USAID
FROM THE AMERICAN PEOPLE

FREDERICK S. PARDEE CENTER
FOR INTERNATIONAL FUTURES
JOSEF KORBEL SCHOOL OF INTERNATIONAL STUDIES
UNIVERSITY of DENVER

The Future of Primary Education Survival in Southwest Uganda

Prepared By: Frederick S. Pardee Center for International Futures, Josef Korbel School of International Studies, University of Denver

Authors: Mickey Rafa and Elizabeth Bremer

April 2018

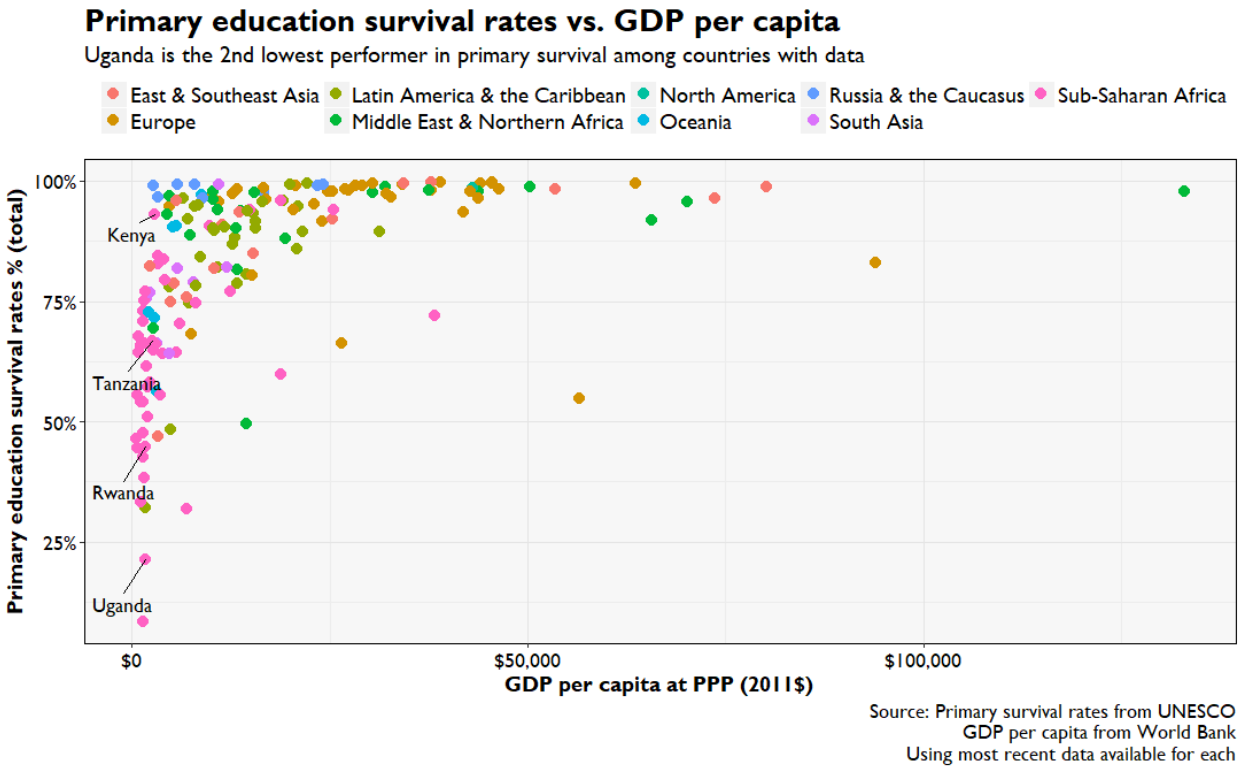
Table of Contents

The authors would like to thank Charlotta Sandin and Nadia Shadravan from the USAID/Uganda Monitoring, Evaluation and Learning Contract, Samuel Hargadine, from USAID-Uganda, and Steve Hedden and Dr. Jonathan Moyer from the Frederick S. Pardee Canter for International Futures at the University of Denver for their thoughtful insights into this research brief. The authors would also like to thank Dr. Mohammod Irfan and Dr. Barry Hughes from the Pardee Center for the development of the IFs education model featured in this research.

Executive summary

Uganda ranks as the second lowest performing country in the world in primary survival rates (of countries with reported data).[i] Despite dramatic improvements in primary enrollment rates, too many students fail to complete primary school.[ii] This highlights the need to examine the causes, patterns, and relationships between repetition, dropout, and survival rates in Uganda.

Figure 1. Primary education survival rates vs GDP per capita globally



Survival – and by extension, dropout – is a complex phenomenon to study, because data are not easily collected on the frequency, timing, or reason for dropping out of school. In this brief, we evaluate the research on the causes and trends in dropout and survival in primary education in Uganda. We will present new data on survival and repetition rates by district and subregion to contribute to the study of the topic.

The geographic emphasis of this research is in Southwest Uganda.[iii] District-level survival rates are low in Southwest Uganda, relative to the national average, but a holistic view of the data suggests a mixed story. Southwest Uganda has relatively low grade-to-grade repetition rates, but primary survival rates also remain low. This supports findings from UNICEF's Out of School

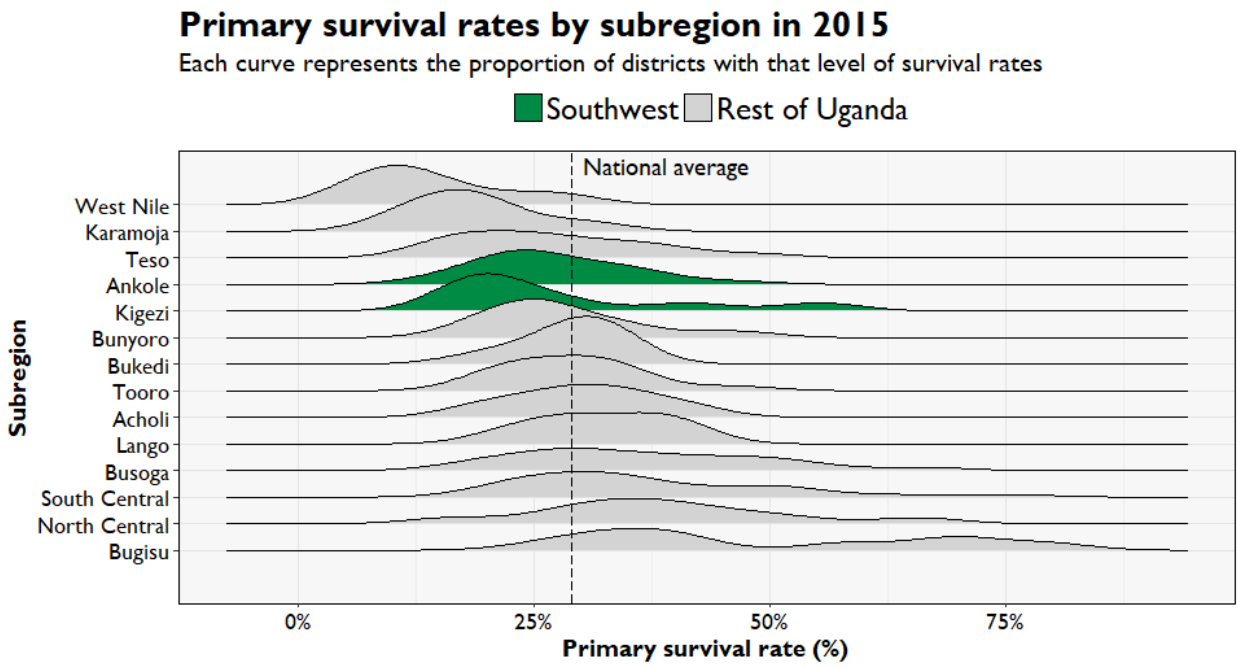
[i] Using the most recent values from UNESCO's international database.

[ii] Primary school refers to P1 through P7.

[iii] This includes the districts of Ankole (Buhweju, Bushenyi, Ibanda, Isingiro, Kiruhura, Mbarara, Mitooma, Ntungamo, Rubirizi, Sheema) and Kigezi (Kabale, Kanungu, Kisoro, Rubanda, Rukungiri) subregions.

Survey that repetition is a relatively low cause of dropout among students in Western Uganda. This suggests that other causes of dropout, including household poverty, could be more directly responsible for low survival rates in Southwest Uganda.

Figure 2. Primary survival rates by subregion in 2015 (subregions in Southwest Uganda highlighted)



Kampala included in South Central subregion
Due to dramatic enrollment variance in 2016 report, the 2014 survival rate is used for Kampala
Authors' calculations based on UIS methodology

Using the International Futures (IFs) system, which has been modified to produce forecasts for the districts of Uganda, this research explores the likely future of survival rates along a Current Path scenario. We find that Southwest Uganda is not on track for achieving universal survival rates by 2030. This means that nearly 160,000 children in the region that should be enrolled in the system could be out of school in 2030.

In the Primary Education Push alternative scenario, we simulate an infusion of additional public resources into the education system to the level seen in peer countries in the East African Community. In this scenario, Southwest Uganda's primary survival rates improve over seven percentage points in 2030 (compared to the Current Path scenario). However, roughly 130,000 children still remain outside of the primary system in 2030 in the Primary Education Push Scenario. This underscores the severity of the dropout problem in Southwest Uganda and throughout the country.

This brief is organized as follows:

- Section 1 provides an introduction and national-level analysis of the topic
- In Section 2, we explore the trends in repetition and survival in Southwest Uganda
- Sections 3 and 4 introduce the International Futures (IFs) system and its education model

- In Section 5, we explore forecasts of primary survival in Southwest Uganda the Current Path and Primary Education Push scenarios to 2030 and beyond.

Section 1: Primary education in Uganda

Introduction

Education is a fundamental human right for all. The Universal Declaration of Human Rights, which was ratified in 1948, stated that access to free elementary education is a basic human right.[1] This notion is also recognized in the 1995 Constitution of the Republic of Uganda, which identifies a free basic education as a right of all Ugandans.[2]

Educational attainment is a critical component of human development. Education facilitates the development of technical, vocational and interpersonal skills that allow individuals to become active and productive in the economic, social, and political life. Improving education can target and reduce unemployment, which leads to improvements in poverty and standards of living. Education gives individuals access to technology and skills they can then use to innovate and problem-solve.[3]

Defining survival rates: The UNESCO Institute for Statistics (UIS) defines the survival rate as the "percentage of a cohort of pupils (or students) enrolled in the first grade of a given level or cycle of education in a given school year who are expected to reach successive grades." A survival rate near 100% indicates a "high level of retention and low incidence of dropout."

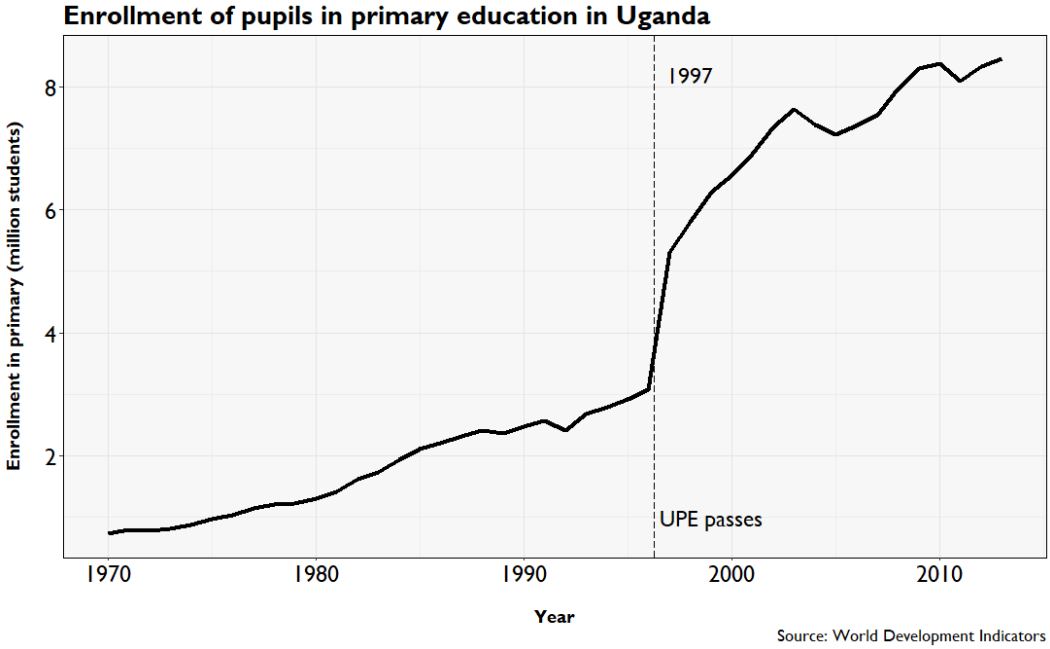
Defining net enrollment rates: defined as "enrolment of the official age group for a given level of education expressed as a percentage of the corresponding population". Gross enrollment rates measure enrollment regardless of the age of the student.

Uganda's education system suffers from a clear bottleneck – although enrollment rates in primary school have improved dramatically, the survival rate of students (also known as the survival rate) has remained stubbornly low.[4] Uganda ranks as the second lowest performing country in the world in primary survival rates (of countries with reported data).

Primary survival rates in Uganda

The Government of Uganda implemented the Universal Primary Education (UPE) system in 1997, which instituted free and compulsory primary education for all Ugandans.[5] Uganda's implementation of UPE was done with a "big bang" approach, in which free primary for all was introduced at once and for all grade levels. This led to a dramatic infusion of learners into the education system.[6] In the first year of the UPE system, enrollment jumped 73% from the previous year. From 1996 to 2013, Uganda's primary enrollment (number of students) improved from about 3 million to nearly 8.5 million students (Figure 3).[7]

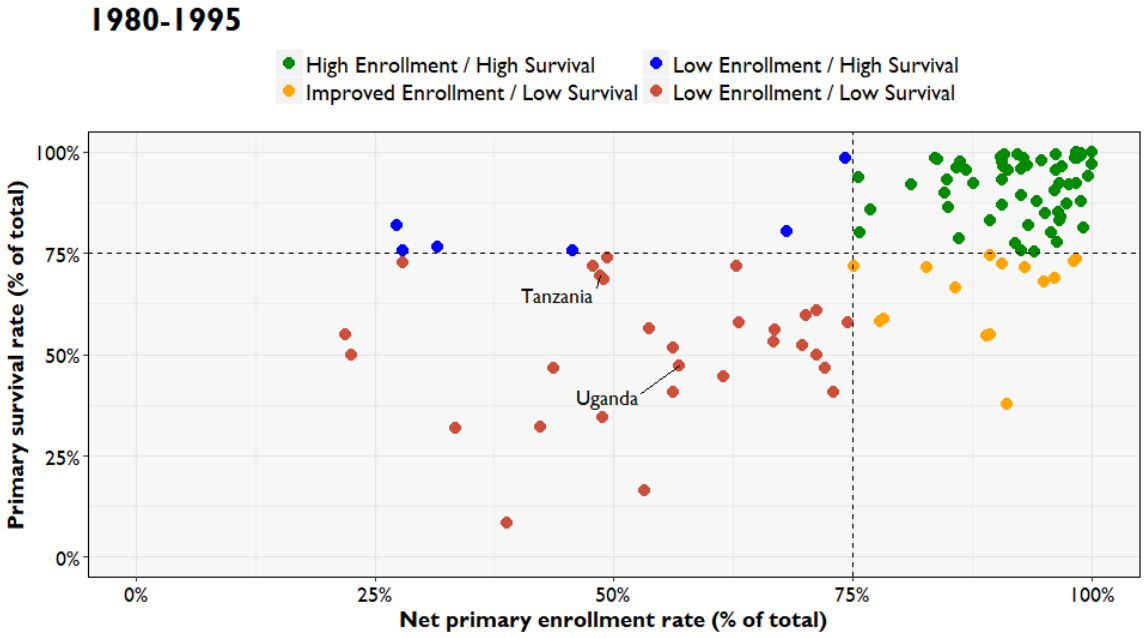
Figure 3. Enrollment in primary education in Uganda, UPE passage highlighted



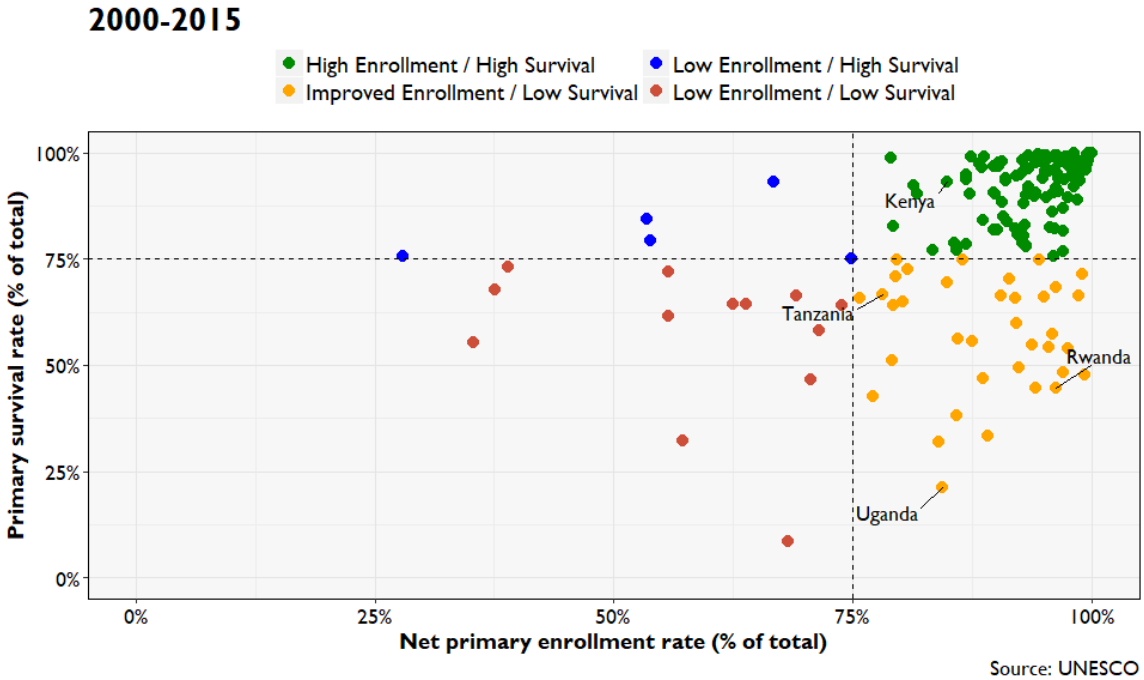
Prior to UPE, Uganda's primary education system could be characterized as a low enrollment, low survival system. The implementation of UPE produced substantial improvements in enrollment or access to primary education. Today, Uganda finds itself in a new problem space (Figure 4), which is the subject of this research. Far too many children drop out of the education system before completing primary school.

Due to high rates of dropout among students, Uganda's primary survival rate in 2014 was just 21.4 percent. This ranks Uganda as the second lowest performing country in the world (of those with reported data).[8] Low survival rates in Uganda indicate that there are issues of quality and inefficiency that prevent students from persisting through the system. This is, of course, imperative, because failing to complete primary school prevents opportunities to achieve higher formal education and skills training.

Figure 4. Categorizing primary education systems by enrollment and survival (most recent data from 1980-1995 and 2000-2015)



Source: UNESCO
Using most recent data from the 1980-1995 period
No data for at least one indicator during period for Rwanda and Kenya



Source: UNESCO
Using most recent data from 2000-2015 period

Causes of dropout in primary school in Uganda

There are many reasons that could lead a student to repeat grades or dropout of primary education, including household poverty, distance from schools, a lack of resources in schools, and abuse. UNICEF, in conjunction with the Government of Uganda and a collection of non-governmental organizations, produced the most comprehensive survey on the causes of dropout in Uganda, known as the "Out of School Survey". This survey explored the causes of dropout by region, household occupation, and refugee status.

The Out of School Survey found that the cost of education was the single biggest reason for dropout in all regions, except Central Uganda (see Table 1).[9] Although primary school tuition is free, there are several additional costs that can make sending a child to school prohibitive. These costs include additional school fees, exam costs, exercise books and school supplies, uniforms, lunches, and sanitary products for females.

Table 1. Leading causes of dropout by region. From the UNICEF 2013/14 Out of School Children Survey.

Reason	Central	Eastern	Karamoja	Northern	Western	Total
Inadequate funding to pay the costs of school	64.9%	76.7%	94.9%	89.3%	74.8%	78.7%
Cooking or cleaning, fetching water or wood	75.0%	71.9%	77.8%	78.1%	62.5%	75.3%
He/she no longer wanted to attend school or had enough	22.1%	31.7%	3.0%	34.1%	14.1%	27.8%
Tend animals, or work on the family farm or in the family business	22.5%	53.1%	22.2%	13.7%	37.5%	25.2%
He/she needed to work or to help at home	28.7%	16.8%	24.3%	26.8%	8.1%	22.2%
Classrooms were too crowded	13.3%	13.0%	18.9%	28.6%	11.2%	19.4%
Drop out age	16.8%	14.0%	12.8%	16.4%	20.9%	16.4%
Child failed examinations or had to repeat class	6.8%	33.3%	10.8%	11.4%	12.8%	16.2%
He got married or made someone pregnant	17.5%	21.7%	21.1%	9.7%	5.1%	13.8%
Teachers did not perform well	17.5%	10.2%	10.8%	16.2%	5.6%	13.5%
It was unlikely that he/she would find a place in secondary	16.5%	26.5%	3.2%	6.0%	13.5%	13.2%
School buildings or facilities were poor or had problems	18.7%	9.2%	16.2%	9.4%	3.7%	10.7%
The school offering the needed class was far away	8.3%	7.5%	7.9%	13.7%	8.8%	10.3%
Work for an employer	6.1%	34.4%	0.0%	0.0%	0.0%	8.2%
Travelling to school was unsafe	15.4%	2.5%	2.8%	8.9%	7.3%	8.1%
Pupils were unsafe at school	13.3%	8.7%	5.4%	2.6%	2.8%	6.2%
School graduates cannot find good jobs	12.7%	8.7%	15.6%	2.0%	0.0%	5.9%

The infusion of new learners in the UPE system has placed stress on an already limited amount of public resources for education. This has led to an environment where households share a substantial burden of the cost for educating their children. One study of education funding sources found that households in Uganda share over half of the total education costs in the primary school system.[10] Roughly 50 percent of teaching materials are funded by households through school fees, with the remaining 37 percent and 13 percent coming from the Government of Uganda and the international community, respectively.[11]

The Out of School Survey found that roughly 40% of Ugandans identified school fees as the leading cost driving students to dropout.[12] Additionally, many schools lack the funds necessary to provide substantial resources for students. Insufficient classrooms, teachers, and latrines create barriers to enroll and make the school environment challenging for students to gain a quality education. Section 5 of this analysis presents a simulation of the impact of an improved school funding environment on primary survival in Southwest Uganda.

Repeating classes and failing exams is often an important element in the context of dropout and survival rates, because they are events in which student performance is evaluated. The Out of School Survey found that these causes of dropout ranked eighth among respondents, but with significant variation among regions, household employment, and refugee status.[13] This analysis will explore repetition as a possible cause of dropout in subsequent sections.

Distance and lack of transportation infrastructure can also limit a student's ability to attend class. Many students drop out because the travel to and from school is too exhausting or difficult to maintain. Approximately 10 percent of respondents in the Out of School Survey said that travel for school was too far, while 8 percent said that it was too dangerous.[14]

Physical, sexual, and emotional abuse in schools creates a toxic environment that inhibits learning and creativity and can lead to attrition. Eighty-one percent of surveyed students reported experiencing some type of violence in school, and 77.7 percent of primary students reported experiencing sexual violence in school.[15] While these figures are unequivocally troubling, the Out of School Survey found that feeling "unsafe at school" was a relatively low stated cause of dropout (approximately 6 percent of respondents). Other barriers to education include a negative or apathetic perception of education (27.8 percent of respondents), crowded classrooms (19.4 percent), early marriage (13.8 percent) or menstruation for girls, and orphan hood.[16]

Repetition and its relationship with survival rates

Grade repetition is often interpreted as having a causal link to student dropout, such that holding back a student increases their likelihood of dropout.[17] Some researchers see this as an inaccurate characterization, because it fails to acknowledge student learning quality or the rationale for holding a child back. The decision to retain a student presents a tradeoff between a myriad of desired outcomes including ensuring the subject matter is learned, developing the socio-emotional skills of the student, and limiting the likelihood of dropout from the system entirely.[iv,18] Are high repetition rates a *cause* of low survival? Or are they a *symptom* of systemic issues in the education system?

Defining repetition rates: The UNESCO Institute for Statistics (UIS) defines repetition rates as the "proportion of pupils from a cohort enrolled in a given grade at a given school year who study in the same grade in the following school year." High repetition rates can reveal inefficiencies or issues in the education pipeline. Official statistics on repetition often underreport its frequency, due to challenges in tracking students as they switch school systems (geographically or between public and private schools).

Kabay (2016) explored the association between repetition and dropout in a multi-year study using student-level data in Uganda. Kabay's analysis found that the age that a student enters primary school in Uganda is critical; older students are more likely to repeat and dropout of primary education. This research also suggests that repetition in P1 and P2 is not associated with an increased likelihood of dropout. The most significant association found between repetition and dropout comes at the P3 level. This could be due to the Uganda's policy of language of instruction, which switches from local languages to English in P3.[19]

Uganda has a national policy of automatic promotion (AP), which technically outlaws the use of repetition as a pedagogical tool. AP (also known as social promotion) is the practice of moving students through the education system, regardless of whether the student met his/her learning objectives and are deemed prepared for the next level. Automatic promotion was implemented in Uganda for P1 through P6 as part of the UPE framework amendment in 2005.[20,21]

Despite the AP policy, there are allowances for repetition in primary schooling for chronic absenteeism or illness. However, Kabay's (2016) qualitative survey analysis found that parents and teachers, although aware of the AP policy, still use grade repeating as a pedagogical tool to improve learning quality.[22] This is an explanation for why high repetition exists in an education setting with an AP policy.

[iv] Research on the utility of grade repetition is mixed, and an evaluation of whether districts with low repetition rates are "high-performing" is outside of the scope of this analysis. For a comprehensive overview of the subject, see *On the success of failure: a reassessment of the effects of retention in the primary school grades.*

Gender parity in education

Defining gender parity: The UNESCO Institute for Statistics (UIS) defines gender parity as the "ratio of female to male values of a given indicator". Values at or near 1 indicate that women are receiving equal access to education and learning opportunities.

Basic education access, for both boys and girls, is a fundamental human right. Gender parity is another critical priority for educational access and attainment. In short, inequities that are created early in a child's development can lead to lifelong disadvantages in economic, social and political life. Improving gender parity in education can lead to reductions in infant, child, and maternal mortality rates. It can also lead to increases in labor force participation and earnings and cultivate more investment into child education.[23] Finally, improvements in enrollment rates for girls and young women is associated with reduced fertility rates over the course of a woman's life.[24] These benefits have the potential to trigger significant positive feedback loops for human and economic development.

Uganda has performed very well in providing equitable access to primary education.[v] In recent years, Uganda has ranked among the leading countries in East Africa and the world in gender parity in primary enrollment rates, with gender parity values exceeding 1.[25]

Section 2: Historical analysis of Southwest Uganda

Details of relevant subnational data collected

The Uganda Ministry of Education and Sports is the primary data source for this analysis.[26] The Education Statistics Abstract is a product created from the results of Annual School Censuses and includes information such as:

- Enrollment and repeating students by various demographic segments (gender, nationality, orphan status, and students with special needs),
- School infrastructure data, such as public/private/non-formal schools,
- Teacher qualification and licensure data

This analysis will focus heavily on the data reported on student enrollment and repetition in primary schools in Southwest Uganda. These data represent the official accounting of student enrollment and survival, but a study from RTI International shows that parental surveys suggest repetition rates that are as much as ten times higher.[27] Many of the enrollment and repetition rates analyzed have been derived from data reported in the annexes of the Education Statistics Abstracts following the standards and methods maintained by the United Nations Educational, Scientific, and Cultural Organization (UNESCO).[28]

---

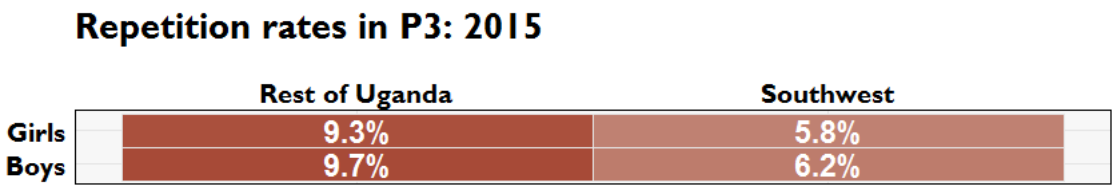
[v] It should be noted that there are many indicators, such as literacy rates or secondary survival rates, in which gender parity is a significant problem. Many districts and subregions in Uganda perform well in gender parity in primary enrollment and survival rates.

Repetition in primary schooling in Southwest Uganda

The repetition rates in Southwest Uganda are generally lower than the rest of Uganda. Looking across the primary education system, several interesting patterns in repetition rates emerge:

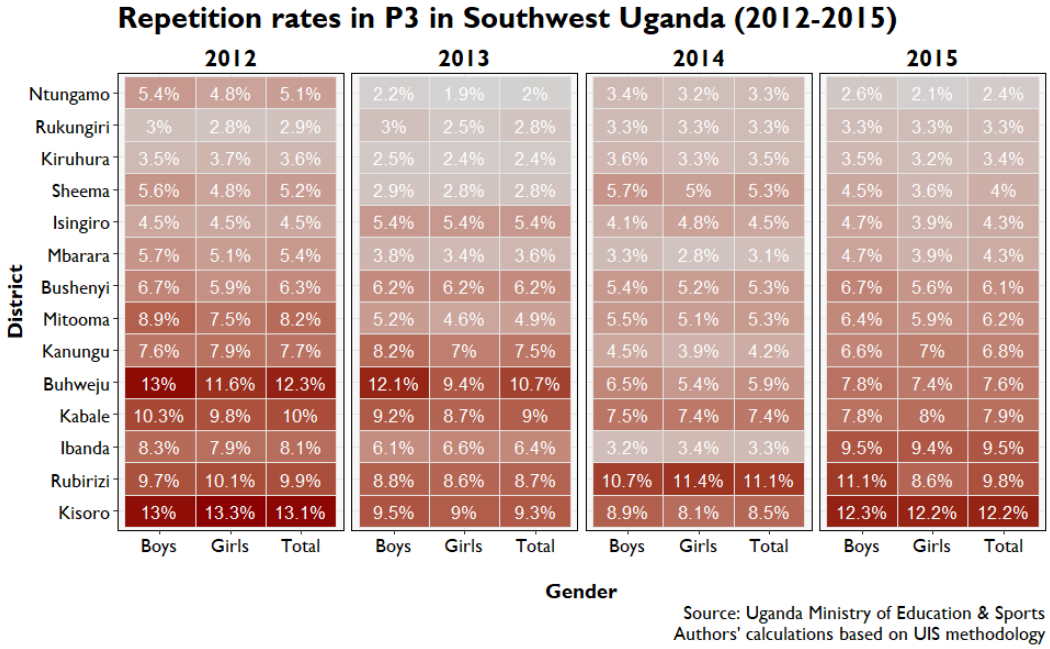
- Following Kabay's (2016) research, which highlighted the importance of P3 to survival through primary, the Southwest has demonstrably lower P3 repetition rates than districts representing the rest of Uganda (Figure 5).

Figure 5. Repetition rates in P3 in 2015



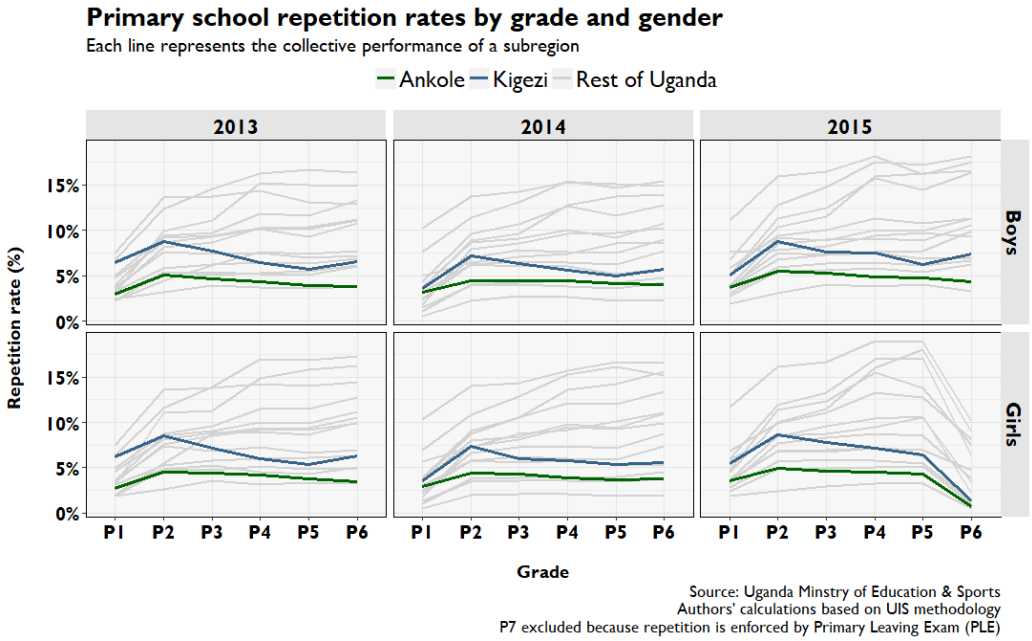
- Within the Southwest, there are districts have consistently lower repetition rates in P3, including Rukungiri, Ntungamo, Sheema, and Kiruhura (Figure 6).

Figure 6. Repetition rates in P3 in Southwest Uganda (2012-2015)



- Relative to other subregions, the Southwest has low repetition rates across all grades (Figure 7).
- All subregions experience a spike in repetition in P2. The repetition rate in Ankole and Kigezi is highest in P2 and P3 for boys and girls. Most other subregions experience rising repetition rates after P2, but Southwest Uganda performs noticeably better. This demonstrates that P2 and P3 could be important bottlenecks to improving primary survival rates in Southwest Uganda (Figure 7).

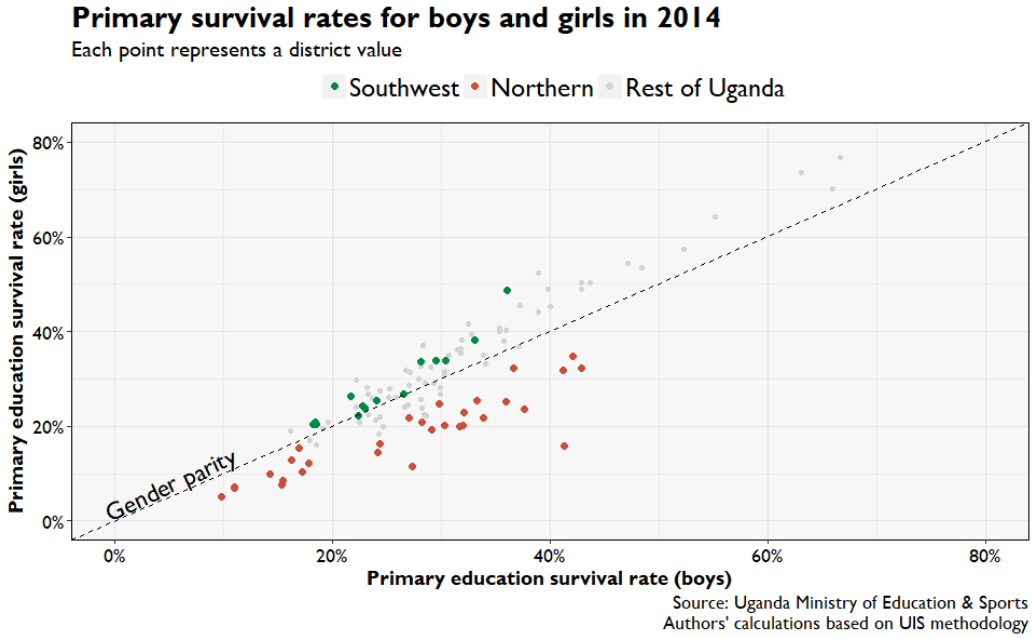
Figure 7. Primary school repetition rates by grade and gender in 2013-2015 (subregions in Southwest highlighted)



Gender parity in Southwest Uganda

The importance of gender parity in education should not be understated. This is a success story in Southwest Uganda – girls and boys are matriculating through the primary system at similar rates. Most districts in Southwest Uganda are near or above the gender parity line, indicating that the survival rate of girls exceeds that of boys in the region (Figure 8); in contrast, not a single district in Northern Uganda has a primary survival parity rate above 1 in 2014.

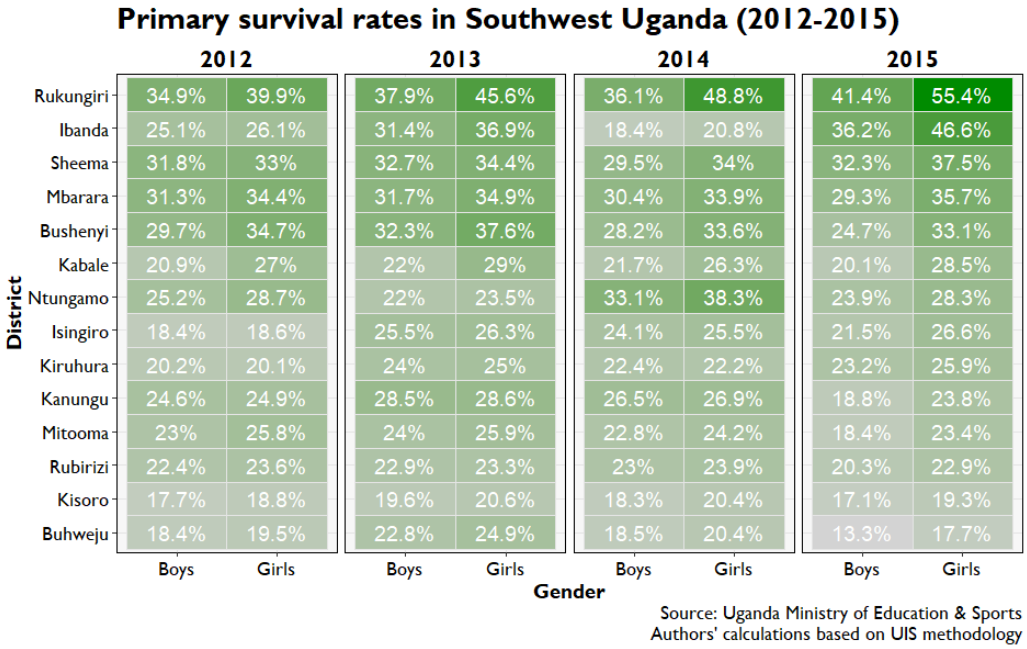
Figure 8. Gender parity in primary survival rates in 2014



Primary survival rates in Southwest Uganda

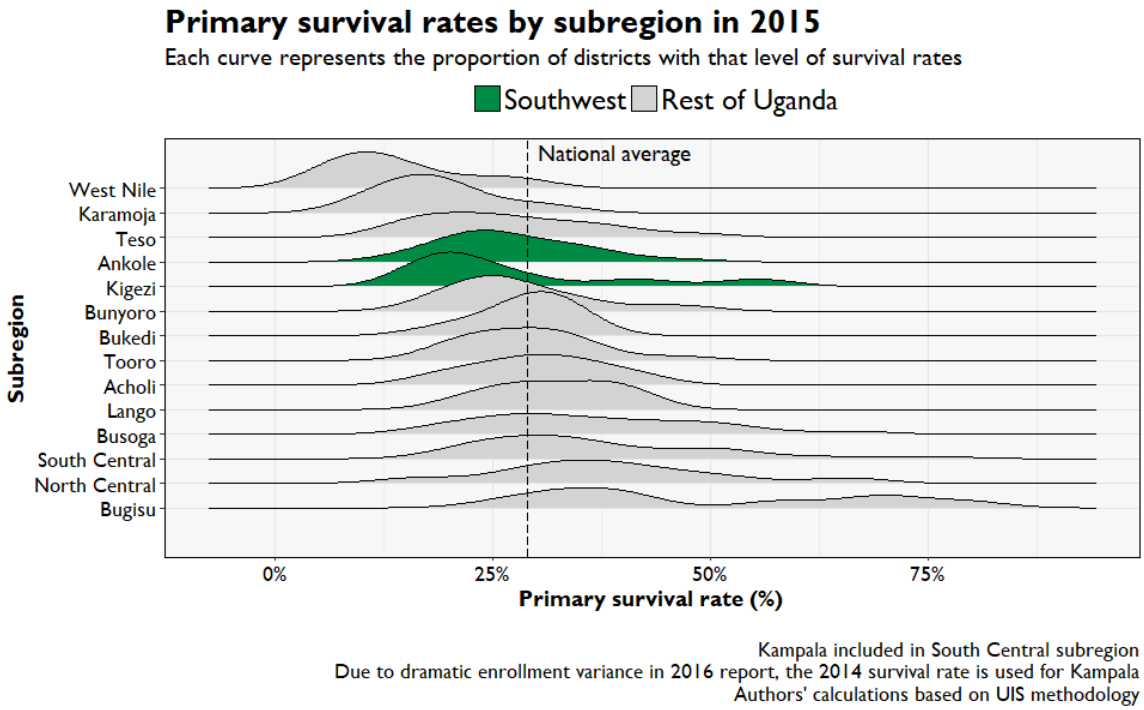
The total primary survival rate (including boys and girls) for the Southwest region is 26.9 percent. Looking within the region, there are districts that are consistently high performing (relatively speaking), including Rukungiri, Sheema, and Mbarara (Figure 9). As the previous section illustrates, gender parity in primary education is strong in Southwest Uganda. The issue is that survival rates are low for *both boys and girls*, and policies are needed to reduce dropout rates for all students.

Figure 9. Primary survival rates in Southwest Uganda (2012-2015)



A regional examination of the data shows that Southwest Uganda performs just below the nationwide average (Figure 10). In some respects, this is a promising story. While other regions need to improve gender parity and total survival, districts in Southwest Uganda can focus on improving primary survival rates for all children.

Figure 10. Primary survival rates by subregion in 2015 (subregions in Southwest Uganda highlighted)



Section 3: Subnational analysis with International Futures

The International Futures (IFs) modeling platform is a tool for thinking about long-term country-specific, regional, subnational, and global futures. IFs integrates across different models, including: population, economy, agriculture, education, energy, sociopolitical, international political, environment, technology, infrastructure, and health. These models are dynamically connected, so IFs simulates how changes in one system lead to changes across all other systems. As a result, IFs endogenises more relationships from a wider range of key global systems than any other model in the world. Technical documentation on each model is available on the International Futures wiki (www.pardee.du.edu/wiki).

The remainder of this analysis will make use of the IFs Uganda district model, which has been under development for analysis since early 2017. This model relies on data that is sourced from several Ugandan organizations or surveys, including UBOS, the Ugandan Demographic and Health Survey, Open Data for Africa, and more.

Text Box 1. About the Current Path scenario

The Current Path scenario represents prevailing development trends and their interaction across all systems in IFs the model. The Current Path assumes no major disruptions in development, policy shifts, or wildcard events (low probability, high impact events such as a global pandemic). However, the Current Path is a dynamic, non-linear forecast and not an extrapolation of historical trends. With each year that the model runs, it is generating forecasts from the relationships that are structured within and across the systems represented in IFs. The Pardee Center regularly compares the Current Path with other global projections, such as those done by the United Nations Population Division.

Section 4: The IFs education model

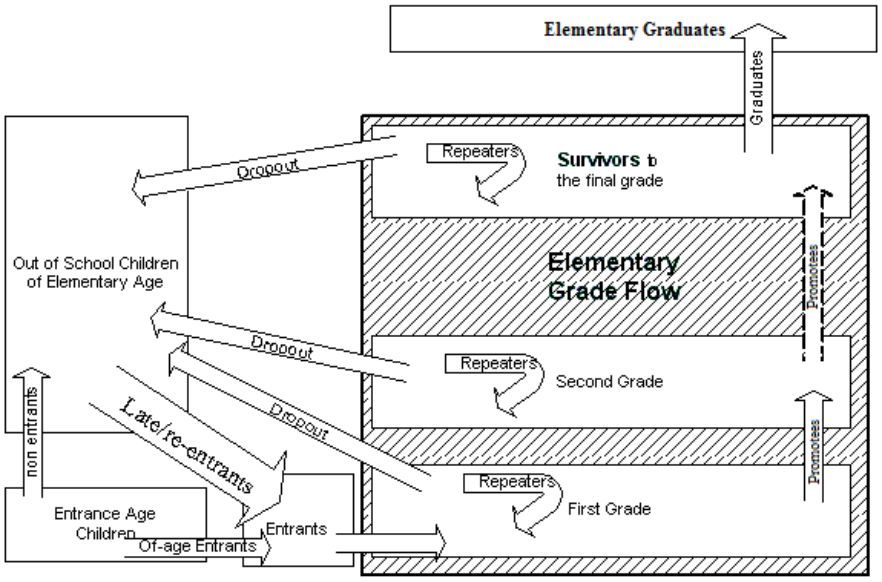
The IFs education model, like all other models in the system, is dynamically interconnected with feedback loops to demographic, economic, social-political models in the system. For example, the demographic model introduces the number of eligible students in single-year age cohorts, and educational attainment drives fertility reductions back to the demographic model. Similarly, educational attainment drives growth in human capital, which enhances economic productivity; this growth, in turn, provides more government revenue potential that can increase per student spending in education.[29]

Defining net intake rates: The UNESCO Institute for Statistics (UIS) defines intake rates as the "new entrants in the first grade of primary education who are of the official primary school-entrance age, expressed as a percentage of the population of the same age". Gross intake rates measure entrants regardless of the age of the student. In Uganda, gross intake rates are well above 100%, as students that did not enter the system on time are catching up with late intake into the education system.

The IFs education model represents the intake of students in P1 and the single-grade promotion and retention of learners through completion or dropout of the system (known as the grade-to-grade flow rate). IFs uses simplifying assumptions to estimate and project repetition and dropout at each grade level with the average across each grade in the system. See Figure 11 for a visual representation of the primary education system in IFs.[30]

Intake and survival rates are projected as a function of per capita income and government expenditures on education. These flow rates update the stock of children in the primary school system for each year in the forecast, which ultimately links to the adult educational attainment over time. As a result, IFs forecasts the age-sex structure of populations with educational attainment estimates for all districts in Uganda.[31]

Figure 11. IFs conceptual framework for student flows in primary education



Text Box 2. Data quality and reconciliation in International Futures

Education data routinely suffer from quality issues. Enrollment rates do not attempt to measure the regularity of year-round enrollment (or absenteeism) of learners. Repetition rates typically miss transfer students (due to students moving or switching schools within districts), which often underestimates repetition rates. The age of students is not always known or accurate, which influences the quality of intake and enrollment data. Although each of these variables are closely related, they are often calculated without using a common data source. This analysis highlights two data quality issues:

- Net enrollment and net intake rates often exceed 100% in the *Education Statistics Abstracts* data. These data are intended to have a maximum value of 100%.
- Gross intake rates were as high as 345% in the officially-reported statistics. While this rate is theoretically possible, it significantly exceeds the rates seen internationally. Due to the relationship between intake and survival in IFs, these high gross intake rates drive elevated survival rates in the forecast period.

The IFs education model reconciles incompatible educational flow data (intake, enrollment, and survival rates). It works by (1) identifying incompatible flow data; (2) applying rules that prioritize and retain the data that are more likely to be of higher quality; and (3) replacing recomputed values for the data that are likely lower quality. At the primary level, data on enrollment rates are more extensive and reliable than either intake or survival data; intake rates have fewer missing values and are arguably more reliable measures than survival rates.

In the projections that follow, districts with large changes in survival rates from historical data to projections highlight an incompatibility in the district-level intake, enrollment, and survival data imported into the IFs Uganda model.

Section 5: The future of primary survival in Southwest using IFs

The Current Path

The Current Path scenario indicates that Southwest Uganda is not on track for achieving universal survival rates by 2030. No districts achieve a 70 percent survival rate in the Current Path scenario by 2030 (Figure 12). This means that nearly 160,000 children in Southwest Uganda that should be enrolled in the system could be out of school in 2030 (Table 2). This is an enormous missed opportunity for regional human and economic development.

Figure 12. Primary survival rates, historical data and forecast (Current Path scenario)

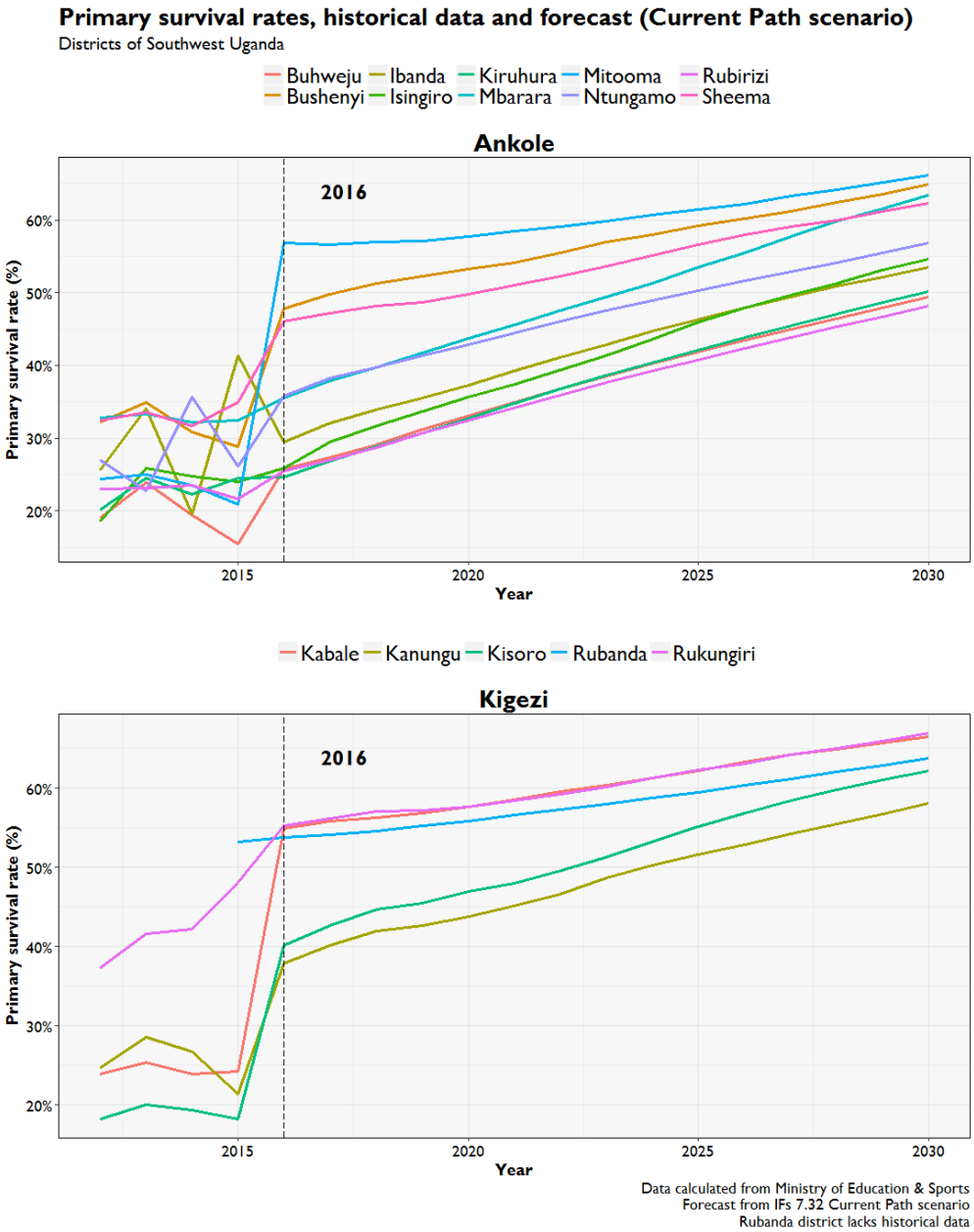


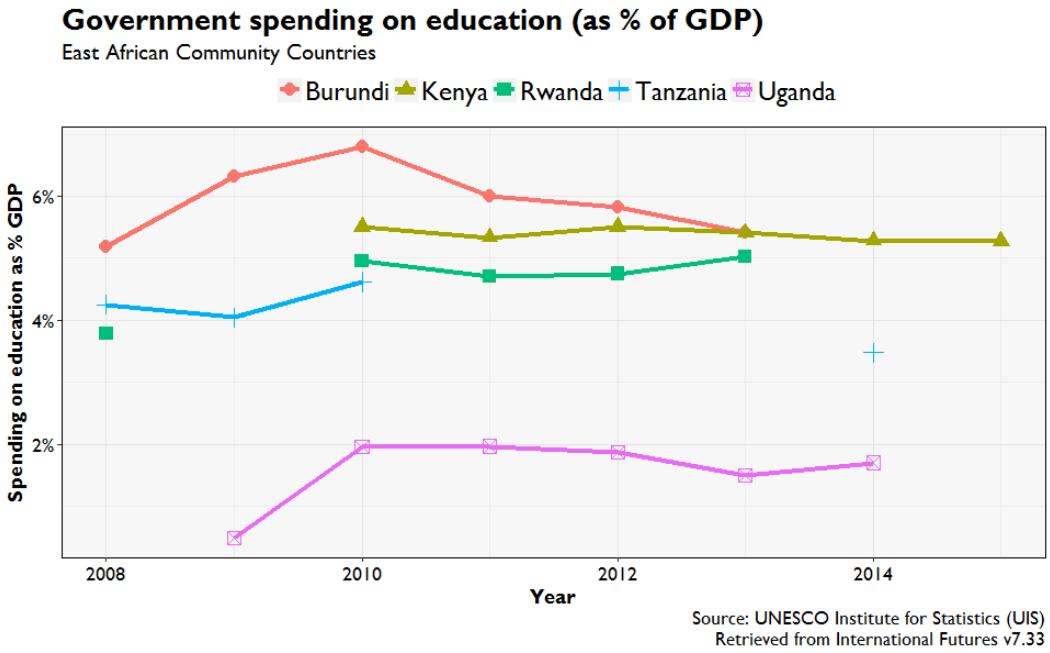
Table 2. Students missing from primary system in thousands, Current Path scenario

District	2018	2024	2030
Buhweju	6.3	6	5.6
Bushenyi	16.2	14.1	9.7
Ibanda	11.2	10.4	8.5
Isingiro	19.9	18.5	16.3
Kiruhura	13.1	12.3	10.7
Mbarara	23.2	19.6	12.6
Mitooma	13.1	12.4	10.3
Ntungamo	28	26.1	23.1
Rubirizi	5.7	5.5	5.5
Sheema	11.6	10.6	7.3
Ankole-Total	**148.3**	**135.5**	**109.6**
Kabale	16.1	14.3	10
Kanungu	13.5	12.2	9.3
Kisoro	10.4	9.3	7.7
Rubanda	9.6	9	7.3
Rukungiri	18.9	18.4	14.5
Kigezi-Total	**68.5**	**63.2**	**48.8**
Southwest-Total	**216.8**	**198.7**	**158.4**

Scenario analysis: Primary Education Push scenario

The Out of School Study found that "inadequate funding to pay for the costs of school" was the most commonly identified reason for dropping out of school. Although Universal Primary Education was implemented nearly two decades ago, families still identify costs as the most common cause for dropout across all regions in Uganda. Following the implementation of UPE, there has been a sustained shortfall in government outlays to meet the needs of the UPE system. Of the countries in the East African Community (EAC), Uganda has ranked last in education spending (as a percent of GDP) for each year since 2009. In fact, Uganda has not eclipsed two percent of GDP in education spending, while most other countries in the EAC are above four percent per annum.[32]

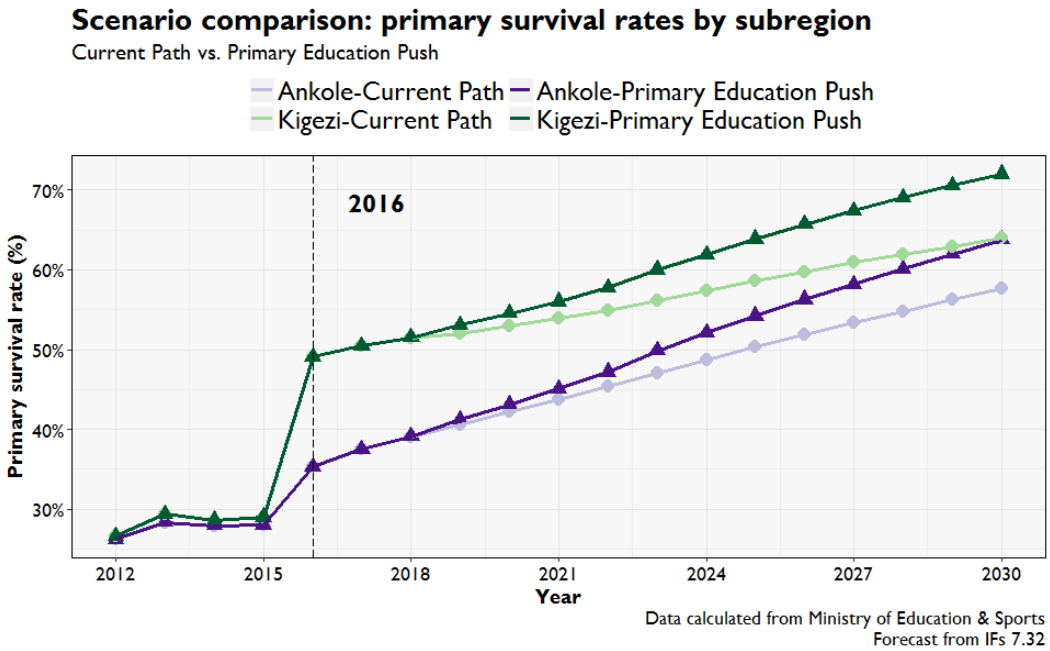
Figure 13. Government spending on education (as % of GDP), East African Community



In the **Primary Education Push** scenario, we increase education spending in Southwest Uganda to meet five percent of GDP (seen by other countries in the EAC in recent years) by 2030.[vi] This scenario simulates the impact of increased government budget outlays to support the material needs of teachers, school infrastructure, and school supplies, thus offsetting the cost demands that families have identified as the primary reason for school dropouts. This scenario is a drive for equitable access to education in Uganda. When the cost of public school is the most common reason for dropout, the education system fails to serve the poor and vulnerable populations that are most in need.

[vi] This scenario was modeled after the Primary Education Push scenario in the following Pardee Center publication: Jonathan D. Moyer et al., "Advancing Development in Uganda: Evaluating Policy Choices for 2016-21 and Selected Impacts to 2040" (Frederick S. Pardee Center for International Futures, 2015).

Figure 14. Scenario comparison: primary survival rates by subregion (Current Path vs. Primary Education Push)



In Primary Education Push, enrollment rates improve and fewer children leave primary school prematurely. Survival rates in this scenario improve across the region by an average of seven percentage points in 2030. In this scenario, two-thirds of children remain and complete their primary education. Additionally, approximately 130,000 children are not enrolled in primary school in 2030 – an improvement of more than 25,000 students relative to the Current Path. These results underscore the importance of increased investments in the UPE system, as well as the severity of the dropout problem that will remain.

Conclusion

Survival and dropout rates in education are complex phenomena to study, because data are not easily collected on the frequency, timing, or reason for dropping out of school. In this brief, we evaluate the research on the subject and present new data on survival and repetition rates by district and subregion to contribute to the study of the topic. We encourage more research on this topic, and districts such as Rukungiri, Sheema, and Mbarara, could provide useful qualitative case studies to examine relatively high performing districts in Southwest Uganda.

There are significant challenges in the primary education system, including household poverty, fragmented transportation networks, a lack of quality school infrastructure, and abuse in schools, which leads to high rates of repetition or dropout in the system. This research finds evidence in support of the Out of School Survey results, which explored the reasons for student dropout in Uganda. Southwest Uganda's relatively low grade-to-grade repetition rates in primary schooling support the Out of School Survey finding that repetition or failed examinations is not a top reason given for school dropouts in the region. Cost – and in particular, school fees – is the most commonly identified reason for dropping out of the school

system. Uganda's need to increase education funding has persisted, which leaves households responsible for supplementing this shortfall with school fees and other related expenses.

The Primary Education Push scenario simulates the potential impact of increased government investment in education. In this scenario, we find that an increase in education spending in the region to levels comparable across the East African Community yields, on average, a seven percentage point increase in survival rates in 2030 (relative to the Current Path). However, roughly 130,000 children still remain outside of the primary system in 2030 in the Primary Education Push Scenario. This underscores the severity of the dropout problem in Southwest Uganda and throughout the country.

Of course, improving primary education is only the beginning. Secondary education delivers higher value technical and vocational skills that are critical for well-paid, sustained employment. The secondary system in Uganda has challenges that are distinct from this analysis of primary education. Poor survival through primary education thwarts greater opportunities at the secondary level and beyond. Improving student survival through primary education should be a key priority. This will allow Southwest Uganda to develop to its full potential with a healthy, well-educated populace and a competitive workforce, and it will enhance development opportunities for the region for the current and future generations.

---

[1] UN General Assembly, "Universal Declaration of Human Rights" (1948), http://www.ohchr.org/EN/UDHR/Documents/UDHR_Translations/eng.pdf.
[2] "Constitution of the Republic of Uganda, 1995" (1995), http://www.refworld.org/docid/3ae6b5ba0.html.
[3] Yusuf Sayed, "Making Education a Priority in the Post-2015 Development Agenda" (UNESCO and UNICEF, 2013), https://www.unicef.org/education/files/Making_Education_a_Priority_in_the_Post-2015_Development_Agenda.pdf.
[4] In Uganda, primary education lasts seven years; a student that persists through the system on time is generally between the ages of six to twelve years old.
[5] Uganda Ministry of Education and Sports, "Education for All 2015 National Review: Uganda," 2015, http://unesdoc.unesco.org/images/0023/002317/231727e.pdf.
[6] Roger Avenstrup, Xiaoyan Liang, and Soren Nellemann, "Kenya, Lesotho, Malawi and Uganda: Universal Primary Education and Poverty Reduction," Case Study, Reducing Poverty, Sustaining Growth: What Works, What Doesn't, and Why A Global Exchange for Scaling Up Success (World Bank, 2004), http://web.worldbank.org/archive/website00819C/WEB/PDF/EAST_AFR.PDF.
[7] UNESCO Institute for Statistics. Retrieved from the World Bank's World Development Indicators project.
[8] UNESCO Institute for Statistics (UIS). Retrieved from International Futures v7.33.
[9] Christine Mpyangu et al., "Out of School Children Study in Uganda" (UNICEF, March 2014), https://www.unicef.org/uganda/OUT_OF_SCHOOL_CHILDREN_STUDY_REPORT__FINAL_REPORT_2014.pdf.
[10] UNESCO Institute for Statistics, "Who Pays for What in Education? The Real Costs Revealed through National Education Accounts" (Montreal: UNESCO Institute for Statistics, 2016), http://unesdoc.unesco.org/images/0024/002462/246277e.pdf.
[11] UNESCO Institute for Statistics.
[12] Mpyangu et al., "Out of School Children Study in Uganda."
[13] Mpyangu et al.
[14] Mpyangu et al.

[15] UNICEF, "Assessing Child Protection, Safety and Security Issues for Children in Ugandan Primary and Secondary Schools," Research Brief, July 2013, https://www.unicef.org/uganda/VACis_Study_Summary_July_8th_10.31am(1).pdf.
[16] Mpyangu et al., "Out of School Children Study in Uganda."
[17] UNESCO Institute for Statistics, ed., *Opportunities Lost: The Impact of Grade Repetition and Early School Leaving*, Global Education Digest (Montreal, 2012).
[18] Karl Alexander, Doris Entwisle, and Susan Dauber, *On the Success of Failure: A Reassessment of the Effects of Retention in the Primary School Grades*, 2nd ed. (Cambridge University Press, 2003).
[19] Sarah Kabay, "Grade Repetition and Primary School Dropout in Uganda," *Harvard Educational Review* 86, no. 4 (2016): 580–606.
[20] Jeje Moses Okurut, "Automatic Promotion and Student Dropout: Evidence from Uganda, Using Propensity Score in Difference in Differences Model," *Journal of Education and Learning* 7, no. 2 (January 16, 2018): 191, https://doi.org/10.5539/jel.v7n2p191.
[21] Note, students in P7 must pass the national Primary Leaving Exam (PLE) in order to complete primary school and be eligible for S1.
[22] Kabay, "Grade Repetition and Primary School Dropout in Uganda."
[23] World Economic Forum, "Global Gender Gap Report 2016" (World Economic Forum, 2016), http://www3.weforum.org/docs/GGGR16/WEF_Global_Gender_Gap_Report_2016.pdf.
[24] Joel Cohen and Martin Malin, eds., "Universal Basic and Secondary Education," in *International Perspectives on the Goals of Universal Basic and Secondary Education* (Routledge, 2010).
[25] UNESCO Institute for Statistics (UIS). Retrieved from International Futures v7.33.
[26] The most recent annual statistical reports are available at http://www.education.go.ug/data/smenu/4/Statistics%20Abstract%20.html.
[27] Tracy Brunette et al., "Primary 1 Repetition and Pre-Primary Education in Uganda," Research Brief (RTI International, 2017), https://www.rti.org/sites/default/files/brochures/uganda_researchbrief_ecd.pdf.
[28] UNESCO Institute for Statistics, "Education Indicators Technical Guidelines," Technical Guidelines (UNESCO Institute for Statistics, November 2009), http://uis.unesco.org/sites/default/files/documents/education-indicators-technical-guidelines-en_0.pdf.
[29] Janet R. Dickson, Barry Hughes, and Mohammod T. Irfan, *Advancing Global Education*, vol. 2, 5 vols., Patterns of Potential Human Progress ([Denver] : Boulder : New Delhi: Pardee Center for International Futures, University of Denver ; Paradigm Publishers ; Oxford University Press, 2010).
[30] Frederick S. Pardee Center for International Futures, "International Futures Education Model Documentation," accessed February 28, 2018, https://pardee.du.edu/wiki/Education.
[31] Frederick S. Pardee Center for International Futures.
[32] UNESCO Institute for Statistics (UIS). Retrieved from International Futures v7.33.