.

In the survey, many faculty members stated that the quality of education they provide at their universities had improved in the past five years,

pointing to the general trend of Cambodia's higher education. In particular, those working at universities that regularly carry out faculty development (FD) activities were aware of qualitative improvement in education during the same period. Table 11.3 indicates the correlation between FD activities and educational quality. Strong correlation is found in the humanities, social sciences, health sciences/medicine, and teacher training/education. In engineering and agriculture, on the other hand, no correlation is found between investment in FD activities and educational quality improvement. One likely reason is that these areas of specialization require, first of all, capital investment in machinery and equipment for experiments, and that FD activities aimed at faculty member quality improvement therefore do not necessarily lead directly to faculty perceiving that the quality of education has increased.

The study also reveals that access to scientific journals varies considerably among faculty members in engineering and agriculture, as compared to their peers in other areas of specialization. That is to say, 33.9 percent of engineering faculty members said that they had "extremely insufficient" access to scientific journals, while 21.4 percent had "fully sufficient" access. Likewise, among agriculture faculty members, 34.9 percent had "appropriate" access to scientific journals, while 23.3 percent qualified their access as "fully sufficient." In sum, scientific journals were perceived to be sufficiently accessible to some faculty members in engineering and agriculture, and not to others.

Table 11.3   Correlation between FD Activities and Educational Quality

Area of Specialization	R	N
Humanities	0.332*	43
Social sciences	0.357**	73
Natural sciences	0.263*	61
Engineering	0.037	47
Agriculture	0.047	43
Health sciences/medicine	1 **	2
Fine arts	0.052	40
Teacher training/education	0.428*	25
Other	0.321*	46
Not classified	–	–
Total	0.262**	464

*$p < 0.05$; **$p < 0.01$.
Source: Created by authors.

In Cambodia, which presently has a large agricultural population and expects to develop economically in the future through further industrialization, agriculture and engineering are key academic disciplines supporting the country's development. Accordingly, reinforcement in these areas is a major challenge for Cambodia's higher education.

Finally, as the fourth area, the study identifies the inadequate state of institutional development regarding the promotion of research across the entire sector of higher education. The division of university faculty member interest between education and research exists. They are strongly interested in research, given that 43 percent and 21 percent of the respondents, respectively, described their main object of interest as "leaning towards research" and "primarily in research."

However, the study reveals that, on the whole, higher education institutions in Cambodia lack a well-developed system for promoting academic research, and that restrictions are imposed on time, funding, facilities, equipment, and human resources required for research. Regarding time for research, faculty members cannot secure sufficient time for this activity because, in the case of private university instructors, long working hours are spent on education both during and outside the academic term and, for public university instructors in the provinces, many hours are devoted to university administration and social service. While younger faculty members generally manage to secure time for research, their overall working hours are lengthy since other activities such as teaching, university administration, and social service occupy just as much time. Even outside academic term, younger instructors, who often work part-time in addition to their full-time job, inevitably spend more time on education than research.

The study also examined how faculty members, classified by type of university, evaluate the availability of funds, facilities, human resources, and the like required for their research. It points to the widespread perception among faculty members of insufficiency regarding research funds, travel allowances, and other additional funds. Interestingly, public university faculty members in the capital who manage to secure relatively sufficient time for research tend to consider that these items are not sufficiently provided. Similarly, the availability of laboratories, experimental equipment, computers, libraries, other facilities, and materials for research tend to be negatively viewed by instructors in the capital at both public and private universities. These results imply that those who spend more time on research tend to show high expectations to their research environments. Furthermore, the availability of research assistants is also poorly evaluated, notably by public university faculty members in the capital. Their counterparts in the provinces, on the other hand, give their material environment

for research a relatively high rating, probably because many universities in the provinces have been more recently established and their equipment and facilities are still new, as stated above.

These results can be read as proof of high motivation for research among academics in the capital. A major challenge at universities in the capital therefore becomes obvious: fulfilling the conditions for research, such as time, funds, facilities, and human resources, at a level to be consistent with the large number of highly motivated faculty members.

Conclusion

Cambodia's higher education sector has been expanding in recent years to over 100 higher education institutions providing education from associate to doctoral degrees. Given the country's economic development and increase in youth population, societal needs for higher education are likely to continue growing in the future. In such a situation, various measures are being implemented to improve the quality of higher education; the effects of these measures are directly perceived by faculty, as revealed in the study presented here. At the same time, Cambodia, with its limited experience in higher education, is confronted with many challenges on its way to establishing an optimal environment for quality education and research.

This study analyzed the results of a survey, addressed to faculty members at higher education institutions in Cambodia, so as to obtain a general picture of their working conditions, research achievements, and degree of satisfaction with their current posts, classified by type of university, instructor age, and area of specialization. The study revealed that instructors at public universities in the capital have a relatively well-balanced distribution of working hours among different activities and are active in producing academic outputs such as publications, in comparison to their counterparts at private universities and public universities in the provinces.

Regarding degree of satisfaction with their current post, the study revealed that younger instructors are less satisfied than their older colleagues, likely because younger instructors have relatively long working hours, especially for education, and often work part-time in addition to their full-time job, even outside the academic term. Degree of satisfaction is also low among faculty members in the areas of engineering and agriculture, key disciplines that support the country's development. In these areas, faculty development activities aimed at improving instructor quality do not necessarily lead to qualitative educational improvement. Furthermore, in these areas of specialization, access to scientific journals

is found to be low among faculty members. Future improvement in these regards is essential.

The study also revealed that research achievements have increased mainly on the part of faculty members at public universities in the capital. To further promote research activities, it would be necessary to enable faculty to secure time for research and to improve the environmental conditions for research. Research and development in the education sector has begun to draw interest and investments from the government and the private sector, although implementation of the research policy and action plan remains a concern.

As discussed earlier, Cambodian higher education is facing numerous challenges. Still, in line with the country's economic progress, this sector has been expanding and improving, though gradually.[5] For example, among younger faculty members, especially those who have studied abroad, the number of researchers with advanced qualifications such as doctorates has been increasing, which is evidence of the enhancement of the human resources that are essential for improving the quality of education and research (Kitamura and Umemiya 2013). On the other hand, the generally low degree of satisfaction with their current post exhibited by faculty, but particularly among younger faculty members, constitutes a serious problem. This dissatisfaction stems from a structural problem that is reflected in long working hours, hence insufficient time for research, and in low income levels, the latter of which also contributes to long working hours. As highlighted by this structural conundrum, many aspects of the situation of Cambodian university faculty members cannot be improved without financial support for salary, facilities, equipment, and others forms of assistance, such as research assistants. To overcome these challenges, reform in the higher education sector must be accelerated based on political decisions clearly manifested by the Ministry of Education, Youth and Sport along with other relevant Ministries regulating higher education institutions.

This study examined the qualitative improvement of education and research at Cambodian higher education institutions based on the results of the survey for university faculty members. It is important to recognize that the governance reforms of higher education in Cambodia have been accelerated under the influence of neoliberal ideology, and that this acceleration has primarily meant quantitative expansion rather than qualitative improvement. As a result, compared to higher education in many other Asian countries, higher education generally and faculty in particular are in a more difficult situation, and it is no easy task to improve the quality of Cambodia's university education and research. Some faculty members bring obstacles to this process of improvement because of personal issues

regarding their economic situation, low motivation for research and so forth. Nevertheless, many working in the field of higher education are courageously struggling in the face of challenging conditions to fulfill their roles as educators and researchers. There are many who work hard, fully conscious of their heavy responsibility toward society, an attitude that, as Cambodia moves forward, will become increasingly important for realizing not only economic, but also political, societal, and cultural development.

Notes

1. There have been a series of international comparative surveys which looked at the academic profession in different countries. In Asia, the Research Institute for Higher Education (RIHE) at Hiroshima University has been coordinating scholars from various Asian countries to conduct the surveys. This chapter is based on the paper presented at the international conference (*The Changing Academic Profession in Asia: The Formation, Work, Academic Productivity, and Internationalization of the Academy*) organized by RIHE on January 24–25, 2014. For details of the international comparative surveys on the academic profession, the reader is referred to Teichler, Arimoto, and Cummings (2013).
2. Comparison to the nationwide compositions of university instructors by gender and by age is based on the interview that the authors conducted in March 2012 with the Directorate General for Higher Education in Cambodia, as well as the interviews and surveys that JICA experts dispatched to the Ministry of Education, Youth and Sports of Cambodia conducted with the concerned offices of the universities covered in the study.
3. In this chapter, when discussing the "education" work or "educational activities" of faculty, we refer to teaching, preparing for classes, giving guidance to students, and grading.
4. They include the interview that the author conducted in March 2012 with the Directorate General for Higher Education in Cambodia and the interviews and surveys that JICA experts dispatched to the Ministry of Education of Cambodia conducted with the offices of the universities.
5. Refer to chapter 9 of this book for the expansion and improvement of Cambodia's higher education in recent years.

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Part 6

Conclusion

Chapter 12

The Way Forward for Education Reform in Cambodia

Chhinh Sitha

Cambodia faced considerable challenges after the fall of the Khmer Rouge, during which time 75 percent of the nation's teachers, 96 percent of tertiary students, and 67 percent of all elementary and secondary students died and 90 percent of the schools were demolished (UNESCO 2008). The nation began efforts to rebuild the country in all its various aspects from scratch while internal conflicts continued throughout the country until the late 1990s. In the education sector, there are several anecdotes that describe how schooling was run during the early years of system reestablishment. For example, any person who was identified as being able to read and write was recruited to become a teacher with little or no teacher training at all and extremely limited resources. Any place would become a classroom ranging from established school buildings in some places to studying in the shade of a tree. The post-conflict decision to run schools in a situation of such scarcity and poor quality teacher preparation was made based on the technical and financial realities of the country during those early post-Khmer Rouge years. Subsequently, poor-quality inputs and inefficient management have continued to haunt the delivery of formal education in the nation.

Contemporary developments of the formal Cambodian education system have been significantly shaped by the availability of finances, the presence of technical expertise, and political will (UNESCO 2000; Tandon and Tsuyoshi 2015). These three elements are intimately enmeshed and require a multipronged approach for positive change to occur. This

concluding chapter, based on the evidence of the previous chapters, seeks to discuss the educational achievements of the nation, the challenges that currently face the process of educational system reform, and provides some practical suggestions to put the system back in order to ensure the intended learning outcomes of the learners across the school system. More specifically, this chapter discusses, first, issues related to access and quality and, then, staff development and management practices that help to ensure the former two issues.

Access vs. Quality

The global community and numerous national governments recognize the right of every citizen to an education and, as such, they have included such a right in their public policy agendas. After the adoption of the Dakar Framework in 2000, most governments have adopted a human rights approach to education (Tomasevski 2004). The goal of a human rights-based approach to education is to ensure every child has access to a quality education that respects and promotes her or his rights to dignity and optimum development.

The Education Strategic Plan 2009–2013 (ESP 2009–2013) focused on children's access to education and, as a result, Cambodia has almost achieved the goal of universal primary education with an official enrollment of 97 percent (MoEYS 2013). However, the completion rates vary widely from one school level to another, measuring at 83.22 percent in primary school, 48.71 percent in lower secondary school, and only 26.09 percent in upper secondary school (MoEYS 2013). These figures raise questions about the efficiency of the system implemented across the nation. Education statistics and indicators (MoEYS, 2013) indicate that less than half of students who enroll continue until the completion of lower secondary school (grade 9), and just slightly higher than a quarter of students completed grade 12. Similarly, Table 12.1 reveals that only slightly more than 10 percent of the students who enrolled in grade 1 12 years ago managed to reach or successfully graduate from grade 12. This figure suggests that the efficiency and effectiveness of the system remain a problem despite concerted efforts by the government, donors, and other development partners.

Separately, system inputs by the government are relatively low. Two indicators often used to reflect the national inputs into the formal education system are: teacher's salary and the student to teacher classroom ratio. There are no countries in the region that are comparable to the Cambodian context; the closest are to be found among some African nations (Odom

Table 12.1 Enrollment and Completion Rate by Cohort

Grade 1 Enrolments		Grade 12 Completion	
Academic Year	Number	Academic Year	Number (%)
2001–2002	782,840	2013–2014	49,921 (6.38)[a]
2000–2001	742,704	2012–2013	91,370 (12.30)
1999–2000	719,300	2011–2012	96,023 (13.35)
1998–1999	681,007	2010–2011	92,236 (13.54)
1997–1998	666,737	2009–2010	87,561 (13.13)

[a] Based on first and second round of examinations in August and October, 2014 respectively.

Source: MoEYS (1997–2013).

and Blomberg 2014). The World Bank database (2014) reveals year after year that, among the ten Southeast Asian countries, the Cambodia government invests the least from its budget to the national education system.

To continue, evidence of poor academic achievement by the student population is not systematically analyzed nor is the information widely available. The Ministry of Education, Youth and Sport (MoEYS) conducted a nationwide assessment in grade 3 in 2006, grade 6 in 2007 and grade 9 in 2008 (MoEYS 2006, 2007, 2008). The results indicated that around 40 percent of grade 3 and 6 students tested by the Cambodian Education Sector Support Project (CESSP) failed to achieve the expected level of knowledge in both mathematics and Khmer language as stated in the curriculum standards for each level.

In short, among the 4-A schemes describing governmental human rights obligations of a nation's education service—that is, availability, accessibility, adaptability, and acceptability—only availability has been achieved by the building of more schools. The provision and effective management of a quality system presents considerable challenges for the government and MoEYS, resulting in limited success in the other three schemes.

Institutional Effectiveness and Efficiency

Institutional capacity building was one of the key educational policy interventions in the past and is also one of the present mandates of the government. Efforts have been made by the government, in cooperation with development partners, to create a system of decentralization and deconcentration. However, the system remains characterized by a culture of

centralized practice. At the national level, the system is run by the cabinet of the MoEYS. The cabinet consists of one Minister, six Secretaries of State, and nine Under Secretaries of State, as of November 2014. The levels for implementing policy are the technical departments, which are categorized into six directorate generals, one inspectorate general, and one Minister Office. At the subnational level, the system is managed by Provincial and then District Offices of Education. The centralized system of management has created a sense of poor responsibility and accountability at the subnational levels where decision making and problem solving is referred to the higher, more centralized level of the MOEYS.

To achieve a successful system-wide reform and restructuring, administration offices at national and subnational and educational institutions such schools and universities must be held accountable for their performance according to the civil servant handbook. An important component of any change needs to include the practice of employing the correct number of appropriately skilled individual in each required role. Such an approach will significantly reduce the amount of staff at both national and regional levels. Cambodia has been tainted with charges of corruption and inefficient management over past years (Transparency International 2013). There is a general observation that staff in any organization including government offices can broadly be categorized into four types, as described in Figure 12.1, which help to describe the current inefficient and ineffective
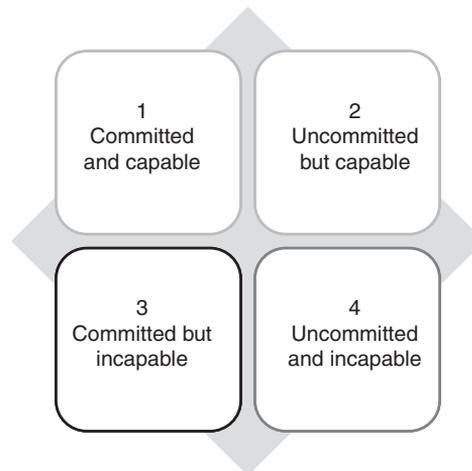
Figure 12.1   Staffing Paradox.

Source: Author.

system. This is a system-wide disease that needs careful change in order to make the system effective and functional.

From a technical point of view, an institution that can operate effectively and efficiently should be staffed with category 1 people. General observation suggests that in government institutions at the national level, there are very few officials in category one, and this is typically attributed to the low salary. People in this category are those whose family has a secure and stable income. Their sources of income can be from their outside business or can be related to the fees they charge when fulfilling the activities that are inherent to their position. There are a few officials who are financially supported by project funds from development partners or donors. Money that officials get from this source can be thought of as both "transparent" and "not transparent," since Cambodia has been identified by Transparency International as one of the corrupt countries in the world (Transparency International 2013).

Category two refers to those who are capable but treat their employment as a civil servant with the ministry as a part-time role although the appointment is fulltime. Some people in this category may work a few days a week or every day a week but only a few hours a day in their government role. Some people may have fulltime employment elsewhere; however, they keep their name on the government payroll so that their government boss can get benefit, thereby securing the absent civil servant's position within the department which they would return to if their conditions and pay improve. To solve staffing problem in this category, the government led by the Anti-Corruption Unit (ACU 2014) has taken a tough measure to remove ghost officials from the government payroll.

The third category refers to people who are loyal to their civil employment. However, due to their poor capability, these people do not have the skills or knowledge to contribute to effective institutional operation. Some people in this category can be trained, some of them cannot due to the size of the gap between the knowledge and skills they have and the knowledge and skills required in their role. These people are likely to be senior in age and were employed in the system during the early years of state functioning after the fall of the Khmer Rouge. Those who have the potential and willingness for capacity development are likely to become people in category two if the salary scale provided by the government continues to be significantly lower than that provided by private sectors or nongovernmental organizations (NGOs). In other words, once they are technically capable, they would leave their government position and work for NGO or private sectors such as school and university, if the payment in private and public sector is not competitive according to experience and qualification. A study by the World Bank suggests that teachers could earn a salary of

only 60 percent compared with employees with similar qualification in other sectors (Tandon and Tsuyoshi 2015).

The fourth category of civil servant provides the greatest challenge to system change. The most effective way to respond to the challenge they present is to reallocate them or to eliminate staff redundancy (perhaps via their retirement) with appropriate financial support in recognition of their services to the government. Such financial support may be used by them to start a business that is within their interest and capacity. During the transitional time of the United Nations Temporary Authority in Cambodia (UNTAC) in the early 1990s, many soldiers were laid off with proper financial support. This template provides a way forward for the education sector where staff need to be released and the positive benefits of such a change will affect every child, and especially those of the poor who will benefit from an effective and high-quality educational system.

There is no empirical evidence to indicate the distribution of the government employees in each category. However, general observation suggests that the function of government institutions is paralyzed by staff in categories two, three, and four and ineffective and inefficient management. This situation is recognized by the Senior Minister and chairman of the Anti-Corruption Unit who is determined to take legal action to remove these officials known as "ghost officials" (the term used to refer to people on the government payroll who do not appear or engage in work in their department or institution) (Radio Free Asia 2014). The Ministry of Education was the first to support the initiative and take measures against ghost officials in the education sector (Radio Free Asia 2014).

Reform Agenda

In his first public appearance as the Minister of Education, Youth and Sport, Choun (2015) reiterated his eight-measure reform agenda in his speeches, keynotes, and presentations. These measures are: (a) strengthen in-depth reform of public finance management, (b) strengthen personnel management, (c) strengthen examination across the board, (d) create a think-tank for the education sector, (e) reform higher education, (f) raise quality, (g) develop technical and soft skills, and (h) reform physical education and sport.

The eight measures are not mutually exclusive and are intended to generally raise the quality of education from K-12 to higher education through improvements in system efficiencies and an increase in financial funding to education. The most popular measure in the minister's

reform journey during his first year of service is related to the examination of grade 12 students, which was held early August, 2014. Over the last decade, the examination passing rate was measured to be around 80 percent. This year's examination though conducted twice with just less than two months a part saw a remarkably low result with only 25.72 percent (MoEYS 2014). In general, the exam procedure was applauded. This was the result of significantly improved mechanisms to prevent cheating during the examinations.

When it comes to discussion of reforms in education, as well as in any other sector, an analysis of challenges usually reveals financial, technical, and political constraints. The procedural conduct of the national grade 12 examinations this year suggests that political will and support is paramount among the three. Political will in this chapter is defined as an action of the politicians (such as Ministers and their cabinets) carried out independently, free from fear, and supported by evidence to achieve the expected outcome for the general public and sometimes against their own interests or those of their own interest groups. When political will is committed and realized in practice, financial support should not, in theory, or due to international aid commitments, be an obstacle for Cambodia or any other committed country. The donor community is obliged to assist the politically committed nation achieve its Education for All goals (UNESCO 2000).

As mentioned, the Cambodian high school-leaving examinations have been tainted with corruption and irregularities over the last two decades, and there was considerable doubt about any possible reform. It was a surprise to everyone that the strict administration of this year's examination was successful despite some criticism about some of the technical procedures, for example, exam paper development, marking criteria and consequences for those who failed in the first round. The MoEYS, in cooperation with Anti-Corruption Unit and Civil Society, was able to ensure the most transparent and fair examination in recent history. The committed political will of the current, well-educated minister drove him to work fearlessly against his own interests (the possibility of losing his minister-ship position) and those with vested interests in the past system. His commitment saw an astonishingly successful national examination process without the usual taint and allegations of corruption and irregularities.

The politics of education cannot be viewed in isolation. The nation's political and socioeconomic contexts must be taken into dual consideration so that education budget is always the highest in the country based on gross domestic product (GDP) or national expenditure. Politics in any field—such as politics of food, politics of health, and general political economy, including the political arena itself—is a two-edged weapon. One side of the edge is to serve the individual's interest or that of the most

influential group. The other edge is the nature of the work that is carried out, often against personal interests but for the benefit of the wider community. When political influence is used for the smaller community—that is, for personal interest—it is called political interference. When it is used for the interests of the wider community, it is called political will or support. Political will or support for education in Cambodia is greatly needed. With appropriate political support, education personnel will understand not only that they are required and expected to work with the highest level of personal, professional and academic integrity but also that self-interest is penalized rather than rewarded.

The Rectangular Strategy Phase III (RGC 2013), devised by the government in 2013, aims to move Cambodia from low income country status (USD944 per annum) to upper middle income status (annual incomes from USD4,036 to 12,475) by 2030 (World Bank 2013). For this to occur, Cambodia needs to move from operating as low-skilled economy to a technical and knowledge-based economy. Such a shift will only happen through a sharp increase in investment in the country's development of human capital through education and training. Cambodia's GDP quadrupled from US$216 per capita in 1992 to US$944 per capita in 2011. From 1994 to 2011, Cambodia experienced an average growth rate of 7.7 percent. Between 2004 and 2007, the economy grew annually above 10 percent (Royal Government of Cambodia 2012). Currently, the economy is dominated by a few industries, mainly agriculture, agro-industry, tourism, construction, and garment manufacturing, the latter of which is labor intensive, low-skilled work done by workers with low levels of education.

Currently, MoEYS employs 110,192 people (MoEYS 2012). Almost 80 percent of MoEYS staff work as teachers in one of the school levels. More than 80 percent of the teaching force holds only high school degree or a degree that is lower than high school (MoEYS, 2013). A recent study on teacher trainees suggested that teacher training attracted high school graduates with the lowest results from high school examination. In his graduate research, Chhit (2013) found that more than 90 percent of the teacher trainees admitted to a teacher training center in the northwestern province of Cambodia graduated from high school with D and E results (in a system of A to F with A the highest level). Recent study (Tandon and Tsuyoshi 2015) also confirmed that teacher profession attracted the lowest quality of the high school graduates.

Evident in the literature is that lower status institutions employ a poorly educated workforce. Poorly educated staff in turn produce poor-quality outcomes. This is a reasonable description of the current status of the workforce employed by government schools. The educational level of

government schools is extremely poor when more than 80 percent of staff hold only a high school level qualification.

A quick review of the countries in the region reveals that no country has moved from one level of income category to the next without an increase in spending on education. Therefore, the only option for Cambodia to achieve its RSP III target is to make painful budget reforms by significantly increasing its spending on education. The government needs to invest in education at significantly higher levels than in any other field in its present development agenda. There are several indicators to suggest that education is a development priority of a government. However, an examination of the spending on education by the Cambodian government suggests otherwise. Statistics indicate that education is not a priority when comparing spending on education to other sectors, and when comparing education spending in Cambodia with the spending dedicated by other countries to this sector.

Of course, a prerequisite for making education funding reform effective is the political commitment to increase spending to the levels suggested by international agencies. While UNESCO suggested the government spend at least 6 percent of GNP, the Fast Track Initiative encouraged the government to spend 20 percent of the national budget on education. High income countries such Brunei Darussalam and Singapore used to spend 8 percent and 4 percent, respectively, of their GDP during the early years of their nation's education development. Moreover, Green (2014, 16) suggests that if a state wants greater growth rates than other countries, then it must invest in education.

Attracting, educating, and employing the best candidates to serve in education costs the current government a considerable amount. However, leaving the education system to be served by poorly qualified teachers and officers at both national and subnational levels is a significantly higher cost that will be borne by generations to come. Investing in education is the right choice for the government to serve the right of the citizens to live a decent life. It is a decision that is smartest, least controversial and has the strongest impact for social development.

Among the various social services, education is the least controversial area where the government can increase spending with less opposition from other sectors due to widespread awareness all social services would benefit directly from this investment. Put differently, there are two kinds of food—food for physical growth and food for mental growth. Expenses for food for physical growth will have a positive early effect but will later have a negative effect if the government has a singular focus on this kind of nourishment. The Pol Pot regime, which only produced food without schooling, collapsed after less than four years of existence. Singapore and

other resource-scarce countries enjoy the status of high-income countries thanks to the investment made in education to equip every citizen to be a resource for the nation. Without spending in education significantly higher than other social sectors, the education system in Cambodia cannot attract the best candidates to serve. Without the best candidates serving the nation, the education system will just grow by the natural strength as a person living with malnutrition who only gains weight bit by bit but at a significantly lower rate than is required for their age. As a result they are underdeveloped physically and intellectually, stunted for life.

Concluding Remarks

Political will and committed action by the top level of national leadership is needed urgently and provides the most viable source to improve access to a quality education. Political will is manifest by prioritizing a nation's resources to education. Therefore, the government, various bilateral and multilateral funding agencies, and development partners must make as a priority the investment in food for thought over food for stomach during the coming decades in order to improve the quality of education, which will flow into a better quality of life subsequently. All things being unequal, investment in teachers and teacher education programs must be prioritized. Freire (1997) stated that the future of a nation does not depend on the stock of the wealth of that nation but on equity of wealth and the knowledge of citizens generally. Without committing to education the highest portion of GDP in the nation's budget, and without effective and transparent management of these funds, equity and quality education remain out of reach for many in the country and the nation remains at risk (Green 2014).

In light of recent actions in education taken by the government as well as MoEYS, it is apparent that there are improvements in political support and funding availability for education. The following concluding remarks are made in order to encourage the continuation of effective and efficient reforms.

First, reform in accountability in education is needed at all levels. Effective management of public expenditure and promotion of accountability in education are keys to ensure better performance of educational entities at all levels, especially schools. The Advocacy and Policy Institute (API) conducted a public expenditure survey in the area of early childhood education in Cambodia in 2012. The results suggest that when schools are held accountable to its citizenry, the expenditures in the schools can

be more equitable and prevent the leakage of public funding and better services in schools. When the leadership team at school level is transparent and accountable, the team will better work with local stakeholders to demand sufficient resources from the funding agency in order to deliver quality education. Citizens must be fully aware that they are the ones that can hold the duty bearers such schools to be accountable only when citizens have basic understanding of the function of the public services provided at their locality and participate in the due process (UNESCO 1998; Pellini 2005).

Second, a Performance Management Approach is needed within the education sector. Currently, the governance of education in Cambodia does not apply a performance management approach, though it is commonly suggested that this approach has physical benefits for education and ensures better outcomes. For example, the introduction of a performance management approach at the school level can yield outcomes such as improving staff self-esteem, developing staff capacity, developing and supporting a culture of ongoing quality enhancement of teaching and learning as well as building the groundwork for professional standards of teaching and learning within the schools. Better performance at schools will also result in lower dropout rates, higher retention rates, low repetition rates, and better learning outcomes.

Third, school-based result management will increase the participation of the citizen as right holders to demand for their quality services provided by the government as duty bearers (Gamage and Zajda 2009, Forsberg 2009). Alternatively, when duty bearers at the local level work with and are accountable to rights holders, together they will demand financial and technical support from the upper echelon of duty bearers. As Cambodia practices a democratic system of government, the ultimate power rests with the rights holders—that is, all citizens. Since political party wants to run government from mandate to another, pleasing rights holders in all aspects of life including education is the strategic intend of duty bearers. In other words, they form the broad vision of educational reform is generally made it known to the public during the general election campaign or after a party wins the election (UNESCO 2013)

There must be strong political support in order to make the education budget the highest in the country. Political will also needs to focus on making the profession of teaching an attractive career that includes job security, a competitive salary, and nonmonetary support, such as subsidized housing in rural and remote locations, in order to attract the most qualified and committed candidates to be teachers. Until educational expenditure is made a national budget priority, the education sector will fail to attract the most capable candidates. Until the education sector

attracts the most capable candidates, education reform will fail, both, to develop healthy roots and to realize the urgently needed outcomes for younger generations.

The year 2030 is only 15 years away. Real reform in education must take place now so that in 15 years time the well-educated and highly skilled workforce will commence their working lives with the skills and knowledge needed to help Cambodia achieve the position of a nation with upper middle-income status.

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Contributor Biographies

Short Biographies for Coeditors

Yuto Kitamura, PhD, is an Associate Professor at Graduate School of Education, The University of Tokyo. He received his PhD in education from the University of California, Los Angeles (UCLA). He had worked in the Education Sector of UNESCO and taught at Nagoya University and Sophia University (Japan). He was a Fulbright Scholar at the George Washington University, Visiting Professor at the University of Dhaka (Bangladesh), and is currently a Special Advisor to the Rector of Royal University of Phnom Penh (Cambodia). He is specialized in comparative education and has conducted his research extensively on education policy of developing countries, particularly in South and Southeast Asia. His recent publications include the following co-edited books: *The Political Economy of Educational Reforms and Capacity Development in Southeast Asia: Cases of Cambodia, Laos and Vietnam* (Springer, 2009) and *Emerging International Dimensions in East Asian Higher Education* (Springer, 2014).

D. Brent Edwards Jr., PhD, received his doctorate in international education policy from the University of Maryland, College Park, and is now an Assistant Clinical Professor of Educational Administration and International Education at Drexel University, Philadelphia, USA. His work focuses on the political economy of education reform and global education policies, with a focus on developing countries. Previously, he has worked with the University of Tokyo; University of California, Berkeley; the University of Amsterdam; the Autonomous University of Barcelona; the George Washington University; the University of Central America; and the World Bank. His work has appeared in such journals as *Comparative Education Review*, *Journal of Education* Policy, *Education Policy Analysis Archives*, and *Prospects*, among others. He has a forthcoming book entitled, *International education policy and the global reform agenda: Education with Community Participation in El Salvador* (Palgrave Macmilan).

Chhinh Sitha, PhD, has been active in research and evaluation of educational projects and policy for more than ten years. In his work, he provides services directly or in an advisory capacity to the Ministry of Education, Youth and Sport; various International Organizations, such as UNICEF, UNESCO, JICA, etc. He currently holds the position of Vice Dean of the Faculty of Development Studies at the Royal University of Phnom Penh.

James H. Williams, EdD, is UNESCO Chair in International Education and Development and Associate Professor of International Education and International Affairs at The George Washington University. Dr. Williams received his doctorate from Harvard University in international educational planning, administration, and policy. He has done extensive educational development work in sub-Saharan Africa and Asia. He worked at USAID in the Africa Bureau for two years, has taught in Japan for a number of years, and has served as past Director of GW's International Education Program. He teaches classes in education and development. His research interests include education and conflict; education for marginalized and conflict-affected populations; decentralization and administrative reform; education and health, equity, and achievement in large cross-national data sets; and the internationalization of higher education. His recent research includes work in Cambodia, Sri Lanka, and Malaysia as well as Japan, and, several years ago, the Philippines and Bangladesh.

Short Biographies for Chapter Contributors

William C. Brehm is a doctoral candidate in the faculty of education at the University of Hong Kong. His research focuses on the privatization and commodification of public education generally and the cultural political economy of education in Cambodia specifically. Previously, he has worked with This Life Cambodia, Digital Divide Data, Open Society Foundations, Paññāsāstra University of Cambodia, *European Education: Issues and Studies*, and Lehigh University. His work has appeared in such journals as *Globalisation, Education, and Societies*; *European Educational Research Journal; Current Issues in Comparative Education;* and *Journal of Educational Research Online*. In addition, he has published numerous book chapters.

Sam Sideth Dy, PhD, is currently the founding dean of the Faculty of Education of the Royal University of Phnom Penh and a member of

the Education Research Council of the Ministry of Education, Youth and Sport. After he graduated his PhD from the Graduate School of Education, Hiroshima University in March 2005, he worked for almost five years as education specialist for UNESCO and almost three years for the Asian Development Bank in Cambodia. He recently provided research consultancy services for the Swiss Development Cooperation and the Asian Development Bank in both Cambodia and Myanmar on Vocational Skills Development and Higher Education, for German Development Cooperation (GIZ) on Skills Development Training, ADB, UNESCO, CDRI, ACLEDA Bank for Teacher Education and Training, Higher Education Reform and Institutional Strategic Plan. He also published paper articles in various reviewed journals and chapters of edited books on Basic Education, Skills Development, and Higher Education in Cambodia.

Makiko Hayashi is a PhD candidate at the Graduate School of Asia-Pacific Studies, Waseda University, in Japan. She also spends her time as a research fellow at the Graduate School of Education, University of Tokyo. Majoring in policy analysis of comparative and international education, she is particularly keen to look at issues covering equity and inclusion, together with the recent and ongoing international discussions on the post-2015 development agenda. With a view that the issue of equity must reach excluded and vulnerable populations, her research investigates whether and how the promotion of inclusive education enriches the quality of education in classrooms for all learners, not only those with special education needs. She is focusing on these issues in the context of Cambodia for her dissertation, with particular attention to issues of gender, ethnicity, disability, income gap, and the rural/urban divide.

Yasushi Hirosato, PhD, is Professor at Faculty of Global Studies and Director, Center for Global Discovery, Sophia University, Japan. He received his doctorate in international development and education from the University of Pittsburgh, USA. He was Special Assignment Appointee at the World Bank, Visiting Fellow at Faculty of Economics, Chulalongkorn University (Thailand), Professor at Graduate School of International Development, Nagoya University, and Principal Education Specialist at the Asian Development Bank. Currently, he also serves as Visiting Scholar at the Department of Higher Education, Ministry of Education and Sport, Lao PDR, and Special Advisor to Director General of the Directorate General of Higher Education, Ministry of Education, Youth and Sport, Cambodia. His major publication includes: *The Political Economy of Educational Reforms and Capacity Development in Southeast Asia: Cases of*

Cambodia, Laos and Vietnam (coeditor, Springer, 2009). His research and professional interests relate to higher education harmonization, networking, and capacity development in Southeast Asia.

Takayo Ogisu is a PhD candidate at College of Education, Michigan State University. Majoring in Teacher Education, her interests cover teacher learning and development, pedagogies, and comparative education. In her dissertation, she aims to understand the processes in which globalized pedagogies—for example, student-centered pedagogies—are appropriated by various actors in Cambodian education reform. She loves to observe classes and has spent more than 200 hours in Cambodian classrooms since 2005.

Naoki Umemiya, PhD, is JICA expert on university administrative management at the Malaysia-Japan International Institute of Technology (MJIIT), Universiti Teknologi Malaysia. Dr. Umemiya specializes in basic and higher education, especially school-based management, quality assurance, and inter-university exchanges and cooperation. Prior to his current assignment, he worked for Technical and Higher Education Division of JICA HQs in Tokyo from 2009 to 2013. From 2005 to 2009, he was stationed in Bangkok and served for the ASEAN University Network/Southeast Asian Engineering Education Development Network (AUN/SEED-Net). He holds an MEd from Harvard Graduate School of Education and a PhD from Tokyo Institute of Technology.

Thomas Zimmermann is a doctoral candidate and researcher at the University of Kassel, Germany, where he works with the Chair for Methods of Empirical Social Research. Together with the Chair for Sociology at the University of Bamberg, Germany, he has also focused on longitudinal studies, and for several years he was a researcher and lecturer at the Royal University of Phnom Penh, Cambodia. He has conducted research for organizations such as Room to Read and UNESCO on various topics such as teacher training in Cambodia. His research interests relate to educational sociology, for example, family decision-making, aspirations, and empirical social research.