Bordering State and Society: Community Schools in Zambia

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Frances Vavrus, Advisor

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Acknowledgments

The act of writing a dissertation is still surrounded by a myth of individual achievement. While I am required to submit this dissertation with a single author on the front page, it is impossible to adequately describe or quantify the amount of support and contribution others made to this text. Each idea, thought, word, and figure in this dissertation has been shaped and informed in some way by advisors and mentors, colleagues, friends, and family. In the few pages here, I would like to recognize the many uncited authors of this text.

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Dedication

To the people of Zambia who build their own schools.
Abstract

Amidst an international push for education for all, people in Zambia began building their own schools most notably in the 1990s. These so-called community schools make up a significant portion of the country's primary school system and potentially represent fundamental changes in the border between state and society in providing education. In this dissertation, I question: why community schools exist in Zambia and continue to operate; how they have been rationalized by the state and public; what learning outcomes result from a bordering between government and community schools. Using a mixed methods framework grounded in critical realism, I analyzed policies, interviews, public opinion surveys, and literacy and numeracy assessment data. I found that community schools existed prior to the 1990s, but in a politically different way. After 1991, these schools grew organically nationwide, amidst an economic crisis, structural adjustment policies, and an unprecedented drop in education financing. In the following decades, the Zambian state promoted different borderings between itself and society, from promoting an explicit neoliberal view of parental responsibility in education to supervising a parallel system of state and community schools. While I find evidence that state and community schools serve similar populations, students who attend community schools have significantly lower learning outcomes even after controlling for factors that should explain the difference. At the same time, there are additional inequities in this parallel system related to the location of schools and the household socio-economic status of students. Findings are significant for both theory and practice: among other implications, this study points to the opportunities for mixed methods research in education, and highlights how conceptions of state and society in schooling – whether made explicit or not – can have political and practical consequences.
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### Abbreviations and Acronyms

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<tr>
<td>AB</td>
<td>Afrobarometer</td>
</tr>
<tr>
<td>AICc</td>
<td>Akaike Information Criterion (Corrected)</td>
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<td>DFID</td>
<td>Department for International Development (UK)</td>
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<tr>
<td>EER</td>
<td>Educational Effectiveness Research</td>
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<td>EFA</td>
<td>Education for All</td>
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<td>EGMA</td>
<td>Early Grade Mathematics Assessment</td>
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<td>EGRA</td>
<td>Early Grade Reading Assessment</td>
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<td>FBO</td>
<td>Faith-Based Organization</td>
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<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GLMM</td>
<td>Generalized Linear Mixed Model</td>
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<td>GNI</td>
<td>Gross National Income</td>
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<td>GRZ</td>
<td>Government of the Republic of Zambia</td>
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<td>HLM</td>
<td>Hierarchical Linear Modeling</td>
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<td>ICC</td>
<td>Intraclass Correlation</td>
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<td>IIIEP</td>
<td>International Institute for Educational Planning</td>
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<td>IMF</td>
<td>International Monetary Fund</td>
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<td>KMO</td>
<td>Kaiser-Meyer-Olkin measure of sampling adequacy</td>
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<td>LPI</td>
<td>Lived Poverty Index</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>MMD</td>
<td>Movement for Multiparty Democracy</td>
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<td>MOE</td>
<td>Ministry of Education</td>
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<td>NGO</td>
<td>Non-Government Organization</td>
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<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
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<td>PCA</td>
<td>Principal Components Analysis</td>
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<td>PCSC</td>
<td>Parent Community School Committee</td>
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<td>PF</td>
<td>The Patriotic Front</td>
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<td>PTA</td>
<td>Parent Teacher Association</td>
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<td>ROCS</td>
<td>Reformed Open Community Schools</td>
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<td>SADC</td>
<td>Southern African Development Community</td>
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<td>SAP</td>
<td>Structural Adjustment Program</td>
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<tr>
<td>Acronym</td>
<td>Full Form</td>
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<td>SDGs</td>
<td>Sustainable Development Goals</td>
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<td>SES</td>
<td>Socio-economic Status</td>
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<td>SPARK</td>
<td>Skills, Participation, Access, and Relevant Knowledge</td>
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<td>SSA</td>
<td>Sub-Saharan Africa</td>
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<td>SSME</td>
<td>Snapshot of School Management Effectiveness</td>
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<td>UN</td>
<td>United Nations</td>
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<td>UNICEF</td>
<td>United Nations International Children’s Emergency Fund</td>
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<td>UNIP</td>
<td>United National Independence Party</td>
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<td>UNZA</td>
<td>University of Zambia</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>VVOB</td>
<td>Flemish Association for Development Cooperation &amp; Technical Assistance</td>
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<td>ZANEC</td>
<td>Zambia National Education Coalition</td>
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<td>ZCSS</td>
<td>Zambia Community School Secretariat</td>
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<td>ZERP</td>
<td>Zambian Education Rehabilitation Project</td>
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<td>ZOCS</td>
<td>Zambia Open Community Schools</td>
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Chapter 1: Introduction

The relief that community schools have provided is temporal [sic] because the infrastructure and learning conditions are hardly ideal. Even the dogged and selfless commitment of volunteer community school teachers cannot be sustained forever. (Ministry of Education, 2014, pp. 34–35)

It was sometime in 2011 that I first encountered a community school in Zambia. After completing a Master’s degree in education, I worked as a Peace Corps volunteer in the country, under a broad mandate of co-teaching and supporting school zones. The main government school that I worked with was in the middle of the country outside of Serenje, situated precariously close to the Great North Road, a one-lane highway that is part of a road system stretching from Cape Town, South Africa to Dar es Salaam, Tanzania. In front of the school, tall trees shaded a variety of classroom blocks built over decades, combinations of concrete, glass, and iron sheets varying in quality. Half of the teachers lived in dedicated teachers’ houses a stone’s throw from the schools, while the other half commuted from town on white and blue mini-buses, which dropped them off each morning near the school’s flagpole. At the end of the school blocks was a teacher resource center, built as part of the decentralization process Zambia had taken since the 1990s in an effort to bring in-service training to the teachers. Behind the school was a soccer pitch, as well as agricultural fields that served as production units, emphasizing the education system’s shift away from solely academics in the mid-1970s (Achola & Kaluba, 1989).

Within the same school zone were community schools, institutions supported mainly by local villages rather than the state. The head teacher or principal of the government school, who was also tasked with being the head of the school zone, was particularly passionate about visiting community schools, and we biked together to each one at least once during my term. Even before reaching these schools, I discovered how dramatically they differed from state schools. On our route, paved streets turned into dirt roads that would shrink in width and branch off into numerous pathways. We would carry our bicycles over the occasional stream, river, or hill, and stop frequently to ask for directions. Often we would pass by schools without noticing them – unlike government schools, there was no sign to direct us, and often community schools closely resembled
houses, or even storage or cooking structures. In one school, lessons took place under an open thatched-roof hut next to a church. Another had a brick structure, but the roof had collapsed. These schools were located in villages where there was a palpable absence of government services: no state schools, paved roads, or government-run health clinics.

Community schools were created out of necessity: the distances we traveled on bicycles would otherwise have to be traversed by young students every day to reach the nearest government school, and this was not viable for children in the early grades. Yet there were still traces of the state: Ministry of Education funds would go to pay for a metal roof, or towards teaching and learning materials, although often the low quality of roads prohibited regular visits from Ministry officials. There was also a dramatic range between community schools: while most of these in the district were one or two room schools, there was one with three new classroom blocks (each with three or more classrooms) – the rumor was that this school was located in the home village of the current Vice President. Yet in this school, three young volunteer teachers struggled to organize their school, collect sufficient books and resources, and deliver lessons to large groups of children.

The fact that community schools existed was perplexing. These institutions seemed to operate perilously in local communities just beyond the reach of the state, as somewhat pseudo-public institutions. On the one hand, they represented local villages taking charge of their children’s education in places where government schools, crowded and under-resourced by U.S standards as they may have been, were too far away to be viable for most children. On the other, these schools’ daily existence was often a struggle, and there was often a reluctance from the local Ministry of Education to take charge of these schools in terms of paying teachers, upgrading facilities, or converting them to state schools. Often the efforts of state officials to support these schools were portrayed more as acts of altruism than duty. Within the school zone there seemed to be a clear border between state and society in regard to schooling which resulted in two types of schools, one managed by the state and the other by the community, the latter in which parents were tasked disproportionately with taking responsibility for their children’s education. In my experience, it was not clear whether this additional labor taken on by community members resulted in their children learning to read or do math on par with students in
state schools – or, as importantly, perform well enough on national examinations to continue to junior secondary school (Grades 8-9), and then senior secondary school (Grades 10-12).

At the same time, there were conflicting messages and narratives about these schools from the local and national Ministry of Education. State officials stressed the importance of community participation and self-reliance while community members and parents spoke about government responsibility for schools, and the importance of the state stepping in to help them. This suggests there was not only a distinction or border between two different types of schools, but different conceptions about where this border should be. Community schools often charged small fees for attendance, which could arguably classify them as “low cost private schools for the poor” (Heyneman & Stern, 2013). Yet Zambian state officials distinguished community schools starkly from private schools, the latter of which usually charged higher fees to wealthier parents who sought a better alternative to existing state schools.

This border between state and society was also typified by social and cultural differences, particularly in terms of the teachers at either type of school. The in-service teacher workshops that I helped organize were open to community school teachers, but unlike government salaried teachers many of them struggled to meet the mandatory fees for attendance, which usually consisted of contributions towards a shared lunch. When they did attend, teachers from each type of school often remained in distinct circles during and after workshops. Volunteer community school teachers may have ended studies before the 9th grade, and spoke mostly in the local language, while salaried government school teachers had attended teaching colleges, and often talked in English to each other.

Since my head teacher and I visited community schools in the afternoon after classes at the state school had ended, we did not have the chance to observe lessons. Yet I always wondered how teaching and learning took place in community schools, and whether it differed substantially from what occurred in government schools, where there already was a challenge of teaching children math and to read and write in local languages. It could certainly be the case that passionate volunteer teachers in community schools could teach more effectively than salaried teachers, particularly in state schools.
where there were issues of absenteeism, high workloads, double-shift or combined classrooms, and low motivation. Also, the participation required for communities to keep their schools running could ensure the institution was working for parents and learners, and allow them to fire absent or delinquent teachers. I wondered whether students who attended these schools were truly at a disadvantage compared to others in state schools, or if the commitment of volunteer teachers and active communities reduced learning inequities.

The educational environment I experienced in 2011-2012 was a result of political, economic, and social developments that started in the 1990s, which I analyze in some detail in this dissertation. One can see contemporary community schools, and the rhetoric of public participation that supports them, as emerging from the era of Education for All, the movement and idea of universal free primary education for all children. From the Jomtiem Education for All conference in 1990, through the World Education Forum in Dakar in 2000, and up to the development of the Sustainable Development Goals (SDGs) launched in 2015, there has been a focus on developing and applying global goals and standards that extend and empower national states to provide educational opportunities for their people. There has also been a move towards decentralizing governance of education in order to make room for local participation in managing and financing schools, as well as to extend services to “unserved and underserved populations” (World Education Forum, 2000, p. 60). Internationally, there have been dual goals to “enhance significantly investment in basic education” and to “develop responsive, participatory and accountable systems of educational governance and management” (World Education Forum, 2000, pp. 8–9). In other words, these lofty aims were to ideally have governments spend more on education, but do so in a more efficient way while at the same time increasing local participation and ownership in education systems.

Yet, in many ways, efforts to increase both the quantity and quality of Zambian schools have dramatically fallen short, even with the proliferation of community schools since the early 1990s. Moreover, Zambia has not reached the target of committing 7-9%
of GDP\textsuperscript{1} towards education even though it had done so during its years of economic growth in the 1970s, fueled by high global prices for the country’s primary export, copper. Reduced government spending on education was precipitated by an economic crisis, when copper prices fell and oil prices increased globally, and by neoliberal policies that sought to reduce the state’s expenditures and its active role in social welfare. Further, there was the HIV/AIDS crisis that began in the 1980s and continued to have a devastating impact on families, children, and teachers. Scholars have noted that HIV/AIDS contributed to the increase of orphans and vulnerable children and disproportionately impacted teachers. Kelly (1998) found that in 1996, more teachers were dying from the virus than graduating from all teacher training colleges in the country. These conditions constrained the drive towards expanding access and opportunities to all. Abdi, Shizha, and Ellis (2010) noted that, in Zambia, “economic decline has been mirrored by a social decline” as education has failed to reach the most vulnerable groups (p. 42).

In the midst of a global push towards education for all, community schools grew rapidly from the early 1990s onward. Yet they have persisted even when Zambia’s economic and education situation improved in the 2000s. While funding for education was increased by the government in this era, with a focus on decentralizing state education to reach more students, in 2016 nearly one third of all basic schools were community schools (Ministry of Education, 2017). The Ministry of Education estimated the number of community schools increased from 38 in 1996 to nearly 3,000 in 2013, and has claimed that since 2000, these non-state schools have created over 550,000 places for students (Ministry of Education, 2014). As I explore in this dissertation, the nature of these schools, and the capabilities of the national Ministry of Education to reliably count them, inhibits a reliable measure of the number of community schools, currently or over time. Very few of these schools have been converted to public institutions that would receive salaried teachers and a more reliable source of funding, despite recommendations from studies and evaluations by scholars and practitioners who have found that

\textsuperscript{1} The Dakar Framework for Action (World Education Forum, 2000) encouraged governments to increase their overall education budgets to 7% of GDP by 2005, and 9% by 2010. By 2010 Zambia’s expenditure on education was 3.7% of GDP (The World Bank, 2015).
community schools receiving consistent support can perform well in terms of educational outcomes (Glassman, Naidoo, & Wood, 2007; USAID, 2004). This is in stark contrast with previous political administrations, which have taken over non-state schools, particularly those operated by missionaries.

In Zambia, as globally, there has always been a balance of state and society in its schooling system, with the government negotiating the financing, supervision, and control of schools with societal input and contributions, often in the form of school fees made by parents or fundraising efforts. Yet the community school model represents a dramatic swing of the pendulum, with community members, specifically parents, increasingly tasked with managing schools, supervising teachers, and otherwise providing education. It is not clear why some parents – those whose children attend a community schools – carry the responsibility of building, maintaining, and managing their own schools, compared to other parents who are encouraged but not mandated to be involved in their children’s state schools. The Government of the Republic of Zambia (GRZ) mandates that the “core responsibility” for managing community schools remains with the local community (Ministry of Education, 2016b); however, it does not delegate such community involvement in state schools and makes participation in parent-teacher associations optional.

**Problem Statement and Purpose**

Despite international, national, and multilateral support for the provision of free primary education for all, many rural Zambian children attend community schools because they do not have access to government schools, where fees have been eliminated and quality is generally higher. Community schools make up a significant portion of the education system, although anecdotally the quality of learning they offer is lower than government schools (Mwansa, 2006; Nkosha & Mwanza, 2009). In many cases, parents who send their children to community schools are disproportionately tasked with taking on an increased responsibility for managing schools, supervising teachers, and ensuring the day-to-day functioning of these schools. The history of these schools is both broad and contradictory: scholars and historians of schooling in Zambia do not agree on the precursors of these schools, and practitioners and policymakers often conflate the history of a grassroots movement with an American-led project in the capital city.
Community schools represent fundamental changes in the border between state and society in providing schools – in other words, the negotiated lines and borders between government and communities are most palpable in school zones between state and community schools. Yet there has been little research on the political aspects of these schools, or on what scholars term “bordering,” or the practices of boundary maintenance (van Houtum & van Naerssen, 2002). And despite the narratives of community schools doing poorly, and anecdotes of some outperforming government schools, there is little systematic research to confirm either. While research has shown that NGO-supported community schools can perform well in Zambia and beyond (DeStefano, 2006; Glassman et al., 2007; Miller-Grandvaux & Yoder, 2002), there are few empirical analyses of early grade educational outcomes which represent the entire spectrum of community schools in Zambia and which move beyond description and towards inference.

My purpose in this dissertation is threefold: 1) to understand why community schools exist and continue to operate; 2) to explore how they have been rationalized by the state and public in terms of a state/society border; and 3) to examine the learning outcomes resulting from this bordering. Within these concerns, I seek to understand: the factors, both nationally and internationally, that have led to the rapid growth of these schools; what the perseverance of community schools suggests about changes in how state and society are delimited or bordered from each other; why these schools have not been integrated into the state system; and whether there is inequity in learning outcomes across state and community school systems. My objective is not to map and describe the state and civil society in order to “pin down” these illusive entities. Rather, it is to explore how the failure of the state to provide free basic education for all has led to non-state actors, particularly communities, assuming some of the traditional responsibilities of the state.
Research Questions

To conduct this inquiry, I follow two key research questions, and accompanying sub-questions:

1. How has the boundary between state and civil society in the provision of schooling been delineated by state actors, in national policies, and by the Zambian public in regard to community schools?
   a. What historical and political factors have contributed to community schools’ emergence and continued existence in Zambia?
   b. How has the government's response to these schools reflected a state-society bordering, and how has this conceptualization shifted over time since 1991?
   c. What has been the public response to the state's management of education and state/society borderings?

2. What is the outcome of the current parallel system of state and community schools, in terms of assessed early grade reading and math?
   a. In what ways do community schools differ from government schools, in terms of their learning outcomes, resources, and community and parent participation?
   b. How do community school students compare on assessments of literacy and numeracy outcomes to those attending government schools?
   c. What is the relation between volunteer teachers, community participation, and these outcomes?

Drawing on qualitative and quantitative methods, I note several key findings. First, community schools existed prior to the 1990s, although the border between them and the state was radically different. Second, these schools after 1991 did not originate from a single foreign effort, but grew organically around the county in response to an economic crisis, structural adjustment policies, and an unprecedented drop in education funding. Third, the Zambian state, in responding to these schools after 1991, promoted different borderings between itself and society, from adopting neoliberal policies that
responsibilized community members, to framing community schools as an alternative system, to coordinating a parallel system in which these schools functioned alongside government schools.

I describe community and government schools as constituting a parallel public education system, as community schools, unlike private and grant-aided schools, are by law publicly accessible. In addition, my research shows that, despite serving similar student populations, community schools were indeed inferior counterparts to state schools, in terms of resources and assessed student outcomes. In other words, the parallel system of schooling in Zambia, at the time of writing, was also one of significant inequity. My analysis (see the fourth through seventh chapters) showed that student learning outcomes in community schools were generally worse than those of peers in state schools, while school location and household socio-economic status were also strongly associated with inequities. At the same time, there was more variation within the classroom than between different schools, suggesting the greatest inequities were within classrooms. It should be noted that these findings and the dissertation overall are not an assessment of the capabilities or efforts of teachers, parents, and community members who manage community schools, but rather reflect the continued structural impediments and inequities between state and society schools, and within classes. These inequities may include the different environments and families students come from, teaching and learning materials, funding for building materials, but also the teacher training and the job security attached with a teacher salary.

Given the sheer number of community schools, Zambia is an apt context from which to study the political nature and learning outcomes of these schools, where nearly a fifth of primary school students in the country attend one of these institutions. Furthermore, the Zambian state has designated community schools as an independent schooling category, along with government, private, and grant-aided schools, the latter being institutions run by churches receiving government subsidies (Carmody, 2009). This legal distinction allowed me to undertake this study on schools, since the state’s definitions and conceptions of the difference between schools was clearly laid out in policies, and community schools were clearly designated as such at national and local levels.
Overview of Methodology

To address the research questions above, I used distinct methodological approaches united under critical realism, an epistemology which allowed me to make causal arguments and conduct an empirical study of outcomes, as well as a more interpretative study of policy and rhetoric. While I explore this framework in more detail in the third chapter, critical realism is a compromise between both strict positivism and interpretivism that views empirical research in social systems as possible yet problematic. For the first main research question, I systematically collected national and international education policies and frameworks since the 1990s, conducted interviews with Ministry officials, non-government organization staff, and University of Zambia lecturers, and utilized Afrobarometer public opinion surveys from 1999-2016. These surveys, sponsored by the UK Department for International Development (DFID), Mo Ibrahim Foundation, Swedish International Development Cooperation Agency (SIDA), among others, collect data on how ordinary Africans in reforming economies and states understand the political, social, and economic environment they live in (Logan, Fujiwara, & Parish, 2006).

Policies and interviews were coded and analyzed together using process tracing, a method which focuses on understanding and unpacking causal mechanisms over time (Bennett, 2010). I used this approach to explain the emergence of community schools and identify key moments in time in state/society relations. Public opinion surveys were analyzed descriptively and inferentially to understand public opinion about education over time, including differences in responses across urban and rural areas, and socio-economic classes. The main questions I used from the surveys included opinions on the state’s management of and responsibility for education, perceptions about existing schools and fees, and reported participation in community meetings.

To address the second main research question, I used hierarchical linear modeling (HLM) methods to examine the association between school type (community or state) and second grade literacy and numeracy outcomes, using data collected from randomly sampled schools and students in 2014. HLM models were accompanied with descriptive statistics which highlight the differences between the two school types in regard to their students, teachers, resources, and parent and community participation. The analyses
conducted for the first set of research questions informed in multiple ways the scope of analyses and key variables included in models.

**Rationale and Significance**

Within the field of comparative education, there has been repeated admonitions to develop and use theories of the state when studying schooling, even and especially as national states adopt more minimized roles in building and managing schools. The existence of community schools contributes to discussions among scholars in comparative education and political sociology about the adoption of neoliberal governance practices and their emphasis on individual responsibility and self-help (Carney, 2009; Carney, Bista, & Agergaard, 2007); changing forms of the state (Carnoy, 1992; Carnoy & Samoff, 2014; Stromquist, 1995; Torres, 1995); and the construction of an imagined border between state and society (Dill, 2013; Mitchell, 1991).

Overall, while education research has focused on the emergence of privatization and markets in education, including school choice and voucher programs (Carnoy, 1998; Plank & Sykes, 2003; R. Rhoads & Torres, 2005; Whitty & Power, 2000), less focus has been directed at tensions around state provision of education that do not fall neatly into the category of privatization. For Heyneman and Stern (2013), there has been a lack of attention to low-cost private schools, or non-government schools targeting the least wealthy. In Zambia and beyond, there is often a hazy distinction between low-cost private schools and community schools, where parents in both instances pay fees. In addition, there has been less attention on how actors already involved in schools – communities, parents, and local leaders – are being tapped to do the state’s work in building, financing, and supporting their schools. Yet this area is increasingly deserving of academic inquiry, as international organizations, particularly the World Bank, are sponsoring participatory and “community-driven” development projects (Binswanger-Mkhize, de Regt, & Spector, 2010).

With this study, I seek to contribute to this discussion by drawing on political sociology theory of the state to study the bordering between state and society via community schools. This dissertation also adds to a body of scholarly work which analyzes and critiques community participation in social service provision by assessing the political rationale for having some parents take on more responsibilities than others,
tracing how this position has shifted over time, and comparing state policies and approaches with public opinion. I also highlight an institution which has been recently backgrounded in international education development circles and projects: community-based education was a trend in education funding and research in the 1990s and early 2000s, but has since been overshadowed by funding priorities in literacy and other areas.

Finally, I offer results that may be useful to education officials, organizations, and scholars in Zambia, related to the political history of schools, learning outcomes, and factors which impact assessed learning. These results may also inform policymakers outside the country who are considering starting, expanding, or otherwise engaging with community-based schools.

**State/Society Bordering**

This dissertation seeks to explore the construction of, and apparent bordering between, state and society, as neighbors who continuously rebuild a fence amidst competing claims to territory. Yet it adopts a theoretical perspective in which *neither state nor society is a concrete or coherent entity*, nor is there an assumption that there is a real border between the two to be discovered. Instead, the fence between these neighbors, according to Mitchell (1991), is merely an analytical distinction by scholars of political science and sociology to delineate the boundaries of a political system and to explain its functions. This dissertation takes the position of Mitchell, as well as Rose and Miller (1992) and Abrams (1988), that state and society are not free-standing agents or objects but are part of an interconnected network. The apparent border between state and society, while not actually acting to divide or separate, does produce power and legitimacy, and also produces the appearance of two distinct and coherent entities. In this dissertation, the concept of state/society border sheds light on the emergence of contemporary community schools, rationalization of them by the Zambian state and public, and inequity in their learning outcomes by providing a framework to understand why different standards and discourses were applied to schools managed by the state and local communities. A more in-depth analysis of these concepts will take place in the second chapter.

**The Organization of this Dissertation**

A multifaceted approach to two distinct yet overlapping sets of research questions determines the organization of this dissertation. The second chapter, the literature review,
builds a logical framework for the research by engaging with foundational and recent literature on community schools, participation, and the state from a variety of disciplines and sources, ranging from sociological and political literature to technical evaluations and assessments of schools. The conceptual framework for each set of research questions is then overviewed. The aim of this chapter is to situate the study within the interdisciplinary field of comparative education, and to overview the structure of concepts that guide inquiry.

The third chapter provides an overview of the study’s methodology, beginning with an overview of critical realism that includes the key concepts from this approach that I apply in analysis. I also describe the research setting and explain and justify the use of specific methods for gathering and making sense of data from policies, interviews, surveys, and learning assessments. The goal of this chapter is clearly connect methods with an epistemological paradigm and provide sufficient detail of every aspect of the research design, from beginning to end.

The four data analysis chapters focus on different research questions: I tackle the first set of research questions in the fourth and fifth chapters, and the second set in the six and seventh chapters. In the fourth chapter, I examine influential factors which led to the growth of community schools. The chapter includes a political history of non-state education in Zambia during colonialism and the Kenneth Kaunda presidency (1883-1991), followed by an analysis of the main causal mechanisms which led to the contemporary community school movement. In this chapter, I seek to address two myths about these schools: first, that they largely emerged in the 1990s, and second, that their emergence and growth can be traced to a single origin point, specifically an American-funded school in Lusaka. In addressing these myths, I point to the rapid growth of schools as a grassroots movement responding to a period of economic and educational crisis. In the fifth chapter, I build on this history by exploring how the Zambian state responded to these schools after 1991, and by identifying three key periods which lead up to the present moment. In each of these periods, I explore national and international influences, and reflect on how a state/society border was articulated and contested, and had shifted over time. In this chapter I argue that since 2007, community and state schools have operated together as a parallel system, in that both move towards the same
learning and curricular goals but with different types of management and levels of resources and teacher certification.

The sixth chapter features a descriptive analysis of this parallel system, where I analyze how state and community schools differ in terms of learning outcomes, students, teacher characteristics, school attributes and resources, and parent and community participation. In this chapter, I detail how my previous analyses on the history and political features of community schools and the Zambian state informed quantitative research in this chapter and the next, in the form of four key assumptions about community schools. In the seventh chapter, I use the same data to conduct an inferential analysis to determine the association between school type – state or community – and literacy and numeracy outcomes. Two sets of hierarchical linear models (HLM) were conducted and include many of the student, teacher, and school variables outlined in the previous chapter.

In the concluding chapter, the eighth, I revisit my research questions and the four key assumptions established in the sixth chapter. I explore the implications for policy, practice, and theory, and outline prospects for further research.
Chapter 2: Situating the Study in its Fields

In the previous chapter, I introduced community schools as non-state education institutions that serve a large segment of the population in Zambia and argued these schools represent a reconfiguration of the traditional boundary of state and society in which public education was largely supported by the national state. As I explore in this chapter, community-based schools – in Zambia and beyond – have been sparsely addressed in the academic literature in education and international development even though they raise important issues about the state/society bordering and community participation in the fields of comparative education and political sociology.

An analysis of community schools in Zambia, which are institutions that seem to rely more on society than on the state, requires a thorough understanding of the state and its role in education. Is the state in the era of Education for All and Education for Sustainable Development responsible for providing and maintaining free, equally resourced schools for all its youth? If so, why – and then how? This question, while simply posed, is at the heart of a global debate in education research and practice. As I discuss below, it can be addressed from the evaluative, philosophical, and sociological standpoints within the interdisciplinary field of comparative education as well as from recent work in political sociology, particularly scholars who bring the state “back in” to analysis. In this dissertation I treat community schools as a case of state/society bordering at a time when the previously assumed power of national governments to manage education systems, build schools, and develop central policy is increasingly under question in many parts of the world.

In the previous chapter I described how the Zambian school system was bifurcated by a state/society border, into state and community schools. This context begs questions about why community schools persist, how they have been rationalized by the state and public, and what learning actually takes place within school walls. In this chapter I explore the state of literature on community schools, state/society bordering, and community participation to address these questions and provide a foundation for conducting inquiry. Considering the dearth of literature on community schools, the review proceeds from the general to the particular: from definitions of community schools to theories of community-based schooling, then to contributions and gaps in more
technical studies of these schools, particularly in Zambia. The main gaps in the literature are: first, a lack of political studies on community schools, particularly in Sub-Saharan Africa; and, second, few reliable empirical comparisons of learning outcomes in community schools, and even less that offer comparison with state schools.

Next, I will outline my conceptual framework. Rather than merely a description of key variables and presumed relations between them, a conceptual framework is more broadly “the system of concepts, assumptions, expectations, beliefs and theories” that support a research project, drawing from Maxwell (1996, p. 39). With my conceptual framework, I advance a state theory and a concept of state/society bordering, and argue for the worth of studying the state within the context of globalization because it is particularly relevant for research on community and society-based schooling. To do this, I explore how comparative education, as well as political sociology, has moved away from studying the state only to recently “bring back” state theory. Other key concepts which inform my research are explored: neoliberalism, society participation in social services, and the “responsibilization” of citizens. Then, I look at the concepts informing a quantitative study of school outcomes, and highlight arguments to “bring back” contextualized comparative studies in education, informed also by the field of educational effectiveness research. Finally, in a side note on terminology, I mainly use the term community school in this chapter and the following ones, as it is the widespread and official term used in Zambia. Community-based schools will also be used interchangeably, which is more common in international discourse.

**Schooling Beyond the State: The Community School**

**Defining the Community School**

Studying community schools is complicated by a lack of a common definition for these schools. Zambia, along with Malawi, have somewhat specific usages and guidelines for the term. However, for other nations, this distinction is not drawn, which complicates comparing schools across nations. Glassman (2007) notes that inconsistent terms, along with the range of institutions covered under the umbrella of “community school,” has led scholars to define them “by what they are not rather than what they are” (p. xviii, emphasis added). In other words, these schools are largely defined as not founded or managed by the national or local government. Miller-Grandvaux and Yoder (2002) view
community schools as non-governmental yet retaining a necessary connection with public education, either receiving some public funding or operating as feeder schools that transfer students to public schools.

Hoppers (2005) departs from a model in which community schools are complementary to a state system, and views them as emerging from a *de facto* informal education sector for which the state no longer claims a direct responsibility. These schools have the potential to be *alternatives* to public education, and thus can vary, adapt, enculturate, or transform a state curriculum or national norms for formal education. As will be explored in the next section, there is some disagreement as to whether community schools are or should be alternative in philosophy or curriculum from state schools in order to be called community schools. The importance of this debate should not be underemphasized. If schools are actually alternatives to state-run public schools, they can be framed within a market model in which they offer a different service than what is available through the state’s monopoly on schooling. If community schools are not alternatives to state schools, or operate as community-based imitations of state schools, they may function as a complementary model to the state schools. In the latter case they would serve as community responses to a failure of the state to build schools in areas where local populations clearly want to participate in public education, or one closely related to it.

Scholars have offered diverging histories of the community school movement in Sub-Saharan Africa; these explanations in turn inform, or are equally informed by, definitions of what constitutes a community school. Hoppers (2005) views contemporary schools as emerging from a long history of community support for education in Africa, particularly social mobilization and self-help efforts enacted in the decades after national independence. These movements aimed to “speed up delivery of social services or to integrate the schools and their communities socially and economically” (p. 118). Miller-Grandvaux and Yoder (2002) cite the *écoles spontanées* in Chad as examples of schools created and financed by communities in the years after independence. In addition, the collaborative building of local civic institutions was a key part of rural socialism, most prominently with Julius Nyerere’s *Education for Self Reliance* in Tanzania (1967). In this historical narrative, community education is viewed as an organic extension of post-
independence efforts to provide not only education for a greater segment of the population, but also to create an education system radically divergent from that of the colonial era that was, quoting Nyerere, “both inadequate and inappropriate” (p. 384). In Kenya, Jomo Kenyatta's strategy of *harambee*, translated as “let us pull together,” led to an ethos of self-help and a Harambee school movement, in which independent schools were established by local communities (Mwiria, 1990). However, these examples may not help to explain the origin of contemporary community schools in Zambia, which arose not in the era of nationalist sentiment during the 1960s and 1970s, but in the 1990s, when the state struggled to provide access to primary education for all Zambian children.

At first reading, there appears to be a dichotomy in regard to key actors’ responses to community schools: they are often viewed as largely positive or negative by scholars, practitioners, and policymakers. On one hand, they are seen optimistically as a “coat of many colours” (Dove, 1980, p. 75), lauded for a potential to promote a local curriculum, facilitate economic development, and democratize education delivery. Conversely, the existence of these institutions effectively as “private schools for the poor” (Hoppers, 2005, p. 133) potentially absolves the government from providing free public education and supports a retreat of the state from rural areas, resulting in communities relying only on themselves and occasional NGO programs for education services. However, as will be explored in detail in this and the following chapters, these opposing viewpoints construct a false binary which does not communicate the nuance, dynamism, and complexity of these institutions, in Zambia or elsewhere. The next section will explore common frameworks by which community schools have been approached and will suggest new dimensions for research which view these schools as both historically conditioned and politically situated. Thus, the literature can be convened into two groups: the first offers theoretical foundations and critical considerations for these institutions, while the second conducts technical descriptions, assessments, and evaluations of community schools and school projects. Within both of these bodies there are significant gaps which this dissertation seeks to address.

**Theorizing Community Schools**

Dove (1980), a decade before the contemporary growth of community schools, wrote generally about the role of rural community schools in developing countries and set
forth a strong conflict theory around these institutions. There is the “potential incompatibility or conflict which may arise between community needs as expressed by the community leaders and national policies for rural transformation” (p. 76). Skeptical of the “true popular participation” heralded by multilateral agencies, Dove notes how, in general, community schools tend “to reflect the interests of rural elites and to neglect those of the common people” (p. 77).

Hoppers (2005), as mentioned earlier, questions whether community schools constitute an alternative form of education. As community schools are often responses to the lack of government education in rural areas, or serve ethnic or linguistic minorities, the main theoretical concern for Hoppers is the relationship of community schools to the state. In particular, Hoppers contends that community schools serve as an “extreme version” of a community participation model, motivated by a lack of available resources and a concerted effort by the state to shift the burden of cost to parents and local communities (p. 128). Hoppers suggests a taxonomy of these schools based on their level of alterity to government systems. The categories include: variation, or schools that provide the same content as government institutions, but differ in delivery; adaptation, referring to a difference of delivery and curriculum; transformation, as empowering individuals and communities, by “promoting learning experiences and outcomes which are in fundamental ways antagonistic to those prevailing in the regular system” (p. 118). Finally, Hoppers describes enculturation as specific cultural or religious systems of learning, which include Islamic madrassa schools or Indigenous education. Yet Hoppers finds most schools only vary slightly or modestly adapt national content: while Mali, Senegal, and Burkina Faso have stronger community involvement in curriculum, most likely due to strong NGO projects in the schools, many schools in Uganda, Malawi, and Zambia tend to reproduce the national curriculum, when possible, thus functioning ultimately as “private schools for the poor” (2005, p. 133). However, the same institutions “appear to move in different directions making different statements about what they purport to be” (pp. 132-133): essentially the discourse around community schools has more variation than actual school practices. This suggests that research should be conducted to see what these schools actually do, and how this replicates or diverges from existing government schools.
Table 1 below offers a typology of community schools, drawing on the purposes set up by Hoppers, but also types of ownership categorized by Destefano (2006). Running vertically are the categories explored in the previous paragraph, while horizontally there are different types of ownership, or whether the school is managed by communities, non-government or faith-based organizations, or an individual. This table demonstrates there are a wide range of schools which may otherwise be described by the same terms, but which ultimately have different purposes, curricula, and ownership. However, there is a further amount of variation in this table. For example, Hoppers (2005) notes that some schools may only slightly adapt teaching, while others, particularly those established by NGOs or even the state, have a more redesigned curriculum. Transformative practices, as described by Hoppers, are closely linked with social justice and social change efforts: while there are some examples of practices and programs in schools that are transformative, there are few examples of sustainable school-wide efforts. Finally, religious schools are the most common forms of enculturation, whether run by communities, organizations, or individuals.
### Table 1. Typology of Community Schools (adapted from Hoppers, 2005; DeStefano, 2006)

<table>
<thead>
<tr>
<th>Started/run by</th>
<th>Community</th>
<th>NGO/FBO</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purpose ↓</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Variation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Same content as government schools; different delivery</td>
<td>Complementary community school</td>
<td>Distance education; radio delivered instruction</td>
<td>Private school delivering national curriculum</td>
</tr>
<tr>
<td>Adaptation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Different curriculum; different delivery</td>
<td>Alternative community school</td>
<td>Alternative NGO school</td>
<td>Private school with own curriculum</td>
</tr>
<tr>
<td>Transformation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching and learning in opposition to state system</td>
<td>Curriculum and instruction in some way opposes state education system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enculturation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Learning connected to socio-cultural or religious traditions</td>
<td>Community religious school</td>
<td>Religious school</td>
<td>Private religious school, madrassa, etc.</td>
</tr>
</tbody>
</table>

Rather than analyzing specific community school models, Bray (2003) focused more broadly on community involvement and participation in education at the level of international policy. Like Hoppers, Bray positions the “desire to spread the burden of resourcing” as a common motivation for including communities in education provision (p. 31). However, Bray discursively questions the use of the term “community” as a blanket statement built into countless educational programs and policy reforms; instead, the word “can have different meanings to different people and in different circumstances” (p. 33). Carney et al. (2007) echo this critique, noting that local community is “a technical and administrative term that refers to the lowest spatial unit of planning” yet has become “a generic term that heralds the cooperative and harmonious image of community while neglecting inequalities, oppressive social hierarchies and discrimination” (p. 616). For Bray, politics are not outside of schools, but within them, thus contesting that relationships and partnerships are easily fostered between government, non-government entities, and conveniently coherent community groupings. The author uses an example of madrassas and Koranic schools to bolster an argument that state goals for community development are not always in harmony with the interests of communities themselves.
Looking at Table 1 above, one can see how quickly a school can shift categories from enculturation to adaptation if the curriculum and teaching is not parallel to the state system, but in opposition or contradiction to it. Communities are not necessarily cohesive nor democratic, which Bray posits, and previous work (Bray & Lillis, 1988) shows that in the area of financing, there are also assumptions and tensions related to how communities are expected to pay and contribute for education. The strongest argument in most countries for involving communities in participating in education is, not surprisingly, financial rather than democratic, as “community initiatives are often able to mobilise resources which are far beyond the reach of the government tax collector” (Bray & Lillis, 1988, p. 204).

These scholars point to the political aspects of these schools, and argue that complex relations within communities and between them and the state may be overlooked in policies which construct notions of participation happening within presumed coherent and conflict-free communities. While the scholars cited in this section critically approach community schools and the accompanying policy discourse, they do so mostly at a distance, often summarizing other research on schools. Most of the research noted above functions as secondary analyses, and supplies evidence more through abstract generalizations than empirical findings. An exception are scholars who have looked at community participation, albeit in state schools (Burde, 2004; Carney et al., 2007; P. Rose, 2003). In addition, these scholars identify common frameworks and assumptions around community schools yet fail to connect the schools with larger political processes, and rarely articulate a theory of the state. If the state indeed has a role in the provision of education, even if it is one in partnership with communities, what kind of state is this? And where are divisions and divides constructed between the terrain of the state and that of society, if at all? There should be a strong connection between this critical body and questions of how community schools reflect a changing state. Yet, this is not the case due to the dearth of studies, the secondary nature of existing studies, and the absent connection between schools and state theory.

**Describing, Assessing, and Evaluating Community Schools**

Beyond the critical and theoretical work explored above, community schools have otherwise been approached from another particular standpoint, one with a more limited
Much of the work on community schools has been published, commissioned, or is otherwise closely involved with NGO-run projects or partnerships, the bulk of which is gray literature. *Gray literature*, distinct from published scholarly work, is produced either by practitioners or researchers, has not been peer reviewed, and is normally descriptive rather than analytical in nature, as it seeks to inform policymakers. The standpoint and focus of this literature is pragmatic and practical, in that it assess the current state of schools and provides recommendations in improving the stability of schools and learning outcomes. The reason for exploring this work in this review is because it contains most of the descriptive and empirical work on community schools, particularly in Zambia. Further, it represents how non-government and bilateral organizations talk about community schools, and the terms and assumptions they use. A drawback of this body of work is that most sources are by now quite dated, as they were part of an international drive, by the United States Agency for International Development (USAID) and non-government organizations like CARE, to create and support community schools in the 1990s and early 2000s as an efficient and cost-effective way of reaching international Education for All goals.

In regard to purpose, this body of literature can be clustered into three categories: work that serves largely as descriptions, assessments, or evaluations. *Description* is operationalized here as an explanation, often in non-technical terms, of an institution, its processes, and its surrounding context; an *assessment* builds on a description with an interest in some standards of objectivity, reliability, and validity towards making general conclusions; an *evaluation* is a “disciplined inquiry to determine the worth or merit of things,” resulting in information with an immediate use in making decisions or informing policy (Salkind, Orthober, & Kifer, 2008).

**Description.** Glassman, Naidoo, and Wood (2007) wrote a book-length description of the Save the Children community school model, with case studies in Mali, Malawi, Ethiopia, and Uganda. While the studies highlight the strengths and challenges of community schools as built and sustained through a partnership between local communities and an NGO, these studies are descriptive analyses not intended to be evaluative. Instead, the cases provide an example that quality and cost-effective education is possible with an NGO partner, although community participation is
“fundamental” to the success of these schools (p. xxi). Despite the limitations of description, particularly in regard to generalizability, Glassman et al. concluded the book with policy recommendations and view community schools as “a complementary component within a multi-faceted education system” (p. 190). They argue for critical reflection on the notion of community, echoing Bray (2003) and Carney et al. (2007), by viewing communities as “complex and culturally diverse entities, not limited to geographical space and not necessarily bound by common interests, concerns, and goals” (p. 174). Yet much of the analysis falls under the question of “how to maintain the institutions that have worked” (p. 31). Furthermore, the authors strongly argue for the necessary role of NGOs as key in community schools, as “supporter, implementer, and intermediary” (p. 186). Yet they fail to reflect on the political consequences of a public education system in which a segment of schools are supported by civil society or international organizations, like Save the Children. Finally, it is unclear how applicable recommendations and conclusions drawn from the Save the Children model are to “spontaneous” community institutions or those created by communities outside of top-down formal interventions, such as Kenya’s Harambee schools or écoles spontanées in Chad.

Assessment. Other literature strives to assess the current state of research on community schools, as well as reflect on national approaches to these institutions. Miller-Grandvaux and Yoder (2002) assembled an expansive literature review on community schools, yet the review’s bibliography reveals a vast reliance on gray literature. Like Glassman et al. (2007), Miller-Grandvaux and Yoder imagine a multifaceted and decentralized space for education delivery and identified three school models: traditional community-based education, government-provided education, and a collaborative model. The last model is “triggered by governments’ lack of resources and mismanagement, proving they cannot deliver adequate services to the community in many African countries” (p. 4). This further suggests there could be a distinction made between schools emerging from state failure to provide education and community schools arising as an alternative or transformative model compared to existing state schools. Categorizing schools by their relation with the state, at least in terms of funding, reflects the
government policy approach of Kenya, where schools are classified as aided, assisted, or unaided by the state (Mwiria, 1990).

The literature review by Miller-Grandvaux and Yoder retains technical motives concerned with sustaining and improving existing community schools and encourages continued NGO involvement. At the same time, the fact that the review is limited mostly to NGO projects brings both its generalizations and conclusions into question. For example, in the review Zambia is limited to four schools supported by a CARE project, although conservative estimates show that around 2006, the year Miller-Grandvaux and Yoder’s review was released, there were already over 1,000 community schools (DeStefano, 2006).

While the literature review by Miller-Grandvaux and Yoder focused on practical questions abstracted from national contexts, Cashen et al. (2001) and DeStefano (2006) assessed community schools in Zambia, on behalf of UNICEF and USAID, respectively. Cashen et al. provided an “institutional assessment” (p. 4) of the community school movement, focusing the pragmatic research goal: “How best to strengthen the existing community school sector in Zambia and to articulate its relationship with the government” (p. 2). DeStefano analyzed the contributions that community schools made to the educational needs of students in Zambia, and echoed Glassman in noting that NGO-supported community schools can “perform exceptionally well” (p. 15). There is also an emphasis on the suitability of both spontaneous and NGO-supported schools in the open marketplace. DeStefano notes that, in Zambia, a more “market-oriented government and economy increased the scope for communities and nongovernmental actors to participate in all aspects of society” (p. 13).

A central facet in the analysis of DeStefano, and to a lesser extent Cashen et al., is the concept of efficiency, by which they mean an evaluation of the success of community schools depending on the completion rate, as an output, compared to the cost of the education service. DeStefano measures efficiency by comparing the cost per student who met the minimum education standards, contrasting students of community schools with those of government schools, and he found the cost per student meeting the standards in community schools to be significantly less. This is also reflected in a cross-national study by DeStefano et al. (2006), where schools in Ghana, Mali, and Honduras were managed
by civil society actors, yet delivered education equivalent to the public curriculum, and at a much lower cost. Despite this conclusion, the measures of cost effectiveness are not straightforward. In some cases, costs per student are more in community schools than government institutions, but are presented with the explanation that the government would likely spend more to reach these students. In other cases, the community schools are delivering an alternative curriculum, in which three years of study are accelerated into nine months, and thus the costs may reflect this.

**Evaluation.** In addition to measuring cost efficiency, there have been some approaches to evaluate the performance of community school students compared to those attending government schools. Destefano (2006) notes that, in 2003, the first national assessment of student learning to include community schools, conducted by the Examinations Council of Zambia, showed that fifth grade pupils sampled from these schools performed better than their government school peers on English, and roughly equivalent in Math. However, it is not evident that the sample was representative of all community schools, as only a portion of community schools have Grade 5 students, and the sample included only “relatively stable and enduring schools with fairly sizable enrolments” (p. 4). Additionally, it is not clear whether performance on English is a reasonable indicator of learning in a system where local languages are used in instruction before Grade 7.

The assessment by DeStefano also did not seem to take other factors into considerations which influence learning, including the education and socio-economic status of parents and family, and resources of the school. These are considered by Muskin (1999), who compared the academic outcomes of community school pupils in Mali, also based on the Save the Children school model, with those studying at government schools. In this study, measures of “local knowledge” were integrated into the assessment, as these schools prioritized this by recruiting teachers from the community, and largely framed themselves as alternatives to the state model. Yet, results showed that while academic learning was roughly equivalent across school types, community school students did not assimilate more local knowledge than students in state schools, based on questions drawn from the community school curriculum. This potentially raises questions of how “alternative” these institutions really were, and whether they should persist as a
separate model. Again, it is not clear how generalizable these findings are to spontaneous community schools, like many in Zambia.

Researchers and practitioners cited in this section, to varying degrees, present findings by studying both the problem of rural access to education and existing community schools and offer practical advice for governments and NGOs seeking to strengthen community institutions. However, this work, intentionally or not, does not address larger social, political, and cultural conditions which shape schools and educational practices. Thus it is inadequate by itself to address larger concerns about community schools, such as: the sociopolitical conditions from which spontaneous schools emerge; the relationship between the state, the private sector, and community schools; how state actors have framed these schools within an imagined bordering between civil society and the state, and how this in turn is reflected or contradicted in official policy targeting these schools. Further, evaluations of the outcomes of schools do not use representative samples, or samples limited to schools participating in NGO programs, casting into doubt the generalizability of findings to all community schools in regions or countries.

**Gaps in the Literature**

The review of both bodies of literature which theorize, describe, assess, and evaluate community schools suggests significant gaps. First, there is a dearth of research that applies state theories to study community schools within a particular context, and moves beyond general theory and contemplative speculation to systematically understand the political aspects of non-state education within a specific national context. Second, there is little known about possible inequities in educational outcomes across state and community schools, particularly at the lower grades where community schools operate. To approach these gaps, it is important to have an applicable theory of the state as a conceptual framework to look at the history and politics of community schools and Zambia, which plays out in a space of shifting relations between central and local governments, international organizations and local NGOs, and society and community actors. Further, it is necessary to conceptually frame a study of learning outcomes across these two types of schools that resulted from this unique political historical situation.
Building a Conceptual Framework towards Conducting Research

As established, a state theory will be used in this dissertation to understand how community schools reflect a particular – yet shifting – border between state and society. I adopt a position that sees the state as material and ideological but without a coherent structure, and the border between state/society as equally ambiguous but also an arena for the state to assert itself and gain real power. This conception is informed by a specific aspect of neoliberalism, responsibilization, or the empowerment of individuals and communities to take on roles in social service provision. Under a common epistemology of critical realism, to be outlined in the next chapter, my conceptual framework draws on state theory, educational effectiveness research, and comparative education to understand the division between state and society in schooling and determine the learning outcomes of this particular political bifurcation.

A Theory of the State

As will be explored in greater detail in the fourth and fifth chapters, the Zambian state, like many in Sub-Saharan Africa, has moved through periods of expansion and contraction in the provision of basic public services like schooling. In brief, education in the continent has largely shifted from a centralized state service from independence (in the 1960s-70s) to one from the early 1990s that was intended to be provided through a partnership that includes the Ministry of Education, decentralized local government, civil society, communities, and private entities, including local and international non-government organizations (Miller-Grandvaux & Yoder, 2002). This transformation signals a profound change of the state in terms of providing schooling for its citizens. To understand this change and its impact on schools, this requires the role of the state to be taken seriously, and effort made to map the demarcated or negotiated line between state and society. This mapping is even and especially critical when studying schools that have been rationalized in policies as operating outside of the state to some extent. Thus, scholars in the field of comparative education have recommended that researchers consider a theory of the state, particularly when analyzing changes in national education systems, in order to better analyze how schooling and education is provided (Carnoy, 1992; Torres, 1995, 2000). However, studying the state is challenging and has not often been taken up until more recently in the field of comparative education.
**Backgrounding the state.** Comparative education as a field is unlike academic disciplines that are characterized more cohesively by a set of methods, epistemological approaches, and a canon (Fordham, 2014). Rather, scholars in comparative education, like those in the field of education, use a variety of methods, epistemologies, and bodies of literature to conduct research on and around a topic area of schools, learning, and education institutions and systems. Specific to the field is the comparison of these objects across various scales. Yet in recent decades, comparative education scholars have struggled both with theorizing the state and developing an analytical union of the global, state, and local (Arnoive, Torres, & Franz, 2012; Ball, 1998; Bartlett & Vavrus, 2014; Larsen & Beech, 2014; Vavrus & Bartlett, 2006, 2017). This problem is compounded by a significant divide between scholars who study at macro and micro levels (Bray, Adamson, & Mason, 2007), specifically those who analyze policy and its global influences (Carnoy, 2007; Mundy, 1998; Robertson, 2011) compared to others who study the conditions inside classrooms and schools (Anyon, 1980; Stambach, 2004).

The influence and study of globalization has also impacted the use and development of state theory. Overall, there has been the drive by scholars, institutions, and funders to conduct research on “global interconnectivity, transnationalism, and deterritorialization and their impact on education” (Carney, 2009, p. 84). This has led some to herald a contemporary “erasure of place” brought on by globalizing forces (Larsen & Beech, 2014, p. 195). The macro level, which had traditionally been the space for analysis of the nation within comparative education (Carnoy & Samoff, 2014), has faded into a global level, with the world seen as sharing a common culture or hegemonic political system (Hopkins & Wallerstein, 1982; Meyer, Boli, Thomas, & Ramirez, 1997). Meanwhile, state theory has often receded into the background of more global theories (Ramirez & Meyer, 1980), or has been actively promoted by scholars (Carnoy, 1992; Torres, 1995).

Within political sociology in the 1990s, a similar discussion was taking place about the role of the state as an organizing factor, also influenced by the fundamental changes taking place as a part of globalization. Rose and Miller (1992) suggested that political sociologists “move beyond the state” and seek to explain national power in respect to governance. They used theories from both Foucault and Latour to argue for the
study of political rationalities and governmental technologies: the intersecting domains of how knowledge is produced and how people and objects are governed. This complexity requires a new and dynamic theory of government, as the state is a “mythical abstraction” which has neither the unity nor functionality normally given to it (pp. 174-175).

Rose and Miller (1992) argued that recent shifts, including neoliberalism, have made obsolete tidy distinctions between the state and civil society, public and private, government and market, and sovereignty and autonomy, and replaced these dichotomies with “a profusion of shifting alliances between diverse authorities to govern a multitude of facets of economic activity, social life and individual contact” (p. 174). The state’s role is increasingly diminished, not simply due to internal pluralism, but also to stronger global factors, such as the pressures of a global economy, multilateral organizations including the UN and the World Bank, and bilateral agencies that funnel resources and conditional assistance from more economically powerful nations. Meyer (1999) and other world culture theorists – whose work is employed by some in comparative education – posited that states are “imagined communities,” drawing on Anderson’s term (1983), lacking the sovereignty normally granted them. Instead, states are embedded entities constructed “as ultimately similar actors under exogenous universalistic and rationalized cultural models,” or as part of a modern world society or “world discourse” in which very similar national models emerge, from models for governing to providing mass education (Meyer, 1999, p. 137). While my work does not directly engage with world culture theory, it is worth noting that there are fervent debates on this theory and how global and national norms interact. Aminzade, Schurman, and Lyimo (2018) describe two main camps arguing against world culture theory: political scientists who demonstrate how policies “transfer” and are shaped by national conditions, and critical geographers who examine the individual and local institutional context of “mobile” policies.

I argue, following others, that the discourse of globalization has produced the “myth of the powerless state” (Robertson, 2011, p. 280), in which it is assumed that the nation is either compelled or consents to serve as the medium for global policy reforms. Yet even within a globalized society, theories of the state have a lot to offer for comparative educational research, as will be demonstrated. In the next section I explore
how state theory was “brought back” in the last decades to both political sociology and comparative education, and I cover relevant political theories of the former which would inform comparative research, particularly conceptual models which tussle with the complex, dynamic, and historic nature of the state and the co-construction of state and society.

**Bringing back the state.** While the state has been richly theorized, from Plato and Rousseau to Hobbes and Mill, it was generally considered an old-fashioned concept by the 1980s, at least within the fields of political science and sociology (Skocpol, 1985). In these fields, pluralist and structural-functional theories explained politics and the government by way of society and social movements, and governments themselves were not seriously considered as independent actors (Skocpol, 1985). Structural-functionalism, notably advocated by Talcott Parsons, saw social change as slow, and shared values and norms being important for the perpetuation of society (Ryan, 2005). With pluralism, the state slips into the background with the theoretical focus instead on groups which bargain over the distribution of resources and political power (Dowding, 2011). With the influence of pluralism and structural-functionalism, the state, as “a concept too vague and too narrow to be the basis of a general science of politics,” was instead replaced by the concept of a political system, intended to build a sharp yet ultimately artificial conceptual boundary between politics and society (Mitchell, 1991, p. 77).

Yet within political science in the 1980s, a variety of scholars sought to effectively “bring the state back in,” insisting not only on the “institutional reality” of the political state but also on its autonomy from civil society (Skocpol, 1985, p. 7). Presenting a range of research around the state, Skocpol recommends both comparative and historical research develop “middle-range generalizations” about the role of states in reform, policies, and conflict. Here middle-range refers to studies that contribute to understanding mechanisms and concepts of the state without becoming “embroiled in a series of abstruse and abstract conceptual debates.” Instead of “new or refurbished grand theories” of the state, including structural-functional and Marxist, Skocpol argues that what is needed is “solidly grounded and analytically sharp understandings of the causal regularities that underlie the histories of states, social structures, and transnational relations in the modern world” (p. 28).
As a comparative social science, the field of comparative education seems uniquely positioned to conduct research on the state well within the realm of “middle-range” generalizations, via the structure and organization of education. Yet, as Welch (1993) argued, “comparative research has often failed to come to grips with the changing role of the state, and its impact on educational change” (p. 12). Carnoy (1992), writing around the same time, echoed the recommendation for state-centered research, noting that “almost all analyses of educational problems have implicit in them a theory of the state, but few [analysts/researchers] tell us what this theory is” (p. 143). When educators or policymakers blame the state for reforms, or insist governments “stay out” of education markets, spaces which include private or community schools, they are essentially basing their argument on a theory of the state, according to Carnoy. Albeit in this example the state theory is one that dramatically reduces the role of the state in providing education.

Torres (1995) also argued for a state theory, noting that a political understanding of the state and the role of public policy is important as these theories “underpin, justify, and guide the educational diagnoses and proposed solutions” for the problems of education (p. 255). In a review of state theories, Torres charts a history of reconfigurations (and reconceptualizations) of the state, from liberal to welfare, neoconservative to neoliberal. These are not simply minor political variations but rather frameworks that radically affect how schooling is organized, how it is financed, what curriculum is used, and the philosophical and social purpose connected with learning. Stromquist (1995) argues that theorizing the state is crucial for engaging in gender issues, as “the state is not neutral toward women” and is a key actor in promoting, or preventing, equal opportunity in education (p. 424). Drawing on political theory, Stromquist highlights the state’s symbolic power over education, and, like Carnoy and Torres, rejects the dominant “romancing” of the nation as a framework that views the state as a responsive (and responsible) entity, rather than a contested terrain of conflicting power interests (p. 454).

In this dissertation, I argue that comparative research should continue the efforts to theorize the state and its role in education, as the state remains the legitimate organizer of social services within its national boundaries. The government endorses and mediates global policies, sets the conditions of private schools, and defines the rules for how
parents and students choose schools. As will be explored later, even resource-poor states set standards for non-state schools, and are able to, even peripherally, use them to claim progress towards education goals and to legitimize the state’s power. As Stromquist (1995) noted, the state also has legislative power to promote equal opportunity and also uses its symbolic power to reproduce social identities and inequalities.

**Concepts in State and Political Sociological Theory**

This section overviews the conceptual framework and theory of the state which primarily informs the first two analysis chapters, the fourth and fifth chapters, and through these the next two analyses chapters, the sixth and seventh chapters. Here I seek to engage with state theory and overview theoretical concepts that I will be using: state/society bordering, neoliberalism, and participation in social services. The concept of state and society bordering is key to this dissertation, while neoliberalism is explored in order to provide a context for the ideas of participation and “responsibilization” of citizens.

**State/society bordering.** While some comparative education scholars have sought to move analysis “beyond the state” towards either global or local levels, others have taken up the state and charted a middle ground in regard to its role, theorizing the state without seeing it as a concrete entity or dissipating it completely into its component parts. Scholars have noted that state borders are only one mode of bordering. According to Robertson (2011), it would be naive to assume that national borders represent the limits of the state, evidenced by the dearth of social services and the presence of the government within national borders, particularly in rural or remote areas. It is equally flawed to view sovereignty as a territorial absolute, given the influence of multilateral organizations and bilateral aid over national governments (Harrison, 2004). Rather, territorial borders are “the deceleration of flows” (Robertson, 2011, p. 286), and processes of statization, nationalization, and bordering – in effect, the creation of formal political states and informal social boundaries – are enacted dynamically within contested spaces. While neoliberalism as a political project, outlined below, is seen as a “context of dissolving or weakening borders,” new borders have emerged and older divisions and separations have gained new meaning, as there has been “a proliferation of borderings deep inside national territories” (Robertson, 2011, p. 289). Thus, what happens on either
side of a national border is no more important than what happens within the borders of the state, including the drawing of new borders and the negotiation of internal terrain. Robertson’s questions about drawn borders are key to this dissertation: “Who is doing the drawing? How is the drawing made? What kind of drawing? Why is the drawing being made?” (p. 287)

One of the most common borderings analyzed by political sociologists and taken on in this dissertation is the often hazy and sometimes distinct line drawn between the state and civil society. Skocpol (1985) distinguishes state from society and characterizes their relationship as a dialectic, with the state partly or fully autonomous from society. Mitchell (1991), seeking to resolve the dispute between abandoning the state and bringing it back in, focuses on the elusiveness of the state-society bordering. Here Mitchell echoes Abrams (1988), who asserted that there is a state-system, or the “palpable nexus of practice and institutional structure centred in government” (p. 82), an “ensemble of institutionalized political power” (p. 75). Yet there is also a state-idea, or an ideology of the state which supersedes and enhances its actual structure, implying a unity and cohesion that does not necessarily exist. In short, the state system creates an idea of itself, what Abrams calls an “ideological project,” in which it is separate from society in order to legitimate itself (p. 76). Mitchell illustrates how the state-society bordering contributes to the legitimacy and cohesiveness of the state:

The distinction must be taken not as the boundary between two discrete entities, but as a line drawn internally within the network of institutional mechanisms through which a social and political order is maintained. The ability to have an internal distinction appear as though it were the external boundary between separate objects is the distinctive technique of the modern political order. (p. 78)

Similar to Abram’s state-system as idea, the state, according to Mitchell, is a “structural effect”: the state is salient and appears to have a structure but is elusive when analyzed closely. While the state is not a coherent entity apart and opposed to another entity called society, “the distinction between state and society should nevertheless be taken seriously, as the defining characteristic of the modern political order” (p. 78).

This state/society bordering, what Beckman (1993) terms as a “terrain of ideological struggle” (p. 21), is one of the main theoretical concepts in this study. When
using this concept I draw on the work of other scholars who have looked at bordering within national territories in Africa. Dill (2013) looked at community-based water management in Tanzania and found that, despite neoliberal rhetoric of a limited state, this form of community-based development increased the state’s capacity to govern social life by allowing the state to define community borders and delineate activities. This occurred through two processes: the first was recognizing community, specifically “the creation of governable spaces” of community groups and community-based organizations, areas over which the state still has power. Dill argues that recognizing community and differentiating state from society fostered “an environment in which residents could be induced to take some responsibility for their own development and established a new norm of demand-driven service delivery” (p 144). The second process identified by Dill, *rendering political*, allowed the state to wield power in multiple spaces in order to maintain “a clear division between the responsibilities, activities, and modes of action” which are assigned solely to the state and those allocated to society (p. 117).

Harrison (2004) examined another type of border, but one which is also relevant in Zambia: the “sovereign frontier” within certain African states which had participated in structural adjustment programs. Harrison traces international financial institutions as beginning as external impositions but ending up as internalized discourses. Within these discourses is the idea of politics as reducible to participation, the sense of society ownership of public programs, and citizens reframed as customers or users. The idea of a “sovereign frontier,” in which international agencies work within and through the state, is useful in Zambia. For instance, the Zambian Ministry of Education is not only reliant on external funds to function, but also is subject to technical advice, as well as bilateral projects which seek to supplement, extend, and redefine the functions of the Ministry.

In this dissertation I view the state as both material and ideological, adopting Abrams’ concepts of state-idea and state-system. The state operates as a structural effect (Mitchell, 1991), or a collection of mundane but still influential practices, including the construction and policing of a frontier, the control of currency, the establishment of national policies, which gives the appearance of a structure. While the state is not a fixed actor, references to the “state” in order to theoretically analyze it will have to be excused
as a reasonable shorthand, when reference to a specific government actor or department is not possible.

In turn I see civil society as part of a complex network of actors and institutions, which includes the state but is not always distinct as a “third sector;” or traditionally conceptualized space between the state and the market (Sullivan, 2009). I recognize that the terms state actor or civil society actor are problematic, as an agent of the government is also a member of society. Nevertheless, as Ministry of Education officials are part of the state system and are often viewed by Zambians as stand-ins for the state system and representatives of the state idea, I will refer to the MOE as “the state” where appropriate, or I will specify the MOE actors by office or title when this conveys relevant information.

Community, seemingly less enigmatic compared to state and society, is also fuzzy on closer analysis. In this dissertation, I treat community as the most local demarcation of society, and in rural Zambia it is often overlapping with or equivalent to a village. By definition, community demarcates “individuals in a social group, within the larger society, who share the same regional area and possess mutual concerns” (Sullivan, 2009, para. 1). Yet, defining community based solely on location or shared interest can be limiting, and these two attributes may often be in tension. In addition, it’s not always clear where communities end and the larger society begins. Although the term “community” is affixed to the non-state school model in Zambia, which is the focus of this dissertation, it remains an indistinct and problematic title that deserves further scrutiny, along with the equally contested terms of state and society.

Finally, I see the state/society border as a hazy but important distinction, in which both state and society actors seek to define and negotiate their roles, and where the state seeks to outline spaces in society and within communities which are governable. How governance of these spaces is conceived, conducted, and enforced in this dissertation is often through logics of neoliberalism, specifically in the enhanced participation of civil society actors and responsibilization of citizens, including school parents.

**Neoliberalism.** Neoliberalism is a political philosophy which views democracy in economic terms, correlating individual rights with the free movement of capital within markets, free trade, and private property rights (Harvey, 2005). Neoliberalism also champions “deregulation, privatization, and withdrawal of the state” (p. 3) in traditional
public areas, including health care, social security, and education, based on the assumption that the state is inherently inefficient at providing services and that strong safety nets create dependence and inhibit entrepreneurship and economic growth (Peters, 2012).

Neoliberalism, as an influential theory of state governance, has been well theorized particularly in the United States and the United Kingdom (Harvey, 2005) and Latin America (Escobar, 2012; Mignolo, 2002; Torres, 2002). It has also been applied to the realm of higher education with regard to privatization of formerly public aspects of learning and research, and accountability and metrics for faculty members (Chipindi, 2018; R. A. Rhoads, Torres, & Brewster, 2005; Slaughter & Rhoades, 2009). Theories of neoliberalism have also been applied to varying degrees to explain the encounters of African citizens with globalization (Ferguson, 2006). Yet as a mode of governance in the continent neoliberalism has not played out in the same way as in the Americas or Europe. Harrison (2004) notes that, on the African continent, “neoliberal reform – programmatised as structural adjustment – failed to infuse itself into the state as the founding logic of public action; it also generated destabilising effects on African societies” (p. 4).

Neoliberal economic policy prescriptions in the late 1980s and early 1990s was often referred to as the “Washington consensus” because they were largely developed and promoted by the International Monetary Fund (IMF) and World Bank, based in Washington, D.C. These prescriptions operated as a set of economic advice for governments around the world (Williamson, 1993), specifically targeted to countries in the global South seeking loans. Scholars have looked specifically at how these types of policies have gained prominence in and have impacted Africa. Owusu (2003) analyzed the adoption in the early 2000s of the New Partnership for Africa’s Development, an economic program developed by the African Union, as well as the World Bank’s Comprehensive Development Framework. According to Owusu, these both represented a settling of the debate between dependency theory and neoliberalism in support of the latter, in that underdevelopment was associated with internal economic and political structures. Dependency theory here refers the view that external factors like foreign capital and the global capitalist system moved resources from developing countries in
order to enrich wealthy nations. Vavrus (2005) studied how structural adjustment policies influenced by the Washington consensus impacted agricultural and educational conditions at a local level in Tanzania, including the imposition of cost-sharing policies at the secondary level. She found that policies had a deleterious impact at local levels, with the devaluation of currency making life more difficult and limiting funds for providing secondary education.

Neoliberalism at the same time operates as a “catchall” theory to encapsulate a variety of changes in governance and policy which do not necessarily resemble the “Washington consensus” recommendations. A challenge to conceptualizing neoliberalism is that the term is used by critics, but not by advocates or policymakers, leading it to be “invisible and difficult to make sense of” (Klees, 2008, p. 247). At the same time, approaches including “decentralised service delivery, participatory development, social capital formation, and collective actions for radical democracy” have been championed by both development theorists on the political right and left, or those roughly categorized as “revisionist neo-liberal” and post-Marxist (Mohan & Stokke, 2000, p. 247).

Considering the critique that the neoliberalism is applied too broadly for it to have analytical force, I seek to use it more narrowly and focus on specific aspects of how neoliberal modes of governance were adopted in African countries in the 1990s. I look mainly at how policies sought to redefine a border between state and society in social service provision. My use of neoliberalism draws on Beckman (1993), who advanced a concept for the political philosophy within post-colonial African states to analyze the state versus civil society debate. According to Beckman, the key distinction between neo-liberalism and liberalism, the latter which also emphasized capitalism, commercialization, and markets, is the redefinition of the state’s role. Neoliberalism is typified by an anti-statist rhetoric which sees most of the traditional economic roles of the state as redundant and an obstacle to the development of civil society. Yet ironically, the state is key in propagating this discourse, and thus “the neo-liberal project conceals its own massive use of state power, transnational and local, for the purpose for constructing a civil society according to its own image” (Beckman, 1993, p. 30). A common claim in this arrangement is that the state recedes into the role of the “coordinator of coordination”
(Dale, 2007, p. 34), and offers to manage social services from a distance, often by setting the conditions for markets and building partnerships with non-state entities.

Thus I see neoliberalism in the Zambian context as characterized by: a redefinition of the state’s role as a coordinator of public and social services, which in turn shifts state/society bordering; a reduction in state support, both ideologically and financially, for public services like education; a discourse of an empowered civil society, with specific, extensive, and often mandatory opportunities for societal participation accompanied by the “responsibilization” of citizens. The latter is a key part of the construction of civil society mentioned above, and will be overviewed in the next section.

**Participation and “responsibilization.”** Theorists of neoliberal governance have also drawn heavily on Foucault’s concept of governmentality. Foucault (1982) sought to redefine the concept and study of “government” more broadly beyond the reified state or political structures. Rather, governmentality refers both to “legitimately constituted forms of political or economic subjugation” and “modes of action, more or less considered or calculated, which were destined to act upon the possibilities of action of other people” (p. 790). Drawing on Foucault, Klees (2008) describes how the administrative state, in which governments were responsible for both economic and human well-being, was shifting into a neoliberal state, in which citizens were cast as “productive economic entrepreneurs of their own lives” (p. 248). These “responsibilized” individuals are persuaded to take responsibility over areas which were previously the purview of the state (p. 251). The key part of responsibilization according to Klees, and where the links to Foucault are clearest, is that this role is not necessarily enforced by the state, but is intended to be part of an individual’s moral and civic framework: people should take pride in providing for themselves, and being entrepreneurial within a space of limited welfare and public services. In short, there has been a transition from government to governance, in which emphasis is placed less on the hierarchical monolithic state and more on markets, networks, and individual or communal responsibility, with the state increasingly sharing the responsibility of governing alongside societal actors (Bevir, 2011).

While there are ample examples of both “responsibilized” citizens and fostered community building in Western democracies, other instances can also be found in Sub-Saharan Africa. In particular, the concept of self-help has been prominent in many post-
independent African nations: for example, *harambee* or joint effort and community self-reliance in Kenya, and *ujamaa* or brotherhood in Tanzania. Self-help involves communities organizing projects with no or little assistance from state, based on local initiative (Holmquist, 1984). Common projects have included schools, health centers, water projects, roads, cattle dips, and women’s groups.

Yet there is an important distinction between grassroots self-help efforts and institutionalized involvement as part of participatory development promoted by the state, although sometimes the line between the two is difficult to draw. Mansuri and Rao (2013) mark the differences between *organic* and *induced* participation. They note that organic participation is activity by social groups and movements that are independent and often in opposition to the state, while induced participation is “promoted through policy actions of the state and implemented by bureaucracies,” at a national or multilateral level (p. 32). The self-help activities noted above would for the most part be instances of organic participation. An example of induced and top-down self-reliance projects was villagization in Tanzania, a policy of forced settlement in collective communities most famously explored by Scott (1999), who argued that well-intention utopian projects by the state could have disastrous outcomes.

Another instance of induced projects, but with more favorable outcomes, was the participatory budgeting in Porto Alegre, Brazil, often used as an example of participatory democracy. It was a “process of collective decision making” combining direct and representative democracy, where citizens could make decisions on policies which politicians would then implement (Aragonès & Sánchez-Pagés, 2009). Through creating spaces for local democracy and input often to respond to failures of state provision, participation in general has been heralded both by proponents of neoliberalism as “responsibilization” and by advocates of radical democracy who see its potential to oppose capitalism and Western influence (Mohan & Stokke, 2000). Further, forms of participation embedded within the state apparatus at national or local levels can blur the boundary between state and society, as well as the distinction between organic and induced participation (Mansuri & Rao, 2013) as processes are begun and managed by institutions and political structures but can be used and coopted by society actors in different ways.
Induced participation, including Community-Driven Development projects supported by the World Bank and decentralization projects sponsored by USAID, are conducted for a variety of benefits, both instrumentalist and intrinsic. These include fostering self-reliance among individuals and communities; reducing the distance between the government and the public and making the state more accountable to its citizens; and serving as a “training ground for citizenship” by providing spaces for individuals to participate in democratic politics (Mansuri & Rao, 2013, p. 17). Yet these projects are not without issues. The World Bank acknowledges that its efforts to use participatory development, defined as “involving local communities in at least some aspects of project design and implementation” and also as civic engagement, rely on a responsive state and can often have unpredictable and unfavorable results (Mansuri & Rao, 2013, p. 1). For example, the requirement for “consensus,” even at a very local level, may result in the subordination of minority voices, or the process is formalized and participation is costly, particularly to the most poor. Another challenge is that decision-making can be shared in superficial ways, with community members engaging in various levels of “pseudo-participation” where they contribute money and resources, and attend meetings, but do not participate in making decisions or have real power (P. Rose, 2003). Taylor (2013) demonstrated that in Tanzania, participation in policy formation like primary education reform offered spaces for grassroots actors in the schooling system, but was constrained by a centralized organizational structure.

In this dissertation I see participation – specifically in schooling – as both influenced by neoliberal principles and based on historic notions of self-help in sub-Saharan Africa. Much like the concept of community as an cohesive group, participation as a process is viewed largely as apolitical and operating within a space of relative consensus and collaboration (Pryor, 2005). Participation is seen as bringing many stakeholders “to the table” of decision-making without recognizing the complex relations and inequalities spread across this table.

Drawing on Midgley et al. (1986), Mohan and Stokke (2000), and Mansuri and Rao (2013), I see community participation as a complex and multifaceted concept, with a history in which it was framed both in radical democratic and neoliberal terms. Further, participation by community members in the provision of education occurs for a variety of
reasons, including market, government, and civil society failures. Finally, participation operates on a spectrum from organic to induced, between processes begun as social movements and those instituted by the state. Both organic and induced participation may be “structured to resist failures in government” (Mansuri & Rao, 2013, p. 33) and emerge from, but also complicate, a boundary between state and society. How this participation is presented and rationalized in policies and by state and society actors, and also by the public at large, is a key to understanding how a bordering is constructed and negotiated between state and society in schooling.

**Concepts to Compare and Understand Educational Outcomes**

In this dissertation, I argue that the Zambian school system is typified by two distinct forms of participation and responsibilization. One is present yet to an extent optional in state schools, where parents are encouraged to take part in Parent Teacher Associations and other activities. The other is more extensive in community schools and is largely typified by the state’s efforts to institutionalize and induce the organic grassroots participation of villages building their own schools. The concepts of the state, society, and bordering between the two, along with neoliberalism and responsibilization, were outlined in the previous section. These conceptions are used in the historical and political analyses to address the first set of research questions, which look at how the boundary between state and society in schooling, and particularly community schools, has been imagined by policies, state actors, and the Zambian public.

To take on the second set of research questions – determining the assessed numeracy and literacy outcomes of the current parallel system of state and community schools – I examine what learning occurs within a school system in which participation, specifically the responsibilization of parents to build and manage schools, is unequally distributed and enforced across state and community schools. At its core this is a comparison between community and state schools, but also involves considering what else impacts assessed learning outcomes, both in and outside of schools. I draw on two main conceptual frameworks: the first is comparative education, particularly the concept of contextualized comparison; the second is educational effectiveness research, which I draw on to determine how much school type – state or community – matters while considering other influential factors.
At the same time, both sets of research questions demonstrate some level of “bringing back” key approaches in the history of comparative education: the first being historical and deeply contextual research which typified the field prior to the 1950s; the second the turn towards social science and quantitative approaches after the 1950s (Steiner-Khamsi, 2009). To address the second questions, I use a contextualized comparative education approach to frame a comparison of schools within the same national setting, and also draw on educational effectiveness research to understand the complex factors within such a comparison.

While Smelser (1976) described comparative education as analysis of “dissimilar units” (cited in Cowen & Kazamias, 2009, p. 129), there has been a general move away from country-level comparative studies and towards single-context case studies in international contexts (e.g. outside of the United States and UK) in the last few decades. Steiner-Khamsi (2009) notes that in comparative education, the cultural turn in social sciences from the 1980s has caused the prominence of qualitative and single-country case studies in the field. According to Steiner-Khamsi, many of these are not comparative, although they could be: these studies could trace education over time, across cultural and dimensional spaces, or across socially agreed standards (e.g. OECD or IIEP studies). Instead, these studies serve as thick description, or single N with many variables (Ragin, 1997), but lack the “broader frame of reference or perspective” (Steiner-Khamsi, 2009, p. 1151) that comparison offers.

On the other hand, Vavrus and Bartlett (2017) argue that case studies can be comparative and many already are, as researchers do work “across space and time” (p. 15), although the concept of comparison has often been limited to cross-national or cross-cultural studies. According to them, studies of policy can look: horizontally, or how similar policies happen in different locations; vertically, or across scales, from local to regional to national, for example researchers that work their way up various levels of government bureaucracy; transversally, by mapping out the historical context of a policy, including processes and relations. Vavrus and Bartlett argue for comparison that is “processual” and “considers the cultural production of places and events, as well as the articulation and dearticulation of networks and actors over time and space” (p. 19). In this dissertation, I conducted a comparative study of process transversally, or over time, while
I also conduct a comparative study of community and government schools within the same national boundaries.

To compare schools typified by either state or societal ownership and management in Zambia, I draw on frameworks that compare educational achievement within and between schools (Postlethwaite & Leung, in Bray, Adamson, & Mason, 2007), specifically those within the field of educational effectiveness research (or EER). Educational effectiveness looks at factors in schools and education systems which may affect learning outcomes. To do so, it requires distinguishing effects of schooling from other influential factors, like student background and parents’ education. EER was a reaction to studies like the Coleman Report (Coleman et al., 1966), which found that schools had little impact on outcomes when compared to the influence of non-school factors. Since then, the field of educational effectiveness has been closely aligned with the practice of using evidence to understand and improve conditions in schools, and has in the last decade been internationalized, through studies beyond and between international borders. As is common in EER, I use an “input/output” method of studying education, in which the impact or association of inputs are measured in relation to the outcome of assessed learning.

Yet an educational effectiveness approach has clear limitations. Among these, it ignores both cognitive and non-cognitive benefits of education and learning by reducing outcomes, as well as inputs, to what is measured according to reliability and validity constructs. The idea of inputs and outputs is also deceptive, as it implies an input (like textbooks or teacher training) causes an output (like increased tests scores or graduation rates), when most studies using regression, like this one, can only reveal correlation – and not causation – between factors (Klees, 2016). Further, this study is limited from performing what Reynolds et al. (2014) describe as an input/process/output study which focuses on why schools have different effects, often using qualitative methods to determine the process that leads to distinct outcomes. Yet, with the necessary caveats, quantitative input/output approaches are useful as they provide a targeted – albeit limited – picture of which factors correlate positively and negatively with education outcomes. Methods like linear regression can make sense of the relationships between various factors, like those explored above, and can expose persistent and systemic educational
inequalities. Further, these methods can - and should - be accompanied with other targeted and limited approaches, both quantitative and qualitative.

**Conclusion**

In this chapter I have argued that conceptualizing the state is essential to understanding the existence and positioning of community schools in Zambia. I have contended that political conceptions of the state are at the heart of both studying and advancing policies for schools, although these ideas are rarely made explicit. The two distinct bodies of literature I reviewed, the theoretical and often critical approaches and the more practical descriptions, assessments, and evaluations, both provide useful context, theory, and information about community schools but also have limitations. The first built a critical foundation, yet relied heavily on secondary analysis, while the second more frequently conducted primary analysis but adopted a limited managerial focus, in which larger political and contextual questions were absent. The review pointed to two specific gaps: a lack of research applying state theory to understand community schools within a specific context; little evidence about inequities in learning outcomes across state and community schools.

I have also posited that a theory of the state can be drawn from political sociology that acknowledges contemporary forms of governance and sees state and society as indeterminate entities within a larger network of social relations. However, this indeterminacy does not mean either cannot be studied: rather, both the idea and structure of the state and society can be objects of serious study, including how the state helps to define and maintain a bordering between itself and society. Such a theory has helped me to explain tensions around education provision in Sub-Saharan Africa, where concepts of self-help, responsibilization, and participation, often framed within neoliberal terms, have been advanced as a beneficial alternative to government provision of education. I concluded by introducing the comparative and educational effectiveness frameworks I used in this study and explained how approaches allowed me to determine whether the lines drawn between state and community schools, and the different discourses of responsibility across this landscape, translate into unequal learning outcomes. In the next chapter, I set forth how I addressed my central research questions methodologically, and
describe the plan for the collection, analysis, validation, and ethical concerns of data used.
Chapter 3: Methodology and Methods

Theory is good, but it doesn’t prevent things from existing. (Charcot, as cited in Fisher, 2009, p. 3)

Community schools, by operating at a local society level amidst national and international efforts to bring public mass education to all, reflect a dynamic and frequently contested division between state and society in the provision of schooling. Thus, there is a need to understand how policies, state actors, and the public in Zambia have explained, rationalized, and responded to this bordering. It is important to see how policies and actors conceptualize an imagined division between state and society, as this dividing and bordering determines policies which govern which “side” is responsible for financing and supporting social services like education. As community schools are positioned as a separate category of schooling in policy, it is also critical to examine their attributes and learning outcomes to determine whether there are inequities across the dual public education system in Zambia. To address the broad scope of this study I use sets of complementary methods to understand policy, history, public opinion, the roles and opinions of state actors, and the outcomes of a state/society bordered public school system.

In this chapter I overview the mixed methods research design I used in this dissertation, in which different but complementary data was collected and analyzed on two levels: the national/historical and the school/empirical. The designation of two levels—the nation and the school—within the research design draws on hierarchical and stratified conceptual approaches to research in comparative education (Bray & Thomas, 1995; Vavrus & Bartlett, 2006, 2017) in order to address interconnected research aims. To review, the two main research questions in this dissertation are as follows:

1. How has the boundary between state and civil society in the provision of schooling been delineated by state actors, in national policies, and by the Zambian public in regard to community schools?
2. What is the outcome of the current parallel system of state and community schools, in terms of assessed early grade reading and math?

I begin the chapter by offering an overall rationale for and brief explanation of critical realism, the underlying epistemology which grounds both the study and its mixed
methods approach. I then describe the critical realist approaches to abstraction, generalization, and causation that I used in analysis. Next I briefly overview and justify the research setting of Zambia, as the nation serves both as an example and outlier of community-based schools. Thereafter, I present details of sampling, data collection, analysis, validity threats, and limitations for each of the two main research questions. Each question had a distinct aim, level of analysis, and methods, but the first question informed the second in a variety of ways, which I will briefly outline in the last section prior to the conclusion.

**Using Critical Realism to Foster Mixed Methods and Understand Causation**

In this study, I applied critical realism\(^2\) to conduct and justify approaches to make different claims about the political history and policies in Zambia, as well as the attributes and outcomes of different school types. My use of critical realism underlies and makes possible a mixed methods design, without having to switch between incompatible or competing epistemologies. Further, realism gives me a theoretical framework and terminology to analyze causation using process tracing, and its concepts of generalization inform study of the state and state/society bordering, which I outline below.

A cohesive framework which makes mixed methods possible is significant as educational research, and the social sciences at large, have in the past decades been typified by two camps of scholars often using distinct clusters of methods. There has been a stark division between quantitative and qualitative scholarship, each embodying different philosophies for collecting and analyzing data. Goertz and Mahoney go so far as depicting these camps as having “alternative cultures … each with its own values, beliefs, and norms” (2012, p. 227). While there are a variety of ways to define these cultures (see Bamberger, 1999; Pawson & Tilley, 2004; Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 1998), broadly, quantitative research often seeks to gather close-ended information that can be subject to various statistical analyses, while qualitative methods are often used to generate more open-ended information which is typically aggregated and analyzed thematically (Creswell & Clark, 2007). However, this division of methodological labor is not as clearly defined nor as polarized as the “paradigm wars” have insisted (Burke & Onwuegbuzie, 2004). Many academics, as well as practitioners,

\(^2\) Critical realism will also be referred to as realism in this section, as it is also used by Bhaskar (1978).
have been moving away from exclusively conducting “mono-method” research (Onwuegbuzie & Leech, 2005). Further, neither qualitative nor quantitative methods, as methodologies, map directly on to a single epistemology, or way of knowing (Crotty, 1998).

There has been theory from the philosophy of science, much of it not very recent, which seeks to address the problematics of conventional epistemologies and forge a path for researchers to use various methods while recognizing the issues endemic to conducting research. These issues in research emerge from abstracting, theorizing, and generalizing within and from complex, messy, and irreducible social contexts. A more established theory is critical realism, a philosophy developed by Bhaskar (1978) and elaborated most notably by Collier (1994) and Sayer (1984).

The stance of critical realism, specifically what I applied in this study, is that empirical research – meaning the pursuit of valid knowledge from material and social contexts – is possible, but inherently problematic. This is because the production of knowledge is always mediated by resources, interests, and discourses (Mcevoy & Richards, 2006), the latter being a social system that produces knowledge embedded in power relations. Like other epistemologies, critical realism is not a method to be applied, but rather a way of thinking about how research is conducted and knowledge claims advanced. It seeks to situate itself between radical\(^3\) forms of positivism and interpretivism.

In contrast to critical realism, traditional positivism is essentialist, in that objects and structures are considered to have unchanging “essences” about which, over time, researchers can construct absolute knowledge (Sayer, 1984). Radical interpretivism is relativist, in researchers operating within this paradigm presume objects do not have a knowable essence, and there is no clear way to choose between different interpretations or views of the same object, even those made systematically by researchers. A well-known flaw of strict positivism is assuming social systems (what Bhaskar often terms open systems) can be “closed” under experimental or controlled conditions, where

\(^3\) I used the term “radical” here to reference rigid and traditional philosophies of science, with the acknowledgement that most researchers subscribe to a more flexible epistemological framework, or fall in between the typologies like those offered by Lincoln (2001).
extraneous factors to the researcher’s study can be reasonably excluded. In contrast, interpretivists may assume systems are so open and contingent on meaning and interpretation that determining causation or offering generalizations is either impossible or irrelevant. Critical realism acknowledges the problematics of open social systems, but it also claims that there is the possibility of understanding within these systems. A variety of terms are deployed to conduct realist social research: these include regularities (that objects in the same context with the same conditions are likely to behave in same or similar ways), structures (sets of objects or practices), and mechanisms (structures’ ways of acting).

Sayer (1984) notes that within a realist framework, “neither objects nor their relations are given to us transparently; their identification is an achievement that must be worked for” (p. 81). A key concept in realism, and one adopted in this study, is that construction of an abstraction from a concrete object is not an automatic process, nor is the abstract equivalent to the concrete. For example, political scientists will develop a theory of the state by studying national states in their various forms, yet this does not mean the state-system nor state-idea are one in the same with these theories. This assumption informs both my qualitative and quantitative methods outlined below. In interviews with state actors and analysis of policies, the theoretical concept of the state as signifier does not correspond to the actual Zambian state at any given moment, nor is it reducible to the institutions or individuals which constitute it. Further, in statistical models, proxies for learning or socio-economic status serve as abstractions for what is ultimately unmeasurable in its totality. In other words, a child’s ability to read and understand texts can be estimated by oral or written assessments, and then analyzed within models to derive assumptions about a population of children. However, these results, either at individual or group level, are not equivalent to actual literacy or learning.

There are few more concepts - and accompanying orientations - that I have employed from critical realism in my research design and analysis. The first is the idea of “structures,” or “sets of internally related objects or practices” (Sayer, 1984, p. 84). In the next chapter, for instance, I assume that structural adjustment policies and political regimes are both structures influencing education reform and ways of seeing community schools. These structures in themselves do not ensure their own existence but are
reproduced by people: they are by definition social constructions. This reproduction is rarely intentional, and thus requires nuanced and multilevel analysis to understand, as it is manifest in practice as normal, automatic, or just common sense. A fitting example of this is the maintained state/society bordering, which is the primary social structure analyzed in this dissertation. While Ministry of Education officials, NGO staff, and University faculty that I interviewed did not necessarily point directly to this border, they made clear reference to the often arbitrary but distinct responsibilities allotted to state and society actors in schooling.

The second concept from critical realism that I use extensively is causation, a concept overemphasized in traditional positivist research and often avoided in interpretive work. The main idea within a realist theory of causation is the mechanism, or the tendency, liability, or “ways-of-acting” of objects (Sayer, 1984, p. 95). Objects exist within structures and have both casual powers and tendencies. Under specific conditions, objects are likely to produce changes, or may not. This is a complex understanding of causation where the relation between mechanisms and the effects they produce are not fixed but contingent. For example, in the fourth chapter, I examine the rhetoric of the Kaunda government towards non-state schools and the actual effort of the state during economic crisis, and see both as contingent mechanisms, as political rhetoric and state action relied on economic and social factors to be put into practice. In analyzing data, I sought to closely examine events and a map them over time to determine the underlying structures, mechanisms, and conditions causing these events. In Figure 1, I illustrate how events are within the realm of the empirical, or can be directly observed and measured, while structures and mechanisms operate in reality but cannot be experienced or directly studied. This is a simplification of the model developed by Bhaskar (1978), who located events within a different realm of the actual, and experiences in the empirical.
Figure 1. Critical realist approach to causation, adapted from Sayer (2000)

The third realist concept I employ is generalization. Using a realist approach, I see historical, political, and social context as particularly important when developing theory or abstraction in research. By context I mean the social, political, economic, and cultural components which make up a research setting, but which are dynamic and can also be produced and influenced by the research project (Bartlett & Vavrus, 2019). This context often determines how far theory, abstraction, or even results can travel or be applied to other situations; otherwise generalizing without this context or in spite of it risks “dehistoricizing” objects (Sayer, 1984, p. 91). For example, while other countries in Sub-Saharan Africa experienced similar economic crises and political change up to the 1990s, Zambia is unique in the prominence of non-state community schools in the nation. In the fourth and fifth chapters, I explore how community schools are both the result of global economic and political conditions, but are also shaped by political actions and orientations which may be specific to Zambia.

In sum, I use critical realism to justify my decision to use mixed methods without the necessary “paradigm switching” required of pragmatists who adopt different epistemologies and accompanying methodologies to conduct various studies (McEvoy & Richards, 2006). This is because critical realists believe social environments can be measured to some degree and are subject to the assumptions and approaches of statistical methods. Drawing on realism, I justify the use of quantitative models to examine learning outcomes across state and community schools and understand the interaction between community participation and these outcomes. By accepting that knowledge is mediated
by discourse, realists also see the value in exploring and understanding interpretation and meaning, mainly through the use of qualitative methods. Therefore, I used interviewing and document analysis to help me to understand the multifaceted conceptions of the state and society in Zambia and how these notions have shifted over time. In this framework, the open-ended nature of the first set of largely qualitative methods illuminated concepts and assumptions which informed quantitative methods and models. Both sets of research methods, as well as the interaction between them, will be outlined in the next section.

**Methods**

A good deal of research in comparative education has grappled with the conceptual and methodological divide and distance between the national and the local. In particular, there is often a stark contrast between how schooling and education are theorized and enshrined in international and national policies and how teaching and learning actually take place in local schools. Thus, my research design, adopting Ball’s policy sociology (1998), consists of two levels and spaces of analysis: national/historical and school/empirical. Across these two, I analyze how policies are constructed and “pose problems to their subjects” (p. 270), which in turn have intended or unintended impacts, or otherwise divergent outcomes within the intended objects of policies, in this case schools. Vavrus and Bartlett (2006, 2017), proposing an approach to research which is less sociological and more ethnographic, note that multilevel methods can analyze “what ‘ought to be’ based on policy pronouncements and cross-national comparisons as well as what ‘is happening’ as recounted by local actors” (2006, p. 98). While my research design lacks the ethnographic component of Vavrus and Bartlett’s comparative case study approach, in this study I integrated local conditions and public opinion in various ways. The research design for this dissertation was based on these two levels: the national/historical, to see how the state and society are imagined over time, and how social policy and reform, but also public opinion, attempts to match, discipline, or reconcile this bordering; and school/empirical, to use empirical methods to understand the outcomes of community schools compared to state schools, while taking into consideration influential factors.

While informed by policy sociology research, my analysis was not limited to the text of policies alone. Rather, I sought to understand policies and education reform as an
outcome of social, political, and economic factors, particularly those taking place in the
nexus of the interconnected network of civil society and the nation-state. Policies,
particulably how they define responsibility for providing and maintaining schools, shed
light on how the state/society border is conceptualized. In concordance with Abrams
(1988), the state, as an “ideological project,” is indeed difficult to study (p. 76), requiring
a nuanced, theoretically founded, and multifaceted approach. The next sections overview
the methods to tackle two different research questions at distinct yet overlapping levels
and spaces. In Table 2, I demonstrate the alignment of research questions with methods.
In Figure 2, I provide a detailed mapping of the research design and timeline, including
the interaction between mixed methods. In this diagram, methods are in upper or lower
case to depict their priority and importance compared to other methods. For example, the
Afrobarometer analyses (quant) complemented the analysis of policies and interviews
(QUAL).
<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Research Methods/Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National/Historical</strong></td>
<td></td>
</tr>
<tr>
<td>1. How has the boundary between state and civil society in the provision of schooling been delineated by state actors, in national policies, and by the Zambian public in regard to community schools?</td>
<td>Semi-Structured Interviews with MOE/UNZA</td>
</tr>
<tr>
<td>a. What historical and political factors have contributed to community schools’ emergence and continued existence in Zambia?</td>
<td>Policy Analysis; Historical Research; Interviews</td>
</tr>
<tr>
<td>b. How has the government's response to these schools reflected a state-society bordering, and how has this conceptualization shifted over time since 1991?</td>
<td>Semi-Structured Interviews; Policy Analysis</td>
</tr>
<tr>
<td>c. What has been the public response to the state's management of education and state/society borderings?</td>
<td>Afrobarometer Surveys</td>
</tr>
<tr>
<td><strong>School/Empirical</strong></td>
<td></td>
</tr>
<tr>
<td>2. What is the outcome of the current parallel system of state and community schools, in terms of assessed early grade reading and math?</td>
<td>Early Grade Reading and Math Assessments (EGRA/EGMA); Snapshot of School Management Effectiveness (SSME)</td>
</tr>
<tr>
<td>a. In what ways do community schools differ from government schools, in terms of their learning outcomes, resources, and community and parent participation?</td>
<td>SSME</td>
</tr>
<tr>
<td>b. How do community school students compare on assessments of literacy and numeracy outcomes to those attending government schools?</td>
<td>EGRA/EGMA</td>
</tr>
<tr>
<td>c. What is the relation between volunteer teachers, community participation, and these outcomes?</td>
<td>EGRA/EGMA/SSME</td>
</tr>
</tbody>
</table>
Figure 2. Mixed methods research design and timeline
Research Context: Zambia, Lusaka, and Serenje District

In any research study, spatial and historical context is important. This is particularly the case in critical realist research, where generalizability is in tension with historic and specific analysis, as well as in a multilevel/multispacial/comparative studies like this one. I also have pragmatic reasons for sharing information about where data was collected. Zambia as a country is both a useful case and an outlier in regard to community schools: while these schools are similar to those in other countries and run the gamut from mostly managed by communities to closely supported by non-government organizations, the scale of community schools as a proportion of the overall education system seems to be without parallel in the region, if not the world. I provide a more in-depth historical overview of Zambia and its education system, and a history of community schools, in the fourth and fifth chapters. In this section I outline the basics about the country and the sites of data collection.

Figure 3. Map of Zambia (Source: OpenStreetMap contributors, 2015)

Zambia is a landlocked nation in Southern Africa, bordering eight countries, including Angola, Tanzania, Mozambique, Zimbabwe, and the Democratic Republic of Congo (see Figure 3). The country gained independence in 1964, after 40 years as the British territory of Northern Rhodesia. With a total population of 15 million, Zambia has a sparse population density compared to other countries in the region, with less than 20 people per square kilometer (CIA, 2015; The World Bank, 2018). Over 70 languages are spoken within the borders, although many are considered dialects; the official language
of Zambia is English, while seven regional languages are recognized and taught in schools, particularly at the primary level. The country’s main industries are copper mining and agriculture, and the history of the country has been heavily influenced by copper output and prices. Despite a strong gross domestic product (GDP) growth of about 6.7% per year and Zambia’s status as a lower middle-income country, rural poverty and high unemployment are still significant challenges. The HIV/AIDS epidemic has affected the country for decades: its prevalence in adults in 2014 was about 12%, making it the 7th most infected country in the world. High risk of infectious diseases, including HIV/AIDS, as well as a high birth rate and low life expectancy, have contributed to a median age of 16 years, with 66% of the population being younger than 24 years old (CIA, 2015; The World Bank, 2018).

A young population, along with low population density, has created an environment where the provision of schooling has been challenging in peri-urban areas (the space between cities and smaller towns), and even more so in remote rural areas, where paved road coverage is minimal. This has been compounded by a relatively low national investment in education: despite the Education For All guidelines to spend a minimum of 6% of GDP on education, reported investment in Zambia has never exceeded 2.5% since 1992 (UNESCO, 2015).

**Lusaka.** Despite having a historically dense population, Zambia has one of the highest urbanization rates in the continent (CIA, 2015), and Lusaka, the capital city, is a visceral testament to this. Its population is over 2.5 million, around 15% of the total national population. The city is the base of the national government, including the Ministry of Education, which occupies two multistory buildings near Cathedral Hill, near other government buildings like the Ministry of Finance. Lusaka is also home to the University of Zambia (UNZA), the first and largest higher education institution in the country.

**Central Province.** In the heart of the country, Central Province begins just north of Lusaka, but spans mainly east and west, also touching the Congolese pedicle to the north. Its population is roughly half that of Lusaka. It consists mainly of rolling hills, interspersed with villages, towns (called “bomas”), and larger cities like Kabwe and Mkushi, with more than half of the population living in urban areas. In most education
indicators, like literacy and school attendance, the province performs worse than the more urbanized Copperbelt, Lusaka, and Southern Provinces, but higher than the rest (Zambian Central Statistics Office, 2010). It is ethnically diverse, at least as measured by languages spoken: less than a third speak Bemba, the most common language in the province; this is compared to Luapula and Northern Provinces, where Bemba speakers represents more than 70% of the population. Both Lusaka and Central Province were sites to conduct research on the level of the national/historic, which I outline next.

**Research at the National/Historical Level**

Research Question 1: *How has the boundary between state and civil society in the provision of schooling been delineated by state actors, in national policies, and by the Zambian public in regard to community schools?*

The purpose of conducting research that included the analysis of national education policy, interviews with state actors associated with the Government of the Republic of Zambia (GRZ), and the examination of national public opinion was to scrutinize how schooling and a state/society border was politically imagined since the introduction of multiparty politics in the 1990s. In particular, how do policies and actors explain the shift from a mass public education to the current context where over 3,000 community schools enroll one fifth of Zambia’s primary school students? And how do they shed light on a change in the state’s role in providing and managing schools? How did the education system get to the point where some parents take on extensive responsibilities in community schools compared to other parents in government schools? At this level, the primary methods I used were policy analysis, historical research, and analysis of public opinion data. Interviews were used as supporting evidence: I conducted semi-structured interviews with Ministry officials, non-government organization staff, and University lecturers. Expert interviews served as a mortar to fill in the descriptive and ideological gaps in the evidential bricks of the policy and history, while public opinion offered a useful counterpoint to see how Zambian people aligned or diverged with public policy.
Data Collection

**Policies.** Borrowing from policy sociology, I used a flexible and open approach to collect and later analyze key policies. Ball (1998) describes the policymaking process as follows:

> National policy making is inevitably a process of bricolage: a matter of borrowing and copying bits and pieces of ideas from elsewhere, drawing upon and amending locally tried and tested approaches, cannibalising theories, research, trends and fashions and not infrequently flailing around for anything at all that looks as though it might work. (p. 126)

To identify which policies were “key” I created an initial list of policies drawn from histories of education in Zambia (Carmody, 2009; Mwanakatwe, 2013). Next I revised this list based on policies’ references to each other and the extent to which these texts explicitly or implicitly referenced community schools or society and the state, and then included influential international policies, goals, and policy writing frameworks. I considered international texts as particularly influential when they had a significant impact on the financing or governance of education, or, in the case of the World Declaration for Education for All in 1990, led to a spin-off national summit at which the foundational education policy was conceived. Policies from Zambia included national education policies, strategic plans, and implementation frameworks from 1990 to the present. Many were available online, while I obtained some from the Ministry, and others were located on dusty shelves in lecturers’ offices in the School of Education at the University of Zambia. Table 2 in Appendix A outlines the international and national policies that I collected and analyzed. I obtained supplementary sources, including historical records, political manifestos, and books from the special collections at the UNZA Library: these aided analysis but were not coded because they had only peripheral mentions of community schools and key themes.

**Semi-structured interviews.** I conducted interviews in Zambia during the summer of 2016. I spoke with national Ministry officials and NGO staff in Lusaka to understand the origin of community schools and how the state had framed its relationship with them in the past years, and the role of the non-state sector in this process. Further, I interviewed a district Ministry official and zonal head teacher in Central Province to
understand how the state/society bordering and community school emergence played out at local levels. Finally, I interviewed University of Zambia lecturers, to shed light on the historical development of community schools in Zambia, and the larger socio-political context. Interviews fit into my critical realist framework because they provided a window into how actors working with community schools viewed these institutions, and how their opinions refracted, reflected, or diverged from policy tenets. These interviews informed my other methods by connecting and overviewing historical and political events, and relating common ideas and assumptions about community schools which informed quantitative models, which will be outlined below.

Overall I interviewed eight individuals for this study. Table 10 in Appendix A lists their roles, and the dates of the interview. While in Lusaka and traveling through Zambia, I also had informal conversations with a variety of Zambians who had strong opinions about community schools, the state, and the current political conditions, particularly since I was there during a Presidential election. I also had the opportunity to visit teachers who I had closely worked with while serving as a Peace Corps volunteer years earlier, who were working with the Ministry and community schools in a variety of ways, which allowed me to see first-hand how current projects targeting community schools were rolling out.

There is no longer a separate unit or department either within or outside of the Ministry of Education responsible for monitoring community schools, and the onus for these institutions has evidently been decentralized across every level of the Ministry (Ministry of Education, 2016b). Thus I used purposeful sampling to identify additional participants with knowledge of policy around community schools, and the history of schooling in Zambia. This type of sampling is common in situations where lists of participants are not necessarily available beforehand (Morgan, 2008). I used purposeful sampling to identify officials who were responsible for policy creation, coordination, or governance of community schools. Interviewees were asked to identify anyone else within or outside of their Ministry department, UNZA, or non-government organization who were also responsible for policy or implementation regarding community schools or could provide useful insight into these schools or the Ministry’s response to them.
I asked interviewees questions about the history of community schools, the perceived role of the state in education, community support and “self-help” in regard to education and other social services, and the history of policy and practice regarding community schools. A semi-structured format allowed me to ask informants the same core question yet permitted me to follow up on unexpected topics or emerging themes (Brenner, 2006). I recorded these interviews, and later I manually transcribed them for analysis[^4]. The interview protocol can be found in Appendix E.

**Afrobarometer public attitude surveys.** Afrobarometer is a research network and partnership between Michigan State University, the Institute for Democracy in South Africa, and the Center for Democratic Development in Ghana that had conducted, at the time of writing, seven rounds of face-to-face national public attitude surveys which measured democracy, governance, and society in African countries. Its first round in 1999 surveyed people in 12 countries, while its latest available round in 2016 covered 36 countries: Zambia was included in all rounds. In partnership with RuralNet, a Zambia based consultancy firm, survey interviews were conducted in the main local languages, and random selection (with probability proportionate to population size whenever appropriate) was used to select a nationally representative sample of voting-age citizens (“Afrobarometer,” 2018).

I used this series of surveys to better understand how public opinion on education and the political environment changed from 1999-2016. Afrobarometer surveys solicit opinions about education in general and the political aspects of schooling, including the relation of society and the state. The survey topics used for analysis included: how well the state is handling education; whether education is considered a problem compared to other issues; whether the state, society, or private entities carry the main responsibility for providing education and managing schools; local issues and concerns with schools; opinions about school fees. All the questions used, as well as the sample size for each wave, are detailed in Table 11 in Appendix A.

[^4]: The tools I used for transcription were a text editor with autocomplete features (Sublime Text) and an audio player (VLC)
Data Analysis

For the analyses discussed in the fourth and fifth chapters, I digitized policies\(^5\) when necessary and interviews were transcribed in order to code both for themes. I subscribed to Saldaña’s (2009) broad definition of a code as a “word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data” (p. 3). Coding is a heuristic process, or an interpretive activity that proceeds without an initial formula: after codes are developed, they are categorized and linked towards developing themes and concepts. Policies were coded first to identify first generation themes, concepts identified during the first round of coding that were revised and reorganized while analyzing interview transcripts. I used a codebook to keep track of emerging codes, consolidate similar ones, and organize them by major themes (Saldaña, 2009). MaxQDA, a qualitative analysis software, was used to organize, code, and analyze policies and interviews. Software was used to increase the speed and efficiency of coding and querying (Basit, 2003); I adopted this specific platform as it allowed for codes to be reorganized in a visual and intuitive way.

To answer research questions 1a and 1b, in particular, I relied on process tracing, an analytical tool used to describe processes within sequences and timelines and identify causal mechanisms. Process tracing is mainly used in political science, but has been recently adopted to better understand how education policies and reforms play out and develop over time (Dryden-Peterson & Mulimbi, 2017). The tool is particularly useful for identifying and describing novel political or social phenomena, evaluating hypotheses, understanding causal mechanisms, or sorting through multiple causes or factors of an event or situation (Bennett, 2010). Drawing on process tracing as a method, and before analyzing policies and interviews, I developed hypotheses from the first set of research questions and set forth possible “diagnostic evidence” which would support a hypothesis. These served as conjectures or hunches, which helped me to build a clear timeline out of separate events related to community schools and to focus only on qualitative information and codes which supported or contradicted a hypothesis. For example, I was interested in

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\(^5\) Meaning physical copies of policies were scanned and converted to PDF format. I performed Optical Character Recognition (OCR) using Adobe Acrobat in order to ensure the text could be reasonably searched and coded.
whether structural adjustment created the conditions for community schools: moderate evidence for this (which passes test in process tracing termed a “hoop”) would be that adjustment policies preceded the growth of schools; stronger evidence (in this case passing a “doubly decisive” test) would be that adjustment policies required a reduction in the education budget and the imposition of fees, both key factors which led to the growth in community schools.

I transformed and analyzed Afrobarometer data in R and R-Studio (R Core Team, 2017), using survey weights⁶ when appropriate. Analyses were conducted within and across survey rounds: within rounds, to see if responses to questions differed by location or socio-economic status, and across rounds, to see if they differed over time. Then I conducted Pearson’s chi-squared tests, mostly using the visual mosaic plots from the `vcd` package in R: chi-square was used to determine whether an observed difference between groups could be explained by random chance. To compare responses over time, I used Wilcoxon rank sum tests for questions measuring responses on an ordinal scale (for example, those with answer choices very good, good, bad, or very bad). Location (rural or urban) was already a variable in the data, while I created a socio-economic status (SES) index using principal components analysis from Afrobarometer’s living poverty index questions, which ask how frequently those surveyed go without basic necessities during a year (Mattes, 2008). The principal components analysis is overviewed in more detail in Appendix B.

**Research at the School/Empirical Level**

**Research Question 2: What is the outcome of the current parallel system of state and community schools, in terms of assessed early grade reading and math?**

My research at the school level was ultimately a response to findings from the analysis of policies and interviews at the national level. My aim at this level was to determine whether community schools, despite being starkly contrasted from other Zambian schools in policy, legal status, and the responsibility expected from parents,

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⁶ In survey data, weights are used to correct for over- or under-sampling certain populations, or also in the case of Afrobarometer, for household size. For example, an ethnic minority which makes up a small proportion of the population may be over-sampled to ensure there is a diversity of responses represented within the minority – weights would then correct for this, and usually be proportional to the size of the minority population.
actually differ from government institutions with respect to learning outcomes, resources, and actual community and parent participation. For instance, community schools may be in reality less funded and less accountable *de facto* public schools, instead of being exemplars of grassroots community-driven development that offer a comparable and cost-effective education. As noted in the previous chapter, the variation between community schools has not always been consistently addressed in the literature. Prior studies were limited to schools that participated in NGO projects or were selected for research in other ways that impacted representation. Thus, a systematic and empirical study, drawing from a nationally representative sample, is necessary to find whether the difference between school types, particularly between community schools and state schools, is significant, and what factors – from teachers’ backgrounds and school resources to parent and student attributes – contribute most to these outcomes.

**Data Collection**

EGRA/EGMA/SSME Survey. The Early Grade Reading Assessment (EGRA) was conducted in Zambia in November 2014 by RTI International, along with the Early Grade Mathematics Assessment (EGMA), to assess the learning of Grade 2 pupils. The Early Grade Reading Assessment was also developed by RTI International and funded by the United States Agency for International Development (USAID) and the UK Department for International Development (DFID). EGRA was created to fill a gap, as existing international assessments of learning, including the Progress in International Reading Literacy Study (PIRLS) and Trends in International Mathematics and Science Study (TIMSS), tended to be paper-and-pencil tests of Grade 4 and above. The issue with these tests is that they presume literacy, and many pupils in lesser developed countries scored beneath the “floor” of these exams. According to RTI, the purpose of the EGRA/EGMA assessments is “to measure basic skills that all pupils need to possess as the foundation of a successful education: being able to read fluently with comprehension, and to perform basic mathematics functions” (RTI International, 2015, p. 1). Both are 15-minute oral tools: in EGRA, children are asked to name letters, read both familiar and phonetic “nonsense words,” and read paragraphs; in EGMA, children identify numbers, perform addition and subtract, compare quantities, find missing numbers in sequences, and solve word problems.
In Zambia, pupils (n = 4,855) were assessed with the EGRA/EGMA tools in all 10 provinces and in 486 different schools, including government, grant-aided, private, and community schools in November 2014. In addition, school observations and surveys were taken from the same schools with the Snapshot for School Management Effectiveness (SSME) tool, also created by RTI. These “snapshots” include observations of school resources, classroom inventories, class observations, and surveys with head teachers (school principals in Zambia), teachers, parents, and students. In short, they provide more contextual data about the environment in which learning takes place as well as students’ home environments. This included: information about who teaches, what resources are present, and other relevant information about the school; parents’ literacy, home water and sanitation conditions, household assets, and home language. The sample was nationally representative, and the design used probability proportional to size (PPS) to oversample subpopulations that would be a small proportion of the population, in order to ensure their inclusion in the sample. In addition, school data was weighted to represent the total amount of schools of the same type within the district (RTI International, 2015). Unlike the previous learning assessment by the GRZ, reading assessment was conducted in seven national languages, instead of only in English.

Data Analysis

For the analyses which inform the sixth and seventh chapters, the EGRA/EGMA data, along with the SSME, were obtained from USAID under its open data policy. I also used R and R-Studio to import, transform, visualize, and further analyze this data. To ensure proper weighing along the original survey design, I used the package survey for descriptive statistics (Lumley, 2004). I compared initial results, estimates, and standard errors with those published by RTI International to ensure the survey sample analyses were the same. Because of weights, percentages and means are reported instead of raw numbers. Of the 486 schools in the data, 52 schools had an unknown school type, so these schools (with 524 students) were dropped. Two other school types, grant-aided\(^7\) (55 schools with 551 students) and private (44 schools with 445 students), were removed

\(^7\) Grant-aided schools are owned by individuals or groups and receive grants from the state, typically teaching staff and resources. These schools are largely religious institutions owned by churches. In 2011 less than 3% of basic schools in the country were grant-aided (Republic of Zambia, 2011).
from the data, in order to focus on the differences between community and state schools. I used the R package *lme4* to conduct the hierarchical linear model analyses (Bates, Mächler, Bolker, & Walker, 2015).

First, I conducted descriptive statistics comparing the characteristics of community schools with government schools, including students, school resources, class and head teachers. For these, I performed *t*-tests for continuous variables (like teachers’ years of experiences) or chi-squared tests for proportions (like percentage of female students). Like the Afrobarometer data, there was the need to construct a socio-economic index to capture household’s relative social status. An overview of how this index was created is covered in the sixth chapter and outlined in detail in Appendix B. Additionally, I created a community participation index to merge six different questions, answered by classroom and head teachers, about parental and community involvement.

Second, I examined EGRA and EGMA outcomes: in the case of mathematics, I used a combined score of addition, subtraction, and number identification questions; with literacy, I used oral reading fluency, as a percent of zero scores. Due to distinct types of outcomes, I applied two different approaches to understand the impact of various factors on these: a linear multilevel model (Hierarchical Linear Model, or HLM) for mathematics and a multilevel logistic model (as a type of Generalized Linear Mixed Model, or GLMM) for reading.

Hierarchical Linear Modeling, a common approach in educational effectiveness research, was used to make sense of government and community school distinctions. Regression as an inferential approach can show: 1) whether factors, like parents’ education, household socio-economic status, or school resources are associated with each other (for example, how parents’ educational backgrounds and wealth are correlated with their participation in schools); 2) how factors correlated with proxies for student learning, particularly literacy and numeracy; 3) the strength of factors’ positive or negative association on learning outcomes. Importantly, it can determine the influence of factors while simultaneously controlling for others. Regression allows, always with some level of uncertainty, for making sense of various factors despite individual randomness (Angrist & Pischke, 2009).
A HLM allows analysis of students “nested” in classrooms at schools, and within districts and other levels of nesting, instead of simply summarizing individual students into a classroom or school mean (often described as a means-on-means approach). Besides the means-on-means approach, ignoring the leveled nature of data and conducting simple linear regression assumes that each student acts independently in terms of outcomes. This is clearly not the case when groups of students learn in the same classroom, with the same teacher, and at the same school. HLM, unlike simple and multiple regression, looks at how student outcomes can vary within and between classrooms, schools, districts, provinces, etc. The model building process, as well as the final predictor variables, is described in detail in the seventh chapter.

Bringing It Together: Separate Research Questions and the “Mixing” of Methods

For the most part, I conducted analyses towards the two sets of research questions simultaneously but mostly separately. I did this in order to tackle distinct yet complementary research questions about the history, political imaginary, and learning outcomes of community schools in Zambia. However, findings from the first set of research questions, coming from interviews, policies, and the public opinion surveys, greatly influenced the quantitative model building used to approach the second set of questions. Some of these influences came from key findings (that community schools and state schools operated as parallel systems, for example), while others were tertiary to the first set of questions but brought insight to the second set (that community schools were seen as places where at least students could pick up basic literacy and numeracy). These influences are explored in depth in the beginning of the sixth chapter.

At the same time, I used different types of methods – specifically both quantitative and qualitative – hand-in-hand to address the first set of research questions. Allowing for structured but also spontaneous “mixing” between methods largely avoided what Sayer (1984) described as the deductivism inherent in positivist research. This deductivism views qualitative description and conceptualization as “unimportant preliminaries to the ‘real’ business of science,” the latter being the construction of hypotheses tests and statistical models. Instead, modeling can and should logically follow qualitative and theory-building, otherwise it runs the risk of reducing complex social
entities and situations to “logical categories or ‘contentless abstractions’ which are easy to manipulate but difficult to interpret” (Sayer, 1984, p. 182).

**Validity Concerns and Limitations**

Validity refers to how correct or credible a description, conclusion, explanation, or interpretation is (Maxwell, 1996). Within the context of research validity refers to a process of checking the quality of both the data and results. Both qualitative and quantitative methods in this study carried possible threats to validity, and mixing the methods also raised additional validity concerns. For qualitative data, there are three general categories related to validity: description, interpretation, and theory (Maxwell, 1992). In order to address validity issues related to description, I recorded interviews and transcribed them myself before analysis began to ensure the information was as close to verbatim as possible, or captured the meaning and context of interviewee’s statements and the exchange in general. While it is impossible to completely reduce researcher bias in interpretation of data, I triangulated interviews with policy analysis or the historical research, and vice-versa, allowing for a comparison which addressed issues that occurred within one data set. Finally, I considered theoretical validity, which refers to the “coherence” between theory, data, and ensuing themes (Auerbach & Silverstein, 2003). I presented my research aims and preliminary findings to a group of University of Zambia lecturers and doctoral students at the end of data collection. Later I shared more advanced analyses and findings with doctoral candidate colleagues, some of whom had contextual knowledge of Zambia. Both provided crucial feedback in understanding and developing the “theoretical construction” (Maxwell, 1992, p. 291) that I had developed during and after data collection and analysis.

I also considered validity concerns specific to quantitative analysis and interpretation. To some extent, I relied on Afrobarometer’s measures and adaptations for internal validity, or whether items were measuring what they were supposed to. I also conducted tests for internal consistency when constructing the lived poverty index. To counter threats to external validity, or the ability to generalize beyond the sample, I carefully considered the sampling procedures for the surveys, and weighted cases when applicable. When analyzing responses across survey rounds, I only compared questions which were framed in the same way and had matching response options – this meant
leaving out many questions from the 1999 round, as they were significantly revised in the years after.

Similar considerations were taken for the EGRA/EGMA/SSME data. Before conducting analysis, I consulted RTI’s tests for instrument reliability and validity. I also used internal consistency tests before creating a SES index and combining different indicators into a single math outcome. A threat to validity for regression in general, and one outlined by Klees (2016), is that regression used to determine causal inference in social environments nearly always fails to meet required assumptions. Among these assumptions are: including all relevant variables, measuring them properly, and specifying any interrelationships. While proposing causal claims is not impossible within a critical realist framework, I avoided making them due to these issues. Overall I restricted myself to cross-tabs and correlations, which Klees notes are the main tools researchers are stuck with, as regression analyses have little hope of unpacking causal mechanism in education research, where a myriad of social factors are at play.

A threat to external validity associated the sampling procedure used is that community schools which are not registered by the state are likely outside of the sampling frame. While this exclusion is necessary to assess the condition of legally registered schools in the country, the sample may not represent the entire population of registered and unregistered community schools in the country. Additionally, the omission of schools whose category was unknown in the data may have unknown impacts on generalizability.

**Limitations and Delimitations**

Ultimately, every research endeavor has both limitations and delimitations: there are participants, questions, approaches, elements, and considerations which are unintentionally left out of research, and others intentionally absent due to research focus and constraints of time, access, and resources. This section seeks to overview both and highlight the weaknesses of this study. Some limitations and weaknesses which were considered in advance, while others were more of a surprise.

**Interviews.** I had originally intended to interview only state actors. However, I realized that civil society organizations played a strong role in providing and supporting schools, including building government capacity and working closely with the Ministry
of Education, often inside its formal structures (see Harrison, 2004). I also found that through interviewing university lecturers, I gained insight towards my research questions as well as access to additional participants. Early on, I had delimited my study so as not to involve community school teachers, parents, or community members. This was done because I was unable to spend the time necessary in Zambia to locate and interview a sample that was large and diverse enough to adequately represent community schools in a province, much less the entire nation. Further, there were already studies which sought to understand these experiences (Cilobe, 2012; Mwalimu, 2011; Mwansa, 2006; Nkosha & Mwanza, 2009; Nsapato & Chikopela, 2012; Okitsu, 2011). Thus, absent are the voices of community school teachers, parents, and even students, which would have provided more insight into the construction of state/society at a local level. Finally, the short time in the field was a limitation affecting a variety of aspects of this study, including the number of interviews, and the scope of interviews with provincial and district education officials.

My positionality also likely affected access and the type of information gained from interviews. While I have prior experience as a teacher in Zambia and am quite familiar with its education system, local languages, and cultural politics, I am a white American man who conducted research within a historical tradition of the North studying the South. In some ways, this allowed me increased access to interviewees: Some participants were happy to talk with a doctoral researcher, as they were currently in graduate studies or planning on undertaking them. However, I cannot discount that my race and positionality may have shaped what they told me. It is difficult to know how both impacted the information and opinions interviewees shared with me. For some interviews, I was accompanied with a University of Zambia lecturer and doctoral student who was also researching community schools, who was an invaluable research partner, informant, and referrer to additional participants.

Policies. In order to focus on the period after multiparty democracy in the 1990s, I had delimited my study to policies from this era. Most policies were available digitally for review before field research, while others were obtained while in Zambia. Even while in the field it was difficult to obtain copies of historical education policies, reports, and studies conducted prior to this era, which may have impacted the comprehensiveness of
my tracing of the origin and precedents of community schools during the Kaunda
government from the 1960s-1990s. Unlike neighboring countries like Tanzania, where
there has been ample historical and otherwise academic focus on the social and education
philosophy and policies of President Julius Nyerere, this has been comparatively little
research on Zambia in the same period. Availability and access to key documents, and
lack of research to rely on, limited me from exploring the role of communities building
schools as part of the nation-building process after independence. If I had additional time
and resources to find this information and interview those with knowledge of or direct
experience with education policies after independence, I am confident I would have been
able to explore how predecessors to community schools, or village-built schools,
contributed to or conflicted with nationbuilding. Finally, I also delimited the study to key
international policies and documents which were influential in the shaping of education
reform in the early 1990s.

Survey data. While the Afrobarometer surveys cover a variety of educational
topics, they do not make reference to school types. There is also a notable gap between
multiparty elections in 1991 and the first Afrobarometer survey in 1999. This first survey
seemed also to function as a pilot, as many questions were changed in the following
round, limiting comparability.

Literacy and numeracy data. There are both benefits and limitations of the
EGRA/EGMA assessments. EGRA has received most of the critique, since literacy is
both more complex a concept to measure and the subject of strong international focus. Its
critics note that EGRA does not recognize literacy beyond decoding and fluency, or
integrate local conceptions of reading ability (Hoffman, 2012). Other scholars have
questioned how the “five core components” of EGRA\textsuperscript{8} are isolated in the test, and how
these are based on a “selective review of empirical evidence available regarding how
monolingual English-speaking children learn to read” (Bartlett, Dowd, & Jonason, 2015,
p. 310).

For the Zambian assessments, RTI maintained instrument adaptation workshops
were used to “localize” the instruments, but at the same time used tasks like letter sounds

\textsuperscript{8} These “five pillars” are: phonetic awareness, or the ability to identify sounds; phonics; fluency of reading
texts; vocabulary; and comprehension.
and nonsense words, which have been critiqued for applying standards from English reading instruction to non-English languages (Share, 2008; Trudell & Schroeder, 2007). Proponents of EGRA caution against using scores to track students, determine whether they move on to successive grades, or reward or punish teachers (Gove & Wetterberg, 2011). They also do not recommend comparing scores across languages, as the adaptability of the instrument to languages prohibits comparing assessed scores from different language families. Clearly, neither EGRA nor EGMA capture all aspects of literacy and numeracy, and certainly are not reliable stand-ins for learning in general. However they can be consistent indicators of knowledge in key literacy and numeracy areas. The resulting scores, obtained through systematic collection and proportional sampling, provide an empirical glimpse into fundamental literacy and numeracy at an early grade level.

A technical limitation of the data, which is explored in detail in the seventh chapter, is the high frequency of zero scores and its impact on potential analyses. This means that many students were unable to answer many of the items correctly, which leads to violations of assumptions for regression and hierarchical linear analyses, particularly the assumption of homogeneity of variance. I addressed this by analyzing the proportion of zero scores, rather than the raw scores that had a high percentage of zeros and thus were significantly right skewed. Another issue was that there was not information in the data to assess whether teachers were volunteers or were paid (most likely by being on the government payroll). In the analysis chapters I detail how teacher certification was used instead, as a complementary but not equivalent indicator.

A further limitation was the difficulty of accessing this data. While USAID has adopted a framework for open data (Crumbly & Pustejovsky, 2014), access to recent data sets for its sponsored projects still remained enveloped in layers of bureaucracy. I had intended to request, receive, and analyze the EGRA/EGMA/SSME data in the two semesters before departing for Zambia, but I did not receive the data until near the end of my field work, only after requesting it directly from USAID. This shifted me pragmatically from a sequential mixed methods model to a concurrent one, where I went through periods of qualitative and quantitative data cleaning and analysis. However, in an unintended argument for concurrent mixed methods, this allowed my regression models
to be deeply informed by qualitative findings, specifically aspects of and assumptions about community schools.

**Conclusion**

In this chapter I overviewed my rationale for using critical realism to ground a methodologically diverse and multilevel research design. Relying on this epistemological framework, I used a variety of methods to understand contexts, causes, and correlations in pursuit of the main research questions. Policy analysis, interviews, and survey analysis were used to understand how a state/society border shifted over time in reference to community schools and determine the public response to this. Descriptive and inference statistics, specifically hierarchical linear modeling, were utilized to establish whether community school students differed in literacy and math outcomes compared to their peers in state schools, and to understand what factors contribute to these outcomes. Threats to validity, which manifested differently in qualitative and quantitative methods, were overviewed, along with both limitations and delimitations which occurred during the research process. The next four chapters discuss the results of this research project.
Chapter 4: Community Schools Amidst the Oscillating State

In the first two chapters of this dissertation I highlighted the emergence of a contemporary community school movement in sub-Saharan Africa in the 1990s. Yet the practice of communities building and managing schools is not a new phenomenon, even in Zambia where people built schools in both colonial Northern Rhodesia and in the independent Zambian nation. However, the stories behind these schools are relatively absent from historical record and were largely ignored by the dominant providers of education, from missionary societies and the colonial government to the modern Zambian state.

In studying how schools emerged and grew in Zambia, historians and education scholars have overemphasized some narratives while underplaying others. For example, there is more focus on schools managed by the state and missionary societies than those built by local communities, largely because the former organizations leave ample documentation and records for researchers to mine. This narrative over/under-emphasis is also present in the study of contemporary community schools. A commonly accepted origin story of these schools is that they began with a single American-founded school in Lusaka, yet this history does not fully explain the emergence of a few thousand schools beyond the capital city. Further, while some of the immediate factors causing community schools have been noted (Chondoka, 2006; Mwanakatwe, 2013), the larger economic and social mechanisms and structures which contributed to these have not been explored in depth.

In this chapter I take on the following sub-question under the first overarching research question: What historical and political factors have contributed to community schools’ emergence and continued existence in Zambia? Drawing on interviews, policies, and secondary sources, I have two specific aims in addressing this question. The first is to examine how the state and society were demarcated and bordered in relation to non-state schools in colonial Northern Rhodesia and independent Zambia between the 1880s and the 1990s. In this period, I compare instances of communities building schools with the contemporary community school movement. I found the state oscillated in this period: at times it adopted a minimized role in school, increasing the role of society, and at other times it expanded its position, creating a different state/society border.
The second aim is to explore the mechanisms and structures which contributed to a crisis in education provision in 1980s and 1990s, which in turn gave rise to community schools. This includes unpacking and countering common narratives about the origin of these schools. In respect to both aims, I contend that largely ignoring historic community-based schools, or seeing them as another foreign intervention, has allowed the Zambian state to conflate self-help and responsibilization, or organic and induced participation, while seeking to define and coordinate these schools after 1991. Further, by viewing community schools as relatively new, the state was able to frame them as positive developments in relation to neoliberal principles of an educational marketplace and community responsibilization. I discuss the implications of this framing of schools in the next chapter.

Instead of emerging from a single source, I see community schools as rhizomatic, or consisting of a loose and non-hierarchical network influenced by common factors and contexts yet not traceable to a single root or point of origin. I draw on this term loosely from Deleuze and Guattari (Deleuze & Guattari, 1987), who conceptualized the rhizome to explain history and culture, setting it in opposition to a root and tree approach in which chronological lines are traced for singular and clear origins of phenomena. A rhizome, instead, consists of “ceaselessly established connections between semiotic chains, organizations of power” and other circumstances (p. 25). The state response to this rhizomatic growth of community schools ultimately led to a bifurcated state/society school system, in which parental responsibility was unequally distributed. By arguing that community schools are far from new, and cannot be traced to a single source, and reflect a shifting state/society bordering, I set the stage in this chapter for the next three: the fifth chapter illustrates how state/society bordering in relation to community schools played out after 1991, while the sixth and seventh chapters examine the outcomes of community schools – as a loose network of society-managed institutions – compared to more systematically governed state schools.

While in this dissertation I focus on community schools after 1991, there are additional reasons to explore state/society bordering before this period. Non-state schools, or those founded and managed by non-governmental actors like missionary societies, civil society organizations, and community members, had a complex
relationship with two distinct states of Northern Rhodesia and Zambia. Northern Rhodesia was managed by two successive colonial states before independence in 1964, and Zambia was governed by Kenneth Kaunda from then until 1991. The Kaunda era, referred to as the First and Second Republics because of the shift to a one-party state in 1973, is explored here to demonstrate how the government’s role in education was articulated differently after a political shift in 1991, and in some ways influenced the reorientation in economic and social policies. The colonial era is also pertinent as education was deeply tied to the colonial enterprise (Rodney, 1972), even when not offered directly by the colonial government. Further, missionary and colonial education both left a legacy on post-independent education systems (Abdi, 2012), which were often perpetuated by political elites who had benefitted from education in colonies and abroad, and who failed to radically reform inherited education systems, including in Zambia (Carmody, 2009). This legacy included a focus on rote memorization and academics over practical skills and cultural knowledge, high-stakes exams to progress into and through secondary school, and an emphasis on English. In overviewing the colonial and post-colonial Zambian state, it should be noted that independence represented not merely a transition from one state to another, but a sociopolitical shift from a colonial territory to a postcolonial nation. Thus I take caution not to draw close parallels between radically different systems of governance and education provision.

Oscillating States: State/Society Bordering and Negotiation in Schooling
Missionary and Colonial Education (1883-1963)

In the colonial era, the division between state and society in schooling was less distinct, as colonial states in the first five decades of rule did not directly create or manage schools. The main bordering in education (and that most prominently depicted in historical record) was between the colonial state and missionary societies. Both state and missionary societies advocated for and sought to influence and govern the Indigenous people living in the territory of Northern Rhodesia. In this period, formal education was mostly synonymous with missionary schooling, and the position of the colonial state towards mission schools shifted over time. When Northern Rhodesia was managed by the
British South African Company, the Company at first did not register or contribute financially to missionary schools. The Company sought to register schools after teachers and those educated by missions were suspected of participating in the Chilembwe uprising in 1915, when John Chilembwe, a Western-educated missionary, led a protest against conscription, which escalated into a short-lived uprising against British rule.

In 1924 the Phelps-Stokes Commission, an education commission tasked with assessing the learning conditions and needs in British African territories, recommended a cooperative education system where government and missionaries worked together but maintained a system which was divided unequally on racial lines. After the British Colonial Office took control of the territory the same year, it established a grants-in-aid system where funds were given purposely, often to pay certified teachers or construct buildings (Carmody, 2009). Yet this funding was also distributed unequally: in 1932, 12 European schools with over a thousand students received the same funding as native schools which had over 76,000 students (Boahen, 1934). Thus there were two reasons two successive colonial states oscillated in controlling schooling: the first was mainly to regulate internal dissent, while the second was part of an international philanthropic effort to study and improve education in Africa.

In the 1920s and 30s, there were so-called village or “bush” schools run by missionary societies, staffed by teachers with minimal education and training. These village schools existed alongside “proper schools” or mission station schools (Snelson, 1990). While these were very different from contemporary community-based schools, there are some points of comparison which can be made here. These similarities relate to the structure of a tiered school system, conceptions of the local, and the bordering of state

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9 The British South Africa Company was a private mercantile company which exercised commercial and administrative rights over central southern Africa. The goal of the Company was to build infrastructure in territories and thus bear the risk of a colonial endeavor which would otherwise be funded by British taxes (Kitagawa, 1983).

10 The Phelps-Stokes Fund was a philanthropic organization established in 1911 to provide services for African-Americans, yet also worked to develop Native Americans, Africans, and the poor. Its education commission in 1924 contributed to the British Colonial Office’s standardized educational policy for Africa (Berman, 1971).

11 In an almost poetic twist, Snelson (1990) describes how village schools were prevalent in the 1920s due to the efforts of missionaries and in particular David Kaunda, a minister and missionary for the Church of Scotland who was born in Malawi, formerly Nyasaland. Kaunda had eight children, the youngest of which was Kenneth Kaunda, who became the first President of Zambia.
and society in the support and financing of schools. Village schools were managed by missions in often centralized ways, and, unlike community schools, could be itinerant, as evangelist teachers moved from village to village combining education with proselytizing. At the same time, the colonial government did not provide direct support to village schools, while at the same time it offered grants-in-aid to mission station schools. However the government used indirect means to impact quality, including collaborating at large with societies and training teachers. There was also an expectation of local participation: communities and parents were responsible for erecting structures, providing materials, and supporting the school by paying in kind.

Snelson (1990) describes village schools started by the Paris Evangelical Missionary Society in the 1910-20s where conditions were similar to contemporary community schools:

Classes in the village schools were often held in the open air. When a building was erected, this was provided by the local people, who were also responsible for building huts for the teachers. All the early buildings were in pole and mud; they were rarely substantial unless the teacher or missionary directed the building operations. Pupils provided their own equipment. This was no more than a slate, a slate pencil, and, perhaps, a reader. Sometimes small fees were charged; usually they were paid in kind in the form of eggs, a fowl, fish or meal. (pp. 47-48)

While these schools occurred a century before contemporary community schools, this description could aptly apply to quite a few community schools in Zambia. This demonstrates that while the extenuating circumstances were different, particularly the prevalence of missionary societies and the religious nature of schools, the community-based schools on the ground would look very similar to students and parents. While there has been recent improvement and state funding for community school classroom blocks, many contemporary community schools began in outdoor kitchen huts, in churches, or under trees.

It is not clear to what extent village schools continued beyond the 1930s, as the colonial government began more directly supporting and providing education. Schools built and operated by local authorities rather than missionary societies were established in 1938, and their number grew to 23 schools by 1945. Some missions saw this as the
precursor to the state’s eventual takeover of missionary schools (Carmody, 2009). To some extent, they were prescient: in 1951, the Northern Rhodesia Education Ordinance authorized local authorities to take over schools missionaries no longer wanted to manage. In the year before independence, in 1963, more than a third of schools were being run by local authorities under supervision from the colonial state (Carmody, 2009).

**Kenneth Kaunda and the First and Second Republics (1964-1991)**

After independence in 1964, the relation between the Zambian state and local communities took a starkly different character, although there were also continuities. Kenneth Kaunda, drawing on strong popular support particularly after independence, sought to apply a quasi-socialist approach to governing, drawing on ideas that he framed under a philosophy of “African Humanism.” I describe Kaunda’s governance as quasi-socialist because he had articulated socialist ideals in his writings but failed to gain the support for enacting more radically socialist policies, including in the sphere of education. Overall, schooling policy in the independent nation of Zambia, particularly in the First Republic, was both a response to the unequal school system inherited from the colonial period and a vision for the future of the nation. In 1964, less than 5% of the population had completed six years of primary school, and rates of illiteracy were 76% for men and 95% for women (Carmody, 2009). Kaunda and the United National Independence Party (UNIP) sought to expand and finance the education system. Investment in education had two main political and social goals: first, it would serve to “Zambianize” the state apparatus by training civil servants; second, improvements in schooling would contribute to the state’s legitimacy as efforts to solve the issues of an inherited colonial system. Moving away from the colonial model where the state facilitated the conditions for missionary societies to manage schools, the government declared a “virtual monopoly” over education provision and encouraged non-government and missionary bodies to surrender schools to the state (Carmody, 2009, p. 23).

The idea of village schools also ran counter to the state’s schooling monopoly, and the narrative of a new Zambian government providing for its citizens. An UNZA lecturer I interviewed in 2016 who researched and worked with community schools recounted the origin of village schools before independence and their status afterwards, particularly institutions built by communities rather than by missionary societies:
Today we think that the idea of a community school germinates from that village school approach, because most of the time, village schools were started by the villagers themselves, they got interested, they organized themselves, then they approached, maybe, the district commissioner, to help them, maybe with a teacher. But of course, the village schools later on would be turned into, maybe, a government school. That’s how they were doing it at that time. And these village schools went up to almost independence, when Zambia became independent, and then the village schools were no more, because the new government was determined to ensure that all village schools were turning to full schools. So from about 1964 to about 1992, there were no village schools, and there were no community schools, per se … if they were there then they were not necessarily recognized, because the government was quick to intervene, and you know in that period … the government, it was a socialist government, and they wanted to prove that they were there for everyone, and so the government was not really so keen at allowing many educational providers in the system … Their interest was public schools, government providing education for everyone. (August 3, 2016)

This quote demonstrates that prior to independence, communities took an often organic approach to providing education, by organizing locally to build schools. The oscillation of the state in its control over schooling, as well as the imagined border between state and society, was dramatically changed after independence, when schooling was nearly exclusively cast and viewed as the state’s business.

Yet there is some evidence that community-based schooling, particularly the building of schools by villages, not only occurred during this period but was encouraged by local government officials. Kelly (1991) notes how nearly all of the schools developed in the decade after independence were built by communities on a self-help basis and were temporary structures which had to be replaced. In an interview with a National Ministry of Education planning officer, he/she explained that most of the schools in this period were community-built:

The majority of schools in Zambia started pretty much the same way as the modern-day community schools started. In other words, you have a group of community members coming together with one purpose, and that is of trying to
establish a school within their location, so that their children can go to school.
(July 25, 2016)

This again suggests that school building efforts were largely examples of organic participation, rather than induced: community members got together to establish a school, instead of being invited to join a top-down participatory project organized by the state or other actors. In some instances, local government officers unofficially encouraged communities to build schools, and relayed that the state would eventually take over costs, especially paying teachers. These efforts were likely influenced by strong public support for the government after independence and a campaign by UNIP on work and self-reliance.

Yet, as will be explored in the next chapter, self-help practices in this period and later were not universal across all areas of the country. According to Mwanakatwe (2013), the practice of self-help in this period was more common in rural areas, while urban residents were often too occupied in wage employment to take on this level of involvement. There was also an acceleration of community involvement in education near the end of the Second Republic, as both an economic and educational crisis began to set in (this crisis is outlined in some depth in the next section of this chapter). In 1987, there was a policy to transform Parent-Teacher Associations into cooperatives that would “assume full responsibility for the school where they [were] located” (Interim National Development Plan, 1987, as cited in Ministry of Education, 1992). This was intended to “facilitate the transfer of school ownership to the community” where local people would be responsible for managing, budgeting, and staffing schools, with teachers, curriculum, some materials, and supervision provided by the state (Ministry of Education, 1992). In the same period, there was a “breed of self-help basic schools” which “came into existence at the initiative of local communities” without technical assistance from the state (p. i): by this definition, these were essentially community schools that emerged prior to 1991.

However, there is little documentation of these schools, as the primary narrative was that the government, on quasi-socialist grounds, carried the sole responsibility for mass education along with other basic services. Thus the border between state and society was strictly drawn out in regard to schooling. This was supported by a view that non-state
education could lead to “the entrenchment of privileges for the wealth and to the marginalization of the poor” (Kagia, 1992, p. 18). There was only a “benevolent tolerance” by the government towards non-state and private providers of schools: private and societal actors’ “participation in education provision was not prohibited, but their major role was understood as supplementary to that of the state,” specifically catering to parents who could pay for a different type of education (Ministry of Education, 1992, p. 49).

However, the idea of a strong state supporting education was emphasized in the First Republic, but this sentiment began to erode in the Second Republic as economic and political challenges impacted the provision of schooling. An UNZA lecturer described the conditions under Kaunda’s one-party quasi-socialist state:

People were not ready to become so innovative, or maybe come up with new ideas, because they were afraid of being confronted [by the government]. But after the change [of state in 1991], there was an economic crisis, and then it gave birth to some of those ideas, people started coming up with community schools. (August 3, 2016)

As the quote highlights, there was a reluctance towards establishing and maintaining non-state schools amidst the Kaunda governments’ monopoly of schooling provision. The idea of being confronted by the government demonstrates how Zambians at the time saw schooling as mainly a state monopoly. The political change in 1991 saw not only a shift in government but in public rhetoric and policies imagining the border between state and society in establishing schools. Part of this was an emphasis in changing Zambian people’s beliefs on what the state could and should do for them.

Village schools built under an oscillating colonial state, despite being segments of a missionary system, would closely resemble contemporary community schools. Similarities included their modest conditions, support by communities, and often improvisational origins. There is evidence that community-based schools existed in the Kaunda era as examples of organic participation (Kelly, 1999), but clearly ran against the dominant narrative of a government strongly supporting schooling for national development. This indicates that the division between state and society in schooling was articulated differently in national policy than it was on the ground, and there was
oscillation between strong policies and rhetoric of government schooling and communities building their own schools. While communities had built schools under the governance of a colonial state and an independent Zambia, there were two important shifts in the 1990s – the change referenced in the quote above – which led to the contemporary community school movement.

**Community Schools: Countering the Official Narrative**

The previous section illustrated how communities before the 1990s got together and built schools largely outside of official recognition or definition. Yet the commonly accepted narrative relayed in Ministry policies, histories, and interviews conducted for this dissertation locates the origin of community schools in 1992 in the capital of Lusaka. This narrative of a single person planting the seed for community schools is inaccurate for two reasons: first, village-based schools were already prevalent in previous eras; second, community schools grew essentially from everywhere, planted by economic crisis and structural adjustment policies, explored below. In this section I present this account, counter it by exploring the larger economic and educational crisis which led to community schools, and look at the growth of schools from the point when their numbers were counted.

In histories, policies, and interviews, I heard a variety of similar narratives about community schools. An UNZA lecturer with expertise in community schools briefly relates a common version of the story of these schools:

And so, when we changed government into a multi-party arrangement, by 1992, there were a lot of children out of school. A lot of children … Now, that out of school situation was not very healthy for the country as a whole. And one lady, by the name of Mary Hopper, she came from the U.S. She was doing her doctorate studies … She got interested in some children who were just doing nothing in Missus [Misisi] compound [a block of houses] … she got interested in a group of young children who were not doing anything, especially girls. And she began putting them together, you know, and started teaching them. And that was the beginning of what we call now “community schools” in Zambia. Because she continued until that small community became quite well organized. And even
when she left, she left that small school in the hands of some volunteer teachers. (August 3, 2016)

This story is also echoed in other sources. Chondoka and Subulwa (2004) attribute the “concept of community schools” to an American women by the name of Dr. Janice Stevens, also in the Misisi compound. In contrast, the Zambia Community Schools Secretariat cite the first community school as opening much earlier in 1983, organized by the Dominican Sisters (ZCSS, in Kelly, 1999). Yet these accounts are implausible because they do not explain how a school movement grew from one school to over one thousand by 2000 (Ministry of Education, 2007b). Rather, this narrative is the origin story of Zambia Open Community Schools (ZOCS), a local non-government organization which began with a single school in 1992 at the Misisi compound, organized by Sisters of Charity with start-up funds from an American donor, likely Dr. Janice Stevens (ZOCS, 1997). The initial idea of “open community schools” was for institutions that were accessible to all at a time where the government school system was limited, which I explore in the next section. In five years, by 1997, the organization had expanded to 24 schools, mostly in and around Lusaka. ZOCS has had a strong role advocating for community schools at large and participating in various policy meetings with the state, but its affiliated schools have never constituted the entire population of schools, or even a sizable majority. For example, in 2016, when there were over 3,000 total community schools ZOCS had 623 affiliated schools (Interview, August 5, 2016). Thus it is important to move beyond the history of a single organization and look at other factors which influenced the rapid growth of schools around the nation in the 1990s.

To understand the growth of non-state community schools, political and historical context is crucial. To use critical realist terms, there are essentially layers (or stratification) of causation that need to be unearthed. The quote above alludes to two commonly cited causes for community schools. First, there is the common demarcation of time into political periods, specifically the change of government in 1991 from the one-party state headed by Kenneth Kaunda (since 1964) to a multiparty democracy. Next, there is the large number of out of school children: gross enrollment at primary school dropped from 99% in 1985 to 93.5% in 1991, and in the latter year 400,000 children were out of school at the primary level (The World Bank, 2018). At the same time, factors
which contributed to out-of-school children and other education issues are important to understand. While community schools themselves were the response to conditions like the lack of public schools, overcrowded classrooms, and out-of-school children, these events can be traced to larger mechanisms and structures, such as an economic crisis and structural adjustment reforms.

The Lost Decades: Crises in the Economy and Schooling

In the 1970s-80s, a significant drop in copper prices and rise in oil prices led mineral-dependent Zambia into an economic decline that was “rapid, sustained, and devastating” (Kelly, 1991, p. 16). In 1974 mineral revenues accounted almost half of total government revenues, but just two years later in 1976, they were less than two percent (Kelly, 1991). According to Andersson (2000), Zambia had moved from being one of the wealthiest countries in Africa to among the poorest in less than a generation. The time from the 1980s to 1990s was termed the lost decade because of the slow economic progress but also the tangible poverty felt by average Zambians as the price of goods increased and living standards decreased.

However, the entire continent also “lost” the decade: average gross domestic product (GDP) per capita in sub-Saharan Africa decreased annually starting in 1980 and did not return to its 1970s numbers until the mid-2000s. In the case of Zambia, there was not GDP growth until the early 2010s (The World Bank, 2018). Thus in Zambia, economic crisis was not only a feature of the 1980s and the Kaunda government, but was prominent under the next government as well. This lack of economic growth was clearly felt by Zambians. An UNZA lecturer who studied education but also lived through both periods described the public sentiment: “From 1992 to about 1999, you were really going to feel the pinch, because in fact most of the people call that decade as a ‘lost decade’: Zambia lost that decade” (August 3, 2016). Thus I am referring to this period, roughly from 1980 to 2000, as the lost decades, as economic conditions, both in real terms and as experienced by Zambians, were quite grim.

The economic crisis impacted every aspect of government, but particularly social service provision. Kagia (1992) noted that the Zambian government’s strategy for education since independence could be seen as a “strong tension between political aspirations for education democratization on the one hand and financial realities which
translated into much slower education expansion on the other” (p. 27). Thus the gap between education goals and implementation widened as revenue declined. From 1984 to 1991, overall government spending declined by 30% in real terms, but social spending was halved or more: in 1991 education expenditures were at a quarter of their levels in 1982 (van de Walle & Chiwele, 1994). The government was spending half as much on primary students in the early 1990s as it had in 1985, and more than 95% of its primary education budget was dedicated to teacher and staff salaries, with little left over for school building or teaching and learning resources (Ministry of Education, 1992, 2007a).

Even well into the 1990s, in the era of multiparty democracy, Zambia’s commitment to education, in terms of spending as a percent of GDP and total government budget, was among the lowest in Africa and the world (Ministry of Education, 1996). Figure 4 below demonstrates that while the average education expenditure (as percent of GDP) of Southern African Development Community countries\(^\text{12}\) was relatively consistent and even grew through the 1980s, Zambia’s expenditure decreased quickly and remained at low levels even into the 2000s. Since this is not spending in raw terms, but as a percent of GDP or Zambia’s market value, this is not merely demonstrating that economic conditions were dire. To use a metaphor, this signals that while the economic pie was shrinking, the piece or proportion cut out of it for education also decreased as well.

\(^{12}\) This figure was created using World Development Indicators (The World Bank, 2018). This average of countries, which would eventually form the Southern African Development Community in 1980, includes Angola, Botswana, Comoros, Democratic Republic of Congo, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, Swaziland, and Tanzania. South Africa was not included because of its status as an upper middle income country; Zimbabwe was excluded because of abnormally high and unexplained numbers in the 1990s.
Figure 4 strongly demonstrates that while other countries were equally impacted by the lost decade of the 1980s, Zambia had consistent and prolonged reductions in government support for education which diverged from regional averages. A Ministry of Education policy in 2007 paints a stark picture of the “face” of basic schooling in the period of the early 1990s:

Dilapidated education infrastructure throughout the country; overcrowded classrooms in the urban schools; lack of school equipment; low motivation among teachers because of poor conditions of service; diminishing education opportunities particularly for disadvantaged children … as a consequence of the state of affairs above, the quality of education remained quite low, resulting in a loss of confidence in the value of education among parents and communities. (Ministry of Education, 2007a, p. 12)

This reduction in state financing for schools contributed to lower primary school enrollment as existing facilities struggled to keep up with population growth. There was a lack of school expansion and “strategies of multiple sessions and excessively large classes” were used to accommodate students but had reached their limits: by 1985 almost
all school buildings were at maximum capacity (Ministry of Education, 1992, p. 15). School expansion had been quickly outpaced by population growth: from 1985-1990 the average growth in first grade enrollments was under 1%, while the population of seven-year-old children grew at an annual rate of more than 3% (Ministry of Education, 1992). There were simply not enough spaces in schools for all school-age children in both urban and rural areas. Further, parents’ views both of schools and the quality of learning also contributed to lower enrollment: a study conducted by the World Bank and the Ministry of Education in 1998 (the Study Fund Project) found that both poverty and a “perceived decline in the quality of education” contributed to lower participation (Ministry of Education, 2014, p. 19).

Thus in the lost decades, there was both a sustained decrease in enrollment and government funding for education. The figures below (Figure 5 and Figure 6), created from World Development Indicators (The World Bank, 2018), demonstrate the quantitative aspects of Zambia’s education system before, during, and after the Second Republic. Figure 5 shows the total government expenditure on education (as percent of GDP), the same data used in Figure 4. Figure 6 shows school enrollment figures: specifically the percent of net enrollment for primary education (net being the number of students of primary school-going age as percent of total children in the same age group). Vertical lines show political periods, specifically the transition from the First Republic to the Second Republic in 1972 and multiparty democracy in 1991; a dotted line depicts the first structural adjustment policy in 1985. These demonstrate first, as noted, the state commitment to funding education decreased in the context of economic crisis, but most dramatically after the adoption of structural adjustment policies. Second, net enrollment decreased during the lost decades and particularly in the 1990s.
Influence of structural adjustment policies. From 1983-1987, the Kaunda government adopted Structural Adjustment Policies (SAPs) as part of a requirement to
access external finances from the International Monetary Fund (IMF) and the World Bank. Structural adjustment was more than a policy and more of a process through which countries agreed to economic changes as conditions to access loans (Ilon, 1994). Through the process of structural adjustment, the Zambian government devalued the national currency, limited wage increases, removed maize and fertilizer subsidies, ended price controls on essential commodities, and reduced civil service employment as part of a public sector reform (Meijer, 1999).

Structural adjustment policies had a direct and indirect impact on education, and they contributed to a gap in schooling provision out of which contemporary community schools would later emerge. These policies along with debt servicing “deprived the country of the funds to develop primary education” (Ministry of Education, 1999, p. 79). Public sector reforms reduced education budgets and staff, while the economic impacts lowered household incomes, impacting parents’ ability to pay for education and causing teachers to look for supplementary employment. Reimers (1994) found that while austerity, or economic hardship caused by reductions in public spending, was present in many countries, it was worse in the Latin American and sub-Saharan African nations that had participated in SAPs.

Structural adjustment’s impacts were both direct and indirect. Directly, education was vulnerable to wage-reducing policies, considering how much of the education budget went to teacher and administrator salaries. Indirectly, austerity lowered parental incomes, and perhaps also parents’ perceived benefit of schooling, which translated to lower enrollment. Among the levels of education, primary was the most impacted. Babalola, Lungwangwa, and Adeyinka (1999) found that in Zambia after the major SAP in 1985, there were decreases in: public spending on education; purchasing power of teachers; quality of education indicators, like performance on exams and student-teacher ratios; and access to schools. In addition, there was a widened gender gap in enrollment. Further, agricultural policies and the removal of subsidies affected most rural Zambians, most of whom worked as subsistence farmers (Ministry of Finance and National Planning, 2002), impacting their ability to pay for school or educational materials.

By 1987, public discontent about the poor economic conditions influenced the Zambian government to abandon SAPs. The nation would be seen as a non-reformer, as it
had abandoned all major adjustment programs under the Kaunda government (McPherson, 1995). However negotiations resumed with the IMF in the 1990s, as the business sector, which was in support of SAPs in the 1980s, gained political power after the MMD party won elections. Thus structural adjustment both predated and served as the backdrop for the emergence of community schools. Yet the authors above agreed with many economists that demonstrating causation between economic policies and various outcomes is challenging. In seeking to impose some level of economic shock on countries to foster market-based changes, SAPs were intended to have an impact, albeit one difficult to measure.

At the same time structural adjustment could have a perceived detrimental impact which would in turn produce real political change. This phenomena was highlighted by Vavrus (2005), who applied the theory of “relative deprivation” or that actual or perceived imbalances of economic policies could spark social movements. Interestingly, Simutanyi (1996) explores how SAPs in Zambia were opposed as part of resistance against Kaunda’s one-party state, but for a variety of reasons did not face strong opposition after the emergence of multiparty politics in 1991. As I explore in the next chapter, the increased political power of the business class and policies of market liberalization led to a broader acceptance of structural adjustment and bilateral influences in national government, as well as an embracing of non-state schools. While the impact of structural adjustment on the economic and educational crisis within Zambia’s lost decades is difficult to confirm, these policies certainly did not alleviate the economic and schooling issues present in the country, problems that themselves would lead to community schools.

**The Mushrooming of Community Schools**

In the context of declining state support for education community schools expanded, responding to and filling in the existing inadequate state system. Despite the rhetoric of the Kaunda government, the state shrank significantly its commitment to schooling in financial terms prior to the 1990s. What remained were large gaps in schooling provision, dilapidated school buildings, and villages without any schools at all, which members of communities sought to address. The term “mushrooming” came out of an interview with an UNZA lecturer who worked extensively with community schools.
(August 3, 2016). This term is used here to illustrate the rhizomatic growth of community schools, like mushrooms with a common yet complex root system, indicating that institutions constitute a loose network influenced by similar causes yet not traceable to a single origin (Deleuze & Guattari, 1987). In short, similar context and mechanisms contributed to the emergence and expansion of these schools in villages, towns, and cities across Zambia, including but not limited to schools in and around Lusaka managed by ZOCS.

First, in exploring the structures and context leading to community schools, it is important to note that there are at least two types of these schools: those found in urban areas and those in rural sites. While this dualism collapses differences between urban and semi-urban spaces, or cities and townships, it demonstrates that there were distinct contexts in which children had different challenges in accessing schools. Distinctions between urban and rural schools are explored quantitatively in the seventh chapter. In many urban areas, like Lusaka or the Copperbelt, state schools were present but often required formal or informal fees for attendance.

While school fees and the various levels of “free” education are explored in the next chapter, it is useful to note that even when there were no official fees for primary education in Zambia and globally, there were unofficial charges levied by districts, schools, and parent-teacher committees, or requirements to buy shoes, pencils, or other materials (Bentaouet Kattan & Burnett, 2004). Community schools were seen as a way not necessarily to eliminate costs but as a way to minimize them, or a way to shift from stricter mandatory fees to voluntary fundraising efforts. A staff member of a non-government organization that works directly with community schools relates:

In some cases, you might have government schools which are near, not too far apart, like in town. But here are these kids, who cannot manage to buy a uniform. They cannot manage to buy shoes. They cannot manage to pay the PTA [Parent-Teacher Association] fees ... government has said free education, but the PTAs, they charge small money, fees, for the operations of the school. And some communities, some children, some parents from some communities cannot even manage to pay that. And therefore their children don't go to those schools. And as a result, even when some government schools are not too far apart, still there are
kids who cannot access education, through those schools, because of these costs. And so they begin schools where they would not pay anything. In such schools, communities just get together and identify fundraising ventures from which they generate some income and therefore they support one or two teachers who are teaching those kids. But the children are not paying. (August 2016)

Even when fees were met, the lack of education financing to meet population growth meant there were insufficient places in schools for all school-age children. For example, in the early 1990s, it was estimated that in Lusaka there was only spaces for two-thirds of the population of seven-year-olds to attend first grade (Ministry of Education, 1992), which led to out-of-school children and contributed to the population of street children (Ministry of Education, 1996).

In rural areas, the main issue was the distance to government schools, which particularly impacted younger students. A national Ministry official argued that while fees were present, a main factor for the creation of community school was distance to state schools:

The major reason in the rural areas for establishing the community schools was not because of the fees that were high. Yes, the fees were high, but not so high, but the major reason was that there was longer distances that children had to cover, from their villages to the nearest school. And so many of the children could not start school at the recommended age of seven. Because they were too young to walk long distances, sometimes covering up to 10 kilometers or more to get to the school. So children would not start school until they were maybe 10 years old, and so parents found it necessary that they should establish a school nearby for these younger children to go to. And once they grew older, they would now walk those longer distances. So many of the community schools which were there would run from, say, the first grade to the fourth grade, Grade 1 to Grade 4. And at the fifth grade, which is our upper primary, these children would usually go to the government schools, because they would now walk that distance, if they were old enough. (July 25, 2016)

These long distances to schools also come out of a study conducted in 1996, which found 83% of rural students traveled less than 5 km to school, while 14% went
distances between 6-15 km, and 2% more than 16 km. This is compared to urban students sampled, who all traveled less than 5 km to reach their school (LCMS, 1996, as cited in Ministry of Education, 1999). Distances to schools were associated with Zambia’s low population density. In 1990, there were over 10 people per sq. km, which was quite low compared to other countries: within each square kilometer, Zimbabwe had over 25 people, Tanzania nearly 30, and the Democratic Republic of Congo (then Zaire) over 15 (The World Bank, 2018). This context meant that more schools would have to be built to serve a more spread out population compared to neighboring countries. Further, migration and resettlement, particularly in a context of limited economic opportunities, impacted school access and created new spaces for community schools to be established (Ministry of Education, 2014). While many Zambians moved to towns or cities, subsistence farming meant others established new settlements in rural areas to access land. A district Ministry official explained: “So as more villages are coming in, each village would rather have a school nearby, to ensure that their children go there” (August 19, 2018).

From a political viewpoint, community schools can be seen in two ways. First, they were a response to the lack of government service and financing in congested urban areas and in remote rural spaces. Second, they represented the perceived absence of political will on the part of the state to ensure access to education by building schools and classroom blocks close to children’s homes. A palpable aspect of the Zambian education system is the age of its educational infrastructure, signaling that the last period of extensive investment occurred decades ago. A district education official elaborated that most government schools were built before the 1990s, and large scale school infrastructure projects had only taken place in the last five years (thus from the 2010s): “So that pace of not providing many government schools for a long time meant there was a gap being left elsewhere, which the community exploited by coming in with the initiative of community schools” (August 19, 2016). Unlike previous eras, in which the expansion of the government system was a priority and there were de facto agreements that community-built schools would transition to state schools, the actual and perceived lack of investment in education precipitated the building and management of institutions
by communities. This was explained by a national Ministry official who worked with community schools:

And so [Zambians] understand that government can only do so much, the rest they will have to do on their own, and not wait for government. And that is the more reason why community schools came into being anyway. It is because communities realized the deficiencies that were inherent in the Ministry of Education at that time, and they said, "If we wait for the Ministry to establish schools here, then we may have to wait for another 20 or 30 years, and by then our children will have outgrown this. So we'd better do something on our own right now, to help ourselves." So they established the community schools. (July 25, 2018)

**Estimating the number of community schools over time.** While there has been a clear growth in community schools since the 1990s it is difficult to quantify or to find consistent estimates of these schools. This is the case even in the 2010s when they were registered by the state. The Ministry of Education, in its Educational Statistical Bulletins or main annual reports of school data, rely on the completion of school census surveys by schools. These bulletins acknowledge underestimation particularly of community schools that are not often easily accessible by Ministry officials or may have a lower rate of returning completed surveys. For example, Frischkorn and Falcolner-Stout (2016) found that in 2016, a USAID funded project was supporting about 2,300 community schools in six out of the country’s ten provinces at the same time the official school census recorded only 1,800 community schools in these provinces. When there was a non-government organization responsible for coordinating with and counting these schools in the 1990s (Zambia Community Schools Secretariat, or ZCSS), its estimates were consistently higher than those from the Ministry. This gap between counted schools, or registered schools, and the population of community schools is also an issue which impacts assessing student and school outcomes (see the sixth and seventh chapters).

This undercounting of schools is likely a direct result of the Zambian state framing these schools as existing mainly in the realm of society, and relegating its role to a “coordinator of coordination” (Dale, 2007, p. 34) or what Ball terms “steering from a distance” (Ball, 1997, p. 258), and often relying on a civil society organization to account
for them. I explore this in the next chapter. While the Ministry integrated community schools into its official count within the last few years, the inaccuracies of the count point to a remaining bordering and inequity between school types within the public school system, or government and community schools.

To portray growth over time, one option is to rely on a single estimate of the number of community schools over time, as many authors have, or somehow reconcile diverging numbers. Instead, I have decided to present together estimates by the Ministry of Education and non-government organizations, in order to deduce the overall trend in school growth and also to understand where and why some counts may differ. Figure 7 and Figure 8 show an increase in community schools from 1996-2016 and in student enrollment in these schools from 1996-2009, respectively. Sources are differentiated by shape, and dotted lines connect estimates from the same source over time. All sources are from the government, with the exception of the ZCSS report; however, prior to 2006, the MOE relied on ZCSS estimates for its official reporting. Bold lines represent least squares estimates for the best fit between all estimates. It is important to note that numbers from the Educational Statistical Bulletin are in reference to community schools at the primary level, and also include primary schools which have an unknown school category.

Most estimates point to around 30 schools in 1996, and by 2004 or after, this number was closer to 3,000. The Statistical Bulletin showed increases and decreases in the number of schools from 2006 to 2015, but it’s not clear whether these were differences in participation in the census survey, or reflected fluctuation in the actual number of schools. For student enrollment, there are less sources to analyze. In 2004, there is the noticeable gap between estimates from ZCSS and the Ministry of Education, which is present in both figures. Both figures demonstrate that there was a clear growth of community schools from a few dozen to thousands between 1996 and the mid-2000s, where this growth appears to have subsided. This growth may be due to additional schools being opened, but at the same time may represent an increase in the state and other organizations recognizing and counting schools. A pattern of growth is less clear to discern with student enrollment, given there are less estimates to draw on.
Figure 7. Various estimates of the number of community schools from 1996-2016

Figure 8. Various estimates of enrollment in community schools from 1996-2009
Charting the rhizomatic growth of schools spatially, or seeing their growth largely outside the capital city, is more difficult. There were no available sources that tracked schools by province prior to the 2000s. After this, community schools were part of census surveys conducted by the Ministry of Education. Figure 9 and Figure 10 demonstrate the raw numbers and percentages of community schools and their growth between 2004 and 2014. In 2004, most provinces had between 100-300 schools which participated in surveys and most had more schools ten years later, with the exception of Northern and Southern Provinces. Looking at the ratio of community schools to government schools, most provinces had ratios up to .50 and down to .25, meaning that for every community school, there were 2-4 GRZ schools. Notable exceptions are the Copperbelt, which had a ratio around .75, and Lusaka, with a ratio above 1, meaning there were more community than GRZ schools. The prevalence of community schools may be due to the increased presence of NGOs and NGO-supported schools in both heavily urban provinces. Between 2004 and 2014, most provinces saw an increase in the ratio, meaning that according to the school census, there was a greater growth in community schools than GRZ schools. This is the case for all provinces except the Copperbelt and Western.
Figure 9. Number of community schools by province, from 2004-2014 (Source: Educational Statistical Bulletins, 2004; 2014)
These figures demonstrate two phenomena of note. First, there was a significant number of community schools around the country in 2004, not just in the capital. In all provinces, there was at least one community school for every four GRZ schools. Second, most provinces saw a growth in community schools, both in raw terms and as the ratio of community to GRZ schools. However, these numbers are estimates: as noted, the school census likely underestimated the actual number of community schools. On the other hand, counts grouped community schools with schools of unknown type. These two findings support the rhizomatic growth of schools around the country, and provides evidence against a narrative where these schools largely emanated from the capital of Lusaka.
Conclusion

Community schools, educational institutions built and managed by local communities and villages, were hardly new in the 1990s in Zambia. They have historical precedents but these have not been studied extensively. This was particularly the case under the Kaunda government where a specific border between state and society was laid out in policy and these schools’ existence ran counter to a narrative of government support for a national education system. Village schools in colonial Northern Rhodesia had similarities with modern community schools: as will be demonstrated in the next chapter, the state was reluctant to support them and these schools operated on the lower end of a tiered school system. The relation of the state to non-state schools, and to schooling provision in general, oscillated throughout the colonial period, and in the independent nation of Zambia. In the Kaunda Era, a border between state and society in schooling was more clearly articulated in policies and political rhetoric, but this frontier took a different shape at local levels, where organic participation occurred as community members built their own schools.

In the 1990s, the growth of community schools was rhizomatic, in that many emerged around the country for similar reasons yet lacked a single origin point. Most histories of these schools point to more immediate factors, like the lack of state schools, available places in these schools, and school fees. In this chapter, I demonstrated how contemporary community schools emerged in an era of structural adjustment programs, and that spending on education was relatively low in Zambia compared to a region also impacted by pricing shifts in minerals and oil. The sheer growth of schools in the two lost decades is evident in various estimates, although there are discrepancies in how these schools were counted, even after official registration procedures were set up. The emergence of community schools and the rapid growth through 1991, accompanied by a political environment of economic and social service liberalization, would lead to another shift in the frontier between state and society in schooling, which I explore in the next chapter.
Chapter 5: Community Schools and the Border between State and Society after 1991

As explored in the previous chapter, community schools emerged rhizomatically from a specific set of circumstances: economic crisis, structural adjustment policies, and a low state investment in schooling. While communities built schools in the Kaunda era, the state response to contemporary community schools after 1991 was markedly different. The state’s reconceptualization of these schools and management of them in a post-Kaunda era suggests a redrawing over time of the border between state and society providing social services, and at large. Ultimately various policies and approaches sought to transform a relatively organic school building movement into a framework of induced and top-down participation, coordinated by the state. This in turn contributed to a bifurcated state/society public schooling system in which state and community schools operated in parallel to reach the same instructional and curricular goals.

As I explore in this chapter, the response to community schools by the Zambian state and specifically the Ministry of Education can be organized into three periods: 1) rationalizing community participation in schools during the first years of multiparty democracy (1991-1996); 2) positioning of community schools as an “alternative path” to learning (1996-2007); and 3) legalizing community schools within a parallel public schooling system (2007-2016). I demonstrate how the Zambian state, over multiple presidencies and the rule of two political parties, moved away from a strict neoliberal philosophy of schooling in which the state served as a “watchdog” coordinating a market for the economy and education, supported a model where community schools offered another type of schooling, and finally oversee a parallel system, in which state and society schools operate under the same national standards, yet where some parents carry more responsibility for their children’s schooling than others. This suggests that the border between state and society was far from static in this period but was instead a shifting territory with negotiations from civil society members, bilateral agencies, and state actors. At the same time, this bordering was a result of the Ministry of Education’s effort to craft politically consistent yet workable state policies in response to the rhizomatic growth of community-based schools.
For the analysis in this chapter I used process tracing methods, drawing on national and international policies as well as expert interviews I conducted in 2016. I explored this in more detail in the third chapter. However, I am not merely interested in how the state apparatus sought to redefine its role in schooling over time, nor how it framed responsibilities for social service provision. The state is not the sole actor drafting its bordering between itself and society. Rather, members of the Zambian public are also participants in the “detailed political processes” by which “the uncertain yet powerful distinction between state and society is produced” (Mitchell, 1991, p. 78). Thus, to identify how the public response to the mapping of state and society has changed over time and different party governments, I used national public opinion surveys from Afrobarometer (1999-2015). Afrobarometer surveys provide a picture of what the public thought of the current government and many of its neoliberal initiatives underway since 1991. Figure 11 presents a timeline of the six rounds of the surveys along with the major events in the areas of politics and schooling taking place during the three periods outlined above. In this chapter, I present both descriptive and inferential results from these surveys, in particular comparing responses between demographic groups and across time, starting in the second period in 1996. An overview of the survey questions used in my analysis can be found in Table 11 in Appendix A.

This chapter is arranged around the three chronological periods. I begin each of the following sections with a brief exploration of the political and social context during the key period under examination. The purpose is to set the stage for a discussion of how the Zambian state conceptualized community schools in terms of a state/society border and created policies to maintain or shift this boundary. I end each of these three sections with a discussion of how the state’s stance on community-managed schools reflects a larger state/society bordering.
Figure 11. Timeline of major moments and periods in schooling reform and policies towards community schools in Zambia

High priority will be accorded to education in the allocation of public funds, but simultaneously there must be a more intensive effort by all the people to provide the system with the financial, material and manpower support it needs. This will necessitate departure from the idea that the responsibility for educational provision rests almost entirely with the Government. (Ministry of Education, 1992, p. 14)

With the introduction of multiparty democracy in 1991, which saw the first change in the ruling political party and Presidency since independence in 1964, the 1990s were a period of major economic and policy reform (Kagia, 1992). The new government of Frederick Chiluba (from 1991-2002, see Figure 11) supported a variety of neoliberal policies under a “liberalization” approach. This political shift occurred during the influential Education For All movement, which led to a greater focus on community involvement in public education both in discourse and policy. In contrast with the previous Kaunda presidency, there was a strong emphasis in policies on communities contributing to social services. This type of participation by definition is “induced,” drawing on Mansuri and Rao (2013), since it was promoted and facilitated by the state. While community schools existed through this period, they were notably absent in the same policies that exhorted communities’ participation in education and other social services.

Political and Social Context: A Political Shift towards Liberalization

These political and economic changes were precipitated by the Zambian business class and trade unions helping to form the Movement for Multiparty Democracy (MMD) in 1990. The MMD platform supported a market environment friendly to private enterprises and a reduction in the state’s size and control over businesses. The party presented Zambia’s economic ills as a result of a “pervasive state sector” (Simutanyi, 1996, p. 832) and mismanagement by the ruling UNIP party. MMD acknowledged that UNIP had provided “peace and stability,” but contended that neither could be eaten by people with empty stomachs (Mwanakatwe, 1994), meaning those who were most affected by the economic crisis of the previous decade. Frederick Chiluba was elected
president in a landslide, capturing three quarters of the vote, and he filled his first cabinet with individuals associated with the country’s business community. As noted in the previous chapter, structural adjustment policies that faced opposition under Kaunda were embraced in the Chiluba era of a liberal market economy.

An external influence strongly shaping Zambian education policy in this period was the global Education for All (EFA) movement, led by UNESCO, UNICEF, the UN Development Program, and the World Bank, with successive projects funded by bilateral agencies, including USAID. Education for All involved an international network of state and non-state actors at various levels that supported access to quality basic education and also a set of national and regional policy goals and targets (Mundy & Manion, 2015). Tikly (2017) viewed EFA less as a movement than a global regime in which a variety of international actors negotiated development issues and sought to resolve tensions between international education goals and national development priorities. The World Conference on Education for All in Jomtien, Thailand took place in 1990 and Zambia was one of the participating countries. Although the conference occurred the year before the major political change of 1991, nevertheless it greatly influenced the MMD education reforms in that the party prioritized increasing access to primary education and enabling community, non-government, and private partners to help reach this goal.

At first, the EFA initiative was relegated to the background as the Zambian government focused on larger political concerns, such as enacting macro-economic policies and then dealing with the unintended political consequences of these changes. However, the vision and details of EFA, specifically those decided on in Jomtien, were ultimately in line with the government’s goals of expanding primary education and its vision of a liberalized and open market economy. Other factors contributing to an acceptance of the EFA regime included a new political openness to non-government organizations and what Mundy and Manion (2015) term a “growing professional expert community on educational development” (p. 55) who operated across the global South and advised and supported Zambia’s reforms towards achieving education for all.

**Bringing in Civil Society: Focus on Learning and Community Responsibilization**

The process of policy borrowing and adaptation of EFA was linear, in that it began with the Jomtien conference and extended towards the first major education
meeting organized by the new multiparty democratic state. After Jomtien, the national Education for All Mulungushi Conference was held in 1991, bringing together state officials, academics, and representatives from donor agencies. In 1992, the policy document *Focus on Learning* was drafted in order to implement ideas from the conference, with its title likely inspired by Article IV of the declaration adopted at Jomtien, named “Focusing on Learning” (World Conference on Education For All, 1990). In particular, three key ideas of EFA related to achieving universal primary education were foundational concepts taken up by Focus on Learning and successive policies. The first was increased funding and operational support from bilateral agencies to achieve this goal; the second was greater attention to partnerships between the state and non-state entities, private institutions, and communities; and the third was the acceptance of alternative programs for children left out of school. This signaled that to achieve universal schooling, it was essential to redraw the boundaries between state and society from an arrangement where the government largely carried the responsibility for public education to one where a variety of actors worked together to ensure all children could access education.

It was also through the Mulungushi Conference that state officials began to reshape their approach to non-state actors delivering education. While the previous government oversaw a smaller number of private schools under strict guidelines (Kelly, 1991), private schools were seen in a different light in *Focus on Learning*:

> It was not until the National Conference on Education For All (March 1991) that private schools were seen as a form of community participation in the provision of education and hence as worthy of promotion on this basis. (Ministry of Education, 1992, p. 119)

Other influences taking place at this time that continued through successive eras were bilaterally conceived and/or funded projects to jumpstart education improvement and progress towards EFA. Shortly after the political shifts in 1991, the Zambian government commissioned the Swedish International Development Cooperation Agency (SIDA) to draft the Zambian Education Rehabilitation Project (ZERP). This was both a policy and a proposal to the World Bank to secure loans for education materials, rehabilitate infrastructure, and build the capacity both of education officials and
communities. Under the Chiluba presidency, but also in the last few years of the Kaunda government, there was a low financial commitment by the Zambian government for education, as I noted in the fourth chapter. Because of this, there was a conditionality placed on the Zambian state by the World Bank to increase its financial support for education while at the same time an encouragement to increase reliance on non-government sources for support. Outlined in the ZERP proposal was greater market liberalization and the encouragement of privatization of state industries and services, including of schools. Communities were expected to be more involved in managing, maintaining, and rehabilitating schools, and a policy study on community participation was commissioned as part of ZERP. According to this proposal, revitalizing the education sector entailed “fundamental shifts” in goals and strategies to fit with fiscal realities (p. 1). Among these shifts was the encouragement of communities to take ownership of schools, whereby ownership often translated to financing. In this period there was a state campaign to sensitize families to the importance of sharing educational costs, specifically paying school fees, which were introduced mainly at post-primary levels (Mwanakatwe, 2013).

Despite the emergence and growth of community schools in this period, they were absent from foundational education policies like Focus on Learning. Two main reasons may explain this absence. First, communities were operating schools without legal recognition from national or local education ministries, in the same way schools were managed prior to 1991. Second, at the time there were few non-government organizations supporting or lobbying for these schools, although advocates would begin to emerge within the supportive space of political liberalization in the post-1991 period. The only mention of community-owned schools in Focus on Learning was schools at the secondary level, schools that would “be treated as private community schools that must charge sufficiently high fees to cover all their running costs” (Ministry of Education, 1992, p. 71). However, within government policy, a narrative began to take shape of community participation in social services at large: in the context of a resource-poor state and a democratic and pluralist political space, individuals and their aggregate communities should rely on themselves rather than on the government. As outlined in Focus on Learning, communities involvement “in the actual work of education”
(Ministry of Education, 1992, p. 117) specifically through participation in providing, managing, and financing education “should be the rule and not the exception” (p. 4):

Community participation in the provision of education is not just an emergency stop-gap measure in times of financial difficulty. It is a preferred alternative in its own right, promising greater accountability and more efficiency. It is desirable, therefore, that community involvement in the provision of education be fostered, not just in the context of cost-sharing, but also at the level of policy-making, planning and curriculum development. (Ministry of Education, 1992, p. 32)

This neoliberal approach - in which local communities are cast as partners in addressing social deficits and providing social services, including bringing education to all – is a key concept which later informed the state’s response to community schools. *Focus on Learning* provides four main reasons for calling on communities to play a more active role in education provision. First, by the early 1990s, there was a need to address a crisis in state financing, as explored in the previous chapter. With an increase in enrollment and reductions in public expenditure, it was important to more systematically tap the “preparedness of communities, despite limited resources, to support school development needs” (p. 119).

Second, there was the emphasis in this policy that participation should move beyond just cost-sharing, and increased involvement in education could meet democratic ideals: schools should belong to communities and function as a “community asset” (p. xxi). This ownership was envisioned to occur at all levels, from making policy to curriculum development – as emphasized by the quote above. There was the idea of fostering community-based learning, like having traditional storytellers share tales in local languages in class. In addition to making schools more penetrable to local influence, there was the vision of having these institutions expand their pedagogical role in the community, and work to reduce adult illiteracy. Drawing on the World Declaration for EFA, the Ministry of Education sought to democratize education at both ends: by expanding beneficiaries of education and involving more Zambians in developing policies and providing education.

Third, *Focus of Learning* depicted the investment of communities in schools as an efficient way to decentralize the education system: parents and community members, as
“users,” were seen as more likely to respond to maintenance and other issues at their schools. A district education official I interviewed further explained this belief by providing an example that if a school window was broken, it would be more easily and rapidly replaced if communities felt, to some extent, that they owned schools, rather than them waiting for the government to fix it (August 19, 2016). This community investment, although in reverse, was also emphasized in *Focus on Learning*, where it states that schools perceived by communities as state-run lose some amount of local support and upkeep. The policy contended that communities “generally look on schools as the property and responsibility of the Government, an attitude that has clear implications in terms of accountability for maintaining the schools’ property and assets in good condition” (p. 116). This idea is echoed in the common Bemba phrase *ni va boma*, or “this belongs to the township,” referring to semi-urban areas where district government offices are located: thus there are structures, institutions, and issues which belong to the state.

Finally, *Focus on Learning* cast parents and communities as, by nature, the primary holders of responsibility for their children’s learning. It states: “the first responsibility for the education of a child rests with the parents who conferred life on that child and; by extension, with the community of which the family is a part” (p. 115). This powerful statement clearly shifts the obligation for education from the state to parents and their communities, and at the same time makes it seem like the onus was always there.

In summary, *Focus on Learning* provided four main reasons behind a neoliberal “responsibilization” of community members and framework of induced participation in schooling: 1) as result of the economic crisis in the 1980s and early 1990s, a restrained state was unable to completely fulfill its obligations; 2) community ownership of schools, connected with democratic ideals; 3) this ownership and the resulting efficiency in terms of community-led upkeep; and 4) parents’ natural responsibility for the learning development of their children.

*Focus on Learning* was ultimately a vision for education rather than a practical plan of action for schools. It called for a resource-poor state to expand primary education via neoliberal principles, envisioning measures for increasing efficiency by sharing cost
with non-state partners, including local communities. However, it was not clear how these reforms would be systematically enacted: implementing them also required the Ministry have “considerably more information on the education sector than is currently available” (Ministry of Education, 1992, p. vi). There were various ideas for sharing costs in this policy, particularly about schooling building. For example, communities could provide money up front for a new building, pay in-kind through their labor, or pay back for structures built by the state in the form of annual user fees. At the same time, there was a professed need for a “coordinating body” to liaise between the state and communities, likely a non-government entity (p. xxi). The need for a NGO liaison suggests that the state actors were serious about “systematically tapping” into community contributions and volunteerism but at the same time adopted a framework of neoliberal governance by suggesting this role be outsourced to a non-state partner.

**State and Society: Expanding the Role of Communities in Delivering Education For All**

From 1991, the MMD government sought to bring in an era of “liberalization” and attempted to reshape the border between state and society in respect to social service provision, including schooling, around neoliberal ideas. The state presented itself as a mere facilitator or watchdog of a liberal market economy, distinguishing itself from the Kaunda era government. The Chiluba government portrayed society and the private sector as newly enabled partners with the potential to flourish, and take over where the state intentionally withdrew itself. Policies called on local communities and private actors to join together to take responsibility for the provision of education. Schooling during this first period was imagined in policy as a space of partnership between communities and the government, with additional support from non-state organizations, including bilateral aid agencies. Although this partnership, at least between villages and local state entities, occurred prior to 1991 (as noted in the previous chapter), it was not institutionalized or enforced in education policies.

Furthermore, it was politically advantageous for the MMD government to differentiate itself from the previous administration in the most obvious aspects of governance because Kaunda’s one-party state was closely associated with economic failures, corruption, and patronage. This was also the case in education policy, as the
global influence of Education for All signaled a move away from status quo approaches to providing schools. As this chapter’s opening quote suggested, despite some continuities from the Kaunda government, *Focus on Learning* signaled a strong departure from the state carrying a near complete responsibility for schools, and called upon parents and communities, as well as non-state actors, to increasingly take more of the burden, but “with government backup” (p. 14). This framework for participating in schools was largely driven by the national state, which contrasted it from communities building schools in the previous area, either on their own volition or with some encouragement from local state actors.

Thus, in this period, the MMD government made a strong effort to change how Zambians saw the role of national and local government. This newly redefined state/society border clearly influenced the approach towards public schools. In policies, communities taking a more active role in schooling was presented as essential in a liberalized, pluralist, and democratic space, drawing on neoliberal notions of responsibility. While there were suggestions for practical and short-term solutions, such as having communities pay user fees and share the cost of new school buildings, there was an additional vision of moving beyond mere cost-sharing towards participatory involvement in all aspects of teaching and learning. The labor and finances of parents and communities – including laying bricks for classrooms, paying fees, serving in school committees, and helping to localize the curriculum – was not just a “stop-gap measure” during economic crisis, but a “preferred alternative in its own right” making schools in the long run more accountable and efficient (Ministry of Education, 1992, p. xxi).

This pluralization of schooling provision was framed both by the multiparty democratic political system (in that school management and financing would match the democratic participatory ideals of the government) and a return to communal and familial values (with parents ultimately responsible for their children’s learning, and the view of schools as a community asset). In addition, there were also elements that community involvement and ownership could fix the problems of a weak or financially strapped state, echoing Dill’s analysis of community-based development initiatives in Tanzania (2013). This neoliberal rationale for increased community involvement and induced
participation in schooling, albeit in government schools, ultimately laid the foundation for the state’s response to community schools.

Second Period: Community Schools as an “Alternative Path” (1996-2007)

So the numbers of these community schools were growing by the day. And so it became imperative that there should be some delegation of support … and government also realized that they could no longer behave like an ostrich, you know, bury its head in the sand … [when] a very good percentage of the children were in community schools. (National Ministry of Education official, July 25, 2016)

With community schools, the multiparty state encountered an opportunity to apply its rhetoric of liberalization and community empowerment, as laid out in the previous period, to a rapidly growing rhizome (Deleuze & Guattari, 1987), or informal and loose network of community built and run schools. The state’s position in this period, negotiated and influenced by emerging civil society organizations and foreign donor-funded projects, shifted towards seeing community schools as a de facto alternative system which was self-sustaining, or at least supported mainly by non-state actors. The Ministry of Education was reluctant to take substantial control of the schools, or at least the coordination of them, likely because of a limited education budget, a still prevalent discourse of partnership, and a growing sector of civil society organizations and bilateral projects targeting community schools. Further, community schools would not be legalized in terms of being outlined in law passed by the Zambian Parliament until the next period. There was an effort by the government to “reintroduce” free education, which had potential implications for community schools, as these institutions emerged in part because of fees in state schools and sustained through collecting fees or payments from parents. At the same time, support for a free education policy was divided, reflecting a debate around quality and cost of education.

Political and Social Context: Discontent in the Era of Liberalization

The free market ideals and policies put in place by President Chiluba and the MMD government did not automatically translate into economic gains for the country. For instance, high inflation was reduced but still had not dropped to level considered acceptable by economists (Dornbusch & Fischer, 1993). Inflation was at a high of over
180% in 1993 though it had been reduced to about 40% in 1996 (Andersson et al., 2000; The World Bank, 2018). The sweeping political rhetoric of reform did not match the small and incremental gains in the economy, and in some cases gains were reversed. The poverty gap had been reduced from 1991-1996, but remained relatively stable until 2002 (The World Bank, 2018). Chiluba faced a heavily contested election in 1996 that he narrowly won, and his government survived a coup attempt a year later. Chiluba remained in office until 2002, when Levy Mwanawasa, also of the MMD party, was elected president (see Figure 11). This section will look at policies and public opinion in the period, from 1996-2007, covering both presidencies, as the bordering between state and society in schooling was relatively the same from Chiluba to Mwanawasa. In this period the state took a more substantial step in recognizing and coordinating management of community schools.

Public opinion in this period provides insight into how Zambians experienced the effects of the economic downturn, and how they conceptualized the role of state and society in development at large and their own well-being, including the provision and management of schools. As noted in the previous chapter, perceptions about poverty and economic issues are just as valuable as raw figures, as relative deprivation can spark social movements and provide pressure to impact policies and start or stop reforms (Vavrus, 2005). According to data from Afrobarometer (AB), most Zambians had a poor opinion of the economy during the decade from 1999 to 2009 (see Figure 12). They saw education as one of the top problems and priorities of the government, along with unemployment, agricultural needs, and general poverty (AB, 1999; 2003; 2005). Despite the focus on liberalizing the economy, including empowering communities and the private sector to assist in basic social service provision, most Zambians in 1999 still saw the state as carrying the main responsibility for providing schools and clinics: In the first Afrobarometer survey (1999), 58% saw the government as mainly responsible for providing these services, compared to 24% who described it as being a shared concern of the state, private industry, and the individual (see Figure 13). In addition, more than half (55%) thought the Chiluba government was not addressing educational issues very well or not at all well (see Figure 12). Zambians in 1999 described the main problems of education as related to access and quality: school was too expensive, there was a shortage
of schools, and existing schools were too expensive to attend; further, according to them, school content and infrastructure were of poor quality.

**Figure 12.** Public opinion on government addressing educational needs and present economic conditions, by year (Source: Afrobarometer, 1999; 2003; 2005; 2012; 2015)
Community Schools: A “Strongly Encouraged” Alternative Path

The Zambian state’s approach to schooling was framed in 1996 by the policy *Educating our Future*, which was written by the Ministry of Education to enact the ambitious vision of *Focus on Learning*. Within this period, state officials in education and other sectors sought to translate the experiment of free market liberalism initiated in 1991, along with a strict division of and partnership between state and society, into more prescriptive and actionable policies. According to *Educating our Future*, providing education required a “plurality of providers” (Ministry of Education, 1996, p. 135) operating with an “enabling environment” furnished by the state, grounded by a principle of liberalization (p. 210). This pluralism was rationalized in nearly the same way as *Focus on Learning*: a sharing of the responsibility for providing education was connected with civic ideals, was cost-effective, increased private accountability for public goods, and was necessary in a context of population growth and a financially constrained state. Further, there was the idea that private sector involvement was an end in itself: drawing on free market liberalism, the policy notes that “the development of education, like that of society does not have to be homogenous” and having the private sector, including communities, deliver education “creates a diverse and rich environment which promotes

![Diagram showing public opinion on responsibility for providing and managing schools](image-url)
the well-being of the entire educational system” (p. 135). This translated to a shared financing of education between the government and families as beneficiaries:

In recent years families have been assuming an increasing proportion of the overall costs of educational provision at all levels. This partnership between the Government and beneficiaries in the financing of education is a healthy development which the Ministry will continue to promote. The contributions from families have been devoted largely to special school funds and levies, educational materials, school uniforms, school-related transport and meals, and school developments … These arrangements will remain in place for basic education. (Ministry of Education, 1996, p. 21)

In education policy during this period, including *Educating our Future*, there was a tension between this enabling environment and the state’s recognition of and eagerness to support community schools, although much of this support was not carried out in this period. Community schools were defined in *Educating our Future* as “communal schools run by local communities and non-government organizations” (p. 134). In a shift from the previous period where they were mostly seen as private institutions, these schools were now described as non-profit, in that they did not charge the same “market value fees” that private schools would levy (p. 133). At the same time they were seen as contributing to attaining the enrollment goals Zambia had established as part of the Education For All movement (Ministry of Education, 1999, 2003). In assessing progress on EFA, the Ministry of Education noted that without community schools, children left out of the formal system otherwise “would never have any opportunities to acquire basic education” (Ministry of Education, 1999, p. xiv). Thus there was the recognition that these schools served a functional role in supplementing the existing government system.

*Educating our Future* was more specific than *Focus on Learning* in regard to allowing communities to build schools and detailing the state’s commitment to these community-run schools:

Communities that wish to establish schools, that would operate as community schools outside the government or District Education Board system, will be strongly encouraged to do so. The Ministry will contribute to the running costs of
such schools through the provision of teachers and teaching supplies, or through a system of capitation grants. (Ministry of Education, 1996, p. 20)

As laid out, this approach was very similar to grant-aided schools dating back to the colonial era, an arrangement that, as mentioned in the previous chapter, allowed the colonial government to both support and regulate missionary schools. However, in this period and the next, state contributions to community schools were limited and salaried teachers were posted to schools only in the mid-2010s. The Ministry of Education’s assessment of EFA progress is a useful policy document to assess the enactment of *Educating our Future* as it was published three years later. This assessment recommended a budget line in the government for these schools, and noted that community schools, along with overall progress towards EFA, were supported heavily by the emergent civil society sector. Further, it described community schools as an “alternative path” (p. xii) for children to access basic education. This concept is worth exploring further, as it is tied with two specific efforts to set these schools as offering an alternative education to state schools.

Citing the need to create an enabling environment and foster partnerships, the Zambian state worked with non-state entities to construct more clear boundaries around an alternative community-based education system. I use the term alternative here to emphasize that community schools were not merely seen as stand-ins for government schools as they were in previous eras – institutions set up by communities to be eventually taken over by the state – but rather as sites for a different types of learning processes and outcomes. Essentially this was an attempt to reorient schools from variation to adaptation, or from making slight changes in learning delivery to intentionally changing the content of learning, while still retaining community ownership and management (see Table 1 in the second chapter). This shift towards an alternative system was supported by two structures: an “umbrella” organization to coordinate community schools and a curriculum framework to be delivered within these schools. Yet ultimately both were short lived and their demise will be explored in the next period.

In 1996, the Ministry of Education supported the creation of a so-called umbrella body, the Zambia Community Schools Secretariat (ZCSS). The purpose of ZCSS was to “cater for the administrative needs” of community schools while working at a national
level in collaboration with the state (Ministry of Education, 2007b, p. 6). The Secretariat was intended to be the “sole established organization for advocacy, coordination, material support and facilitation” to community schools. It was established with support from UNICEF and non-government organizations because they sought to have a formal structure to ensure assistance and resources could be reliably given to community schools (Chakufyali, Chinobwe, & Oki, 2008, p. 11). The Ministry of Education, through a memorandum of understanding with ZCSS, pledged to provide human and financial resources “channelled through the existing coordination structure of ZCSS” (Ministry of Education, 2007b, p. 6).

Another intervention that positioned community schools as an alternative system was a curriculum developed by UNICEF specifically for these schools. Called Skills, Participation, Access, and Relevant Knowledge (SPARK), it consisted of minimum guidelines, a syllabus, and teacher training. SPARK was intended to deliver a complete primary education in four years, compared to the seven years for the national curriculum (Cashen et al., 2001). This condensed program was developed for students who were expected to enter school later and leave earlier because of economic hardship and the need to support families’ subsistence farming. There was also the emphasis on non-cognitive skills, including life skills, creative thinking, and problem-solving. Aligned with the Ministry’s previous policies, there was also a planned integration of locally relevant topics. In a way this constituted a shift from conceptualizing community schools as teaching basic literacy to helping “the literate child acquire certain practical skills for survival in the community where she/he came from” (Chondoka & Subulwa, 2004, p. 13). The first SPARK manual was published in 1997 and later revised in 2000. SPARK constituted a shift in the concept of community schools by casting them not only as alternatives to how schools were run and financed but also as different in terms of what was happening within the classroom. Yet only ten percent of community schools, according to Ministry of Education estimates, used the SPARK curriculum in 2002 (Chondoka & Subulwa, 2004), which signals that the curricula was a project that was radical in design, but not particularly prevalent in practice.
The Presidency of Mwanawasa: Reintroducing Free Basic Education and Perceived Responsibility for Education

In this period (1996-2007), there was a reconsideration of the fees for education that had been adopted for austerity reasons in the early 1990s. This policy and the larger debate about free education are deeply tied to community schools for reasons which I explore below. In *Focus on Learning* there was an explicit redefinition of “free” schooling as “departure from the concept of free *education* to the more limited concept of free *tuition* at the primary level” (Ministry of Education, 1992, p. 13, emphasis added). Although tuition was free, schools had the authority to require uniforms and shoes, exercise books, school supplies, etc., as well as impose any additional fees to raise funds. Months after the election of Levy Mwanawasa the Ministry of Education announced the “re-introduction” of free basic education, abolishing user fees and mandatory uniforms for Grades 1-7. This was a political strategy signaling the commitment of the new administration to its people beyond just the fulfillment of EFA goals. It was seen at the same time as a move away from fee-based policies mandated by the International Monetary Fund (IMF) and World Bank (Mwanakatwe, 2013). However the new free education policy only eliminated contributions which would otherwise prohibit parents from sending their children to school. While education boards and parent-teacher associations were allowed to raise funds from parents for school projects, the official policy stated that “no child can be denied access to school on account of costs” (Ministry of Education, 2003, p. 11). This concept of “free” education, and the continuation of having parents bear the real costs, was analyzed by Vavrus and Moshi (2009) after a similar policy change was taken in Tanzania. They recommended that the international conversation about increasing access move beyond school fees onto the total cost of education.

The free education policy is related to community schools in two main ways. First, this policy had the potential to level the playing field between state and community schools by removing one of the main factors which led to the latter, specifically the prohibitive cost of attending state schools for many families. Second, if community schools relied on contributions by parents, cash or in-kind, they could be at least in principle in violation of the free education policy, if these costs are prohibitive. As the
data below shows, the debate about school fees, and how quality relates to the “price” of education, is significantly different in rural areas, suggesting the prevalence of poverty means the imposition of fees has a stronger effect on prohibiting access than in urban areas.

Data from Afrobarometer show that by 2005, most Zambians (89%) were aware of this free education policy. Further, the survey sought to determine whether people were in support of free education in general, even if it translated to low quality, or whether they thought that it was better for the government to focus on raising educational standards, even if parents were required to pay school fees. This survey question tackled whether Zambians were in favor of free schooling in principle or preferred that schools focus more on quality than keeping access free. Overall, Zambians were split in their responses: 55% were in favor of free education, while 42% felt standards should be raised (see Figure 14). However, those living in rural areas were more in favor of free education while urban dwellers leaned towards quality learning with the possibility of fees (AB, 2003; 2005). This may be related to an income gap between urban and rural Zambians, most dramatically between urban wage earners and rural subsistence farmers. In addition, there is evidence that rural schools are overall lower in quality than urban schools: urban provinces and districts usually outperform rural and sparsely populated locations (demonstrated in the next chapters) and rural parents were more likely to report schools being too expensive, lacking textbooks, or having poor facilities (AB, 2005).

Also, there is some evidence that strong opinions in the free education debate diminished over time. The year after the introduction of the free education policy, most Zambians agreed very strongly either with the need for quality learning, or absolute free education; in other words, the responses were bifurcated by strong support on either side of the argument. However, in the years later (2005 and 2009), respondents were more likely to agree but not strongly with either side. This moderation of opinion could mean the nuances of the free or quality education debate were sinking in, or there was more skepticism about the idea that quality could be directly improved if parents payed for school.
It is likely the free education policy combined with the new Presidency of Mwanawasa improved public opinion of how the state was handling education. Harding and Stasavage (2014) provide evidence that the removal of school fees in Africa is more common in democracies and after elections, suggesting there are political motivations for campaigning and following through on free education policies. Most Zambians in 2003 felt the government was handling education fairly well at the beginning of Mwanawasa’s term (70%), but this confidence diminished two years later to 60% in 2005 (AB) - see Figure 12. While in 1999 most Zambians saw the government as carrying the main responsibility for providing schools and clinics, they were divided on the role of state and society in social service provision (Figure 13), and more generally responsibility for individual well-being (see Figure 15). In 2003 and 2005, about half of Zambians (47% and 48%) reported that, in general, people should look after themselves and be responsible for success in life; the other half held onto the idea that the government should bear the main responsibility for the well-being of its people (AB). However, in the both surveys, there was a distinct difference between urban and rural Zambians, and by socioeconomic status. Urban Zambians and those with high SES were more likely to
strongly agree with the personal responsibility (particularly in 2003), while those living in rural areas and with lower SES reported to a greater extent that the government was responsible. This furthers the idea that people’s location and socioeconomic status are tied with their beliefs about government support and the state/society border in general, and in schooling provision in particular.

Let’s talk for a moment about the kind of society we would like to have in this country. Which of the following statements is closest to your view?

![Bar chart showing attitudes towards government versus personal responsibility for well-being by year, poverty index groups, and location](image)

Figure 15. Government versus personal responsibility for well-being, by year, poverty index groups, and location (Source: Afrobarometer, 2003; 2005)

While the Zambian state under the direction of both Presidents Chiluba and Mwanawasa attempted to create an enabling environment for schooling provision at least in rhetoric, its investment of public funds in education was modest at best. As noted in the previous chapter, investment in education was 3-6% of GDP before 1985, but by the 1990s, it was less than 2% (The World Bank, 2018). While the Fifth National
Development Plan (2006) had a goal of increasing this amount to a standard Southern African funding level of at least 5%, by 2008 it was barely over 1%, according to the same World Bank estimates (2018). This provides a counterpoint to the predominant narrative in policies from 1991 onwards that the state, lacking resources and limited in budget, faced “competing demands” which gave it no recourse but to reduce social service spending and invite others to provide education (Ministry of Education, 1996, p. 6). As the country’s economic growth, in terms of gross domestic product, was positive in the 2000s, public spending on education increased in real terms but remained quite low in terms of percent of domestic product and was much lower than other countries in the region (see the previous chapter).

**State and Society: Community Schools as Alternative to State-Run Institutions**

In the midst of the growth of community schools, the Zambian state began recognizing these schools in policies like *Educating our Future*. In policies, community schools were presented as mainly emerging from a recently created environment of liberalization instead of having existed before the 1990s. This allowed the state to define these schools within frameworks of induced participation and responsibilization. Two efforts in this period, namely ZCSS and SPARK, led community schools to be framed as an alternative path for a different demographic to be educated and for the nation to reach education access goals. To do this, the government utilized partnerships with a growing non-government sector, including organizations that assisted community schools before the state had adopted an official position about these schools. However, as demonstrated by the management and coordination by ZCSS as well as the separate curriculum and teacher training through SPARK, this was a path not only with a distinct route, but also with a different finishing point. Community schools were viewed as marginal non-state institutions sitting more squarely in the realm of society, supported by non-state actors and civil society organizations, and building on notions of induced community participation that were emblematic cornerstones of MMD liberalization. Even coordination between the state and these schools was facilitated by a non-state organization, ZCSS.

With community schools framed as an alternative path to education, society and the state were partners yet distinct entities operating within a pluralist environment. At
the same time the management and coordination of these schools blurred the boundary between the two. For example, ZCSS lobbied for state funding, appointed “key point persons” within the Ministry at various levels to coordinate with the Secretariat, and performed the state’s role of certifying, collecting data, and coordinating the community school system. This blurred bordering is reminiscent of Harrison’s (2004) concept of the sovereign frontier, as the hazy area of collaboration between international agencies and African nations that had to some extent integrated neoliberal logics into their state operations. In Zambia, the bordering becomes even more blurred in the next period, with the demise both of ZCSS and SPARK and the alignment, in parallel, of community and government school systems.

The principles of community autonomy and self-help promoted by the state in education and at large were not in line with the Zambian public’s views. Instead, community schools grew amidst a debate about whether the state was responsible for the well-being of its citizens, and whether free education was just about increasing access or was accompanied with quality learning outcomes. Afrobarometer survey responses demonstrated, particularly in 2005, that Zambians still saw the national state as having a prominent role in their well-being and in building and maintaining schools. This view was particularly common in rural areas and among those with lower socioeconomic status (see Figure 13). In part, this indicates that the imagined division between state and society, much like the provision of schooling, was conceived differently in rural and urban spaces of Zambia in this period. These differences were not limited to this period, which I explore in the next section.


Interviewee 1: Because at first, community schools were looked at either temporary or transition - that the government will build a proper school. You can … start learning under the tree.

Interviewee 2: But now some of them have been there for decades. They're not very temporary. (Group interview of NGO staff members, August 29, 2016)

In this period from 2007-2016, the Zambian state sought to take more symbolic control over education by reasserting national planning towards development and shifting away from the strict philosophy of free market liberalism laid out in the two previous
periods. This reassertion of the national state was influenced both by international and domestic factors, with a poverty reduction strategy process and the election of the political opposition party Patriotic Front (PF). With the failure of an alternative curriculum (SPARK) and the civil society umbrella organization for community schools (ZCSS), the state recognized community schools as a legal category and took a more systematic role in managing them, albeit from a distance and moderated by the civil society sector.

Through policies and guidelines, the Zambian state asserted community ownership and management of schools while simultaneously structuring a framework of induced participation in schooling. The Ministry of Education integrated community schools more closely into a decentralized state system by distributing responsibility across various levels of its bureaucratic structure. In this way, the Ministry sought to recognize community and render it political (Dill, 2013), which I explore in this section. Drawing on previous policies, the Zambian state continued to create a “new norm of demand-driven service delivery” (p. 144) where communities were responsible for development of their own schools, and the state carved out a “clear division between the responsibilities, activities, and modes of action” for state and society members (p. 117). The result of this was a parallel system in which parents were unequally tasked with activities and obligations in their children’s schools. While state funding increased, only a fraction was allocated to community schools when compared to state schools. By not having to directly pay volunteer teachers in community schools, the Ministry mostly avoided the human resource costs associated with its own schools. Yet again, this type of partnership was not necessarily aligned with public opinion. Finally, within this particular state/society mapping there were unresolved complexities around schools regarding definition, management, and even the land on which schools operated.

Political and Social Context: King Cobra and the Shift in Party Rule in 2011

National politics in this decade were typified by debate and discontent. Since multiparty democracy began in 1991, a single party (MMD) had exclusively held the presidency. President Mwanawasa died in office in 2008, and Vice President Rupiah Banda served as acting president until narrowly winning the presidential election later in the same year. In 2009, Afrobarometer data indicated that public opinion of the economy
was quite low, with nearly half of those surveyed reporting the present economic conditions as very bad and a quarter fairly bad. In addition, the majority (58%) felt the government was handling education poorly or very poorly (see Figure 12).

In 2011 the main opposition leader Michael Sata of the Patriotic Front (PF) party won the presidency, after running unsuccessfully against Mwanawasa in 2006 and Banda in 2008. Sata, nicknamed “King Cobra,” likely due to his fierce and candid rhetoric, ran on a populist campaign against the status quo of the MMD government. The platform of the party, highlighted by Sata’s public denouncements of government corruption and undue influence from Chinese firms, was based on increased spending on health, education, and social services, and additional funding and power delegated to local authorities, including traditional leaders. It presented the absence of government services under MMD not as emblematic of a philosophy of neoliberalism but due to “vices such as corruption, abuse of public resources, tribalism, nepotism and unaccountability to citizens” (Patriotic Front, 2011, p. 4). Optimism after Sata’s election was reflected in public opinion, although this waned a few years later. For example, Afrobarometer data for 2012 show that the majority saw the current economy as performing very or fairly well (54%), and the government as handling education very or fairly well (60%), but by 2015 only a third (34%) saw the economy on the same positive terms, and support for education was reduced (54%) (see Figure 12).

**Parallel Schooling Systems: Community and State Schools**

In this period spanning both MMD and PF governments, community schools transitioned from an intended alternative system to one which ran more parallel to the existing government system. Instead of separate systems serving different aims with distinct methods – what Hoppers (2005) terms adaptation – in Zambia dual systems of schools would move towards the same end and use similar means by following the national curriculum (see Table 1 in the second chapter). At the same time it was clearly laid out which schools belonged to the state and to society. I use the term *parallel* as it came out strongly from a series of interviews with Ministry officials at different levels. Community and governments schools constitute a parallel system of public education because by law they cannot refuse admission to students based on failure to pay fees or contributions, unlike grant-aided and private schools. A district education officer
explained the following, implying that community schools lacked educational quality compared to state schools:

Yes, [government and community schools] are actually a parallel system, they are a parallel system in that they operate with different systems, community schools operate with a different system, government with a different system. But both using the same curriculum, and providing the same kind of education, only that in this parallel system, one has better quality of education than the other. (August 19, 2016)

Similar to common institutional arrangements for community-driven development (Dongier et al., 2002), governance of community schools in Zambia shifted from a partnership between the state and non-government organizations (for example ZCSS) to a partnership mainly between local governments and schools. This means instead of dealing with a single body, like ZCSS, ZOCS, or UNICEF, to reach schools, community schools were intended to be registered and supported by district and provincial Ministry offices, although NGOs and bilateral projects continued to work with and within the state at various levels to support community schools. There are three key moments which contributed to this parallel system: first, the failure of ZCSS and SPARK, for different reasons; second, the creation of Operational Guidelines for Community Schools, which outlined how schools should operate and who is responsible for them; and third, a planned state takeover of schools by the Patriotic Front, which the party ultimately backpedaled on.

The two main approaches for supporting community schools as an alternative system failed for different reasons. While both attempted to reproduce government services (management, registration, and coordination; curriculum and teacher training) in different ways for non-state schools, ZCSS had logistic and funding issues, while SPARK suffered from design and logistic concerns. ZCSS only had offices in the capital city, Lusaka, and thus relied on focal point persons at regional and district levels, specifically government officials who already had full-time positions supporting a resource-poor state system. Further, there was a lack of information and coordination between the main public and private partners, and ZCSS policies were not followed in uniform ways, with schools running for years without recognition by the Ministry (Ministry of Education,
2007b). Due to funding issues, ZCSS was declared defunct in 2007 (Mwalimu, 2011), which left a “void in national policy and coordination of community schools” (Frischkorn & Falcolner-Stout, 2016, p. 5). This gap was only partially filled by the state, which will be explored shortly, and other organizations like ZOCS, which provided direct services to only a small proportion of schools.

SPARK had failed partly because it represented a move towards a hierarchical tiered system of education, where community school students educated under the curriculum were in a poor position to succeed in national examinations. Midgley et al. (1986) note that this was also a threat to the credibility of Kwamsisi community schools in Tanzania, where they use the term “examination backwash” to describe a job market and society organized around progression through formal examinations (p. 80). Further, SPARK training and credentials did not allow teachers to find employment outside of community schools following the program (Cashen et al., 2001). Non-government partners and donors were split in their support for an alternative curriculum. At the same time there was disagreement about whether all schools should follow the same national curriculum (Chondoka & Subulwa, 2004).

With the end of ZCSS and SPARK, Operational Guidelines were written by the Ministry of Education as an explicit articulation of how community schools would run, and outlined responsibilities for the state, non-state partners, society, and community members. Essentially these guidelines were a specific framework of how induced participation would occur in community schools, or the state facilitated arrangement for how parents and community members engaged with these schools. In assigning roles, the guidelines clearly laid out a border between state and society and recognized the outlines and roles of community. The document was a collaboration between the Ministry and a variety of organizations (ZANEC, ZCSS, ZOCS, CARE, Reformed Open Community Schools or ROCS) and collaborating partners (UNICEF, VVOB, and USAID). The purpose of these guidelines was to resolve “confusion over who ultimately is responsible for coordinating and guiding these schools” (Ministry of Education, 2007b, p. 6). Another reason for practical guidelines was to register schools under a “predictable support framework” (p. v) so as to provide state and non-government organizational support to those registered. Registration was essential for the state to know how many schools were
operating but also to prevent fraud by articulating how a school can be “genuine,” as noted in an interview with a national Ministry official who contributed to the updating of these guidelines:

Now, the only way to provide support [to schools] was to have them registered. Otherwise, there was also a lot of cheating, by some crooks who pretended they were opening up community schools, when in fact they were individual [private] schools, and once support was provided, in terms of funds or books, the following day the school closed. (July 25, 2016)

Most importantly, the guidelines notes that the Ministry recognized community schools as a “legal entity,” although this would be enshrined into law in the Education Act in 2011.

Yet this was far from the state taking responsibility for schooling: in the guidelines, the Ministry used much of the same language of neoliberalism as it had in the previous periods. For instance, the role of the Ministry was to “facilitate the smooth participation of civil society in the management and organization of community schools” with community partnership being “a principle and fundamental pillar” to deliver education to all (Ministry of Education, 2007b, p. 6). Yet these schools still required “strategic support” from the state and other partners to “enhance teaching and learning processes” (Ministry of Education, 2010, p. 6). According to interviews, this took the form of distributing teaching and learning materials, incorporating students in national examinations, and eventually posting government salaried teachers to community schools. Community school teachers and parents could also seek help from adjacent state schools, including requesting books and materials, and teachers were integrated into inservice training activities. Yet successive policies asserted the owners of schools were community members: “Communities remain the principle owners, however, and they are expected to participate in the management and governance of such institutions,” and decisions about the “level and nature of support” from parents were left to school committees to determine (Ministry of Education, 2007b, pp. 9–12).

Crucially, the guidelines do not describe the conditions in which a community school should be established in lieu of a government school. There was only a requirement that community schools be built a certain distance away from existing GRZ
schools. There is also little clarity on how or whether a community school could transition to a government institution, or vice-versa. Thus, beyond the current arrangement of state and society schools, there is no justification for why some parents are tasked with the responsibilities of maintaining a school and supervising teaching while others can take on more minimal participation at state-run schools. When the Operational Guidelines were updated in 2016, additions included increased responsibilities for students, parents, and teachers in community schools (Ministry of Education, 2016b). Tasks given to teachers were both optimistic, given the lack of education and training, and unclear: teachers were encouraged to keep records, provide individual attention for special needs, conduct self-evaluation, provide guidance and counseling (including career guidance), and provide psycho-social support. In the same document there was an acknowledgment that ways to increase teacher capacity had failed: teachers had the syllabi and curriculum but may not have used them effectively; in-service training within zones and districts were poorly attended, likely due to distance.

The Operational Guidelines were released in 2007 in the end of Mwanawasa’s presidency and were in place during Banda’s term. When they were updated in 2016, after the Patriotic Front had taken power, there were relatively few changes, as mentioned. However, under the campaign and election of Michael Sata, there was a radical reorientation of the government that included specific plans for community schools. According to the Patriotic Front manifesto in 2011, lack of funding by the MMD government had led to the state being “continuously and heavily dependent” on funds from cooperating partners as well as other issues, including the “mushrooming” of community schools (2011, p. 7). Their solution, along with increasing the education budget and cracking down on so-called “unofficial” school fees, was to upgrade community schools to “fully fledged” primary or secondary schools. This was in itself not a new idea, as the Ministry under Mwanawasa had planned to gradually take over all schools by 2015 (Ministry of Education, 2007a). Yet after Sata was elected, and his successor Edgar Lungu took over after Sata’s death in 2014, the government mainly maintained the status quo in regard to community schools, in which the government provided some funds but left management up to communities and coordination to civil society entities. This is evidenced by the minor changes in the revised operational
guidelines. Further, instead of conversion of more than 3,000 community schools, the most recent PF manifesto called just for the “continued upgrading” of these schools, including upgrading 500 traditional buildings into concrete school blocks (Patriotic Front, 2016, pp. 10–11).

This movement, from a radical plan to shift all community schools to state schools to the more traditional task of building classroom blocks, signals policy backpedaling away from an overarching plan for the state to completely redraw the border between itself and society in relation to community schools by fully incorporating these schools into the state system. While it is not clear what caused this retreat, policies and interviews shed light on three factors which contributed to the perpetuation of the status quo in this area.

First, there was no clarity on how a transition from community to state school would actually happen, either on a small or grand scale. I interviewed an UNZA lecturer who worked frequently with community schools and civil society organizations, and this lecturer suggested the state, along with non-state entities, had not outlined how a transition would happen, even at the school level:

I think also ZANEC, which is Zambian National Education Coalition\textsuperscript{13}, ZOCS, and government have not really sat down to map out a strategy to say, “How do we graduate a school from community school to government school?” That idea, that approach, has not been taken. (August 3, 2016)

The lack of planning for this contingency is evidenced in policies, particularly the Operational Guidelines. In the guidelines there are clear parameters for a community school to be registered (having a school committee, qualified teachers, at least 15 students, toilets, and sitting facilities), but very little information on how stable community schools could transition to state control, where they would receive full funding and a minimum number of salaried teachers. This lack of clarity further reinforces a border between state and society in regard to ownership of schools, where it is unclear how a school transitions from one side to another. A national Ministry official

\textsuperscript{13} ZANEC is a civil society coalition that was established to promote EFA (Education for All) goals, and is composed of non-government organizations, teacher trade unions, faith based and community based organizations.
who worked extensively with community schools noted in an interview that it was not government policy to “force” schools to become state schools, while the lecturer above explained how communities may resist the idea of a government takeover because teachers are invested in the school and receive modest and in-kind payments from parents. Additionally, according to the lecturer, communities may rely on current income generating activities based in the school.

Second, the PF government’s reluctance to take over more than 3,000 schools could also be attributed to budget concerns, considering the already low budget commitment to education. Additionally, this followed a history of the Zambian state being reluctant to enact radical changes in the education sector, often having to balance the multiple interests of donors and society actors.

Third, agendas of donor projects and local NGOs have historically embraced the community participation inherent in these schools and sought to support community schools while also strengthening the capacity of the national, provincial, and district Ministries to provide assistance. Thus there is no evidence that successive projects and local organizations have strongly pushed to transition these schools into state-run institutions. However, because of its association with the PF campaign and Sata’s opposition politics, the state takeover was something frequently cited in my interviews with Ministry officials. This was likely the case because we spoke before and after the Presidential election of 2016, which was ultimately won by Sata’s successor, Edgar Lungu. According to a district education official who worked with community schools, what was laid on the PF platform meant that in the future “there should be nothing called the community school” (August 19, 2016).

**State and Society: Concepts and Complexities within the Parallel System**

Despite campaigning on change, the Zambian government under Sata and Lungu continued to balance government support for schooling with community management and governance such that the state largely affirmed its stance as the “coordinator of coordination” (Dale, 2007, p. 34). It became clear during this third period that the country had a parallel and possibly unequal set of schooling tracks. The state management and coordination of community schools, albeit from a distance, built on previous conceptions of community involvement and induced participation in schooling and other social
services. Yet these ideals were not shared by all Zambians, and further, the current parallel alignment of community schools alongside a government system brought additional complexities. These complexities or tensions highlight a contested articulation of state and society, despite the close network of partnership that was laid out in policies and guidelines. These tensions, related to ownership of schools, community participation, and even the land on which schools are built, demonstrate that a bordering between state and society, specifically community, has certain characteristics but is far from fixed and is negotiated at local levels.

**Opinion about the true custodians of schools.** For more than a decade from 2006 to 2017 Zambian education policy spoke of empowered communities that were “custodians of schools” (Ministry of Education, 1996, p. 132). Education policies during this period directed parents and local leaders to be more involved in and take ownership of schools. Yet, Afrobarometer data suggested that from 2009, during the Banda presidency, communities increasingly did not feel they “owned” schools in terms of being responsible for providing and managing schools. The majority from across the country (81%) believed government was responsible for providing schools and clinics, while only a portion saw it as shared between government and the individual (7%) and even less just the individual (1%) (see Figure 13). A majority also saw the central government as responsible for managing schools (77%), while some saw it as a responsibility for the local government (15%) – only a few (6%) saw communities as responsible. Responses were consistent for both rural and urban-dwelling Zambians.

The number of respondents seeing the government as solely responsible for managing schools is an increase from 1999 (when it was 58%). While it is unclear what led to this change, it may be due to the public frustration with lack of progress in schooling and the economy since MMD rule began in 1991. Overall this demonstrates that while schooling policy imagines a border between state and society blurred and overlapping within and through schools, the public had a very different conception and continued to see the state as largely responsible for providing and managing schools, an opinion which seemed to grow over time. In addition, the dominant public view that the central government rather than its local offices was responsible for managing schools stood in stark contrast to the decentralization policies of the last two decades, which
sought to increase efficiency and speed of delivery by delegating power to provinces and districts.

**Community participation across rural and urban spaces.** From the most part, there was relative consistency across urban and rural areas in opinion on educational issues. One related item which consistently saw a difference was participation in community meetings, which include but are not limited to those in schools. Rural respondents were more likely than those in urban areas to report attending a community meeting at least once or several times (see Figure 16). As noted in the figure, this difference has remained over time, with a greater proportion of urban residents reporting they had not participated in community groups. Interestingly, there was not a significant difference in reported attendance between lived poverty groups\textsuperscript{14}, suggesting that participating in community meetings, whether related to a child’s school or other issues, has more to do with location than economic status. It is not clear why participation of this kind would be more prevalent in rural areas, although it may be a response to a lack of active government support in rural areas or due to stronger familial and communal ties at village levels that would lead people to organize to improve their communities.

These differences based on location in the extent to which Zambians engage in community meetings are in stark contrast to how the state has framed community participation, which has drawn on international concepts of community participation in development. Despite laying out in detail the responsibilities of communities in supporting and providing social services, policies have made little to no mention of how communities and communal bonds may differ across rural and urban spaces. There is no mention of how community participation or self-help may mean different things in villages, towns, and densely populated cities. Instead, participation itself is cast as a blanket solution for a variety of social problems, including the issues of access to and quality in schools.

\textsuperscript{14}To understand differences in survey responses across socioeconomic groups, I conducted a principal components analysis based on Afrobarometer’s “lived poverty” questions (Mattes & Dulani, 2016) to create an index and then groups. See Appendix B for an overview.
A hazy distinction between community, private, and family schools. Another complexity also related to differences between urban and rural spaces is the unclear distinction between community schools and other non-state schools, particularly those owned by individuals and families. This came out of both policies and interviews. While considered separate types of schools in policy, private and community schools are both owned locally and charge parents fees. In fact, the Operational Guidelines require that, at a minimum, communities support volunteer teachers with in-kind contributions. However, the distinction often made is in the amount of fees: according to a national
Ministry official who has created education policies, private schools charge high fees and expect cash payment, while community schools negotiate fees that are “extremely, extremely low” and can be paid in kind, with parents providing bags of maize or peanuts, poultry, or exchanging labor (July 25, 2016).

An UNZA lecturer who worked with community schools suggested private schools have three key distinctions from community schools: private schools are initiated by individuals, rather than communities; these schools find it difficult to rely on volunteer teachers, especially if a profit is being made; and they run on the decisions by one or two individuals, rather than the community. For example:

A community school thrives on community influence … while private school, just like we said, it thrives on individual decisions. And individual influence. We have been to community schools where, when the rainy season comes, the community says, "Close the school now." [laughs] In most of these private schools, of course it's the director to make those decisions. (August 3, 2018)

However, this distinction may be difficult to translate into policy. While community schools are required to have a Parent Community School Committee (PCSC), it may not be clear whether decisions are made collectively or by a few influential members or the teachers. There is not yet a scale of what fees are considered low and those which are high and make the school by definition a private institution. Often, distinctions are more in the realm of “I know it when I see it”: one school that charges higher fees to provide an education typically of somewhat higher quality than most state schools and is managed by teachers is a private school, while another that charges lower fees, accepts in-kind payments, provides education on par or lower than state schools, and holds regular parent committee meetings is a community school.

Another complexity is the conceptual overlap between community, villages, and families, which is not dealt with in policy. Thus these social groupings are hidden under the generic demarcation of “community.” The same UNZA lecturer elaborated on this:

You know that the idea here, in the Zambian situation, community schools, most of the community schools, you find them in villages, and if it's in a village, it means that the people in that village are related to each other … [the school] may end up being an extended family school. … Where we went, the other time to
Southern Province, and I deliberately did something, I said, "Can all the parents introduce themselves?" … when I asked them to introduce themselves, almost everyone had the same surname. Meaning that the school was basically belonging to an extended family, to some extent. And there are a lot of them like that. Because of the village arrangement, in the Zambian situation. So while it would mean that it's a community school for everyone, around the place - but because the context in which they are found is that the villagers are interrelated, the chances are that most of the people will be in that school are also related. (August 3, 2016)

These complexities reveal that while policies have focused on a division between state and society in schooling, by distinguishing GRZ schools as belonging to the state and community schools to society, there are additional borderings, groupings, and networks in society related to community schools. There is no clear line differentiating schools that are individually owned, schools that are community owned but controlled by influential individuals or teachers, and schools that are managed by and for families. Further, the standards for “free” education at state schools – the absence of prohibitive costs – are not necessarily the case in community schools, where fees are mostly set by local market demands and negotiations between teachers and parents. This suggests again that local power dynamics are likely present but mostly ignored in policies of community participation and engagement.

**Land use issues and disputes.** An unexpected finding from interviews was the subject of land use. I learned that where schools are built gives additional insight into a bordering between state and society. These issues included where the state can legally build a school as well as different conceptions of land used for public or social aims. A national Ministry official noted that some community schools used church buildings or are located on privately owned church land, which hinders the government from obtaining the land to construct a building for the school. Another official I interviewed at the district level noted that a school was asked to relocate after the land was bought by commercial farmers, and this led to a dispute. While the community had moved the school to a forest area, the Minister of Education discovered that it was protected land governed by the Ministry of Lands and Natural Resources. An NGO staff member also
related how land issues played out in urban areas, in particular unplanned settlements around the capital city. Due to lack of space within or near the settlements, the local government had built schools further away, leading to the founding of community schools within the settlement. All of these issues are further complicated by the dual authorities governing land use in Zambia: these are the government and traditional authorities, where the latter holds the power of delegating and selling land within chiefdoms. Thus the parallel system, while relying on different types of management and sources of funding, may have dramatically distinct spatial distinctions based on land governance.

Within this third period of the Banda, Sata, and Lungu presidencies, there was an attempt by the state in collaboration with non-state partners to extend its reach to include community schools. The stated intention for this re-bordering was to clarify the confusion about management and coordination of all schools, create a clearer way to distribute financial support, and reduce fraud. Although the state provided resources, and eventually salaried teachers, to community schools, it took control primarily symbolically over the community school system and positioned itself as a facilitator of communities owning schools and non-state entities supporting them. Through guidelines, registration, and eventually teacher placement, the state was able to recognize community efforts, previously organic participation to fill the gaps of a weak state, and render them political by inducing participation and laying out the specific roles of state and society actors (Dill, 2013). Through this effort, policies essentially produced communities where before there were villages, families, and complex social networks, and outlined the “nature and extent of the political space afforded to community-based actors” (p. 102). The result was a parallel system with two types of schools, by definition one owned by the state and the other society. These two tracks moved towards the same aims and used the same curriculum, yet had differences in management and resources, and perhaps also in quality and education outcomes.

While guidelines were laid out for these schools, there was no guidance on where community or government schools should be initiated, or how to transition from one form to another. This lack of information about crossing the state/society border in schooling served to preserve the current spatial and socioeconomic placement of these schools, as
distinct tracks of education. This arrangement was relatively unaffected by a change in government as radical plans for community schools were not carried out. Yet this mapping of state and society, in which local communities increasingly take a strong role in managing or overseeing education, both within community and state schools, was still not necessarily reflected in public opinion. Most Zambian surveyed by the Afrobarometer saw the national government as the primary “custodian” of schools. Further, a variety of complexities taking place at local levels – varying opinions about the ownership of schools, community participation across rural and urban spaces, distinctions between community, family, and private schools, and land use issues – disrupt the definitions and generalizations about community schools and communities laid out in policies.

Conclusion

In this chapter I argued that, since 1991, the Zambian state has taken three distinct yet overlapping stances in response to the rhizomatic growth of community schools, each suggesting a different bordering between state and society. At first, the transition to multiparty politics and the influence of neoliberalism led to a philosophy of community participation in social services, including education. Second, these theories were applied to varying extents, while community schools were portrayed as alternative paths of learning. Third, community schools have become a permanent and legally recognized system, moving from a temporary solution to a schooling system in crisis to operating in parallel to existing state schools. Throughout these periods since the early 1990s, the organic growth of schools has been institutionalized as an induced partnership between state, civil society, and local communities, where roles and responsibilities have been clearly outlined. To do this, the state had to recognize and essentially create cohesive communities around schools, although the various complexities outlined later in this chapter disrupt this essentialism. Further, it rendered them political in policies, by ascribing the spaces of democratic engagement, and limiting the roles to funding and managing schools.

Through fostering and managing a border between state and society in the provision of public education, the state sought to transition an organic movement into a coordinated model of induced participation. Yet public opinion on partnership in schooling – in which state and community are partners in providing and managing
education – was not universal and varied across socio-economic class and urban and rural spaces. Additional complexities within the parallel school system, which I explored in the last section, demonstrate that the bordering between state and society is not merely about the management and building of schools, but it extends to the ground on which bricks can be laid. Community schools can be seen often as improvisational acts negotiated within the community, while state schools are defined more by a process of bureaucratic planning, regulations, and often incremental progress. In the next two chapters, I assess the differences in outcomes of this parallel system of schooling where one set of schools are defined by state tenure, with the others by community or societal ownership.
Chapter 6: Attributes of a Parallel School System

If the argument is that in community schools you have untrained teachers, and in government schools all the teachers are trained, how then is it that students or pupils in community school would perform better than that in a government school? It's a paradox, isn't it? (National Ministry of Education official, July 25, 2016)

The previous chapters have established that at least in policy and rhetoric, there has been a constructed yet dynamic border in the space of schooling between the work of the government and the participation of local communities. This bordering is particularly noticeable between government-run schools and those operated mainly by the community. As noted earlier, community schools now operate as part of a state legitimized parallel system, complementing the existing public system and moving towards similar goals, specifically in educating children using the national curriculum. From educational policies, it is clear there are different expectations for parents who send their children to community compared to those who matriculate their children in government schools. What are the additional components and learning outcomes of this bifurcated system, and is there inequity across and within these different forms of schooling? Are differences in resources, teachers, community involvement, and other factors associated with learning outcomes? The purpose of this chapter and the next is to explore the characteristics of students, teachers, and schools in this parallel system, and understand how students perform in literacy and numeracy at the early grades that most community schools serve.

In this chapter, I will outline and compare attributes of students and teachers, and aspects of schools, between schools run by the state and those by community members. I exclude from analysis grant-aided and private schools, and instead focus on GRZ (government) and community schools which both serve public aims and do not, at least in policy, require fees for attendance. In this analysis, I mainly consider the descriptive differences between schools, to address Research Question 2a: In what ways do community schools differ from government schools, in terms of learning outcomes, resources, and community and parent participation? In the next chapter, I use hierarchical linear modeling (HLM) as a multilevel analysis to understand the association
of school type with literacy and numeracy outcomes and see differences between and
within schools, while controlling for influential factors at the level of students, teachers,
and schools. These analyses do not occur in isolation: rather, the qualitative and
quantitative historical, social, and political analyses of the previous chapters informed
model building, interpretation of results, and additional analyses.

As discussed in this chapter, I found that community and state schools are both
located in rural and urban areas, and serve very similar populations, particularly in terms
of students’ household socio-economic status. However, community schools tend to have
fewer resources and teaching and learning materials, like readers and exercise books, and
their class and head teachers are less likely to have attended teachers colleges or hold
credentials. In the section below, I first explore this connection between research
methods, particularly between the process tracing analysis of the previous chapter and the
HLM analysis used in this chapter and the next. Then I introduce the data set, a national
assessment of Grade 2 numeracy and literacy, and follow this with descriptive statistics
about students, teachers, and schools.

**Informing Models: Four Assumptions about Community Schools**

In this chapter and the next I examine the descriptive and inferential differences
of math and literacy outcomes of students in state and community schools in order to
understand how education quality can vary between and within these school types.
Instead of building regression models in isolation of the history and politics surrounding
community schools, I interrogate assumptions about community schools that arose from
the analyses in the previous two chapters, as well as additional information from
interviews and policies. The debates, conversations, and discourses around community
schools informed my quantitative models, and suggested variables to be included or
excluded. The four assumptions that I question are as follows: First, is the parallel system
articulated in policy, interviews, and public opinion also manifest in distinct
characteristics and outcomes of schools? Second, is there variance in the quality and
resources within community schools, when examples of high performing schools
rationalize and defend the existing system? Third, are community schools successful in
teaching basic literacy and numeracy skills? Finally are extensive community support and
volunteer teachers, which make community schools distinct from state schools, connected
with literacy and math outcomes? I briefly overview these four assumptions below and argue how this analysis can address them.

(1) **Community and state schools exist as a parallel school system.** As I explored in the fifth chapter, policies, plans, and programs which cast community schools as an alternative system, like SPARK, were abandoned for both practical and political reasons. Currently, these schools are seen as supporting the government education efforts as a complementary system, providing access to children who could not reasonably access state schools. According to an official at the national Ministry of Education who was involved in policies targeting community schools: “We [as all schools] use the same syllabus. We use the same curriculum … community schools are being taught exactly the same things as government schools” (July 25, 2016). Rather than a complementary system, the same official admitted this was a parallel system, as explored in the previous chapter. An UNZA lecturer that worked with the government, civil society organizations, and community schools insisted community school parents and teachers would take offense at the suggestion that what took place in community schools was radically different from that in state schools (August 3, 2016).

By analyzing students’ literacy and numeracy outcomes, I seek to determine the results of a current system, in which some institutions are managed by the state and others by communities and parents. Do inequalities exist between schools? How do factors like poverty contribute to inequities?

(2) **Some community schools outperform government schools.** In the quote in the previous paragraph, the Ministry of Education official summed up the parallel nature of the system - that community and state schools are on the same track, both following the national curriculum. However, the official then immediately asked, “Why then is it that some community schools are doing better than government schools?” (July 25, 2016). Anecdotes of community schools outperforming neighboring government schools, or exceeding the average performance of the state system, are often used to defend the existing arrangement, in which community institutions receive a proportion of the funds and support allotted to state-run schools. Various studies have pointed out there are high performing and stable community schools, as well as struggling ones (DeStefano, 2006; Falconer-Stout, Frischkorn, & Franco, 2017). The sheer variance in performance between
community schools has befuddled previous analysts, including the recent middle primary level assessment (Chilala, Musakanya, Nkoya, & Chomba, 2014), where outcomes were summarized only by mean score, aggregated by school type. Combining all schools into one average score obfuscates potentially important distinctions between high and low performing schools. However, a multilevel analysis allows me to examine the differences between different community schools, as well as within individual classrooms, highlighting differences and inequalities both between and within schools.

(3) **Community schools exist to teach basic literacy and numeracy skills, not necessarily to ensure entrance to secondary school or eventually college.** Community schools have a variety of purposes ascribed to them, both officially in government policies and guidelines, and unofficially, which emerged from interviews and other studies. These rationales seek to explain what community schools have to offer, and why these schools persist. One political reason for the continuity of these schools is that they provide basic education to a significant number of children who are not able to matriculate in government schools. Officially recognizing community schools as complementing the government system, the state’s extension of some level of support, in partnership with various civil society organizations, required fewer financial and human capital resources than converting all to government schools. These costs may have contributed to the Patriotic Front’s reluctance to enact its plan of taking over community schools, as described in the previous chapter.

By providing access, community schools fulfill enrollment goals for the state: the Ministry notes that “community action has been crucial” in regard to moving towards Education For All goals, as from 2000-2014, community schools have created over 550,000 new places for students (Ministry of Education, 2014, p. 1). However, these increases in access may be questionable if the learning provided in these schools is not equitable to that provided in state schools, particularly at the lower grade levels.

Another attributed purpose of community schools, noted in policies and interviews, is to provide early grade education, typically Grades 1-4, for students too young to travel long distances to government schools. Because of this, most community schools provide instruction at lower or middle grades (Grades 1-7), with only some
functioning as secondary schools (Grades 9-12). An education policy in the late 1990s defines community schools as being “inexpensive, less demanding of entry requirements and [which] emphasize inculcation of literacy, numeracy and problem solving skills” (Ministry of Education, 1999, p. xiv). A Ministry official, after emphasizing these schools were not there to put students eventually on the college track, reiterated the importance of community schools delivering basic skills:

And so, it was felt, that if the parents just came together, and established this school, and engaged ... their own teachers, and paid them sometimes in kind, it would help the children to at least be able to read and write. That was the most important thing. So that they could try to be literate. (July 25, 2016)

Most community schools, staffed by volunteers lacking teaching credentials and without basic teaching and learning materials, would be ill equipped to prepare students to later enter private or public schools or pass national examinations. However, at least, according to educational policy and opinion, these schools offer basic numeracy and literacy to their students. Thus previous assessments at Grade 5 and higher miss the mark, as most of community schools operate at lower levels. Therefore, it is necessary to look at how community schools are able to meet this goal of imparting basic literacy and numeracy at early grades.

(4) Volunteer teachers and active communities keep community schools afloat. As described in the previous chapter, education policies since the 1990s espoused the power of communities and parents to be intimately involved in their children’s schools, even those run by the state. According to the Community School Operational Guidelines, as well as reports from bilaterally supported school projects, this involvement is cited as a key ingredient of a successful community school. As noted in the previous chapter, educational policies and frameworks advanced the argument that communities that feel they “own” their schools are kept up in infrastructure and quality. A district Ministry of Education official, as noted previously, proposed a “broken windows” theory:

15 The Ministry of Education’s statistics pool community schools with private and religious institutions at the secondary level; however the amount of teachers is disaggregated by school, and in 2015 there were only 204 teachers recorded teaching at community secondary schools, compared to over 17,758 in government schools, 2,577 in grant-aided schools, and 2,260 in private schools (Ministry of Education, 2016a).
that a school window broken in a community school would lead to an immediate local response, while the same issue would go unattended at a state school, where property was seen as belonging to the government. Both policies and interviews emphasized the importance of a strong Parent Community School Committee (PCSC) in schools. Yet it is valuable to know whether empirical data confirms that the involvement or participation of communities and parents can have an impact beyond fixing windows, and is associated with higher measured literacy and numeracy.

Beyond the ownership and resolve of communities, government policies and interviews emphasized the commitment of volunteer teachers. While it can be argued that a dedicated volunteer is better than no teacher at all, community teachers cannot be expected to have the same pedagogical skills as teachers who have been trained in subject content and instructional strategies. These volunteers usually come from the community, often have some level of schooling but may lack teaching certificates, and are motivated to teach classes for in-kind payment from parents. While volunteerism is not available in the data, this analysis looks at whether teaching credentials can significantly predict student outcomes in literacy and numeracy.

These four assumptions necessitate a study of how early grade learning outcomes differ between state and community schools, and which variables, such as community participation and teachers’ credentials, contribute to these variances. In the next section I describe the data used, how it was gathered, and the specific variables that I use in analysis.

**Exploring the data: Descriptive results put into sociopolitical context**

As described in the third chapter, analyses were limited to community and state (GRZ, or the Government of the Republic of Zambia) schools, using data from an early grade literacy and numeracy assessments conducted across all schools in Zambia. Looking descriptively at the data, a picture begins to emerge about the students, parents, communities, teachers, and school structures within both community and GRZ schools (represented in Table 3).

**Student Variables**

As seen in Table 3, there were an equal number of male and female students tested. However, at a system level, Zambia has been relatively successful in meeting
gender parity goals in access to education, at least in the primary grades. By grades 7 to 8 boys start to outnumber girls. The table also shows that although the policy entry age in Zambia is seven years, the average (mean) age of male and female students is higher than this. As seen in Table 3, the average age in Grade 2 is over nine years. Assuming students did not repeat the previous grade, this means half of the students were eight years or older when they started school at Grade 1. Repeating grades does occur, and this may contribute to the higher average age of students. The data showed that community schools students were more likely to repeat Grade 2 than students in government schools.
Table 3. Descriptive Statistics (Mean and Standard Error) for Variables at Student, School, and Teacher levels, by School Type

<table>
<thead>
<tr>
<th>Variable</th>
<th>Community</th>
<th>Government</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Students (n = 3322)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>643</td>
<td>2,679</td>
</tr>
<tr>
<td>Female</td>
<td>.50</td>
<td>.50</td>
</tr>
<tr>
<td>Age</td>
<td>9.6 (.15)</td>
<td>9.3 (.07)</td>
</tr>
<tr>
<td>Repeated Grade 2</td>
<td>.11*</td>
<td>.07*</td>
</tr>
<tr>
<td>Attended preschool</td>
<td>.24</td>
<td>.28</td>
</tr>
<tr>
<td>Speaks class language at home</td>
<td>.68</td>
<td>.69</td>
</tr>
<tr>
<td>Homework in the last week</td>
<td>.56</td>
<td>.58</td>
</tr>
<tr>
<td>Ate before coming to school</td>
<td>.48</td>
<td>.44</td>
</tr>
<tr>
<td>Has reader in home language</td>
<td>.09</td>
<td>.15</td>
</tr>
<tr>
<td>Has exercise book in home language</td>
<td>.57*</td>
<td>.69*</td>
</tr>
<tr>
<td>Has reader in English</td>
<td>.06*</td>
<td>.14*</td>
</tr>
<tr>
<td>Has exercise book in English</td>
<td>.62</td>
<td>.71</td>
</tr>
<tr>
<td>Books, newspapers, reading materials at home</td>
<td>.29*</td>
<td>.38*</td>
</tr>
<tr>
<td>Mother/guardian knows to read</td>
<td>.73</td>
<td>.81</td>
</tr>
<tr>
<td>Father/guardian knows to read</td>
<td>.83</td>
<td>.88</td>
</tr>
<tr>
<td>Has mathematics textbook</td>
<td>.08*</td>
<td>.16*</td>
</tr>
<tr>
<td>Has mathematics exercise book</td>
<td>.70*</td>
<td>.80*</td>
</tr>
<tr>
<td><strong>Socio-economic status‡</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>.44</td>
<td>.44</td>
</tr>
<tr>
<td>Middle</td>
<td>.43</td>
<td>.42</td>
</tr>
<tr>
<td>High</td>
<td>.14</td>
<td>.14</td>
</tr>
<tr>
<td><strong>Schools (n = 333)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>65</td>
<td>268</td>
</tr>
<tr>
<td>Rural</td>
<td>.68</td>
<td>.79</td>
</tr>
<tr>
<td>Total students</td>
<td>336.1(45.9)*</td>
<td>800.1(39.6)*</td>
</tr>
<tr>
<td>Female students</td>
<td>.50</td>
<td>.49</td>
</tr>
<tr>
<td>Enrolled students in surveyed class</td>
<td>37.2(2.3)*</td>
<td>70.2(3.9)*</td>
</tr>
<tr>
<td>Attending students in surveyed class</td>
<td>24.2(1.6)*</td>
<td>38.2(1.8)*</td>
</tr>
<tr>
<td>Library</td>
<td>.17*</td>
<td>.32*</td>
</tr>
<tr>
<td>Electricity</td>
<td>.24*</td>
<td>.43*</td>
</tr>
<tr>
<td><strong>Class Teacher</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of experience</td>
<td>6.2(0.6)*</td>
<td>7.5(0.4)*</td>
</tr>
<tr>
<td>Education lower than Grade 12</td>
<td>.20*</td>
<td>.00*</td>
</tr>
<tr>
<td>No teaching certificate or diploma</td>
<td>.52*</td>
<td>.03*</td>
</tr>
<tr>
<td>Teacher at school the day of assessment</td>
<td>.91</td>
<td>.93</td>
</tr>
<tr>
<td>Uses English most often</td>
<td>.17</td>
<td>.13</td>
</tr>
<tr>
<td><strong>Head Teacher</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of experience</td>
<td>5.3(0.6)</td>
<td>5.0(0.3)</td>
</tr>
<tr>
<td>Education lower than Grade 12</td>
<td>.12*</td>
<td>.00*</td>
</tr>
<tr>
<td>No teaching certificate or diploma</td>
<td>.32*</td>
<td>.01*</td>
</tr>
</tbody>
</table>

For italicized variables, mean is reported with standard error

* Significant differences by school type, using t-test for means and Chi-Square test for proportions, with $\alpha = .05$

‡ SES was derived from a variety of asset questions, and is explained in detail in a later section
As seen in Table 3, there was no significant differences in access to early childhood education across school types, with around a quarter of students having attended preschool. In 2011 Zambia included preschool (ages three to six) as part of the basic education system (The Government of the Republic of Zambia, 2011), however it is neither free nor compulsory. While there is insufficient attention paid to preschool by local authorities who are responsible for it (United Nations Development Programme, 2011), there is evidence that preschool does contribute to learning outcomes in primary school. Low-cost preschools in Mozambique were shown to improve school readiness and even impact the school enrollment of siblings (Martinez, Naudeau, Bank, & Pereira, 2013). In Zanzibar, students who were selected to receive preschool had increased literacy and numeracy scores when in primary school (EDC, 2009).

Another known factor that impacts students’ early grade learning is language. While Zambia has adopted teaching in local languages through Grade 4, there are three challenges in regard to local languages. First, while there are seven official languages taught in schools, there are additional languages and dialects spoken across the country. Second, multilingual communities due to migration to urban areas, send their children to a school which teaches in one official language. Third, teacher deployment is based on the precept of “one Zambia, one nation”: in order to promote national unity, teachers can be assigned to posts outside of their home province. This means teachers may not fluently speak the language of their students or that of instruction. The indicator for speaking class language at home, in Table 3, combines two variables in the data reported by the students themselves: whether the language spoken at home is the same as that used most often by the teacher in the classroom. While there are no differences by school type, around 30% of students overall encounter a different language in the classroom from that spoken at home.

In terms of Grade 2 learning materials at school and home, there are some differences. Overall, a significantly higher percentage of government school students have access to exercise books at home than community school students do. Zambian teachers, responding to the lack of books, often will copy portions of textbooks or readers on blackboards for students to work from. Apart from these differences, it is surprising that a significant number of students attend class without exercise books in numeracy and
literacy, given the recent investment in the years before the assessment in quality education and increases in textbooks and materials.

In the United States and beyond, parents’ education has been found to have a strong effect on the performance and opportunities for their children (Davis-Kean, 2005). In Kenya, parents’ education has a strong correlation with children’s literacy (Wambiri & Ndani, 2015). In the data, literacy is often treated as proxies for parents’ education, and is often related to socio-economic status and poverty. While they do help to understand differences between aspects of student populations, they do not in themselves demonstrate that community and GRZ schools serve different socio-economic groups. In educational statistics in Zambia, and other similar countries, poverty and social class are not routinely reported, as both are difficult to measure.

A common proxy for socio-economic status (SES) is location. More commonly, schools, rather than students, are reported as being urban or rural. The Ministry of Education has an established definition of this and uses a set distance from town centers (or “bomas”) to determine whether government schools are rural, often in order to offer rural hardship allowances to teachers. In Zambian education policies, urban and rural is often set up as a binary, and used with broad strokes to denote social class. There are references to the “quest to close the rural-urban divide” in which students in rural schools underperform on average their peers in urban schools (Ministry of Education, 2016a).

However, urban or rural status is far from a binary, and it is a poor stand-in for social class in Zambia for a variety of reasons. There is a general understanding that Zambia’s population density in rural and urban spaces are made up of a majority of rural subsistence farmers and urban wage-earning elites, and this has been the backbone of policies to develop services to rural areas. However, rural/urban is not a binary: even with the addition of a peri-urban space, Iaquinta and Drescher (2000) describe these spaces as “uneven, or lumpy, multidimensional continuum” (p. 9). Further, rural and urban spaces do not reliably match with SES: in reality there are low income families who have migrated or live in urban areas, while rural sites have high income elites, like commercial farmers. In the space of education, regular or boarding schools can serve the students of wealthy families. Thus, there is a need to understand SES on a student level, rather than summarizing student outcomes based on whether schools are classified as rural or urban.
One of these is family social class, which has a demonstrated link with academic achievement to some extent in the Global North (Sirin, 2005) and in Africa (Van der Berg, 2005; Zuze, 2010).

**Socio-economic Status**

To look at household wealth, I constructed socio-economic status (SES) groups out of the national assessment data, using household information, like means to cook food, source of drinking water, electricity, and assets like mobile phones, bicycles, and cars. These groups were created using Principal Components Analysis: an overview of the methods and decisions made can be found in Appendix C. It should be emphasized that these are not absolute groups but relative clusters based on the available data. While these groups confirm that there is a majority of rural poor students, and a minority of wealthy urban students in community schools, SES is far from synonymous with location, as there are students at rural schools with high SES, and urban students with low status. Considering the influence of social class on achievement in education, SES is a useful indicator for analysis, as well as an important constant.

Descriptively, SES supports the idea that GRZ and community schools serve similar populations: overall the proportion of students in each social group is similar across school types. Figure 17 shows the distribution of students at each school type, with raw Principal Component scores on the x-axis, and the proportion of total students on the y-axis. Further, cutoffs for SES groups used in the analysis (low, middle, and high) are displayed, and the locations of schools (urban or rural) are added as colors to highlight the interplay between socio-economic status and location. As can be gleaned from this figure, the majority of students attend rural schools and were categorized into low and middle socio-economic groups. The minority of students who are in the high SES group attend urban and rural schools, although for community schools, most of these students attend urban community schools. These figures show students by school type, and do not cluster them by individual school: presumably there are some schools which serve higher groups while others lower. In fact, school factors potentially influence and interact with student outcomes, as highlighted in the next section.
School Variables

As noted above, both community and government schools are present in urban and rural areas, although a larger proportion of GRZ schools are present in rural areas. This may be the result of school building projects from the mid-2000s (Ministry of Education, 2010). As seen in Table 3, GRZ schools are on average larger, in terms of total students enrolled. Class size, at least for Grade 2, is also higher in government
schools, both in terms of enrolled and attending students\(^\text{16}\), with very little variation. Yet there is inconclusive evidence that teacher-pupil ratio has an effect on learning outcomes in low income countries, with some studies finding that outcomes as assessment scores increase with class size, rather than decrease (Glewwe, Hanushek, Humpage, & Ravina, 2011). At the same time there is some negative association between large class sizes and primary school completion (Ruff, 2016).

There are also expected differences in school resources. Libraries have been shown to have an impact on assessed student learning in lesser developed countries (Glewwe et al., 2011). In Zambia, around a third of government schools had libraries, with a smaller proportion of community schools with such facilities. Electricity was also similarly and unevenly distributed among schools in rural areas. While some studies have shown a positive impact in having electricity, in terms of test or assessment scores, three more rigorous studies did not find a significant effect (Glewwe et al., 2011). Electrical power by itself may not endow benefit, but it does enable evening or night classes and informal study groups. Like many of the variables so far, electricity is far from an independent variable, but it is often indicative of school location: in the national assessment data, most of the urban schools were connected to the power grid, while less than a third of schools in rural areas had power.

**Teacher Variables**

Both the quality of teachers at community schools and the retention of quality teachers are concerns, with the Ministry of Education noting that “even the dogged and selfless commitment of volunteer school teachers cannot be sustained forever” (Ministry of Education, 2014, p. 35). One solution has been the placement of government teachers in community schools, often as head teachers. While the national assessment data do not distinguish between type of teacher, specifically whether they receive a government salary or not, it is likely many are still volunteers. Table 3 overviews some of the variables around class teachers, and head teachers or principals. While many community schools are staffed by these volunteers, these teachers are by no means inexperienced: the

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\(^{16}\) There are two indicators for class size in the data: the number of enrolled students in the selected Grade 2 class, or how many students are allowed by the school to be in the class; and the total attending students during the assessment, or how many students showed up on the day of the assessment.
average years teaching for Grade 2 teachers was over 6 years, compared to around 7 years for those in GRZ schools. However there are stark differences in the education and credentials of teachers. Nearly all GRZ teachers had passed their Grade 12 exams and had a teacher certificate or diploma. In community schools, a fifth of teachers had not reached Grade 12 or passed the exam at this level, and more than half did not have any form of teaching certificate. This is an improvement from statistics on community schools in 2004: while a similar ratio reported attending Grade 12, only 16% had gone to a teacher training college (DeStefano, 2006).

Language of instruction, including the use of English in the classroom, is also of interest in understanding literacy and numeracy outcomes. As noted, the Ministry of Education moved away from using English as the medium of reading instruction in early grades and towards the seven Zambian languages, based on evidence that learning occurs more easily in home languages (Ministry of Education, 2012). However, fluency in English is essential for success in later grades, and particularly on qualifying exams: English remains as the official language of instruction from Grade 5 up to university (Ministry of Education, 2012). While English is more prominent in private schools and is more commonly spoken at home in high SES families, there is no significant difference in use of English in GRZ and community schools, in terms of whether the Grade 2 teacher uses English most often.

Head teachers serve as the lead teachers, or the principals, of a school. Most head teachers in the sample had spent on average around five years in this role. A greater proportion had qualifications and education compared to the classroom teachers. Less than a third of community school head teachers had no teaching certificate or diploma, while more than a tenth did not attend Grade 12 or pass the exams at this level. Considering the stark differences in staff qualifications and education, community school teachers and head teachers may be less able to provide quality instruction given their lack of training. In a review of how school resources affect learning outcomes in lower income countries, teacher education and experience were correlated with increased

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17 According to the national assessment data, 78% of students in private schools had a teacher who reported teaching mostly in English, compared to 7% in either community or GRZ schools. Students reporting speaking English at home have a significantly higher average socio-economic status.
assessment and test scores. Further, principal experience also significantly impacted these measures of learning, but it is not clear whether principals’ education did as well (Glewwe et al., 2011).

**Community Participation**

While community members and parents were not directly surveyed with the School Snapshot, or the data collection tool, they are represented in the data via a few proxies. First, information about families was collected from the students, some of which was used to construct socio-economic status. Second, survey questions for both teachers and head teachers asked about whether community members, in the last year, participated in schools in specific ways. These are presented in Table 4, and they range from monitoring attendance and conducting class observations to monitoring the implementation of school projects. These indicators are far from rich descriptions of community participation, and do not describe the complex workings of school committees, or distinctions between the roles of Parent Teacher Associations (PTAs) at GRZ schools and Parent Community School Committees (PCSCs) at community schools. However, these community participation questions are helpful in that they provide a basic yet multifaceted glimpse into how communities and parents engage with schools, which can be examined in parts or as a combined variable. To understand how all of these ways of participating in schools contribute to student outcomes, another Principal Components Analysis was conducted. Principal Component Analysis scores drew on participation as reported by the classroom teacher and head teacher, and these scores were divided into three groups with low, middle, and high levels of community participation (see Appendix C). Looking at these groups alone, as shown in the table below, strong differences do not emerge in the overall participation between community and government schools.
Table 4. Community participation in education (in mean terms), according to school head teachers

<table>
<thead>
<tr>
<th>Variable</th>
<th>Community Teacher</th>
<th>Community Head Teacher</th>
<th>Government Teacher</th>
<th>Government Head Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>A parent or member of the community came at least once during the last term to:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor student attendance</td>
<td>.45</td>
<td>.74</td>
<td>.30</td>
<td>.60</td>
</tr>
<tr>
<td>Conduct classroom observations</td>
<td>.32</td>
<td>.57</td>
<td>.25</td>
<td>.34</td>
</tr>
<tr>
<td>Monitor implementation of school projects</td>
<td>.61</td>
<td>.80</td>
<td>.71</td>
<td>.89</td>
</tr>
<tr>
<td>Monitor the availability of textbooks</td>
<td>.25</td>
<td>.32</td>
<td>.15</td>
<td>.16</td>
</tr>
<tr>
<td>Look at your record of continuous assessment</td>
<td>.21</td>
<td>.42</td>
<td>.32</td>
<td>.49</td>
</tr>
<tr>
<td>Help you to teach reading in some way</td>
<td>.24</td>
<td>.36</td>
<td>.26</td>
<td>.31</td>
</tr>
</tbody>
</table>

**Community Participation Principal Component Groups**

<table>
<thead>
<tr>
<th>Groups</th>
<th>Community</th>
<th>Government</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>.33</td>
<td>.31</td>
</tr>
<tr>
<td>Middle</td>
<td>.30</td>
<td>.33</td>
</tr>
<tr>
<td>High</td>
<td>.37</td>
<td>.35</td>
</tr>
</tbody>
</table>

There are some distinctions in these indicators, however, when they are examined separately. Certain types of community participation are more common in one school type than another. For instance, community school teachers, compared to GRZ teachers, reported community members more frequently monitored school attendance and conducted classroom observations. However, community stakeholders in government schools were more often reported monitoring implementation of school projects and looking at records of continuous assessment. In GRZ schools, PTAs have an outlined role in fundraising and assisting with projects, including the building of new classroom blocks. However, the impact of community participation on student learning is not clear, as there is little research in this area. Instead, research has focused on how schools can encourage and motivate parents, rather than how communities support schools. While these measurements of participation are fairly shallow, they do provide an opportunity to test the impact of some level of community activity on student outcomes in numeracy and literacy.
Conclusion

In this chapter I looked at descriptive differences between community and government schools related to students, teachers, school resources, communities, and parents. These initial descriptive statistics provide a useful but also limited picture of average school characteristics. Information about assets allowed for socio-economic groups to be constructed out of the data, providing a better indicator of the household economic conditions of students and adding more variation beyond an urban-rural binary. In general, community schools, despite serving similar demographics, lag behind government institutions in providing class and school teaching and learning resources, and in the qualifications and education of their teachers. However, GRZ schools are not necessarily high performing institutions, and they also lack available textbooks and exercise books, and have relatively large class sizes. Beyond the data presented here, government schools fall behind private schools, or elite institutions which also grew in the 1990s with the government’s liberalization of social services.

These descriptive statistics only show a picture of average schools, students, and teachers sampled. Observing the means and the standard deviations (as the average distance from the mean), there is a fair amount of variation in all indicators, meaning that within each category of school, there are a variety of institutions, staffed by teachers with varying qualifications and experience, serving different groups of students, supported by distinct communities. How does one make sense of how these myriad factors might contribute to students’ measured learning, specifically literacy and numeracy? How influential are teachers’ credentials and training compared to spirited but untrained volunteer teachers? Does community participation in various forms actually make a difference? And do schools reinforce existing inequalities, in terms of differentiated socio-economic conditions, or alleviate them? The next chapter relies on hierarchical linear models to address these questions.
Chapter 7: Literacy and Numeracy in a Parallel System

In the previous chapter I described the parallel system of community and government schools, and in this chapter I analyze these differences to understand whether and to what extent school type is associated with distinct literacy and numeracy outcomes. Here I seek to understand whether there is inequity across a parallel system of public education in Zambia, in terms of assessed foundational literacy and numeracy skills assessed by Early Grade Reading and Mathematics Assessments (EGRA/EGMA). In addition, another goal of this chapter is to examine the relationship between volunteer teachers, community participation, and these outcomes. An inferential approach is important because, as shown in the previous chapter, there are a variety of student, family, and school factors which affect learning and assessed outcomes, often in complex and correlated ways. As noted, a Hierarchical Linear Modeling (HLM) approach will be used to account for students “nested” within sampled schools. I base this analysis on a conceptual framework which draws from educational effectiveness research, outlined in the second chapter. Further I seek to address the four key assumptions from the previous chapter, which I return to in the concluding chapter.

This analysis yielded some key findings. Despite controlling for factors that should explain the differences between schools, including teacher experience, school resources, and student characteristics, there remain significant differences between community and government schools both in numeracy scores and the likelihood of reading in local languages. Students in community schools perform worse on average than their peers in government schools. Further, there are other factors which cut across the parallel system: a school’s location in a rural area and low household socio-economic status are associated with lower performance on assessed numeracy and literacy.

In this chapter I discuss how regression models were chosen, and then interpret the findings. First, I will overview the outcome and predictor variables at various levels of the HLM: instead of using the terms independent/dependent variables, the term predictor will be used for the variables which correlate with an outcome variable. Next I outline the model building approach, or how I added predictor variables to reach final regression models, followed by the results for sets of models with numeracy and literacy
outcomes. I then illustrate key differences between the two school types, and then discuss
the findings.

**Variables: Test Scores, School Features, and Student and Teacher Attributes**

**Outcome Variables in Reading and Math**

The outcomes in the models are literacy and numeracy, or the proxies measured
by the Early Grading Reading and Mathematics Assessments (EGRA and EGMA, also
referred generally in this chapter as *reading* and *mathematics*). For mathematics, students
were timed on separate addition, subtraction, and number identification problem sections.
To create a more standardized measure, the total time and correct questions on all three
mathematics sections were combined: this outcome variable represents the correct
questions per minute for all sections.\(^{18}\) Averages of these, by school type, are presented
below in Table 5.

For reading, students were given a variety of tasks, including identifying the
sounds of letters, reading unfamiliar invented words, and reading a narrative text. I
consider the last item, termed oral reading fluency, as less problematic than other
indicators that have been critiqued for relying too much on English literacy teaching
concepts (Schroeder, 2013). However, a challenge in using oral reading fluency as well
as many of the other reading outcomes is the high prevalence of zero scores. For oral
reading fluency this was significant: 60-80% of students scored zero, meaning they were
not able to identify any words in the text. To demonstrate this I plotted the oral reading
fluency scores, as correctly identified words per minute, by the percent of assessed
students in either community or government schools (Figure 18). The results are fairly
stark: the vast majority of students in both schools did not identify a single word
correctly, while there were some students who appeared to have a high level of reading.

\(^{18}\) For the purposes of this analysis, I am not interested in analyzing addition, subtraction, and number
identification score as separate concepts, but rather my concern is with overall mathematics skills. Thus I
am using the combined scores as an outcome variable.
Comparative studies and reports on EGRA worldwide have also noted the high prevalence of zero scores particularly in Sub-Saharan Africa (Gove & Cvelich, 2011). While this may indicate lack of literacy or low levels of reading that were not measured by the instrument, it also poses an issue for regression as there is the assumption that error, or the remaining unexplained variance in the model, has a normal distribution. Further, this may indicate that there are two distinct groups of students: those who can read with varying levels of fluency, or emergent readers, and those which cannot read at all, so-called non-readers, as measured by EGRA tasks. The evaluation of the Time to Learn project, discussed in the fifth chapter, used four reading level categories: those with zero scores were classified as non-readers, followed by pre-emergent and emergent readers, and finally readers (Falconer-Stout et al., 2017).

One approach is to analyze reading outcomes as a binary indicator, or categorizing students into two groups: those that read one or more words in the text, or failed to do so (and obtained a zero score). A drawback of this approach is that it collapses variation between levels of readers by capturing a specific aspect of the data, the difference between a non-reader and a reader at any level. The proportion of zero scores by school type is found in Table 5, along with the correctly identified words per minute. A regression approach would seek to understand the average probability of a
student falling into one category over the other – reading or not reading – depending on whether they attended a community or government school. An added benefit of looking at zero scores, rather than variation in reading levels, is that this approach has been seen as a more reasonable way to compare EGRA outcomes across different languages. Gove and Wetterberg (2011) note that the inability to identify a single word in a text, or obtaining a zero score, is relatively comparable across languages, while there is evidence students learn to read at different rates in distinct languages, thus making cross-language analysis of the continuous oral reading fluency score problematic.

Table 5. Average Performance on Early Grade Reading and Mathematics Tasks by Grade 2 Students

<table>
<thead>
<tr>
<th>Variable (outcomes in bold)</th>
<th>Mean (Standard Error)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Community</td>
</tr>
<tr>
<td>Early Grade Reading (EGRA)</td>
<td></td>
</tr>
<tr>
<td>Oral reading fluency (words per minute)</td>
<td>3.12 (0.78)</td>
</tr>
<tr>
<td><strong>Oral reading fluency (percent of zero scores)</strong></td>
<td><strong>80.2% (3.0)</strong></td>
</tr>
<tr>
<td>Early Grade Mathematics (EGMA)</td>
<td></td>
</tr>
<tr>
<td>Correct addition problems per minute</td>
<td>7.01 (0.72)</td>
</tr>
<tr>
<td>Correct subtraction problems per minute</td>
<td>4.90 (0.53)</td>
</tr>
<tr>
<td>Correct number identification problems per minute</td>
<td>11.44 (1.20)</td>
</tr>
<tr>
<td><strong>Combined Mathematics score</strong></td>
<td><strong>7.67 (0.81)</strong></td>
</tr>
</tbody>
</table>

Predictor Variables at Student and Teacher/School Levels

While I discussed many of the variables used to predict literacy and numeracy outcomes in greater detail in the previous chapter, predictor variables will be briefly defined here, with any information about how the variable was collected or transformed for analysis. I chose variables for inclusion in the models based on theoretical importance, as outlined in the previous chapter, and information gained from the historical and political analyses in the earlier chapters. Statistical tests were used to determine the relative quality of models, however I overview these specifics in the next section.
Table 6. Predictor Variables Used in Math and Reading HLM Models

<table>
<thead>
<tr>
<th>Level</th>
<th>Predictor</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Student</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>Whether student was female</td>
</tr>
<tr>
<td></td>
<td>Age</td>
<td>The student’s age in years</td>
</tr>
<tr>
<td></td>
<td>SES</td>
<td>The socio-economic groups (low, middle, high) constructed from asset data through a principal components analysis</td>
</tr>
<tr>
<td></td>
<td>Parents’ Literacy</td>
<td>The number of parents or guardians who can read, according to the student (0: none, 1: one parent/guardian, 2: both)</td>
</tr>
<tr>
<td></td>
<td>Language</td>
<td>Whether language spoken at home was the same as the language mostly used by classroom teacher, both reported by student (0: different language, 1: same language)</td>
</tr>
<tr>
<td></td>
<td>Math textbook, math exercise book, local language reader</td>
<td>Whether the student reported having any of these learning materials and resources</td>
</tr>
<tr>
<td><strong>School/Teacher</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>School Type</td>
<td>Community school or government school (as reference group)</td>
</tr>
<tr>
<td></td>
<td>Rural</td>
<td>Whether the school was classified as rural, as opposed to urban</td>
</tr>
<tr>
<td></td>
<td>Class Size</td>
<td>The number of enrolled students in the selected Grade 2 class</td>
</tr>
<tr>
<td></td>
<td>Teacher Experience</td>
<td>The number of years a classroom teacher reported working in that role</td>
</tr>
<tr>
<td></td>
<td>Teacher/Head Teacher Certification</td>
<td>Binary variable indicating whether the classroom or head teacher had a certificate, diploma, or higher qualification, including bachelor’s degree</td>
</tr>
<tr>
<td></td>
<td>Appropriate # of Textbooks</td>
<td>Whether the school started the term with the appropriate number of textbooks according to Ministry policy, as reported by the head teacher</td>
</tr>
<tr>
<td></td>
<td>Community Participation</td>
<td>Groups (low, middle, high) for parent and community participation in schools, drawn from reports by head teachers and teachers through a principal components analysis</td>
</tr>
<tr>
<td><strong>Province</strong></td>
<td>Province</td>
<td>Name of the province in Zambia (as the highest level of administrative division in the country)</td>
</tr>
</tbody>
</table>
Hierarchical Model Building

Model building for HLM models, or the process of choosing which predictors should be included and excluded, is a challenging and often subjective process. Choices must be theoretically grounded but also statistically robust to explain variation in the model without overfitting. I briefly explore here my process for building and choosing models. First though, an important caveat for this analysis is that while many similar hierarchical linear models may have three levels for a school – student, classroom, and the school itself – my analysis utilizes two: student (Level 1) and the classroom with additional school variables (Level 2). This is because the sampling strategy was to assess 10 students from one Grade 2 class (or stream) at each school, since only large schools are likely to have more than one Grade 2 stream. Thus, predictor variables representing the school like school type, resources, and location will be at Level 2 with classroom and teacher indicators. As only one classroom and teacher were sampled at each school, this analysis will treat classroom and school as interchangeable in discussion of results.

An HLM was used for mathematics, as the outcome met the assumptions for this technique. For reading, the outcome is binary: being able to read one or more words in a text (coded as 1), or not able to correctly identify a single word (coded as 0). Because of this, a multilevel logistic model (as a type of Generalized Linear Mixed Model, or GLMM) was used to predict the probabilities and odds of obtaining a score more than zero in the oral reading fluency subtask, which I refer to in this chapter as “reading.” For comparability across both mathematics and literacy model sets, influential predictors were chosen based on the EGMA analysis, but relevant tests were used to compare models and avoid overfitting.19

In regression and other common statistical tests, social scientists have increasingly argued against relying primarily on p-values as the standard way of determining whether results are significant (Gardner & Altman, 1986; Hubbard & Lindsay, 2008). The concern is that researchers and practitioners tend to conduct studies until reaching significance despite the possibility of false positives, and emphasis is often

\[ \text{To build the final models, a sample-sized correction of Akaike Information Criterion (AICc) was used at each step to estimate the relative quality of competing models, and the model which had the lowest AICc score, and thus the best fit that minimized information loss, was chosen.} \]
placed on the statistical significance rather than the size of the effect, which may be minimal. Further, HLMs do not have a reliable and standard means of determining $p$-values (Bates, 2006). Where $p$-values are available in reading results, they will be considered along with the estimates and confidence intervals, representing the uncertainty of estimates; where $p$-values are absent in reading results, these additional measures of evidence will be used.

**Results**

I present results for mathematics and reading regression models in standard table form here, with 95% confidence intervals showing the conventional certainty of estimates. Figure 19 and Figure 20 depict the two final models with dot and whisker plots, with estimates being fixed effects, or effects which are constant across individual students within classrooms. Dots represent the estimate for each predictor variable, with colors or shades representing positive and negative correlations. Crossing through the dots are the whiskers, as horizontal lines representing confidence intervals. These visuals communicate the same content reported in tables but in a more readable way (Kastellec & Leoni, 2007). Visualizing results demonstrates that simply declaring an item significant based on $p$-values fails to present a comprehensive picture of estimates. Confidence intervals show that estimates vary, as predictors may have a “strong” effect but vary greatly, while others have a weak effect but little variance. In short, intervals point to how precise the estimate is, as well as its uncertainty. Predictors whose confidence interval overlaps with zero cannot be reasonably said to have an effect in terms of significance: in other words a factor has either a positive or negative correlation but also no impact as well, thus it is difficult to conclude with certainty whether there is a correlation at all. Thus, confidence intervals include the information encapsulated within a $p$-value, but they expand on it by showing the range of estimated values possible within the model.

**Mathematics**

Results from four EGMA models are presented below. Table 7 shows four successive models as predictors were added: Model 1 has all student, or Level 1, predictors; Model 2 adds the key predictor of interest, school type, along with school location; Model 3 includes additional teacher and school predictors; Model 4 adds community participation groups. In regression, the intercept refers to the expected value
of the math outcome if all factors are zero. This is important in statistics, as it is the base for all models; however, it is not always interpretable, as it is impossible to imagine a case where a student has zero age, or a teacher having zero years of experience, etc. The table is followed by Figure 19, which illustrates in another form the effects of the final model, Model 3. As opposed to reading, mathematics is a continuous variable representing the number of correct math items solved per minute. For example, the estimate of 0.4 for age means that for every year older a student is, their math score is expected to increase by this amount of correct items per minute. For dummy variables (binary items with values of 0 and 1), the estimate is the predicted increase between a group and the reference group, the latter being the category not represented.

Overall, we can see from the bottom of the table that there is more variation in combined math scores within schools than between them, indicating that differences in assessed numeracy are more substantial between students than between different schools. This means that schools (Level 2) explain only a small proportion of the total variation (the residual) in math scores, as seen by the intraclass correlation (ICC) scores in Table 7. Niehaus, Campbell, and Inkelas (2014) find this is common in multilevel studies in education. While a low ICC score indicates that an HLM model ultimately approaches an ordinary least square or single level regression model, I chose to continue with an HLM because it more accurately reflects the nested nature of students in schools. Further, Myers notes that HLM, even with low ICC, “explicitly models the dependency between observations, produces unbiased standard errors, and produces more stable slope and intercept estimates” (p. 669, cited in Niehaus et al.), which are essentially the main output of a regression model used to estimate an outcome.
Table 7. Hierarchical Linear Models Predicting Early Grade Combined Mathematics Scores

<table>
<thead>
<tr>
<th>Fixed Effects</th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>3.08 (.75)</td>
<td>4.54 (.82)</td>
<td>4.19 (1.23)</td>
<td>4.10 (1.23)</td>
</tr>
<tr>
<td>Female</td>
<td>-.33 (.16)</td>
<td>-.33 (.16)</td>
<td>-.11 (.18)</td>
<td>-.10 (.18)</td>
</tr>
<tr>
<td>Age</td>
<td>.42 (.06)</td>
<td>.43 (.06)</td>
<td>.36 (.07)</td>
<td>.36 (.07)</td>
</tr>
<tr>
<td>SES (middle)</td>
<td>.54 (.20)</td>
<td>.48 (.20)</td>
<td>.64 (.26)</td>
<td>.13 (.40)</td>
</tr>
<tr>
<td>SES (high)</td>
<td>1.56 (.31)</td>
<td>1.18 (.33)</td>
<td>1.49 (.38)</td>
<td>.92 (.53)</td>
</tr>
<tr>
<td>Parents’ literacy</td>
<td>.44 (.15)</td>
<td>.44 (.15)</td>
<td>.36 (.17)</td>
<td>.34 (.17)</td>
</tr>
<tr>
<td>Language</td>
<td>-.44 (.20)</td>
<td>-.42 (.20)</td>
<td>-.48 (.22)</td>
<td>-.48 (.22)</td>
</tr>
<tr>
<td>Math textbook</td>
<td>.97 (.25)</td>
<td>.91 (.25)</td>
<td>.81 (.28)</td>
<td>.82 (.28)</td>
</tr>
<tr>
<td>Math exercise book</td>
<td>.92 (.24)</td>
<td>.87 (.24)</td>
<td>.90 (.26)</td>
<td>.88 (.26)</td>
</tr>
<tr>
<td><strong>School type (Community)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>-1.55 (.42)</td>
<td>-1.06 (.44)</td>
<td>-1.02 (.44)</td>
<td></td>
</tr>
<tr>
<td>Class size</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
<td></td>
</tr>
<tr>
<td>Teachers’ years of experience</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher certification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Head Teacher Certification</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Appropriate # of textbooks</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation (middle)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participation (high)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Random Effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES (middle)</td>
<td>3.69 (1.92)</td>
<td>3.76 (1.93)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SES (high)</td>
<td>.79 (.89)</td>
<td>.77 (0.88)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>n Students (Schools)</td>
<td>2731 (333)</td>
<td>2731 (333)</td>
<td>2206 (269)</td>
<td>2206 (269)</td>
</tr>
<tr>
<td>ICC for School/Prov</td>
<td>.001 / &lt; .001</td>
<td>.001 / &lt; .001</td>
<td>.002 / &lt; .001</td>
<td>.002 / &lt; .001</td>
</tr>
<tr>
<td>AICc</td>
<td>16321.14</td>
<td>16307.15</td>
<td>13189.08</td>
<td>13190.16</td>
</tr>
<tr>
<td>R²</td>
<td>.348</td>
<td>.346</td>
<td>.383</td>
<td>.385</td>
</tr>
</tbody>
</table>
With the final model as reference, the takeaway from these models is that some factors at student and school level are more clearly associated with mathematics scores, while the evidence for other factors is less clear. The strongest predictor, controlling for other factors, is SES: on average, a student coming from a high socio-economic family has an average score of 1.5 correct questions more than those from low SES backgrounds, while middle SES students on average score 0.6 more questions compared to low SES.\textsuperscript{20}

\textsuperscript{20} As seen in Table 3, socio-economic groups were used as a random effect for Model 3 (the final model) and 4, since results from AICc demonstrated their addition explained more variation. Thus, there was evidence that social class had a different association with math outcomes at different schools, not just at the individual student level.
Attending a community school, as the predictor of interest, had a clear negative association with mathematics scores, with an estimate of about -1. This means that students at community schools, who match on all other recorded factors with peers at government schools, are predicted to score one less correct question per minute. At the same time, there is evidence this inequity widens across locations: a rural community school student is predicted to score two less items per minute compared to urban GRZ students. A difference of two items is consequential considering the mean score outcome for the sample is less than 9 for government schools, and less than 8 for community schools. However, estimates for school type and location in the model have relatively wide confidence intervals, indicating there is substantial variation in the outcomes in both types of schools.

There are other associations which are useful to explore, moving through each model. Model 1 demonstrates the associations of student-level predictors on math scores before considering school level factors. Being female is associated with a small negative difference in scores: female students on average score one third of an item per minute less than male peers. Controlling for gender, a student’s age translated to less than half an item, thus being older is correlated with a slightly higher math score. In a result which is not intuitive, speaking the same language at home as that in school is negatively associated with math outcomes. There may be different reasons why this is the case, which I explore in the next section. The last predictors at the student level, having a math textbook or exercise book, is not surprisingly associated with a higher score, each correlated with an additional correct item on the assessment.

Key school predictors were added in Model 2. Even controlling for the student level factors noted above, attending a community school is associated with one less correct item per minute, compared to being in a government school. School location is also important: those in rural schools scored on average 1.5 more correct questions. However, this estimate is lower when considering other school factors, which indicates that other aspects of the school or classroom help explain variation previously attributed to a school being rural or urban. In Model 3 class size, teacher and head teacher experience and qualifications, and the availability of textbooks are not clearly correlated with math outcomes. However, results from AICc indicates that they are useful controls,
as they explain variation in the model. When the community participation groups were added to Model 4, they did not have a clear association with the outcome, and AICc did not identify this as the best model compared with the others. Thus Model 3 will be considered the final model (and is depicted in Figure 19).

**Reading**

I conducted four GLMM models to predict the odds of whether students were able to identify one or more words in a reading passage, as seen in Table 8 and Figure 20. The table uses the same format as the mathematics models but estimates are reported in odds ratios, with asterisks indicating the level of significance according to $p$-values. Figure 20 displays the predicted odds ratios for the final model, Model 4. As noted above, this outcome was reverse coded with 0 being unable to correctly identify any words in the passage and 1 for identifying one or more words. This also makes it easier to compare with math as positive estimates signal increases rather than decreases in assessed outcomes. For brevity, being able to read one or more words in the oral reading fluency subtask will be referred to as “reading.”

While logistic regression outputs log odds estimates, I report the more interpretable odds ratios. Odds ratio represent the relative odds that an outcome will happen (in this case, reading) given a predictor variable, compared to the odds of the absence or decrease of that variable (Szumilas, 2010). An odds ratio of one signals equal odds for each increment or between groups, while larger than one indicates a predictor is more likely to result in an outcome and less than one, less likely. Thus the reference line in Figure 20 is set at one. Less student and school factors are included in reading models compared to the math models, due to the constraints of computing generalized linear mixed models (GLMM). While $p$-values are shown, significance should be considered alongside other factors, including odds ratio estimates and accompanying confidence intervals.
Table 8. Generalized Linear Mixed Models Predicting Odds of Oral Reading Fluency

<table>
<thead>
<tr>
<th>Fixed Effects</th>
<th>Model 1 Odds Ratio (CI)</th>
<th>Model 2 Odds Ratio (CI)</th>
<th>Model 3 Odds Ratio (CI)</th>
<th>Model 4 Odds Ratio (CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Intercept)</td>
<td>0.06*** (0.01 – 0.24)</td>
<td>0.07*** (0.02 – 0.28)</td>
<td>0.47 (0.07 – 3.01)</td>
<td>0.17 (0.01 – 2.01)</td>
</tr>
<tr>
<td>Female</td>
<td>0.74*** (0.73 – 0.75)</td>
<td>0.74*** (0.73 – 0.75)</td>
<td>0.74*** (0.73 – 0.75)</td>
<td>0.76*** (0.74 – 0.77)</td>
</tr>
<tr>
<td>Age</td>
<td>1.07*** (1.06 – 1.07)</td>
<td>1.06*** (1.06 – 1.07)</td>
<td>1.06*** (1.06 – 1.07)</td>
<td>1.07*** (1.07 – 1.08)</td>
</tr>
<tr>
<td>SES (middle)</td>
<td>1.44*** (1.41 – 1.47)</td>
<td>1.44*** (1.41 – 1.47)</td>
<td>1.44*** (1.41 – 1.47)</td>
<td>1.17*** (1.13 – 1.21)</td>
</tr>
<tr>
<td>SES (high)</td>
<td>1.83*** (1.77 – 1.90)</td>
<td>1.66*** (1.61 – 1.72)</td>
<td>1.66*** (1.61 – 1.72)</td>
<td>1.36*** (1.30 – 1.43)</td>
</tr>
<tr>
<td>Parents’ Literacy</td>
<td>1.28*** (1.26 – 1.30)</td>
<td>1.25*** (1.23 – 1.27)</td>
<td>1.25*** (1.23 – 1.27)</td>
<td>1.28*** (1.26 – 1.30)</td>
</tr>
<tr>
<td>Local Language Reader</td>
<td>2.23*** (2.17 – 2.29)</td>
<td>2.23*** (2.17 – 2.29)</td>
<td>2.06*** (2.00 – 2.11)</td>
<td></td>
</tr>
<tr>
<td>Language</td>
<td>0.73*** (0.71 – 0.74)</td>
<td>0.73*** (0.71 – 0.74)</td>
<td>0.72*** (0.70 – 0.73)</td>
<td></td>
</tr>
<tr>
<td>School type</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Community)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>0.16* (0.04 – 0.68)</td>
<td>0.21* (0.05 – 0.85)</td>
<td></td>
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<tr>
<td>Class size</td>
<td></td>
<td></td>
<td></td>
<td>1.00 (0.99 – 1.01)</td>
</tr>
<tr>
<td>Teacher Certification</td>
<td></td>
<td></td>
<td></td>
<td>1.78 (0.32 – 10.01)</td>
</tr>
<tr>
<td>Participation (middle)</td>
<td></td>
<td></td>
<td></td>
<td>1.22*** (1.18 – 1.26)</td>
</tr>
<tr>
<td>Participation (high)</td>
<td></td>
<td></td>
<td></td>
<td>1.47*** (1.41 – 1.54)</td>
</tr>
<tr>
<td>ICC for School/Prov</td>
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<td>.668 / .204</td>
<td>.661 / .201</td>
<td>.675 / .177</td>
</tr>
<tr>
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<td>411545.8</td>
<td>390896.4</td>
<td>390875.0</td>
<td>372232.8</td>
</tr>
<tr>
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<td>2739 (333)</td>
<td>2739 (333)</td>
<td>2567 (311)</td>
</tr>
</tbody>
</table>

Notes: * p < .05  ** p < .01  *** p < .001
As can be seen in Table 8, the student level predictors in Model 1 are all significant with narrow confidence intervals, which means we can be relatively certain about the direction and size of the correlation with the outcome. Also, these predictors, with the exception of SES, stay fairly the same when other factors are considered in successive models. Being female has a negative effect, as it does in math, on the odds of reading: male students are 35% more likely to read than female peers, controlling for student factors. This means that, within this data, there is a gender gap within reading outcomes, with girls at the bottom. Students a year older have an increased 7% in their odds, compared to their peers. Students from high and middle socioeconomic households on average are more likely to be readers than low SES students. Also, students with literate parents have odds for reading increased by about a third for each parent who reads. Additional student level predictors were added to Model 2. These indicate that having a reader, like math resources, increase student’s odds more than two times.
Speaking the same language at home as in school was also significantly associated with decreased odds of reading.

Models 3 and 4 see the inclusion of the predictor of interest, school type, along with location and other school level factors. While Model 3 is useful to see the effect of adding additional variables, Model 4 will serve as the final model, and is explored in Figure 20. As with math, both school type and location are strongly and negatively associated with the outcome, or the odds of reading. GRZ students are more than 11 times more likely to be readers than community school peers. Further, students in urban schools are almost five times more likely to read than those in rural schools. There are relatively wide confidence intervals for these two predictors, compared to the rest of model factors. This signals that while one can be fairly confident about the direction of these associations, there is variance in their strength. Interpreting these intervals means that GRZ students are between 3 and 50 times more likely to read, and urban students between 17% more and 20 times more likely.

Like mathematics, the number of enrolled students in the class and whether teachers had certification were neither clearly associated with reading odds. Community participation, according to the groups generated through principal components analysis (see Appendix C), does have a significant correlation with being able to read according to the oral reading fluency task. Students at schools falling into the middle participation group were 22% more likely to read, or 47% in the high participation group, compared to those in the low group. This is more clear-cut than in the mathematics models where participation neither had a clear association nor helped explain outcome variation. That participation measures specifically included reading in one measure may contribute to this: teachers and head teachers were asked whether parents or community members helped teach reading in some way.

Across both sets of models for mathematics and reading, there emerge three key factors: school type (community or GRZ), school location (urban or rural), and socio-economic groups (low, middle, and high). These signal that students, holding all other factors constant, can have very different learning outcomes depending on what type of school they attend, where this school is located, and their household socio-economic
status. The regression models above point to key inequities that are worth exploring on their own, based on the data from these models.

**Visualizing Inequities**

To understand these inequities – as well as equities – in learning outcomes based on school type, location, and socio-economic status, I plotted predicted values from the final models (Figure 21). These are the predicted mathematics and literacy scores based on model estimates, holding all the other factors constant. Dots represent the average scores, while lines areas are the variance in terms of confidence intervals: solid lines represent community schools, while dotted lines are government schools. For mathematics, values are in terms of number of correct math items per minute. Literacy predictions take the form of probabilities that differ from the odds ratios presented above: these refer to the probability of reading in the oral reading fluency task, presented in percentage. For example, a student with 100% probability would be predicted to read, while one with 0% probability would not be expected to read any words correctly. Further, a student with 50% probability would have equal odds of reading or not.
These plots show several important inequities, and the uncertainty around estimates, between GRZ and community schools, urban and rural schools, and SES groups. First, for all four plots the average predicted value for GRZ students, represented by dots, falls outside the confidence interval for community school students. This means that differences based on school type are significant and possibly meaningful in the models above. However, an overlap in intervals indicates that there are students in community schools who are expected to score the same or better than some of their peers.
in government schools. The top left plot describing predicted math scores based on location demonstrates that there is about one correct item per minute difference between both school types and locations. Here there is a slightly larger variation in student outcomes in urban schools than in rural schools. This indicates that students in urban settings are more likely to do better, but there is more departure from the norm. While rural students are more similar in their scores, they would perform on average worse than peers in urban schools. With the top right plot, socio-economic status seems to have a similar effect on both types of school. In both, but more so with community schools, there is variation in predicted scores, indicating a wider range of expected student outcomes.

For predicted literacy outcomes, the results are more dramatic. However, probabilities are constrained by 0 and 1: probability takes the form an s-curve where it approaches but fails to reach either no probability or certain probability. Because of this, there is less information about probabilities approaching zero, which some of the community school student predictions do. In the bottom left plot, there is a gap between urban and rural schools as well, and community school students have quite lower predicted probabilities. Again here, the variation is relatively large for both types of school. Socio-economic status on its own seems to have less association with predicted outcomes than location. GRZ students have a greater variation on outcomes, although it’s difficult to tell the exact confidence interval for community school students, as it is close to zero.

These plots reinforce the findings that there are inequities between community and government-run institutions, urban and rural schools, and socio-economic groups. There is a fairly wide gap between community and government school students in terms of the likelihoods of students reading, although this divide is not dramatically widened across socioeconomic groups. With math outcomes, there is a more consistent but smaller gap across these factors. The difference between school types is about the same across different locations and social class groups, thus distinctions between socio-economic status are neither amplified nor dampened within community or government schools. While there remains uncertainty in these estimates, location and social class remain
powerful attributes to make sense of not only the variation in community schools but in government institutions as well.

**Discussion**

Using two different regression approaches, I looked at the student, teacher, and school factors that were most associated with combined math scores and the probability of reading, or identifying any words in a written text. However, the resulting estimates of influential factors were similar across models both in their direction and relative strength. This indicates that student, teacher, and school attributes had similar associations with both mathematics and reading outcomes. Among these factors, there were results which were somewhat intuitive while others were more puzzling. School type was the key predictor across analyses: in both sets of models, attending a community school was negatively associated with numeracy and reading scores. This means that a typical student in a community school had lower math outcomes and was more likely to be a non-reader. It is not surprising that community schools underperform GRZ schools, as previous chapters have emphasized that the general assumption and position of the state and civil society actors is that there is inequity and community schools need some level of assistance.

What is surprising, however, is that inequity in outcomes still remains after controlling for many of the factors that should explain this difference. These factors included teacher credentials, teaching and learning resources, school location, class sizes, and student characteristics. The caveat is there is variance in the confidence of these estimates, indicating that inequity is wider between some schools and narrower between others. I explore the other factors making up the models below, from expected results to more surprising findings, and then return to discuss the main predictor variables.

There were other factors associated with math and reading outcomes which were less than surprising. Age had a positive association in both model sets, and this makes sense because of the development of cognitive and behavioral skills that impact reading (Crone & Whitehurst, 1999), as well as the additional exposure to oral language and written texts. An analysis more interested in the effect of age could take into consideration the small proportion of students who repeated Grade 2 and move towards decoupling grade repetition and beginning primary education later. Household socio-
economic status, as measured through an assets principal component, and parents’ literacy, as a proxy for parents’ education, were both correlated with learning outcomes. In addition, learning materials used by the students in the subject area, from mathematics textbooks and exercise books to readers in the local language of instruction, were tied with increased numeracy and literacy scores.

In contrast, some other estimates were less intuitive. For instance, teacher certification did not have a clear association either way with math or literacy scores, and head teacher certification and classroom teacher experience equally did not have an obvious relationship with math outcomes. This means that when controlling for other influential factors, neither a class teachers’ graduation from teachers’ college nor having a certificate or other higher qualification were connected with their students having increased or decreased assessed numeracy and literacy. Estimates in both models show wide confidence intervals, signaling that certification is associated with a wide range of positive and negative assessments scores, without a clear pattern emerging.

Surprisingly, students who spoke the same language at home and in school had on average lower math scores and lower likelihood for reading. However, the indicator used masks how different languages may have a different impact on learning, as well as the role of multilingualism. For example, some students speak one Zambian language at home while they learn another at school. In contrast, others speak English at home, which is more common in higher SES households, and have instruction in a local language in the early grades, as per policy. Further, the School Snapshot instrument did not measure multiple languages spoken within households. For example, English may be spoken at home along with a local language that may be the same as that taught in school. Finally, there are notable differences between academic and spoken local languages: for example, Nyanja is an official language taught in schools, while the dialect used in larger cities called “Town Nyanja” was so distinct that separate language learning guide has been recently published (Gray, Lubasi, & Bwalya, 2013). In short, these examples indicate that there are a variety of situations around language of instruction and home language that are collapsed together in a single indicator in the data.

As noted, community participation was also an area that was not captured at great depth in the data. The level of participation in schools, represented in my models by
principal component groups, was not clearly associated with math but was connected with the likelihood of reading. This indicates that community and parent participation—like monitoring attendance, textbook availability, and school projects—occurred more in schools where reading outcomes were higher. This indicator was itself quite limited in how it was measured: I outline the issues with this approach in the section on limitations below.

Both school type and location had relatively strong correlations with both numeracy and literacy outcomes: students attending a community school had on average lower expected scores and likelihoods than those in government schools, while students in rural schools were behind those in urban schools. This indicates that the type of school and its location matters for students in terms of assessed learning. However, the extent to which it matters is less clear as both estimates have considerable variation in the two sets of models. This suggests a bifurcation in the parallel system: instead of inequity merely between government and community schools, there were rifts whether schools were located in urban or rural areas. Another factor equally influencing outcomes, as noted, was socio-economic status, where students coming from wealthy households, as measured by household items, are more likely to score higher on math and read.

**Limitations**

Like any other research endeavor, the analyses in this chapter have limitations. Some are general limitations about the tools and methods involved, while others are specific to the data and indicators used. In general, the results presented above were specifically limited to emphases of associations and correlations between predictors and math and literacy scores, rather than positioning them in a causal order. The analyses fall short of operating as causal models, where coefficients can serve as estimates of actual effect. Thus they operate in the less problematic domain of “correlations and cross-tabs,” outlined by Klees (2016) in a critique of casual regression approaches. I provided a more nuanced discussion of the general limitations of regression in the third chapter. Thus, while models above demonstrate a correlation between school type and student outcomes, they do not address whether or how community schools cause or contribute to lower test outcomes.
As noted, despite the efforts to validate and test both EGRA and EGMA instruments, results from assessments still serve as proxies for learning outcomes. The use of proxies, however, is reasonable within a critical realist framework, where any exact approximations of the “real” are impossible. Yet the one-on-one delivery and the spoken nature of these assessments gives both an advantage over the written tests used prominently in later grades. Yet both only show particular aspects of learning reading and mathematics, out of which a few indicators were taken as outcomes for these analyses. Further, the prominence of zero scores in EGRA subtasks suggests there may be more variation at low levels of assessed performance than is captured by the tool. Some studies have focused on analyzing “zero scores” as they are present in the data. However, the drawback to this is that it may suggest a deficit approach to literacy, or categorizing students by their inability to read, which in turn may not be adequately measured by the assessment tool.

In the results from the regression models, it was not clear how community participation is associated with learning and other outcomes. The indicators in the School Snapshot tool (SSME) were very shallow in their assessment of parent and community involvement in schools, as noted. These did not capture whether parents were occasionally or actively participating in school affairs. Also, indicators did not shed light into the specific differences in management between the different parent/community organizing bodies - PTAs in GRZ schools and PCSCs in community schools - which was highlighted in interviews.

Another limitation was that the sample likely did not include non-registered community schools, or schools which did not follow the registration guidelines as outlined in the Operational Guidelines in order to be recognized by district education officials. The national assessment conducted in collaboration with the Ministry of Education most likely drew on official lists of schools for sampling purposes. As indicated in interviews, as well as a more systematic estimation by Time to Learn (Falconer-Stout et al., 2017), there are more community schools operating than those officially counted by the Ministry. While the sample provides a picture of the official school system, it is not clear how the likely absence of unregistered schools skews estimates from the true population of schools. Finally, there were issues with model
convergence for the EGRA generalized linear models, particularly when additional school factors beyond school type and location were added. This may have affected the precision of estimating confidence intervals for the estimates.

**Conclusion**

In previous chapters I outlined the history and politics that led to a parallel system of schooling consisting of government and community schools. In chapter six and this chapter, I found significant and meaningful inequities between these school types in terms of assessed literacy and mathematics outcomes, with community school students behind state school peers. There were additional rifts between outcomes associated with household socio-economic status and school location. Further, there was more variation between students than schools, which signals larger gaps within schools than on average than between them.

Overall, there were intuitive findings mixed with more surprising results, in terms of the associations between student, school, and teacher factors on literacy and numeracy outcomes. There was not reliable evidence, given the limitations of the data, to assess whether community participation or volunteer teachers were associated with increased literacy or numeracy scores. However, certification was not clearly tied with outcomes either way, contrasting with the Ministry’s emphasis on replacing uncertified volunteers in community schools with government posted teachers. Despite limitations from both the nature of the analysis and the underlying data, this analysis provides further evidence of a parallel system of education constructed and reinforced by a particular state/society bordering. In the final chapter I discuss the implications of these findings along with those in previous chapters, and explore terrains for future inquiry.
Chapter 8: Conclusion

As long as community schools are run by untrained personnel, the quality of education will always be compromised. As long as the … teachers in the community schools remain unpaid, in one way or the other, the attrition of teachers will continue. Meaning that [schools] will always be changing one teacher for the other, because of dissatisfaction in terms of remuneration. And that means even the quality of education will be affected ... So these are some of the issues that have been expressed … by different people. (District Ministry of Education official, 19 August 2016)

In this dissertation, I have sought to understand why community schools in Zambia have persisted over time, how the provision of schooling by local communities in the past decades sheds light on the shifting border between state and society, and whether their quality is comparable with state schools. As I explored in the first chapter, I encountered the paradox of community schools in Zambia when I was a Peace Corps volunteer nearly a decade ago. For me, this paradox centered on some parents having, by default, far more responsibility than others for their children’s schooling, depending on whether their children attended a community or government school.

In this concluding chapter, I first summarize the main findings by chapter. Next I discuss overarching conclusions, in terms of community schools reflecting a state/society border, and revisit the key assumptions about community schools that I outlined in the sixth chapter. After this I explore the implications this dissertation has for policy, practice, and theory, and lay out further areas for research.

Key Concepts and Findings by Chapter

In the first chapter, I introduced the problematic for this study, overviewed the political context in Zambia since the 1990s, and touched on scholarly work on community participation, schooling provision, and political theories of the state. I defined the concept of state/society bordering as the imagined division that portrays state and society as distinct and separate entities and outlines the powers allotted to each. In the second chapter, I situated the study in the fields of comparative education, political science, and sociology, and identified two main gaps in the literature on community-based schools: a lack of political analysis of community schools, and insufficient
comparative evidence on student learning at early grades at community and state schools. To set up the study, I argued that both state theory and contextual comparison should be “brought back” to the study of education systems.

In the third chapter I explained the methods and approaches I used to gather and analyze data at the national/historical and school/empirical levels. I explored how my use of critical realism justified mixed methods research and allowed me to better understand processes and causation. I also described the research context and provided an overview of the policy analysis, historical research, analysis of public opinion data, and hierarchical linear modeling of math and literacy assessments scores used to understand the history, political context, and current learning outcomes of community schools.

In the fourth chapter, I explored how communities built schools during the era of President Kaunda, prior to the 1990s, despite a strong rhetoric of the state expanding the national school system. Community schools after 1991 grew rhizomatically from an economic crisis, a reduced state financing of schooling, and a context of structural adjustment and reform. Despite their prominence and dramatic growth, I noted the difficulty of determining the exact number of community schools over time.

As discussed in the fifth chapter, I found that the bordering between state and society in relation to community schools shifted after 1991, from an explicit neoliberal framing of community participation to a parallel public school system in which the state took symbolic control over community schools while leaving the main responsibilities to communities. Overall, the Zambian state was able to translate an organic school-building movement into a framework of induced participation in schools: in policies and guidelines, communities were recognized and framed, and certain responsibilities and power in schools that were allotted to parents. This process was supported and promoted by policymakers but also historians who saw community schools as largely emerging in the 1990s within an environment of deregulation and liberalization. Yet there were additional complexities that demonstrated how the state/society bordering promoted by the state was disputed, rearranged, and negotiated at local levels. In particular, the Zambian public diverged from the state’s conceptions of state/society partnership and largely continued to view the national government as responsible for providing and managing schools.
In the sixth chapter, I explored four assumptions about community schools which were then tested to varying extents by hierarchical linear models (HLM) using early grade numeracy and literacy outcomes. The primary finding was that community schools served similar students as GRZ schools, although the former had fewer resources and less qualified teachers. In the seventh chapter, I demonstrated, using HLM and GLMM models, that community school students were significantly behind government school peers in numeracy and literacy outcomes, even after controlling for influential factors. While there was inequity across types of schools, I found that school location and household socio-economic status were also strongly correlated with student learning outcomes, suggesting that other rifts contributed to inequity within a parallel system of schooling.

**Community Schools as De Facto Public Institutions: Crosscutting Themes**

Now that I have reviewed the major findings from each chapter, I now explore seven crosscutting themes from the dissertation. The first three relate more specifically to the implications of state/society bordering while the other findings revisit key assumptions about community schools. Together, these findings support the overarching argument of this dissertation that community schools are, in fact, de facto public schools and constitute part of a parallel but unequal system in Zambia.

**Between State and Society: Political Ramifications of Community Schools**

(1) **Community schools are largely de facto public institutions.** At no point in my research did I find evidence from policies or interviews that community schools were intended to offer a radical alternative to government schools. Instead, these schools were largely positioned in policies as complementary to the existing state schooling system, as a community-based response to the state’s failure to build or expand schools. The adoption of the national curriculum and the prohibition of private ownership of community schools suggests parents want their children to participate in public schooling, or a form closely like it. Unlike private and grant-aided institutions, both community and GRZ schools are required to ensure access to all children. At least from a policy standpoint, it is difficult to see community schools as anything but public, meaning they are open to all Zambians who can access them and are a legitimate and legal avenue to fulfill one’s right to education.
(2) Maintaining a state/society border has allowed the state to set the terms for community schools. Despite functioning as public institutions and serving very similar populations, community schools are portrayed in policies as substantially different from government schools, in terms of who is responsible for building, operating, and sustaining them. I have found that this distinction is promoted through a bordering between state on one hand and society on the other. Despite the promotion of an open marketplace for education, and partnerships between various entities to deliver social services since the 1990s in Zambia, the “ideological project” of the state creating a coherent entity of society and community, and rendering itself distinct from both (Abrams, 1988), was very much at play.

This bordering functioned to separate society from the state, but did not make society or communities autonomous. Through registering and writing guidelines for community schools, the Zambian state and Ministry of Education has “recognized community” around community schools and essentially created communities as manageable, coherent spaces where before there were simply networks of villages, families, and settlements (Dill, 2013). While guidelines have committed the Ministry to provide more support to community schools, these frameworks have also outlined the terms for what parents, local leaders, and other community members are expected to do. Further, the legitimation of community schools in the period of multiparty democracy has made them a valid educational institution in their own right, instead of a starting point for a government school that was initiated by the community – which was the de facto arrangement prior to the 1990s. This particular state/society arrangement in terms of public education has allowed the Zambian state to maintain relatively low funding for education, while simultaneously ensuring nearly all Zambian children have access to either a government or community school.

(3) Guidelines and unequal funding have resulted in unequitable expectations of parents. These two findings return me to one of the main drivers of this study: why parents whose children attend community schools are responsible for so much in these schools, including building structures, hiring and paying teachers, and supervising learning. Even with the increase of funding the Ministry of Education has committed to community schools, the use of volunteer teachers and lack of full state funding mean
parents have to subsidize their children’s schooling far more than in government schools. The findings in this dissertation suggest that this inequity is supported and sustained by the state’s promotion of a state/society bordering that casts state and community schools as intrinsically belonging to different entities: either the bureaucratic apparatus of the state or local villages, communities, and groups of parents.

**Inequalities across Parallel Tracks: Revisiting Key Assumptions about Community Schools**

In the beginning of the sixth chapter, four key assumptions about community schools were highlighted that inspired and informed the multilevel models in this chapter. In revisiting these assumptions here, I explore findings and themes that emerged from multilevel analyses of math and literacy outcomes. These findings compliment the themes noted above, as I explore the inequity in school outcomes, while previously I look at distinctions between school inputs, specifically the responsibilities expected from parents. Overall, the themes and findings have clear implications for community-based schools in Zambia and beyond, which I continue to address in the following section.

**4. Community and government schools make up a parallel public system.**

The quantitative analysis supported my argument that community schools are quasi-public and the assumption that they operate in parallel with state schools. Descriptive statistics, explored in the sixth chapter, demonstrated that the sampled government and community schools serve very similar populations: students were equally likely to come from different socio-economic groups, and both schools were found in rural and urban areas.

The parallel system was bifurcated not only by school type but also by where schools are located and what kind of households students come from. Inequities related to school location have already been identified as a problem by the Ministry of Education and have been the focus of policies and reform. For instance, the Ministry has highlighted lower learning outcomes and resources in rural schools and has thus motivated teachers to work at these schools by offering rural hardship allowances.

However, the impact of socio-economic class on education is less prominent in policies. The exception is scholarships, known as bursaries, provided for orphans and vulnerable children to continue their post-primary education. While education’s role in
reinforcing inequalities was a point of focus during the Kaunda years, despite the fact there were limited efforts to systematically address it, this concern has been relegated to the backdrop in the post-1990s era of neoliberalism. Yet there is little evidence in literature that opening social services to the private sector and non-state organizations has by itself increased outcomes overall or reduced inequities. In reviewing evidence on private schools in developing countries, Ashley et al. (2014) note there is inconclusive evidence that low-cost schools are reaching the poor, are affordable, or have a sizable impact on learning compared to government schools. In this dissertation, I provided further evidence for the latter point.

(5) Variance among community schools, and examples of successful schools, are overshadowed by significantly lower outcomes compared to government schools. In this dissertation I demonstrated there was variation between community schools in their attributes, including teachers, students, and learning outcomes. At the same time, in interviews with Ministry officials, NGO staff, and University lecturers, there was the frequent mention of outstanding community schools. My results do signal there were high performing community schools that may have leveraged community effort and available state and non-state funding and resources to provide a quality education on par with some GRZ schools. At the same time, there were many community schools with very low outcomes, suggesting these schools may have struggled to obtain sufficient resources and retain quality volunteer teachers. Further, there were likely unregistered schools that were not included in the data. I provided evidence that students in community schools can outperform their peers in some government institutions, when controlling for factors at the student and school level which may impact their performance on reading and math. However, the average performance of community school students was both significantly and meaningfully below that of the GRZ student mean. At the same time, and an important caveat to this finding, there was a larger variation within schools than between them. This suggests there was a greater distance between students in the same classroom, in terms of assessed literacy and numeracy, than distinctions in the mean scores between schools.

(6) Community schools, for the most part, are not providing a strong foundation for the development of literacy and numeracy skills. It is difficult to
conclude that many community schools are educating students in basic literacy when 80% of Grade 2 students in these schools could not identify a single word in a reading passage, with a majority failing to identify letter sounds and so-called non-words. Performance on the math items was relatively better. This is perhaps not surprising as literacy, requiring phonological and phonemic awareness, word identification, and comprehension, is in general a more complex task than addition or subtraction problems.

While community schools lagged behind government schools, the latter also struggled to meet goals of teaching literacy: 60% of GRZ had zero scores on the same reading item. It should be noted that low levels of assessed literacy in early grades is not unique to Zambia. Research by Uwezo in Kenya, Uganda, and Tanzania (2012) found that only one third of Grade 2 students had basic literacy and numeracy, as assessed by tests similar to EGRA/EGMA, albeit abbreviated. More striking was the finding by Uwezo that one out of five Grade 7 students did not meet these same Grade 2 literacy and numeracy standards.

Another concern that impacted both community and GRZ schools was the differences in achievement between male and female students. Girls on average performed worse in math and literacy outcomes. This gender difference was reduced in mathematics after the inclusion of school-level factors, meaning that some distinctions between boys and girls were explained instead by these predictors. However, this difference in reading attainment was pronounced and consistent across models. This suggests that while Zambia has achieved very close to gender parity, in terms of 50% of the primary student body being female, the global focus on equal access to schooling has not yet translated to girls are reaching equivalent learning outcomes as boys (The World Bank, 2018; World Economic Forum, 2018).

(7) The evidence that active communities and passionate volunteer teachers make a difference is elusive. My analyses were inconclusive as to whether community involvement and volunteer teachers were associated with student outcomes either in community or government schools. A weakness of my analysis was a lack of robust measures of parent participation and teacher volunteerism. According to available measures of community participation, parents and community members were involved in somewhat different ways in community and GRZ schools. This aligns with roles
prescribed in policy and further highlighted in interviews. Overall, there were no strong differences in these measures of community support between school types. Urban parents were more likely to be involved in schools, as demonstrated by the principal components analysis: this may have been tied with social class, as high SES households were more common in urban areas, and families may have had the education and resources to contribute to schools. On the other hand, Afrobarometer data provided evidence that community organization in general was more prominent in rural settings, irrespective of social class.

One of the main strategies by the government to improve the quality of community schools has been to ensure that more certified teachers work in these schools. This has typically involved government salaried teachers being posted to community schools, but in some cases local government has sponsored existing volunteer teachers to attend teachers’ colleges (Interview, August 19, 2016). Yet surprisingly, teacher certification does not correlate with higher student scores in math or literacy. This finding is in contrast with other studies also in lesser developed countries, which have found significant correlations between tests and teachers’ education (Glewwe et al., 2011). Whether uncertified teachers were volunteers was not clear in the data. Falconer-Stout et al. (2017) surveyed employment status in 105 sampled community schools in Zambia, and found that 53% of teachers were volunteer teachers, compared to those on government salary, with a minority being retired teachers. Around half of the total teachers lacked any professional qualifications, although it was not clear whether this is the same half that volunteered.

In short, Zambia has continued to have a public education system starkly divided by a state/society border, which has clear inequities in terms of assessed student learning. However it is not always clear how to interpret inequities. Since the data was from a single time point, it is not apparent whether inequities between community and GRZ schools in terms of numeracy and literacy have been narrowing or widening. The Ministry noted the gap between these schools has been closing from 2006-2014, according to its Grade 5 national assessment (Chilala et al., 2014), which tested mathematics, life skills, local languages, and English. However, the qualification for this claim is that this has been caused by a decrease in the aggregated score for GRZ schools,
while community school outcomes have stayed relatively constant. In other words, these data do not suggest that community schools were catching up in terms of outcomes. However, bilateral projects like Time to Learn have demonstrated that working directly with community schools can increase literacy skills as measured by the EGRA (Falconer-Stout et al., 2017).

**Implications for Policy and Practice**

This study has resulted in implications that can inform the work of three main groups: international bodies and non-government organizations working in education, national and local educational policymakers beyond Zambia, and policymakers and local non-government organizations in Zambia. Since the involvement of these groups in public schooling can vary widely, I explore these implications more by topic than by group: some recommendations may apply to more actors than are noted here.

For national or local policymakers beyond Zambia, as well as international NGOs, particularly those considering implementing or supporting community school models, it would be useful to categorize these schools by funding source and aim, using tools like the community school matrix presented in Table 1 in the second chapter. Who owns and manages schools is important because it can define whether institutions are sustainable and equitable. The aim of the academic curriculum is also key because it determines whether a school is alternative to government schools or may be operating as a de facto public school. Further, it is important for government policymakers and non-government practitioners to understand the current or potential relationship between community and state schools in any country, considering how assumptions about the state’s role in education are often implicit yet rarely explicitly laid out. I have demonstrated how community schools in Zambia find definition in contrast or parallel to existing state schools, and have been largely shaped and outlined by state policies. International NGOs working in host countries should carefully consider how community-based schools may support, diverge, or conflict with existing public institutions, and whether these schools may enhance existing inequities or create new ones. A body of work, most notably Ferguson (1994) have explored how international development work is far from politically neutral.
Further, policymakers should consider how various approaches to community schools can further construct, reinforce, or challenge a particular bordering between state and society. In the fifth chapter, I demonstrated how the Zambian state and particularly the Ministry of Education took different policy approaches to community schools, from largely ignoring them, to framing schools as alternatives, and then situating such schools closely within a parallel yet unequal public system. I also showed how each of these policy positions carried advantages and disadvantages for state actors, the public, and parents in terms of additional labor, time, and finances required to support schools, as well as confusion about who owned and was responsible for schools. The political considerations behind community-based schools are important for other national Ministries and NGOs, since, returning to the argument made by Carnoy (1992), many reforms already carry a conception of the state, despite the fact that few policymakers are aware of it or make it explicit.

Policymakers should seriously consider how the public view their role in schooling, especially when parents and others are given the responsibility to build, manage, and otherwise support schools. Public opinion, as I demonstrate, can diverge from existing schooling policies. This matters because, as scholars like Scott (1999) have demonstrated, induced state-led participatory projects can fail spectacularly if they are forced upon people and there is not a shared consensus of what the project does or where responsibilities lie. What does it mean for citizens if they feel that their contributions in schools go beyond ordinary civic or parental duties and are supplanting the work of the state? Government policymakers should take public voice seriously, as failure to listen may not only cause projects to fail, but can have political consequences as well.

Overall, policymakers should consider the implications of having a parallel system of schooling at all, especially where expectations of parental investment, both of time and finances, are not equal. This could have political implications, particularly if community-based schools are more prominent in areas that oppose the current government, although it is not clear this is the case in Zambia, where community schools are present everywhere in the nation. In lower income countries where a great percentage of the population relies on subsistence farming and can make less than two dollars a day, additional responsibilities which require parents’ time and money are unrealistic and
unjust, and would cause students to drop out of the system. Requiring some parents to carry more responsibility than others depending on the school type closest to them works against the Sustainable Development Goals, which call for all children to “complete free, equitable and quality primary and secondary education” (United Nations, 2015).

These considerations also apply for policymakers in Zambia at both national and local levels. In Zambia, I have demonstrated that national policymaking has occurred largely without a clear long-term plan for community schools. In some cases, such as the campaign of Michael Sata and the Patriotic Front, there was a plan outlined but it was never carried out. This begs the question: what is the five or ten year plan for the future of community schools, according to state actors, non-government staff, and community school teachers and parents? Will these schools continue to exist with some level of support from local government officials, non-government organizations, and bilaterally funded projects? Will the national state step in and take charge of schools, or deploy teachers to transition community schools to state-run institutions? A medium- and long-term plan, based on what community school parents and teachers need, could guide both national policy and non-government projects and programs.

More immediately, there is a need for Zambian policymakers to set and enforce clearer guidelines that differentiate community schools from individual or family owned schools, or private schools for the poor. This definition is important, as the main reason for legalizing these schools, and directing some proportion of public funds to them, is that they are owned and sustained by communities and serve public aims. Part of these guidelines would be defining what level of fees would be prohibitive, and using government funds where necessary to ensure community schools be completely free of cost. Eliminating fees and in-kind payments in schools would be key to ensuring all families have access to schools, especially those with no alternative than community schools. Clear guidelines would be useful for local education officials to categorize and register schools, and ensure community schools are not operating like private schools by charging prohibitive fees and making decisions individually rather than collectively. The current system, where government schools are free and community schools have some costs, risks amplifying inequities by positioning the poorest Zambians not as communities to be served by schools, but customers in educational markets.
Further, there is a need for national policymakers to articulate what a transition from a community to state school, or vice-versa, looks like. What is the pathway for community schools to become public institutions? Is there a way for active communities to still retain their involvement in these schools? Can parents in GRZ schools where teacher absences or mismanagement are a problem take over schools and turn them into community schools?

In interviews with government policymakers and NGO staff, I asked how the existence of community schools had impacted government schools, or what the state system could learn from how community schools were collectively managed. I was surprised when a prominent national Ministry official answered that no, the existence of community schools did not change in any way how GRZ schools operated. This begs the question for national policymakers, with implications for local actors, both in Zambia and beyond: What can existing state schools learn from community schools about community involvement, local democracy, and accountability? Are parents involved in government schools in superficial ways – like raising funds and supervising production activities – or can they influence the curriculum, fire absent or abusive teachers, or work closely with school administration to enact change?

Emerging from the quantitative study of outcomes, there are more specific implications that are relevant to Zambian policymakers. I demonstrated that in terms of learning outcomes there was more variation within schools – both community schools and GRZ schools – than between them. This suggests that Zambian policymakers should also pay attention to reducing inequities within classrooms in addition to reducing differences between community and state schools. How are students living in the same location with similar socio-economic backgrounds getting ahead, in terms of learning outcomes, while others seem to be left behind? Other findings point to concerns which are largely outside of the control of education policymakers, officials, and teachers, issues such as household socio-economic status and parents’ education. Yet other factors are more within their locus of control. For instance, most community and GRZ students have access to exercise books, but fewer students at community schools have access to textbooks, readers, or libraries. It is questionable how well literacy and numeracy can be taught and practiced without access to books and resources in the language being taught,
and my analysis demonstrated that these have a positive association on outcomes. Finally, policymakers can more seriously consider inequities driven by class differences and how to narrow gaps by allocating resources, offering scholarships, and ensuring schools are free and accessible.

Community schools have greatly benefitted from the involvement of local non-government organizations (NGOs) and bilateral projects, which have provided these schools resources and training, while working closely with the Zambian Ministry of Education to increase their support of community schools. However, NGO staff should contemplate how their work may reinforce a particular state/society border in which parents whose children attend community schools have a disproportionate responsibility for managing schools. How does working directly with community schools contribute to a state/society border in which the state is less responsible for this track of public schooling? Bilateral projects like Time to Learn, for example, have balanced working with community schools with building state capacity to manage these schools, and lobbying the government for allocating more of the budget to community schools.

Implications for Theory and Scholarship

In some ways, I have engaged with several old ideas in this dissertation. The first is that states still have a role in shaping national schooling systems, even with they adopt policies that promote their withdrawal from building and managing schools. Second, comparative education can and should compare different entities such as types of schools with key consideration to context. Third, despite a global movement away from orthodoxy to neoliberal economic ideas, neoliberal values particularly in Africa may still be present (Harrison, 2010), albeit refracted. I argue that these values are particularly evident in how states portray and manage schools, as well as imagine a state and society border in relation to schooling.

I demonstrated that while state and society, and the border between the two, are intangible and complex entities, they can and should be the object of analysis within education research. How a border between state and society is conceptualized is important because as in the case of Zambia, it has defined how some parents, compared to others, carry unequal responsibility for managing their children’s schools. While policies and reforms can be outcomes of complex negotiations between different parties,
and exhibit uneven or inconsistently applied state theories, both can have real impact, for example in defining where the state directs funds and human resources for schooling. In this study I have demonstrated that calls for induced participation rely on and reinforce particular notions about where the border between state and society in schooling lies. This is significant, because in Zambia, it has normalized parents laying bricks to build a school block, then recruiting and paying for teachers in order for their children to access public education.

This dissertation also has methodological significance. I show how quantitative and qualitative methods can follow each other or be closely integrated to interrogate and explore the history, politics, and outcomes of schooling. Influenced by Vavrus and Bartlett’s comparative case study approach (2006, 2017) and Steiner-Khamsi’s call for “contextualized comparison” (2009), I have demonstrated that an understanding and assessment of political context and history is not merely a useful backdrop for research, but it crucially informs a quantitative assessment of outcomes. Early in my doctoral career I received advice that students contemplating a mixed methods dissertation should instead limit themselves to one set of methods for the dissertation, and publish the other methodological piece separately. I disagree heartedly with the argument that mixed methods is too disconnected, epistemologically inconsistent, or messy to be contained in a single work. Instead, I found a range of methods can deeply support and complement each other. For example, a finding of a significant difference between state and community schools would have minimal relevance without a complex understanding of the policies and political influences which drove this bifurcation and a fostered a particular conception of state/society bordering.

In addition, in the fifth chapter I demonstrated how policy analysis can move beyond a reading of policies to put public opinion data, drawn from existing data sources like Afrobarometer, in conversation with government plans and guidelines. This demonstrates how debates about public policies and forms of social regulation are not just between government officials and intellectuals, but take place around corner stores over newspapers, in family homes, and in schools.

Throughout this dissertation, my aim was to use visuals to communicate ideas, relate themes, and portray nuance, particularly in making quantitative findings more
accessible to readers. My main sources for ideas and frameworks behind the figures in this dissertation include Kastellec and Leoni (2007) and Tufte (2001). Many of the figures in the chapters and appendices were originally created during analysis to aid my understanding of the data, as visualization can and should be an integral part of the data analysis process (Wickham, 2011). A variety of packages and platforms make data visualization easier and more incorporated in analyses, although there are less out-of-the-box solutions for qualitative and mixed methods data.

Also drawing on the work of others, I showed how socio-economic groups can be constructed from the data itself using principal components analysis without relying on income data or poverty thresholds. I provide examples of applying this in education research in two ways: using asset data to create SES groups, and the Lived Poverty Index from Afrobarometer surveys. Both socio-economic status and lived poverty are important to analyze, because rural and urban boundaries, or school type, do not strictly denote household wealth, assets, or experienced poverty, and these three factors interact in complex ways, as demonstrated.

While I have showed how qualitative analyses can inform regression models, my use of sequential mixed methods also leaves unanswered questions. In the next section, I explore unresolved issues emerging from the quantitative analysis but also the preceding mixed methods historical and political analyses.

Prospects for Further Research

This study has been comprehensive in terms of its use of qualitative and quantitative methods, but there are still areas for further inquiry, and I conclude with a discussion of five relatively open terrains for research. These are: ethnographies and oral histories of individual communities and their schools; studies of the encounters between bureaucrats, teachers, and people involved with community schools; more robust and credible indicators of community involvement in schools; further scrutiny of factors not

21 While nearly all figures in this dissertation were created with ggplot2 in R, Excel, and Adobe Illustrator, there are additional platforms like plot.ly and Tableau which enable researchers to quickly plot and graph their data. While tools like NVivo and MaxQDA, as well as experiments like nineteen (http://usenineteen.com/), allow some level of visualizing qualitative data, there is an open frontier for tools in qualitative and mixed methods analysis, particularly as new approaches emerge.
clearly associated with learning outcomes, including home language, volunteer teachers, and social class; and exploration of other frontiers in state/society bordering beyond education.

**Ethnography and Histories of How Communities Built Their Schools**

In this study I analyzed the historical and political context of community schools and offered generalizable evidence about their learning outcomes, but I did not explore the important histories and narratives of individual schools and the communities that built and maintain them. It appears that many community schools in Zambia existed for decades, from the economic hardship in the last years of Kaunda era through shifting state policies of the multiparty state therefore each institution is a site of rich stories on community participation and conceptions of and interactions between state and society. Oral histories could illuminate and bring together these narratives, while surveys about school establishment could help explain the rhizomatic growth of these institutions across Zambia before and after the 1990s. How and why did individual communities start schools in the first place? When did they reach out to or were reached by state actors? How did some schools expand in terms of increased enrollment, additional classroom blocks, and more teachers? How did others fail, and why? What role did local conceptions of schooling or self-help and community involvement inform how parents were involved in schools? What do parents and community members think about this additional responsibility of managing their children’s school? What were the boundaries of that community and school, and who was included or excluded? How did conceptions change over time, as temporary institutions seemingly became permanent? Research in this area would add to our understanding of state/society bordering from the perspective of the parents and teachers who make up these schools.

**Encounters between Bureaucrats, Teachers, and Parents**

In light of the Zambian MOE posting government salaried teachers to community schools, there is a need to assess encounters between local bureaucrats, salaried teachers, and community school teachers and parents. This work is key to understand how state/society bordering plays out between actors in schools and inform policymaking, particularly if outfitting community schools with salaried teachers becomes the main approach the state will be using to improve schools. Drawing on Montgomery (1988),
relations between state actors and people can be a “complex mix of ideology, clientelism, envy, and mutual convenience” (p. 1). How do community school stakeholders work with, or against, state actors, and how do both regard each other? What happens when government salaried teachers are posted to community schools – how do they enhance the school, work with teachers and parents, or conflict with them? Falcolner-Stout, Simuyaba, and Mayapi (2014) released a short case study on this, exploring how government teachers were posted to two community schools. While the authors were quite optimistic that these schools had made a smooth transition from volunteer teachers to salaried teachers, they also documented initial conflict and miscommunication. One of the positive aspects was the flexibility of the government teachers in working with the parent committee and ensuring they had a role in the school. As one community member noted about getting a government teacher, “This was a relief because we knew we won’t have to be paying him and we felt we were part of the education system” (p. 5).

While Falcolner-Stout et al. (2014) emphasize recognizing the value of volunteer teachers especially in having them work alongside salaried government teachers, how may this create inequities at a professional level, particularly when a salaried teacher is earning a great deal more than a volunteer? In my interview with a national Ministry of Education official, they suggested salaried teachers for the most part bring a “government school attitude” to community schools which inhibits community input and control (25 July, 2016). What are the implications of having a bordering of this kind between state and society teachers at the same school? Further, what other interactions do community members have with Ministry officials, including but beyond receiving a salaried teacher? What do community school parents and stakeholders want or need from the state for schools to be sustainable, and for their children get what they need from schools? While there is some anecdotal evidence that communities would prefer to manage institutions while receiving government funding and teachers, there is a need to systematically gather data on the ground to inform policies, particularly those which seek to induce community participation without necessarily including their input in the policymaking process.

**Community Involvement in Schools**

Beyond the role the state may play in community schools, there is a need to explore and interrogate how communities are involved in schools. Considering the data
used, this dissertation was particularly limited in this area. Better indicators measuring the frequency and depth of community involvement in schools would reveal more about how parents are active or inactive in schools, as qualitative studies suggest participation is framed and practiced differently in community and government schools (Mwalimu, 2011; Okitsu, 2011). There is a need for more robust community participation indicators that distinguish between occasional volunteerism and the extensive work of parents building a school, hiring a teacher, and liaising with local government to get resources.

In the case of Zambia, there is a need to explore the differences in structure and expectations between Parent Teachers Associations (PTAs) in government schools and Parent Community School Committees (PCSCs) in community schools. On paper, these two groups of people have very different expectations: PTAs may fundraise and participate in building projects, while PCSCs are expected to levy fees, determine the calendar and school subjects, support and pay teachers, get resources, and keep all necessary records (Ministry of Education, 2016b; The Government of the Republic of Zambia, 2011). Yet what do the actual practices look like, and what happens when either committee does something different beyond its allotted roles? And what are the results of participation in terms of assessed learning, measures of school stability, and other outcomes? While there has been work to measure community participation qualitatively, more robust survey questions would make it easier to assess whether different types of involvement translates into more stable and functioning schools and also increased learning outcomes. In this dissertation, I have highlighted differences in community involvement across rural and urban spaces, and further research could investigate why this is the case, and how the state/society border is constructed and negotiated through community involvement in urban, semi-urban, and rural locations.

Learning in Schools: Language, Teacher Salaries, and Social Class

In addition to outcomes related to community participation, this dissertation, as often is the case, leaves more questions than answers about impacts of student and teacher factors on learning. First, there is opportunity through further research to better understand the role of home language in literacy acquisition in a multilingual society like Zambia. In the previous chapter I demonstrated that without identifying whether there are
multiple languages spoken in the home, the relation between home and school language is fairly ambiguous.

Second, there is value in studying the relationship between teachers receiving a salary and learning outcomes. Teacher background and experience was not clearly associated with outcomes in my analysis, but would salaried teachers have an impact on learning or stay longer in their roles than volunteer teachers? As noted, I was not able to tell from the data whether teachers volunteered or received a government salary, and instead used credentials to explore this to some extent. What are the impacts of transferring the burden of financing teachers from the state to communities, or vice-versa?

Third, there is a need to explore why inequities are greater within classrooms than between schools, and what the implications are for policy if there are very different levels of knowledge and skills within the same classroom. Fourth, in countries like Zambia where the focus has been on reducing inequities like location and gender, instead of social class, there is a great need to better understand how household wealth and resources impacts learning and contributes to inequities. I would suggest the study of these aspects include the use of sequential mixed methods, in order to qualitatively gather information from schools and households, and then measure and analyze quantitatively to determine whether there are systematic differences or trends.

**Frontiers in the Border between State and Society**

In this dissertation I have demonstrated how community schools in Zambia both represent and demarcate a bordering between state and society, but I have generally limited the analysis from exploring this bordering in other sectors beyond education. In many rural communities in Sub-Saharan Africa, often the school and clinic are said to be the sole signifier of the state. Thus it would be valuable to examine how borders are drawn in public health provision, for example. Are there similarities with community schools, in terms of villages building their own, and conflict between certified clinicians and local traditional healers? How does bordering play out in other social services, like policing, job training, or social work? Is there also a divide between how the state has laid out borderings in policies and its activities, and how the public perceive responsibility for social services, like in the subject of this dissertation? If so, what
explains this mismatch? This type of political research could examine, in a variety of public spaces, whether states are able to gain power by ceding provision and management to society and community vis-a-vis a neoliberal framework, as suggested by my findings and those of Dill (2013).

**Conclusion**

My ultimate aim in this dissertation has been to study the origins and consequences of Zambians building their own schools. The research process, from traveling back to Zambia to conduct interviews, to coding policies and analyzing data, to writing the dissertation, has allowed me to investigate the paradoxes I encountered and questions I formed as a Peace Corps volunteer visiting community schools for the first time nearly a decade ago. Amidst this effort, memories of two community schools in particular remained constant.

The first community school that I remember, which I explored briefly in the first chapter of this dissertation, was separated from the nearest government school by a series of hills. Traveling there, we biked around the hills for more than an hour, and returned over them, carrying our bicycles over a narrow path wandering over a rocky incline. It was hard for us to imagine first and second grade students making either trek daily to attend school. In between our visits, heavy rains had caused the school’s roof to collapse, and parents were looking for ways to rebuild the school. After six months or so, the district Ministry of Education was able to provide some metal roofing. However, the school’s teacher, citing unpaid fees, left and took the school’s textbooks and resources with him.

I also recall a second community school, which was surprisingly close to a nearby GRZ school, and was made up of a single classroom block nestled amongst crop fields growing maize and vegetables. I was struck by the architecture of the school, which was reminiscent of a one-room schoolhouse in North America and Europe. In the community there was some tension between parents and the teacher, with some perception from the community that the school was individually, rather than collectively, owned. In other words, there were rumors that the teacher, along with one family, made decisions about the school. After some disagreement with parents, the teacher closed the school, and
refused to teach. A few months later, there apparently was some compromise between various parents and the teacher, and the school reopened.

In the case of both schools, community members and teachers were actively involved, but their participation was not always as extensive, harmonious, or collaborative as imagined in national policies and guidelines. In this dissertation, I have shown that Zambia’s public school system is starkly segmented along state and society lines, with very different ownership and parental responsibilities for GRZ and community schools. In my experience, though, there are also very different conditions within community schools, which some research has highlighted (Kalemba, 2013; Okitsu & Edwards, 2017). Nevertheless, this variation is something that could be explored further to gain a better understanding of inequities between different community schools.

From the findings in this dissertation, the enduring question for me remains: is primary schooling a public good? And what is the role of the state in supporting schooling as a public commodity? What does it mean when some parents have to work more to obtain a public good than others? These questions, while emerging from my research in Zambia, can rapidly travel beyond these two community schools outside of Serenje in Central Province, past the national borders of the country, and be asked globally. Certainly the question of schooling as a public good is already a subject of debate and does not emerge solely from this work. I have demonstrated how an environment that includes a state withdrawal from financing education, the encouragement of community responsibilization, and a partnership of state, society, and the private sector has empowered people to build and manage their own schools. At the same time these same conditions have resulted in inequalities both in parental duties and learning outcomes within a parallel public schooling system. On behalf of those who exist at the lower end of educational inequity, I believe it is essential to continue interrogating the public nature of schooling, and study where schools, systems, and states fall short of their promises made to parents and students.
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Appendix A: Policies, Interviews, and Survey Questions

Table 9. Government Policies, Guidelines, and Documents Used in Analysis

<table>
<thead>
<tr>
<th>Policy</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>National Policies</td>
<td></td>
</tr>
<tr>
<td>Focus on Learning</td>
<td>1992</td>
</tr>
<tr>
<td>Educating Our Future</td>
<td>1996</td>
</tr>
<tr>
<td>Education for All 2000 Assessment</td>
<td>1999</td>
</tr>
<tr>
<td>Zambia Enhanced Structural Adjustment Facility Policy Framework Paper (International Monetary Fund)</td>
<td>1999</td>
</tr>
<tr>
<td>Zambia Poverty Reduction Strategy Paper</td>
<td>2002</td>
</tr>
<tr>
<td>Fifth National Development Plan</td>
<td>2006</td>
</tr>
<tr>
<td>Operational Guidelines for Community Schools</td>
<td>2007; 2011</td>
</tr>
<tr>
<td>Sixth National Development Plan 2011-2015</td>
<td>2010</td>
</tr>
<tr>
<td>The Education Act</td>
<td>2011</td>
</tr>
<tr>
<td>Education for All 2015 National Review</td>
<td>2014</td>
</tr>
<tr>
<td>International Frameworks</td>
<td></td>
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<tr>
<td>World Declaration on Education for All</td>
<td>1990</td>
</tr>
<tr>
<td>Education Rehabilitation Project (The World Bank)</td>
<td>1992</td>
</tr>
<tr>
<td>Education for All: The Dakar Framework for Action (World Education Forum)</td>
<td></td>
</tr>
<tr>
<td>A Sourcebook for Poverty Reduction Strategies (The World Bank)</td>
<td>2002</td>
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Table 10. Interviews Conducted from July-August 2016

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<tr>
<th>Interviewee</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>UNZA Lecturer, School of Education</td>
<td>July 22, August 3</td>
</tr>
<tr>
<td>Planning Officer, National Ministry of Education</td>
<td>July 25</td>
</tr>
<tr>
<td>Staff Member, Zambian Open Community Schools (ZOCS)</td>
<td>August 5</td>
</tr>
<tr>
<td>Standards Officer, District Ministry of Education</td>
<td>August 18</td>
</tr>
<tr>
<td>Zonal Head Teacher</td>
<td>August 18</td>
</tr>
<tr>
<td>Staff Member, Time to Learn</td>
<td>August 29</td>
</tr>
<tr>
<td>Staff Member, Time to Learn</td>
<td>August 29</td>
</tr>
<tr>
<td>UNZA Lecturer, School of Education</td>
<td>August 30</td>
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Table 11. Afrobarometer Survey Rounds and Main Questions Used in Analysis

<table>
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</thead>
<tbody>
<tr>
<td>In general, how would you describe: The present economic conditions of this country?</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>What are the most important problems facing this country that the government should address?</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>What are the most important things that need to be changed about the way we govern our country?</td>
<td>●</td>
<td></td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>How well would you say the government is handling the following matters? Addressing the educational needs of all Zambians</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
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<tr>
<td>Over the past year, how often have you attended meetings of a group that looks after the community?</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Is there a school close by where you could afford to send your children?</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In your opinion, who should take the main responsibility for these things [Providing schools and clinics]? Is it the government, private business, individuals, or some combination of these?</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Is there a school in the primary sampling area?</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Based on your experience, how easy or difficult is to obtain the following services? Or do you never try and get these services from government? A place in primary school for a child.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Which of the following statements is closest to your view? It is better to have free schooling for our children, even if the quality of education is low. B: It is better to raise educational standards, even if we have to pay school fees.</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Question</td>
<td>R1</td>
<td>R2</td>
<td>R3</td>
<td>R4</td>
<td>R5</td>
<td>R6</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
<td>-----</td>
</tr>
<tr>
<td>Which of the following statements is closest to your view? A: People should look after themselves and be responsible for their own success in life. B: The government should bear the main responsibility for the well-being of people.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Can you tell me whether the Zambian government has a policy to provide: Free primary education, that is, parents do not have to pay school fees?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Who do you think actually has primary responsibility for managing each of the following tasks: Managing schools. Is it the central government, the local government, traditional leaders, or members of your community?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>In your opinion, who should take the main responsibility for providing these things: Schools and clinics? Is it government, private business, individuals, or some combination of these providers?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>If the past 12 months you had contact with a public school, how easy or difficult was it to obtain the services you needed from teachers or school officials?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>If the government of this country could increase its spending, which of the following areas do you think should be the top priority for additional investment?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>
Appendix B: Lived Poverty Principal Components Analysis

In order to determine whether Afrobarometer survey responses differed by socio-economic status, a lived poverty index (LPI) was created using a principal components analysis (PCA). For a more in depth explanation of PCA and when it is appropriate, see Appendix C. Here a PCA was conducted, drawing on the “experiential measure of lived poverty” developed by Afrobarometer (Mattes, 2008, p. iii). Five questions were used:

Over the past year, how often, if ever, have you or anyone in your family:

- Gone without enough food to eat?
- Gone without enough clean water for home use?
- Gone without medicines or medical treatment?
- Gone without enough fuel to cook your food?
- Gone without a cash income?

Response options were on an ordinal scale from 1-5: never, just once or twice, several times, many times, always. Mattes (2008) demonstrated that across countries and time points, there was sufficient reliability and internal validity for this index. Bratton (2006) found that lived poverty correlated with household income and self-perceptions of poverty, where respondents rated themselves between 0 being poor and 10 being rich.

While Mattes (2008) created a 5 point scale for LPI (where zero was no lived poverty and four was a consistent lack of basic necessities), it was not necessary for me to have this detailed outcome. Instead, I used a Principal Components Analysis (PCA) to create three discrete LPI groups, similar to the groups constructed from SSME asset data (see Appendix C) albeit with very different source data.

Both a KMO and Bartlett’s test were conducted for the five LPI questions from data pooled together from all time points of the Afrobarometer that had these questions (2003; 2005; 2009; 2012; 2015). Bartlett’s test had a p-value < 0.001, indicating the principal components may result in a useful factor. The overall measure of sampling adequacy was 0.77, which is above the standard 0.5 cutoff for being acceptable (Cerny & Kaiser, 1977). Overall the principal component explained 44% of the variance across the five questions.
Table 12. Lived Poverty Index Principal Components Analysis Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>Principal Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food to eat</td>
<td>2.19</td>
<td>.72</td>
</tr>
<tr>
<td>Clean water for home use</td>
<td>2.17</td>
<td>.60</td>
</tr>
<tr>
<td>Medicines/medical treatment</td>
<td>2.36</td>
<td>.71</td>
</tr>
<tr>
<td>Fuel to cook food</td>
<td>1.86</td>
<td>.59</td>
</tr>
<tr>
<td>Cash income</td>
<td>3.05</td>
<td>.69</td>
</tr>
</tbody>
</table>

Communality

Eigenvalue = 2.20; proportional variance = 0.44; KMO MSA = 0.77; Barlett’s $\chi^2 = 4008.6$, $p < 0.001$

The top 40% of scores were put into a high LPI group, the second 40% into a middle group, and the bottom 20% into a low LPI group (Filmer & Pritchett, 2001). Figure 22 below shows the principal components scores overlaid with the LPI groups. Unlike the socio-economic groups from SSME data (see Appendix C), the structure of the questions mean a higher score indicates higher poverty (as a greater frequency of reporting being without food, clean water, cash income, etc.). Table 13 below samples three participants from each group to illustrate how responses translated into scores and then groups.

Figure 22. Lived Poverty Index (LPI) principal component scores and LPI Groups
Table 13. Sampled Respondents by Lived Poverty Index Group, with PCA Scores

<table>
<thead>
<tr>
<th>LPI Group</th>
<th>PCA Score</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>-0.94</td>
<td>In the past year never went without food to eat, water to cook, or medicine/medical treatment; went several times without fuel for cooking and cash income</td>
</tr>
<tr>
<td>Middle</td>
<td>-0.02</td>
<td>In the past year never went without food to eat or fuel to cook, but many times without water to cook; several times went without medicine/medical treatment; went without cash income many times</td>
</tr>
<tr>
<td>High</td>
<td>1.73</td>
<td>In the past year went many times without food to eat, cash income, and medicine/medical treatment; never went without water to cook but always without fuel to cook</td>
</tr>
</tbody>
</table>

As expected, there was a moderate relationship between lived poverty and location – whether the respondent lived in an urban or rural area (see Figure 23). Principal component scores, on average, were significantly lower in urban areas ($t = -12.79, p < 0.001$). As evident in Figure 23, while there was a greater proportion of urban respondents in the low LPI group, there are also a fair amount in both middle and high groups. Overall there were more rural respondents than urban, and among these most were concentrated in middle and low high groups. Thus a relation between poverty, as measured with the LPI, and location is expected.

Figure 23. Lived Poverty Index Principal (LPI) component scores and LPI Groups, by location
Appendix C: Principal Components Analyses with National Assessment Data

The Snapshot of School Management Effectiveness (SSME) data includes a variety of common asset questions. These include: where students get their drinking water at home, how and where their families cook, whether they have electricity, the type of home toilet, and family possession of assets like mobile phones, televisions, bicycles, cars, and cattle. Some are binary – families have electricity or not, own cattle or do not – while others are categorical – drinking water coming from a river or stream, well or borehole, indoor plumbing, etc. Thus turning a variety of factors into a single measure of SES requires decision making. One approach is to simply add the number of assets together and use the sum as SES. However, this presumes they are all assets are equal in weight, when a mobile phone may be less of a determinant of one’s status than a car, or home electricity. An alternative and common approach which takes into consideration the data to aggregate options is a Principal Components Analysis (PCA).

Principal Components Analysis is a tool for dimension reduction or reducing multiple variables into one or more. It is also used to measure latent variables, or phenomena which cannot be easily directly measured, like SES. The tool is also a process of determining whether a theoretically sensible group has enough similarity, in terms of correlation of variables, to be combined. Using PCA to determine SES with asset variables is becoming relatively common but has its disadvantages (Vyas & Kumaranayake, 2006). For example, it is a data-driven approach that creates an indicator and groups out of the data, rather than an absolute standard that can apply across contexts and data sets. However, seen another way, this is also an advantage. A principal component of SES drawn from this data does not compare Zambian students and their households with those in dissimilar settings. Instead, it constructs relative groups based on the available data. An additional limitation is that the resulting principal components scores, or the variable created from the individual assets, is not directly interpretable, and there are arbitrary choices made along the way, from selecting variables to determining SES groups (Vyas & Kumaranayake, 2006). The process of constructing a SES component will be briefly explored, highlighting some of these decisions.

First, categorical variables – like whether students’ families cooked with charcoal, wood, gas, or electricity – were converted into binary, or dummy, variables. Variables
with small numbers of cases, and thus fewer comparison points with other indicators, were dropped. A Kaiser-Meyer-Olkin (KMO) test, commonly used to determine whether data is suited for a factor or principal components analysis, was initially conducted. A KMO assesses whether there are compact patterns of correlation within the data, and thus distinct and reliable factors (Field, Miles, & Field). Additionally, a Bartlett’s test of sphericity was conducted, which tests in another way whether variables correlated with each other, returning a probability value. The KMO measure of sampling adequacy was 0.88, indicating the data was “meritorious” (Cerny & Kaiser, 1977). Further, Barlett’s test had a p-value < 0.001, indicating that principal components may result in a useful factor.

The outcome of the principal component analysis is summarized in Table 14. The single component constructed from the variables explains 32% of the variance in the total data. This may suggest that there are other factors which explain the variables – why families own certain assets or obtain water or cook in different ways – besides a common SES factor. It could also reflect the amount and variety of indicators used to construct the principal component. However, this percentage of variance explained (the eigenvalue) is not unprecedented as other studies using the same method in low to middle income countries found principal components which explained even less variance (Vyas & Kumaranayake, 2006).
Table 14. Socio-economic Status Principal Components Analysis Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ratio in Sample</th>
<th>Principal Components Score</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electricity</td>
<td>.27</td>
<td>.78</td>
<td>.38</td>
</tr>
<tr>
<td>Radio</td>
<td>.70</td>
<td>.24</td>
<td>.94</td>
</tr>
<tr>
<td>Mobile Phone</td>
<td>.83</td>
<td>.30</td>
<td>.91</td>
</tr>
<tr>
<td>Television</td>
<td>.46</td>
<td>.62</td>
<td>.62</td>
</tr>
<tr>
<td>Computer</td>
<td>.09</td>
<td>.49</td>
<td>.76</td>
</tr>
<tr>
<td>Refrigerator</td>
<td>.20</td>
<td>.79</td>
<td>.38</td>
</tr>
<tr>
<td>Bicycle</td>
<td>.70</td>
<td>-.18</td>
<td>.97</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>.07</td>
<td>.12</td>
<td>.99</td>
</tr>
<tr>
<td>Car/truck</td>
<td>.15</td>
<td>.49</td>
<td>.76</td>
</tr>
<tr>
<td>Cattle/livestock</td>
<td>.54</td>
<td>-.27</td>
<td>.93</td>
</tr>
<tr>
<td>Books, newspapers, reading materials</td>
<td>.37</td>
<td>.37</td>
<td>.87</td>
</tr>
</tbody>
</table>

Source of drinking water
- Well or borehole                      | .60             | -.44                       | .80         |
- Pipe at home                          | .12             | .68                        | .54         |

Location and method of cooking
- In a shed                             | .39             | -.46                       | .79         |
- In the house                          | .30             | .54                        | .70         |
- Wood fire                             | .54             | -.62                       | .61         |
- Electric stove                        | .12             | .73                        | .47         |

Sanitation
- Pit latrine                           | .80             | -.58                       | .66         |
- Flush toilet, outside                 | .06             | .48                        | .77         |
- Flush toilet, inside                  | .07             | .57                        | .68         |

Eigenvalue = 5.48; proportional variance = 0.27; KMO MSA = 0.85; Bartlett’s χ² = 24097.4, p < 0.001

From here, the PCA scores, namely the single variable created from the analysis, were extracted. The scores ranged from -1.14 to 2.65 with a mean of 0 and standard deviation of 1: the higher the score, the higher the SES. Groupings were created based on established yet arbitrary cutoffs: the lowest 40% are in the low SES group, the top 20% in high, and the rest in the middle (Filmer & Pritchett, 2001). Table 15 provides a more qualitative illustration of typical families in these groups, drawing on the data and resulting PCA scores.
Table 15. Examples of Family Attributes for the Three Socio-economic Groups

<table>
<thead>
<tr>
<th>SES Group</th>
<th>Attributes of a typical family</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Uses a wood fire for cooking; draws water from a well or borehole; owns a bicycle and a radio; uses a pit toilet</td>
</tr>
<tr>
<td>Middle</td>
<td>Cooks food with charcoal, draws water from a communal tap; owns a bicycle, television, cattle, and mobile phone; uses a pit toilet</td>
</tr>
<tr>
<td>High</td>
<td>Cooks on an indoor electric stove; gets water from indoor pipes; owns a car, cattle, bicycle, refrigerator, television, mobile phone, computer; uses an indoor flush toilet</td>
</tr>
</tbody>
</table>

While the socio-economic groups are conceptually useful and are used in the analyses in the sixth and seventh chapters, the principal components scores as a continuous variable can be used to better understand the socio-economic distributes by location and within schools. Figure 24 demonstrates a histogram plotting the number of weighted students and SES principal component scores with location highlighted. This plot does not confirm a stark binary between wealthy urban students and poor rural students. Instead, most of the students in the sample have relatively low socio-economic scores, and many but not all attend rural schools. There are relatively fewer high SES students attending rural schools. Further, those attending urban schools have a wide variation in their socio-economic status. Yet because of the number of low SES students attending rural schools, most students at urban schools are above average in terms of their SES.
Figure 24. Percent of students versus socio-economic Principal Component scores, by urban or rural location, in the Grade 2 National Assessment data

**Community Participation PCA**

The same analysis was conducted with teachers’ reported community and parent participation at the school in the past term. Both the accounts of head teachers and teachers were used to have a better approximation of participation from their vantage points in the school and classroom. These variables were strongly correlated, and the results of the principal components analysis are summarized in Table 16. PCA scores were extracted and split into three groupings: low, middle, and high.
Table 16. Principal Components Analysis Results for Community/Parent Participation in Schools

<table>
<thead>
<tr>
<th>Variable</th>
<th>Ratio in Sample</th>
<th>Principal Components</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>According to head teachers, community/parents came at least once in the last term to:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor student attendance</td>
<td>.63</td>
<td>.58</td>
<td>.67</td>
</tr>
<tr>
<td>Conduct classroom observations</td>
<td>.38</td>
<td>.60</td>
<td>.64</td>
</tr>
<tr>
<td>Monitor implementation of school projects</td>
<td>.87</td>
<td>.35</td>
<td>.88</td>
</tr>
<tr>
<td>Monitor the availability of textbooks</td>
<td>.19</td>
<td>.43</td>
<td>.81</td>
</tr>
<tr>
<td>Look at your record of continuous assessment</td>
<td>.48</td>
<td>.54</td>
<td>.70</td>
</tr>
<tr>
<td>Help you to teach reading in some way</td>
<td>.32</td>
<td>.44</td>
<td>.80</td>
</tr>
<tr>
<td>According to teachers, community/parents came at least once in the last term to:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Monitor student attendance</td>
<td>.33</td>
<td>.55</td>
<td>.69</td>
</tr>
<tr>
<td>Conduct classroom observations</td>
<td>.26</td>
<td>.58</td>
<td>.66</td>
</tr>
<tr>
<td>Monitor implementation of school projects</td>
<td>.69</td>
<td>.34</td>
<td>.88</td>
</tr>
<tr>
<td>Monitor the availability of textbooks</td>
<td>.17</td>
<td>.55</td>
<td>.70</td>
</tr>
<tr>
<td>Look at your record of continuous assessment</td>
<td>.30</td>
<td>.57</td>
<td>.67</td>
</tr>
<tr>
<td>Help you to teach reading in some way</td>
<td>.26</td>
<td>.54</td>
<td>.70</td>
</tr>
</tbody>
</table>

Eigenvalue = 3.18; proportional variance = 0.27; KMO MSA = 0.8; Bartlett’s $\chi^2 = 7426.75$, p < 0.001
Appendix D: Hierarchical Linear Modeling Details

This appendix details the model equations and correlations for the HLMs conducted for literacy and numeracy assessment scores.

**Model Equations**

Most of the models explored in the seventh chapter are based on essentially the same multilevel model equation, although the amount of individual coefficients changes for each model. Below is the hierarchical equation for HLMs predicting math outcomes.

Level-1 Model: Students (i) within schools (j)

\[ \text{Math Score}_{ijk} = \beta_{0jk} + \beta_{1jk}(\text{Student Factor})_{ijk} + \beta_{2jk}(\text{SES})_{ijk} + \ldots + e_{ijk} \]  

Level-2 Model: Schools (j) within provinces (k)

\[ \beta_{0jk} = \gamma_{00k} + \gamma_{01k}(\text{School Factor})_{jk} + \ldots + r_{0jk} \]
\[ \beta_{1jk} = \gamma_{10k} \]
\[ \beta_{2jk} = \gamma_{20k} + r_{2jk} \]
\[ \ldots \]  

Level-3 Model: Between-provinces (k)

\[ \gamma_{00k} = \pi_{000} + u_{00k} \]
\[ \gamma_{01k} = \pi_{010} \]
\[ \gamma_{10k} = \pi_{100} \]
\[ \gamma_{20k} = \pi_{200} \]
\[ \ldots \]

Where i are individual pupils or students, j are schools, k are provinces. \( \beta_{0jk} \) is the intercept for the Level-1 model, or the math score when all the student-level factors are set to zero. Each student-level predictor is added on to the intercept, with two shown here as examples, and \( e_{ijk} \) is the error for this level of model, or the variation not explained by predictors at that level. Ellipses (\( \ldots \)) signal that each predictor would be included in the full version of Equation 1. Since students are nested in schools, the intercept \( \beta_{0jk} \) is a random intercept, meaning that each are contingent on the school. For example, some
schools may have a high intercept, meaning a high base math score, while others have lower.

As noted in the Level-2 model for schools, the student intercept $\beta_{0jk}$ is equal to the school intercept $\gamma_{00k}$ plus school-level factors like school resources, teacher experience, etc. Student socio-economic status or $\beta_{2jk}$ is the only factor which is a random effect, so both the intercept and slope vary at the school level. This means that not only the average SES differs by school, but the effect of SES on the outcome, math scores, can also be different for each school. For instance, household SES may be a big factor in assessment scores at one school, but not at another. Again, every student-level variable would have its own line in Equation 2.

Finally, the intercept $\gamma_{00k}$ in the Level-2 model is contingent on the average at the provincial level (see Equation 3). As noted in the seventh chapter, there are no provincial factors included in these models, so this equation is relatively straightforward.

Below is a similar hierarchical equation for the generalized linear mixed model (GLMM) predicting odds of reading.

**Level-1 Model:**

$$\text{Logit(Odds of Reading)}_{ijk} = \beta_{0jk} + \beta_{1jk} (Student\ Factor)_{ijk} + \cdots + e_{ijk} \quad (4)$$

**Level-2 Model:**

$$\beta_{0jk} = \gamma_{00k} + \gamma_{01k} (School\ Factor)_{jk} + \cdots + \epsilon_{0jk}$$
$$\beta_{1jk} = \gamma_{10k}$$
$$\vdots$$

(5)

**Level-3 Model:**

$$\gamma_{00k} = \pi_{000} + u_{00k}$$
$$\gamma_{01k} = \pi_{010}$$
$$\gamma_{10k} = \pi_{100}$$
$$\gamma_{11k} = \pi_{110}$$
$$\vdots$$

(6)
One of the main differences from the math model equation is the outcome. Where \( \text{Logit(Odds of Reading)} = \ln\left(\frac{\pi}{1 - \pi}\right) \) where \( \ln \) is the logit function, \( \pi \) is the probability of reading, and \( 1 - \pi \) is the probability of not reading. Another key difference is the lack of a random effect of SES: according to the AICc scores, there was not additional variation explained by including SES as a random effect.

In addition, correlations between outcomes and predictors, and between predictors, were checked. Multicollinearity, or where predicting variables essentially predict each other, can impact the estimation of individual factors that predict the outcome, since a correlated factor is associated with another. Figure 25 and Figure 26 demonstrate the correlation between predictors and outcome before conducting HLMs. While these figures are useful to see relationships between various factors, the Variance Inflation Factor (VIF), a standard test for how severe multicollinearity is, was calculated for each set of variables. All variables were at or below a VIF of 2, which is well below the standard conservative cut-off score of 5 (Sheather, 2009).
Correlations between Outcomes and Predictors

Figure 25. Correlations for Early Grade Math Combined Scores (as outcome) and predictors

Not significant (p > .05)
Figure 26. Correlations for Oral Reading Fluency Zero Scores (as outcome) and predictors
Appendix E: Protocol for Semi-Structured Interviews

Themes & Questions:

Background
1. What is your role at (Ministry, organization, University)? How does your role involve community schools?

The emergence of community schools in the 1990s: causes and historical precedents
2. (I’ve heard stories, but...) Why do you think community schools emerged in Zambia? What led to the growth of these schools?
3. Are they different than previous (non-formal) schools, like Village schools?

The role of GRZ/MOGE/NGOs in relation to financing, management, and monitoring of community schools
4. What is the current role of the GRZ/MOE regarding education for all? And community schools? How has this role changed in the past decades?
   a. NGO/Org: What is the role of your organization? What is its relation to community schools and education at large? How does it work with the MOGE? Where does it overlap, and what does it do separate from the MOGE?
5. Who is responsible for the financing/management/monitoring of these schools? What support do they get, and from whom? What was it like in the 1980s, 1990s, 2000s?
   a. If there is shared responsibility, how are these schools jointly managed? Who does what? Who is responsible for whom?
   b. How have NGO/Orgs (ZOCS, ZCSS, TTL) helped shape government policy?

Contemporary and historical responsibility of civil society for education
6. What role does civil society play in education? What were the expectations of civil society and communities in the 1970s, 1980s, 1990s?
7. How has the state and civil society shared, if they have, the responsibility for education? And what type/levels of education?

Notions of “self-help” and individual/communal responsibility for education
9. How have notions of self-help changed over the years?
10. What are communities responsible for? What happens when this responsibility overlap with government services?

The alternative nature or curriculum of community schools
11. Is the education provided by community schools alternative, or fundamentally different, from that of government schools? Do they have reliable access to the national curriculum?
12. How are these schools different from private schools? How to distinguish a community schools with a “private school for the poor”?
13. Has the existence of community schools changed/impacted government schools?

The legalization of community schools and creation of a separate school category
14. Who was responsible for the categorization of community schools?
15. How have community schools *(registration and enrollment)* helped to meet EFA goals?

The future of community schools and the role of the GRZ and Ministry of Education
16. What does the future of community schools look like – what is the long-term aim? How should it look like? What would you do with these schools?
17. Who should be responsible for these schools, and education in general? An umbrella/civil society organization, or MOGE?
18. What are the potential problems or challenges with these schools? *Is it a parallel system?*

Additional Questions

The GRZ’s changing stance on non-state education since the structural adjustment period of the 1980s
- How has the financial crisis of the 1970s, as well as structural adjustment in 1980s, affected how, and how much, the government supports education?
- Was perception or policy of these schools different in the Sata, Banda, Mwanawasa, Chiluba Presidencies?

*Operational Guidelines for Community Schools* *(2007, 2013): The origin of the policy and its influence on state and community actors*
- Who was responsible for the Operational Guidelines? What did the writing and approval process look like?
- What international or multilateral organizations have influenced education policy in Zambia? Have they had any influence on community school policies?
- Who wrote the updated Operational Guidelines *(2013)* and why was it updated? What are the major changes, and why?
- How regularly does follow-up and monitoring with community schools occur?

Follow-Up

- Suggest people who can shed light on a different facet of organization/Ministry *(Different department, different level)* – How can I contact them?
- Suggest others in other organizations, ministries, societies
- I’m conducting a mixed methods study, using quantitative data, to see if these schools fare on average compared to schools, and what factors lead to successful community schools. What *data* does the Ministry/Org have?