DEVELOPMENT POLICY RESEARCH UNIT

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COMBINING EDUCATIONAL ACCESS AND EDUCATIONAL QUALITY INTO A SINGLE STATISTIC

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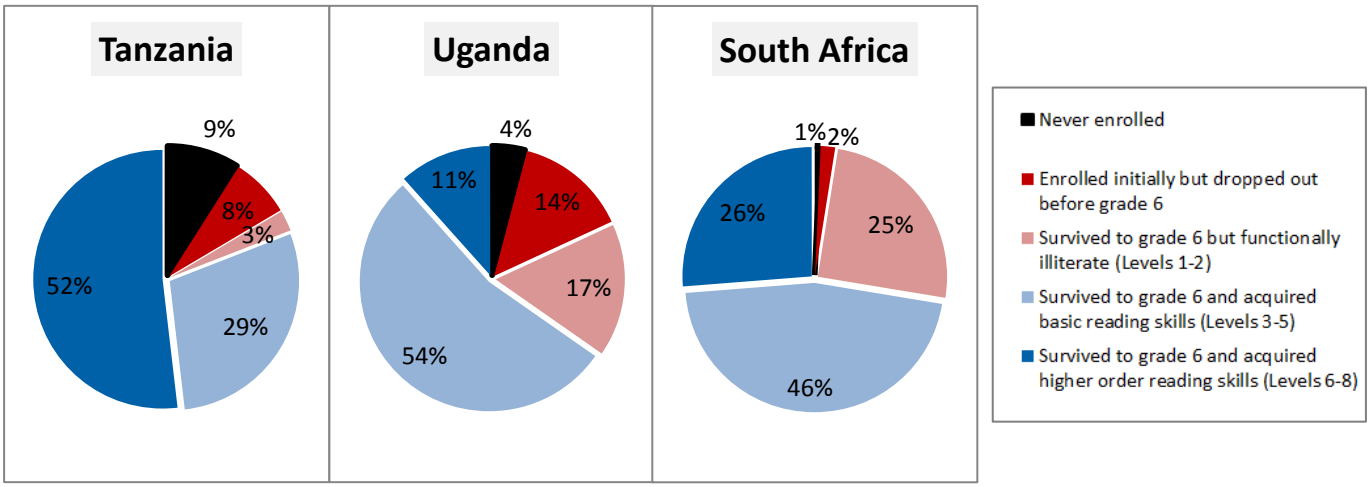
I. INTRODUCTION

The expansion of access to schooling in developing countries has been one of the most successful social movements in recent history. The proportion of people aged 15 and over, living in developing countries, that had no schooling halved between 1980 (38%) and 2010 (17%) (Barro & Lee, 2010, p. 32). Consequently, there has also been a drastic increase in the average years of schooling, rising from 4.3 years (1980) to 7.1 years (2010). Unfortunately, learning outcomes in many of these countries can only be described as dismal. When taken together, these two outcomes prompt the question: "What is the purpose of expanding access to formal schooling?" Is it to increase the number of children frequenting a building called a "school", or is it to increase the number of students acquiring the knowledge, skills and values they need to participate in modern society? If it is the latter, then that is what we should measure.

Recent scholarship has started to draw attention to the increasing disconnect between schooling (access) and learning (quality). A sequential analysis of the access-to-education literature, and subsequent policy dialogues, shows an important development in the thinking of educational researchers. What started out as an almost single-minded focus on access, 'Education For All', has slowly developed into a more nuanced concept of quality education for all (UNESCO, 2005; Lewin, 2007). As more and more countries approach universal enrolment, there is a shift away from simplistic measures of access to schooling and towards a fuller concept of access to learning. Although the method and data used here will be discussed at length below, Figure 1 provides an illustration of such an attempt at combining measures of access and quality for three different countries: Tanzania, Uganda and South Africa. From the graphs one can see that the three different countries face different problems. In Tanzania initial enrolment is particularly low whereas in Uganda where low initial enrolment is less of a problem, dropout between grade 1 and grade 6 is unusually high. In South Africa – where initial access is high and dropout low, there are large proportions of children that are in school in grade 6 but remain functionally illiterate. Clearly there are country-specific differences with respect to both access and quality.

Figure 1: Integrating measures of access to education (enrolment) and quality of education (learning)



It is now widely accepted that the ability of a country to educate its youth cannot be measured by access to schooling or enrolment rates alone, but rather by its capacity to impart to students the skills, abilities, knowledge, cultural understandings and values that are necessary to function as full members of their society, their polity, and their economy (Pritchett, 2013). While access is a necessary condition for this type of education, it is by no means a sufficient one. On this matter, closer inspection of the phrasing of the second goal of the Millennium Development Goals (MDGs) is telling: "*To ensure that by 2015, children everywhere, boys and girls alike will be able to complete a full course of primary schooling*." Inherent in the goal is presumably the underlying assumption that children learn as they progress through school and that completing primary schooling means that children have acquired some foundational knowledge and skills – an assumption that is not in fact true in many instances, as will become clear in the discussion below.

> ***A Millennium Learning Goal***
>
> *"Even in countries meeting the Millennium Development Goal of primary completion, the majority of youth are not reaching even minimal competency levels, let alone the competencies demanded in a globalized environment…While nearly all countries' education systems are expanding quantitatively nearly all are failing in their fundamental purpose. Policymakers, educators and citizens need to focus on the real target of schooling: adequately equipping their nation's youth for full participation as adults in economic, political and social roles. A goal of school completion alone is an increasingly inadequate guide for action…focusing on the learning achievement of all children in a cohort a [Millennium Learning Goal] eliminates the false dichotomy between "access/enrolment" and "quality of those in school": reaching an MLG depends on both" (Filmer, Hasan, & Pritchett, 2006, p. 1).*

Notwithstanding the above, the existing literature on education in developing countries is almost entirely bifurcated with research focusing on either access to education or the quality of education, but rarely both simultaneously (for exceptions to this see Hanushek & Woessmann, 2008; Pritchett, 2013). This is problematic for two reasons: 1) Observing access to education without regard for the quality of that education can be misleading, primarily because the underlying assumption that enrolment and attainment are correlated with learning is often not true; 2) Analysing the quality of education amongst those attending school without taking into account the enrolment and dropout profiles of countries is likely to bias the results. Countries with lower enrolments and higher dropout rates perform better on average, than otherwise similar countries that have higher enrolments and fewer dropouts (UNESCO, 2005, p. 48). This is largely due to the selection effects involved where the 'strongest' (i.e. the wealthiest, most advantaged, and most able) students enrol and then remain in the schooling system (Lambin, 1995).

The aim of this policy brief is to summarize new research which combines educational access and educational quality into a single measure. By combining household data on grade survival and survey data on cognitive outcomes it becomes possible to provide an integrated picture of educational performance for ten African countries: Kenya, Lesotho, Malawi, Namibia, South Africa, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe.

II. METHOD

In order to create a composite measure of educational performance it is necessary to have data on both educational access and educational quality. If one can get an estimate of the number of children that reach a particular grade (access) as well an estimate of the learning achievement of students in that grade (quality), it is possible to combine these two measures into a statistic which measures "access-to-learning." We use grade 6 because this is the only grade for which there is cross-national data on learning achievement in sub-Saharan Africa.

Data on access

For data on access to education one can either use the enrolment or grade-survival rates reported by governments themselves, found in the UNESCO Global Monitoring Reports, or one can use household survey data such as the Demographic and Health Survey (DHS). Particularly for cross-country comparisons, a survey like the DHS is often more reliable than country-reported enrolment rates since the data are collected by an independent body and done so in a standardised manner using a standardised instrument. A further problem with the Gross Enrolment Ratios (GER) and Net Enrolment Ratios (NER) typically reported is that they combine data from two sources: school administrative data for the numbers enrolled and population statistics data for the size of the age-specific population (Stukel & Feroz-Zada, 2010). If one or both of these estimates are incorrect the resulting GER or NER can be strongly biased. Moreover, GERs and NERs by their definition are heavily influenced by grade repetition and age-for-grade patterns. Therefore, the measures themselves and the data used often render GERs and NERs an inadequate picture of access to schooling.

Education & Economic Growth

"It is both conventional and convenient in policy discussions to concentrate on such things as years of school attainment or enrolment rates at schools. These things are readily observed and measured. They appear in administrative data, and they are published on a consistent basis in virtually all countries of the world. And they are very misleading in the policy debates. Cognitive skills are related, among other things, to both quantity and quality of schooling. But schooling that does not improve cognitive skills, measured here by comparable international tests of mathematics, science, and reading, has limited impact on aggregate economic outcomes and on economic development…We provide strong evidence that ignoring differences in cognitive skills significantly distorts the picture about the relationship between education and economic outcomes" (Hanushek & Wößmann , 2008, p. 608).

After deciding which data to use, one then needs to calculate the number of students that reach the grade for which you have learning-outcome data, in this case grade 6. Thus one would need to find a measure of how many students actually continue to grade 6 in each country. From the DHS data we are able to see how many children never enrol in school, how many enrol but drop out prior to Grade 6, and how many enrol and survive to Grade 6 for different ages.

One important point to remember when looking at educational access in Africa is the widespread practice of grade-repetition and late-entry. This leads to a situation where a number of students are older (and sometimes considerably older) than they should be for the grade that they are currently in. If students start school at age six then they should be 12 years old by the end of Grade 6. Yet the data show that many children in Grade 6 are considerably older than this. Looking at the students that wrote the Grade 6 SACMEQ test in 2007, there were large numbers of students that were aged 15 or older,

the specific proportions being: Kenya (24%), Lesotho (27%), Malawi (32%), Namibia (18%), South Africa (7%), Swaziland (26%), Tanzania (37%), Uganda (29%), Zambia (29%), and Zimbabwe (2%). Following Filmer (2007) we use the Grade survival rates of 10-19 year olds calculated by Filmer (2010) using the closest DHS data to 2007 (the year SACMEQ was conducted).[1] We use these estimates of Grade survival rates for ages 10-19. Not using this method leads to an underestimate of grade survival and enrolment, with the underestimate being larger the larger the proportion of overage students in the finishing cohort.

Data on quality/learning

The only cross-national study of learning outcomes in sub-Saharan Africa is the SACMEQ[2]. SACMEQ is a consortium of education ministries, policy-makers and researchers that, in conjunction with UNESCO's International Institute for Educational Planning (IIEP), aims to improve the research capacity and technical skills of educational planners (Moloi & Strauss, 2005; Murimba, 2005) and to provide policy-relevant information on the quality of education in 14 participating countries. To date, it has conducted three nationally representative school surveys in participating countries, specifically SACMEQ I (1996), SACMEQ II (2000), and SACMEQ III (2007). These surveys collect extensive background information on the schooling and home environments of students, and in addition, test students and teachers in both numeracy and literacy (Ross, et al., 2005).

Schooling & Learning

"Education is the preparation of children to assume their adult roles in society as loving parents, as engaged citizens, as contributors to society and their communities, and as productive workers. The premise is that schooling and education are linked: a child who spends more years in school is thereby expected to acquire more education—more skills, more capabilities, more competencies. Yet, tragically, it has been demonstrated again and again that this is not always the case" (Pritchett, 2013, p. 2).

Based on the results of the numeracy and literacy tests, SACMEQ classifies school-going children into one of eight categories for reading, ranging from *pre-reading* (level 1) to *critical reading* (level 8), and similarly for mathematics, where the levels range from pre-numeracy (level 1) to *abstract problem solving* (level 8). Detailed descriptions of the eight competency levels can be found in Hungi, et al. (2010, p. 6). According to this classification system, if children have not reached level three in either reading ('*basic reading*') or mathematics ('*basic numeracy*') they are deemed functionally illiterate[3] and functionally

[1] The specific dates that each DHS survey was conducted in 9 of the SACMEQ countries are: Kenya (2008-9), Lesotho (2009), Malawi (2010), Namibia (2006-7), Swaziland (2006-7), Tanzania (2010), Uganda (2006), Zambia (2007) and Zimbabwe (2005-6). For South Africa, we follow Filmer (2010) and use the South African General Household Survey of 2006, given that the South African DHS data have not been released to date. Filmer (2007, p. 166) derives the Kaplan-Meier survival probabilities which "implicitly accounts for the fact that some in the cohort are still in school and will ultimately complete a higher grade than they are currently observed to be in." The Kaplan-Meier method is based on the assumption that those still in school who have not yet reached grade 6 have a similar probability of survival as the group of the same agewho have already been observed to either reach grade 6 or drop out of school. In reality the survival rate amongst those still in school would probably be slightly lower. Therefore, strictly speaking the Kaplan-Meier method slightly overestimates the survival rate.

[2] SACMEQ stands for the Southern and Eastern African Consortium for Monitoring Educational Quality.

[3] The terms "illiterate" and "innumerate" have a number of possible meanings ranging from the inability to write a sentence or complete a one-step arithmetic sum, to more demanding definitions which include reading for meaning or using numerical skills in everyday life. We take the latter approach and use the terms 'functionally illiterate' and 'illiterate' interchangeably in the paper. It is of little use if children can write down and read a memorised paragraph if they do not understand what they are reading or writing. Similarly, if children cannot relate basic arithmetic skills into real world situations, these skills are only of limited value.

innumerate respectively. As Ross et al. (2005, p. 262) explain, “It is only at Level 3 that pupils can be said to read [otherwise they] could be said to be illiterate.” By this definition, if students are functionally illiterate they cannot read a short and simple text and extract meaning; and if students are functionally innumerate they cannot translate graphical information into fractions or interpret common everyday units of measurement. This threshold of competency has been used before in the literature (Spaull, 2013). Shabalala (2005, p. 222) also uses the bottom two SACMEQ levels and deems students below this threshold as ‘non-readers’ and ‘non-numerate.’

III. FINDINGS AND DISCUSSION

In addition to the illiteracy category discussed above, we group competency levels three, four and five (*basic reading*, *reading for meaning*, and *interpretive reading*) under the heading ‘basic reading skills’, and competency levels six, seven and eight (*inferential reading*, *analytical reading*, and *critical reading*) as ‘higher order reading skills’. The corresponding numeracy designations are ‘basic numeracy skills’ with competency levels 3, 4 and 5 (*basic numeracy*, *beginning numeracy*, and *competent numeracy*), and ‘higher order mathematics skills’ with competency levels 6, 7 and 8 (*mathematically skilled*, *concrete problem solving*, and *abstract problem solving* (Ross, et al., 2005). Figure 2 and Figure 3 below use these designations and include two further categories for children who were not in school: (1) never enrolled and (2) enrolled initially but dropped out before Grade 6. This follows the approach of Hanushek and Wößmann (2008, p. 656) and extends their analysis to these 10 African countries. Using this approach makes it possible to combine educational access (enrolment and grade survival) and educational quality (cognitive skills) in a single graph.

Figure 2 shows that of these ten countries, Tanzania has the highest proportion of children that never enrol (9%), but that Uganda has the highest proportion of children that enrol but drop out before Grade 6 (14%). Zambia and Malawi both have very high (30%+) proportions of children that reach Grade 6 but remain functionally illiterate, and Uganda, South Africa, Lesotho, Namibia, Malawi and Zambia all have very high (30%+) proportions of children that reach Grade 6 but remain functionally innumerate. In all ten countries there were more students that were functionally innumerate than functionally illiterate.

Comparing South Africa and Kenya provides a useful example of why it is important to include both access and quality in a single measure. Although Kenya has, as a proportion, four times as many students that never enrol in school (4%) compared to South Africa (1%) and three times as many students that drop out before Grade 6 (3%) compared to South Africa (1%), the vast majority of Kenyan children that *do* reach Grade 6 also acquire basic numeracy and literacy skills. Only 7% of Kenyan Grade 6 children reached Grade 6 but remained functionally illiterate and 10% remained functionally innumerate. However, although South Africa has higher initial access and lower dropout, the proportions of South African children that reached Grade 6 but remained functionally illiterate was much higher at 25% and those who remained functionally innumerate was even higher at 38%. So, although the average South African child has a higher probability of reaching Grade 6 (access), they have a considerably lower probability of learning basic numeracy and literacy skills (quality) than their Kenyan counterpart.

Access-to-literacy and access-to-numeracy rates

While creating graphs like those in Figure 2 and Figure 3 are informative and helpful, it is necessary to create a statistic that summarises the situation in each country. One method of doing so is to assume that those children who either (1) never enrol in school, or (2) enrol in school but drop out before Grade 6, are both functionally illiterate and functionally innumerate. This is a relatively conservative assumption since dropout is often correlated with low learning to begin with and thus dropouts are likely to be drawn from the bottom end of the distribution. By combining these students with those who are enrolled-but-functionally-illiterate, we are essentially creating an access-to-learning statistic. Using the South African example, although the grade survival rate to Grade 6 was 98%, the access-to-literacy rate was only 71% and the access-to-numeracy rate was only 59%. In contrast, the grade survival rate to Grade 6 was only 93% in Kenya, but the access-to-literacy rate was 86% and the access-to-numeracy rate was 83% - both considerably higher than in South Africa.

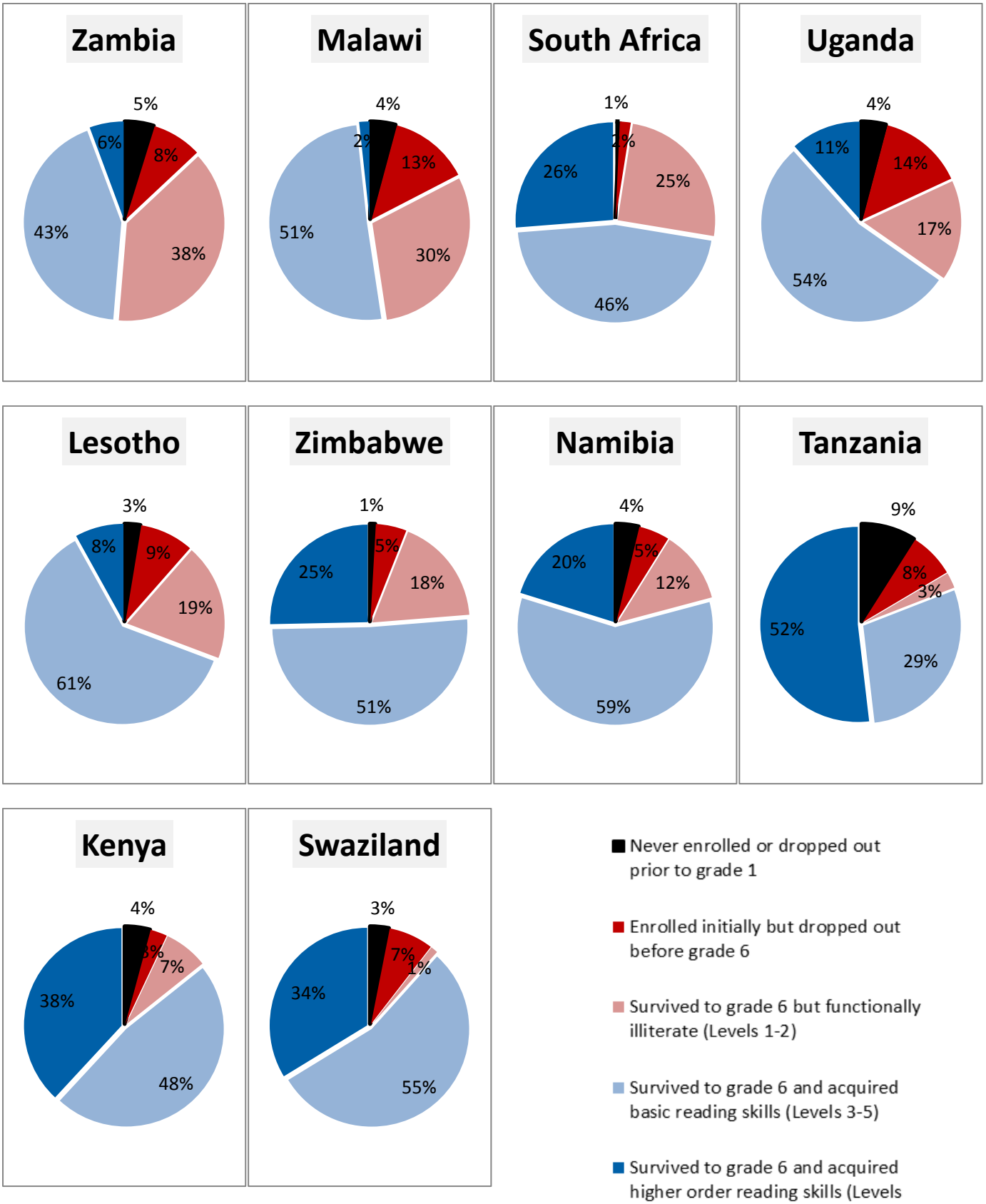
Table 1 and Table 2 below report the access-to-literacy and access-to-numeracy rates for each country and, within each country, by four important sub-groups: gender (male and female), geographic location (urban and rural), wealth (poorest 40%, middle 40% and richest 20%) and a gender-wealth interaction (poorest 40% girls, poorest 40% boys etc.).

Important sub-national differences in access-to-learning

Table 1 and Table 2 below show that there are considerable differences between the sub-national categories of gender, school location, wealth and a gender-wealth interaction. A number of notable findings are worth highlighting:

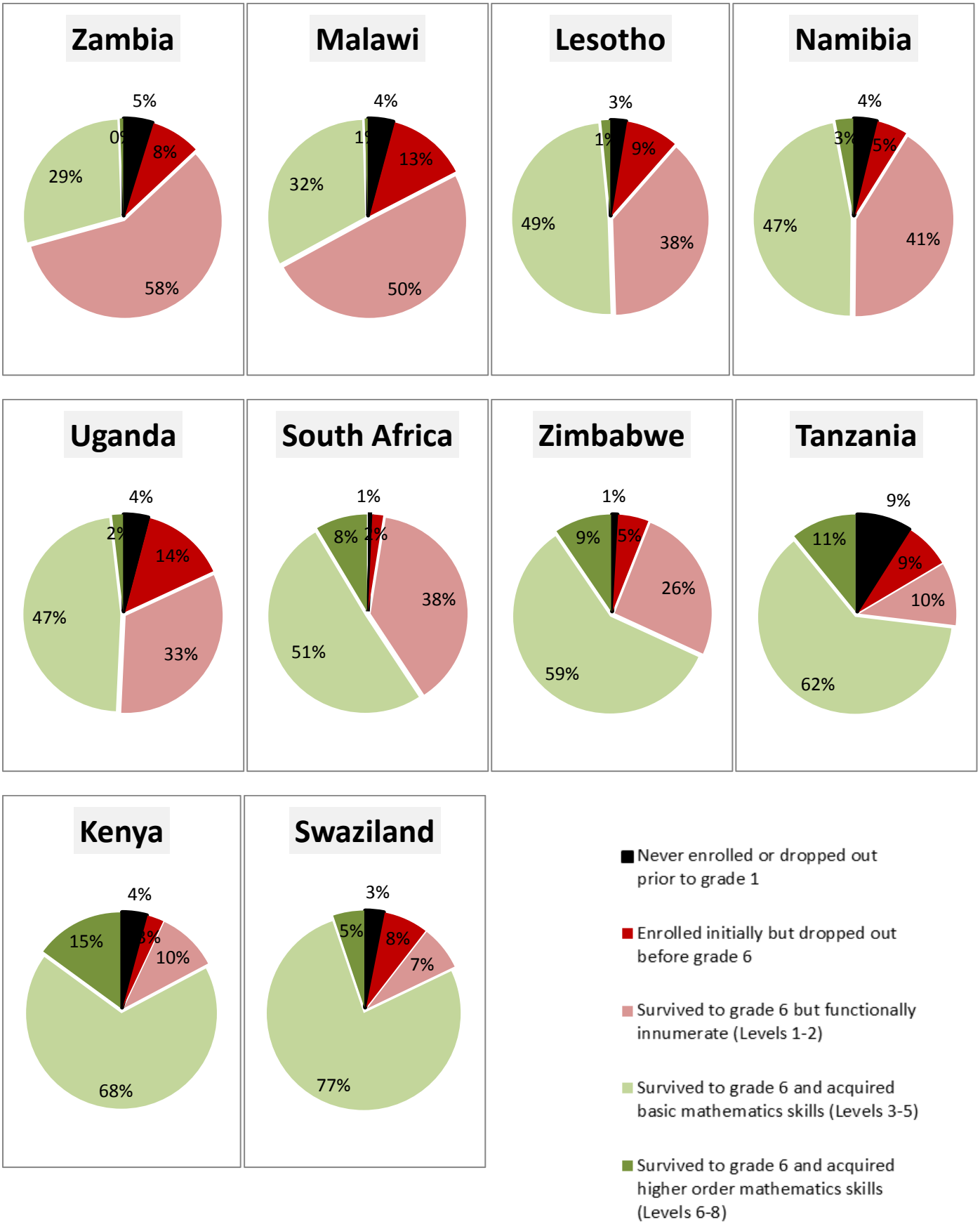
a) In all countries, the access-to-literacy gap between rich and poor and urban and rural is considerably larger than the gap between boys and girls
b) In poorer countries (Zambia, Uganda and Malawi) boys have higher access-to-literacy and access-to-numeracy rates than girls, while in wealthier countries (Namibia and South Africa) girls have higher access-to-literacy and access-to-numeracy rates than boys.
c) In South Africa, Namibia and Zimbabwe, children in urban areas are considerably more likely to be functionally literate and functionally numerate than children in rural areas
d) Previous studies have shown that girls in poor countries face a double disadvantage in being jointly part of two groups that are at risk of being socially excluded from education – girls and the poor (Lewis & Lockheed, 2007). Table 1 shows that this is especially true in Zambia where the access-to-literacy gap between the poorest 40% of girls and poorest 40% of boys (14%) is twice as large as the gap between all girls and all boys (7%). Similarly in Uganda the gap between poor girls and poor boys (9%) is three times as large as the gap between all boys and all girls (3%).
e) Closer inspection of Lesotho shows that boys are considerably less likely to have access-to-literacy than girls, with the effect being compounded for the poorest 40% of boys.
f) The gaps in access-to-numeracy rates between the richest 20% of students and the poorest 40% of students in Namibia and South Africa are enormous. Looking at a cohort of the poorest 40% of children in South Africa, only 44% will be functionally numerate by the end of grade 6, in comparison to 85% of children from a cohort of the richest 20% of children in South Africa

Figure 2: Combining educational access and educational quality - literacy



Note: Own calculations for all countries using SACMEQ III data for educational achievement and World Bank data (Filmer, 2010) for survival rates to Grade 1 and Grade 6. Also see Hanushek and Wößmann (2008, p. 64) for a similar graphic for other developing countries.

Figure 3: Combining educational access and education quality - mathematics



Note: Own calculations for all countries using SACMEQ III data for educational achievement and World Bank data (Filmer, 2010) for survival rates to Grade 1 and Grade 6. Also see Hanushek and Wößmann (2008, p. 64) for a similar graphic for other developing countries.

Table 1: Access-to-literacy rates by sub-groups

LITERACY	National	Urban	Rural	Boys	Girls	Poor40	Mid40	Rich20	Poor40M	Poor40F	Mid40M	Mid40F	Rich20M	Rich20F
Kenya	85.5%	90.3%	83.6%	85.3%	85.6%	78.8%	88.7%	93.4%	79.8%	77.8%	87.3%	90.0%	93.4%	93.2%
Lesotho	69.7%	82.7%	64.7%	61.2%	77.7%	62.8%	70.5%	80.1%	51.6%	73.6%	61.5%	78.1%	77.1%	83.9%
Malawi	52.4%	68.0%	48.2%	55.0%	49.6%	44.3%	52.7%	64.0%	47.9%	41.0%	53.5%	51.4%	69.0%	59.0%
Namibia	78.7%	88.8%	72.7%	74.0%	83.2%	70.9%	81.0%	91.4%	64.7%	76.4%	76.4%	85.8%	89.8%	92.8%
South Africa	70.9%	85.4%	57.1%	66.8%	74.9%	58.8%	73.1%	91.1%	55.5%	62.5%	67.0%	78.5%	89.6%	92.8%
Swaziland	88.2%	92.2%	87.3%	86.2%	90.3%	83.3%	89.6%	95.0%	81.0%	85.5%	86.6%	92.4%	95.6%	94.6%
Tanzania	80.6%	89.3%	77.9%	81.1%	80.1%	73.4%	81.8%	90.9%	74.4%	72.6%	82.1%	81.4%	91.9%	90.1%
Uganda	65.2%	82.0%	60.5%	66.7%	63.7%	52.6%	67.6%	78.7%	57.2%	48.1%	67.3%	67.4%	79.7%	78.7%
Zambia	48.6%	59.5%	42.2%	52.2%	45.1%	38.1%	49.2%	62.6%	45.0%	31.1%	51.4%	47.6%	64.6%	60.5%
Zimbabwe	76.6%	94.2%	70.5%	72.4%	80.0%	71.2%	76.2%	87.9%	66.2%	75.0%	71.7%	79.9%	86.3%	89.7%

Source: Own calculations combining access data from DHS (Filmer, 2010) and learning-outcome data from SACMEQ 2007.

Table 2: Access-to-numeracy rates by sub-groups

NUMERACY	National	Urban	Rural	Boys	Girls	Poor40	Mid40	Rich20	Poor40M	Poor40F	Mid40M	Mid40F	Rich20M	Rich20F
Kenya	82.6%	87.3%	80.7%	83.9%	81.1%	75.2%	86.2%	90.6%	78.2%	72.2%	86.5%	85.7%	91.0%	90.2%
Lesotho	51.5%	66.2%	45.5%	46.5%	56.1%	43.4%	52.5%	64.4%	37.6%	48.4%	46.6%	57.7%	61.7%	67.4%
Malawi	33.1%	43.6%	30.3%	36.9%	29.3%	28.6%	32.7%	40.5%	32.3%	24.9%	35.9%	29.5%	45.8%	35.2%
Namibia	47.7%	67.3%	35.9%	46.4%	48.8%	34.9%	49.4%	70.7%	32.7%	36.7%	47.8%	51.0%	72.2%	69.4%
South Africa	58.3%	73.8%	43.5%	55.9%	60.7%	44.4%	59.2%	84.9%	42.1%	46.8%	56.4%	61.8%	82.8%	86.8%
Swaziland	81.8%	87.8%	80.1%	81.6%	82.1%	76.3%	82.8%	90.8%	76.3%	76.3%	81.3%	84.2%	92.9%	88.6%
Tanzania	72.4%	84.1%	68.4%	75.1%	69.9%	64.6%	74.2%	83.3%	67.4%	62.0%	77.6%	70.8%	85.1%	81.8%
Uganda	50.2%	69.2%	44.4%	52.3%	48.0%	38.8%	51.9%	64.0%	43.2%	34.4%	53.2%	50.7%	65.3%	63.2%
Zambia	28.4%	37.0%	23.6%	32.3%	24.5%	20.4%	28.4%	41.2%	25.8%	15.2%	30.4%	26.5%	47.2%	34.9%
Zimbabwe	69.0%	91.1%	61.0%	66.9%	70.8%	60.9%	70.4%	82.4%	59.4%	62.8%	67.3%	71.5%	81.2%	84.9%

Source : Own calculations combining access data from DHS (Filmer, 2010) and learning-outcome data from SACMEQ 2007

Access-to-learning and the post-2015 Millennium Development goals

The increased emphasis on learning (quality), rather than a naïve focus on schooling (access) has prompted a variety of stakeholders to lobby for quality-informed targets for the post-2015 MDG replacements. The United Nations 'Report of the High-Level Panel of Eminent Persons on the Post-2015 Development Agenda", for example, argues for an education-related goal worded as follows: "Ensure every child, regardless of circumstance, completes primary education able to read, write and count well enough to meet minimum learning standards" (United Nations, 2013: p. 36). Similary the UNESCO Institute for Statistics and the Center for Universal Education at the Brookings Institution have covened the Learning Metrics Task Force (LMTF) to "Catalyze a shift in the global education conversation from access to access *plus* learning…building consensus on global learning indicators and actions to improve the measurement of learning in all countries" (UIS & CUE, 2013, p. 2)

Education access, educational quality and the labour-market

In one sense the expansion of schooling in recent years has been a pro-poor development in that it is mainly children from poor communities who were previously excluded from schooling and now enjoy access. However, generally speaking learning outcomes amongst the poor are considerably worse than amongst more affluent children. Simple measures of access by socio-economic status are therefore likely to understate the full extent of the educational disadvantage faced by the poor. Table 1 and Table 2 clearly show that access-to-literacy and access-to-numeracy rates are considerably lower for the poorest 40% of the population than for the wealthiest 20% of the population, especially in South Africa, Uganda, Zambia and Namibia.

This is an important point because education is widely regarded as a pathway out of poverty. However, the literature on returns to education (probablity of employment and expected earnings) indicates that the amount of education as well as the quality of that education is important for labour market prospects. Therefore, as access to schooling amongst the poor nears the point of universal coverage, it is crucial that inequality in learning outcomes is properly measured because this is what will drive labour market inequality.

The same is true for analyses of the role of education in the economic growth of countries. Since the early contribution of Mankiw, Romer and Weil (1992), measures of human capital have become conventional for inclusion in growth models. In recent years, growth models have included not only the amount of education in a population but also the quality of that education (e.g. Hanushek and Woessman, 2008, Murnane et al 2001). Future models of economic growth may wish to explore the inclusion of a single metric of access and quality, such as our proposed access-to-literacy and access-to-numeracy rates, should comparable figures for enough countries become available.

IV. CONCLUSION

As the focus of the education development agenda shifts from access to schooling to the quality of education the need to develop appropriate measures is arising. Measuring either access or quality in isolation is typically misleading and incomplete. Suitable measures can be constructed by combining information from comparable household survey data on grade survival with information

on learning outcomes from international assessments of achievement. The “access-to-literacy” rates and “access-to-numeracy” rates presented here are , we argue, the most meaningful and recent measures of overall education system performance in Southern and Eastern Africa. As more countries begin to participate in such surveys, the number of countries with comparable statistics will increase.

Combined measures of access and quality are also important for examining inequalities between relevant sub-groups, such as by gender or by socio-economic status. This is because inequalities in access and inequalities in learning outcomes typically combine to form a greater overall disadvantage than either of the individual measures portray.

Finally, the new measures presented here focus policy efforts on the right outcome: learning opportunities for the entire population. It thus avoids the potential perverse tendencies to focus either on expanding access without regard to quality, or to ensure high quality education for only an elite part of the population.

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