

Aid to Education and Sustainable Development: How Much, to Whom, for What?

What has Comparative Education to Say? Keith M Lewin

Keith Lewin gave a keynote speech in plenary to the Sixth World Comparative Education Forum which was hosted by Beijing Normal University from September 24th-26th. Keith has been an Honorary Professor at BNU since 1991. His presentation was entitled "Aid to Education and Sustainable Development: How Much, to Whom, for What?". A paper and powerpoint are available below and on the download tab.



Keith with Professors GuMingyuan, WangYinjie, LiuBaocun, and WuSheping, and Elena Minina and Tony Welch and conference participants

Aid to Education and Sustainable Development: How Much, to Whom, for What?

What has Comparative Education to Say?

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Abstract

The Sustainable Development Goals commit all countries to make rights to education realities for all children. Most of those out of school, and in school but not learning, are in Low Income Countries. Poor countries allocate 3%-4% of GDP to education. 6% is needed to finance universal primary and secondary school. Aid can help. However, aid to education in poor countries has stagnated since 2010 at USD 12 Billion annually. Aid can accelerate development that is self-sustaining through investment in human capitals and the promotion of public goods. Over the last three decades national investment has helped some countries transform their education systems. In other countries progress has been disappointing. The challenge for old and new donors to education is how should future aid be provided to promote sustainable development aid and how can Comparative Education help?

Introduction

Over 250 million children fail to complete nine years of education successfully. The Sustainable Development Goals commit all countries to make rights to education realities for all school age children. Most of those out of school, and in school but not learning are in Low and Low Middle Income countries. Despite the evidence of unmet needs to finance and deliver educational services globally aid to education in poor countries has stagnated since 2010 at about USD 12 Billion annually. Though new donors have committed additional funds this has only just compensated for a diminished appetite amongst conventional donors to allocate funds to education.

One of the main purposes of aid is to accelerate development that is self-sustaining. Theoretically investment in education can enhance the formation of human capitals and aid can compensate for market failures that may result in under-investment in education with negative consequences for economic growth and social equity (UNICEF 2015). Large scale data sets are now available over time that allow analysis of trends in aid and associations of development indicators with levels of external assistance. Patterns of allocation of aid can be linked to indicators of poverty, under enrolment, fragility, and economic growth.

Over the last three decades national investment has partnered with external assistance to help some countries transform their education systems. In other countries progress has been disappointing raising the question as to whether more aid of the same kind will make a difference in future. The challenge of the SDGs, and for new donors to education for development, is to decide how future investment in education in low and low middle income countries should be profiled.

The purpose of this paper is to answer three questions.

- First, how has international aid to education developed and what are the patterns of allocation?
- Second, how much additional finance is needed to meet the goals for educational development set by the Sustainable Development Goals?
- Third, what are likely to be the most effective forms of aid to education that will accelerate development without creating national dependence on external support?

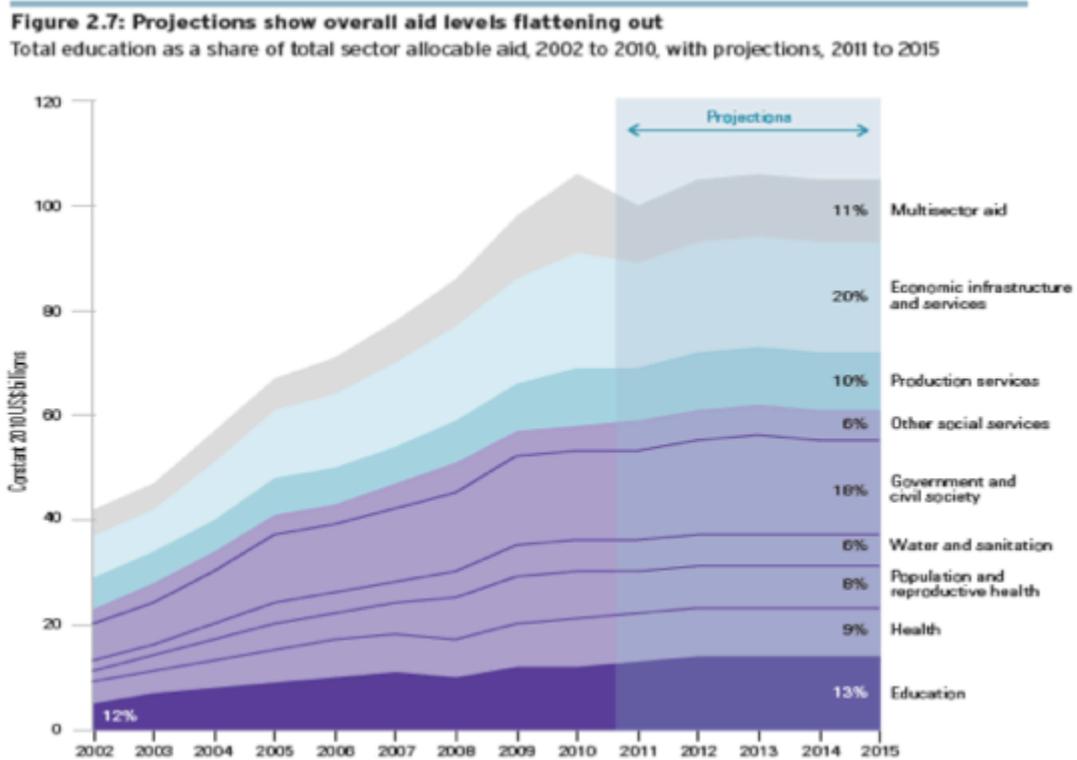
Comparative Education can provide illustrations of cases where aid has been transformational and cases where it has had little impact. It can explore and explain the 3-Ds of Development - *Differences, Distributions and Desires*. *Differences* arise when countries develop at different rates in different directions. Describing the differences and linking these to educational investment can illuminate cause and effect. Uneven *Distribution* - of educational opportunity, participation and outcomes - is characteristic of development. When the unevenness increases rather than diminishes equity will deteriorate with consequences for efficiency and effectiveness. Understanding changing patterns of inequality is essential to judging how aid may affect equity (WIDE 2017). Lastly, *Desire* determines whether *Differences and Distributions* are regarded as fair and appropriate, or unfair and problematic. Social cohesion depends on the legitimacy given to patterns of difference and distribution of desired outcomes. Comparative education can shed light on how each of these dimensions are managed and may suggest where aid may be most effective.

International Aid to Education

Aid to education from member States of the Development Assistance Committee (DAC, 2017) rose from the year 2000 to reach about USD 16 Billion per year by 2010. Since then flows of aid have stagnated and may have slightly declined. Other sectors have received a growing proportion of international aid. Notably Health has grown rapidly to account for nearly 10% of total aid. Support to improve governance has also grown rapidly and is the second largest component (GMR 2015). Investment in infrastructure remains the largest single commitment at about 20% of the total.

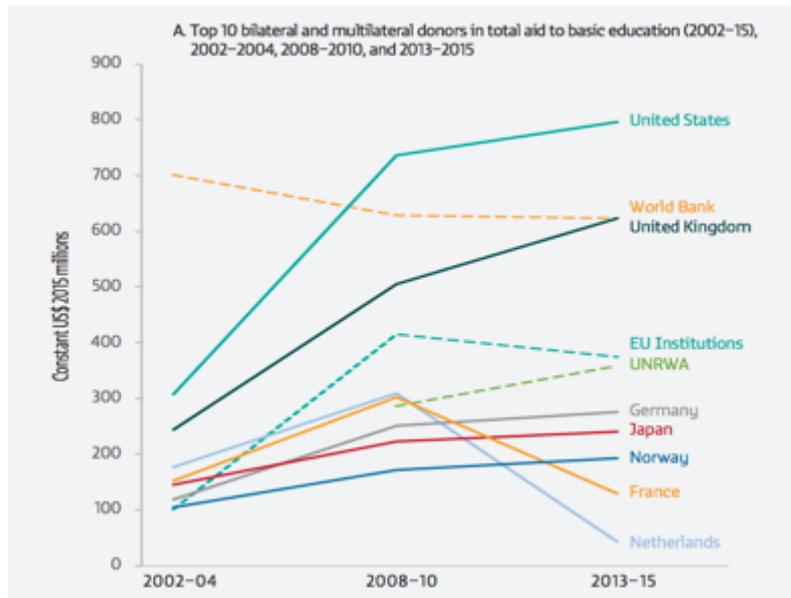
Most aid to education is provided by the USA, the World Bank and the United Kingdom each contributing between USD 600 and USD 800 Million. EU institutions and UNRWA are also big donors with about USD 400 million. The World Bank, EU Institutions, France and the Netherlands have seen the steepest declines in commitments to aid to education (GEMR 2017). Recent development (IFCE (2016) suggest that attempts will be made to reverse the decline in aid to education.

Figure 1 Aid to Education and other Sectors 2002-2015



Source: GMR 2105

Figure 2 Top 10 Aid Donors to Education



Source: GEMR 2017

At the same time aid has stalled and in some cases declined, the number of children out of school has also stopped declining after a decade of progress up until 2010 (UIS 2017). Over 370 million children and young adults were not in school in 2000. By 2014 this had

fallen to about 260 million. The largest numbers not attending school were of high school age. More males were out of school at every level except primary school. Most of these children were in Sub-Saharan Africa and in South Asia. Nigeria and Pakistan have more out of school children than other countries.

Figure 3 Out of School Children

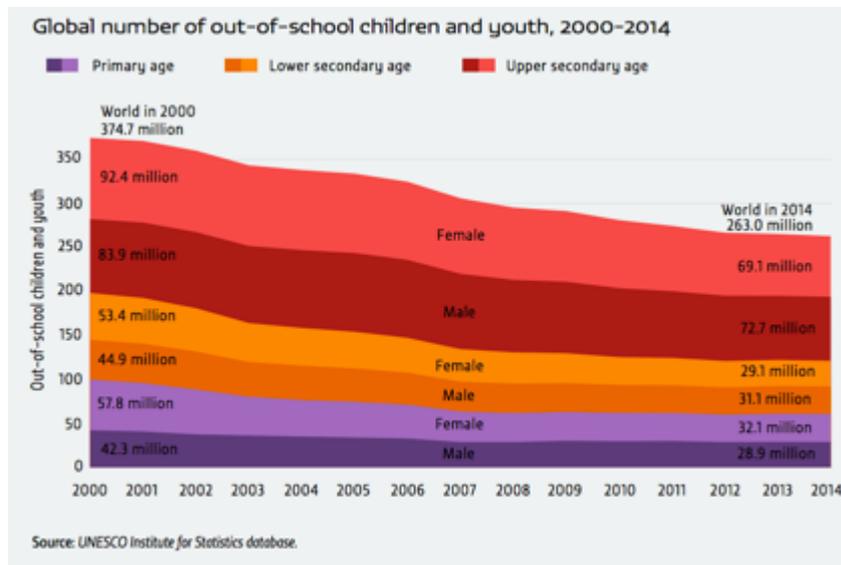
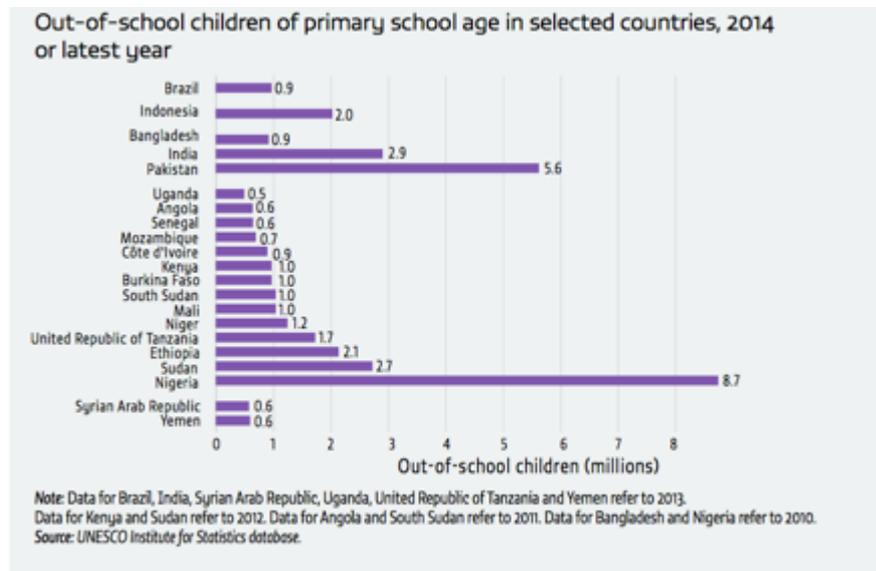


Figure 4 Out of School Children by Country.

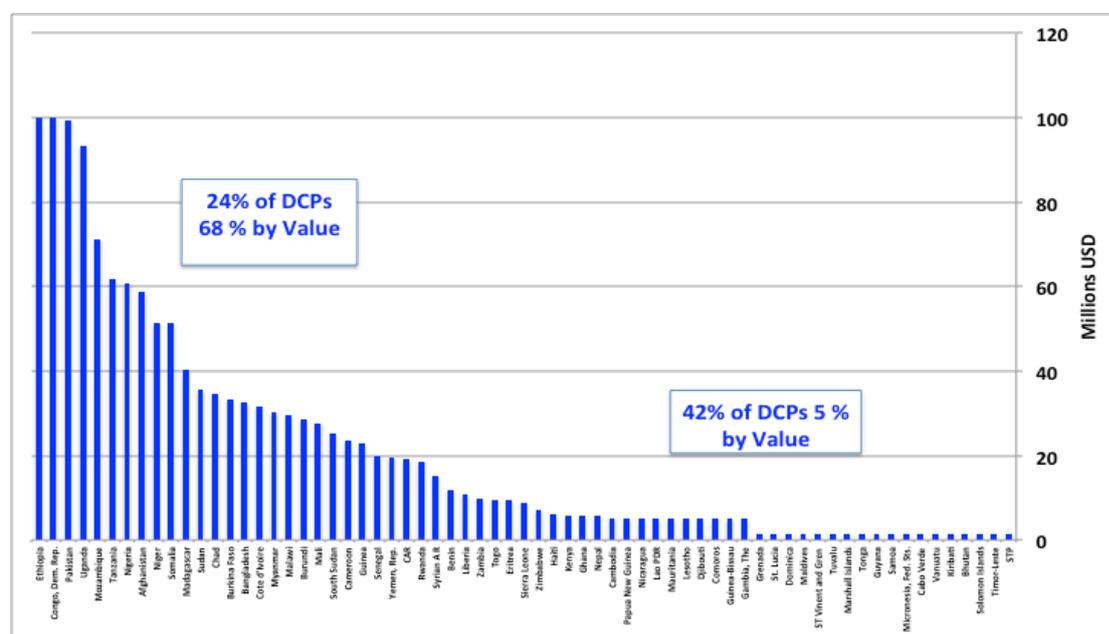


Source: GEMR 2017

Aid to education from DAC countries is concentrated on the poorest states. Low Income Countries (LICs – GDP/capita below USD 1045) and Low Middle Income Countries (LMICs – GDP/capita below USD 4025) receive most concessional aid to education most of which is in grant form with no repayments. The pattern of aid allocations by the Global Partnership for Education (GPE), the largest single source of aid to basic education, is shown below .

About 24% of countries receiving this aid account for 68% of all aid by value. Some large countries like Ethiopia, Pakistan and DR Congo are major beneficiaries. On the other hand 42% of aid recipients receive less than 5% of all aid. Most of these countries are either small or richer or both, and they include many small island states.

Figure 5 Aid to GPE Countries



Source: GPE 2017

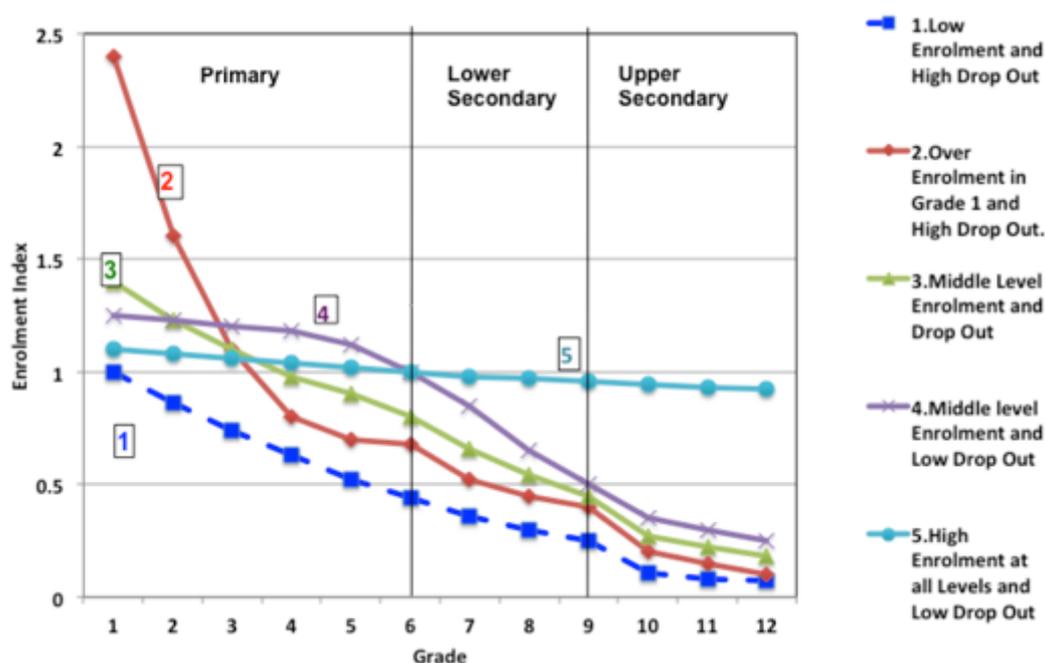
The recipients of educational aid vary greatly in how much they receive in total and how much they receive per capita. Flows are not stable over time and there is considerable volatility.

Patterns of Participation in Countries Receiving Aid

the pattern of enrolments by grade is an indicator of the level of system development and draws attention to how many children complete different levels of education. It also shows where many children are over age in lower grades, and where there are bottlenecks in the flow of students that lead to drop out.

There are five different profiles of participation in Developing Country Partners (DCPs) that condition new investment and strategies to manage progress towards universal participation and more effective , OECD 2016) in both LICs and LMICs (Lewin 2017). The different types of education system are defined by patterns of enrolment by grade from grades 1 to grade 12. These patterns of enrolment by grade are (1) *convex*, (2) *highly convex*, (3) *linear decline*, (4) *concave*, and (5) *linear full enrolment*. Alongside these characteristic patterns of enrolment and attrition, there are four different patterns of gendered exclusion. These can be described as (1) *strong exclusion of girls in all grades*; (2), *weak exclusion of girls in primary, strong exclusion at secondary*; (3) *near equity in primary and weak exclusion of girls at secondary*; and (4) *gender equity in all grades*.

Figure 6 Types of Enrolment by Grade in DCPs



Source Lewin 2017

- Type 1 DCPs have concave enrolment curves through to grade 12. Intake levels into grade 1 are similar to the number of children in the entry age group indicated by a participation index of 1. The tipping point, where there are as many children in the age group than are enrolled in school, is in grade 1 or grade 2. Drop out starts in grade 1 and results in fewer than 50% completing grade 6. Completion rates may be below 40% at primary, and are less than 20% for lower secondary. Development at secondary level is strongly constrained by the output from primary. The priority in these DCPs is to increase age related entry and progression rates and reduce drop out.
- Type 2 DCPs have very high rates of over enrolment in the early grades of primary. Enrolment curves are very concave and tipping points are typically around grades 3. Enrolment in grade 1 may exceed 200% of the number of children in the age group. High drop out means that less than 70% of the age group complete grade 6 and less than 50% reach grade 9. Over-enrolment arises from many children entering who are over age, and from high rates of repetition. In some DCPs this pattern has persisted for more than a decade after universal primary education policy has been announced. The implication is that one equilibrium between with low enrolment, low drop out and low completion, has been replaced by another with a very high intake, high enrolments, and a higher rate of drop out leading to low completion rates.
- Type 3 DCPs include countries where the intake rate to grade 1 is high, but is less than 50% times greater than the number of six year olds, and is therefore less than Type 2. Enrolments decline linearly with increasing grade, and the tipping point is around grade 4. No more than 75% of children in an age group reach the end of primary school.

There may be serious issues with over-age children and repetition, and with persistent drop out that accumulates from grade to grade such that fewer than 50% complete lower secondary. Primary completion rates constrain expansion of secondary school.

- Type 4 DCPs include countries that are close to achieving universal completion of grade 6 but have yet to reach more than about 50% completing grade 9. Enrolment curves are concave and tipping points are around grade 6 or higher. These DCPs are more likely to have regularised intake into grade 1 so that all children are within a year of the appropriate age. Most of those who start primary finish on schedule at the right age. The biggest attrition occurs in lower secondary and less than half of all children succeed in entering upper secondary. These systems are most likely to need support at the post primary level for curriculum development, quality improvement and enhanced equity as well as investment in infrastructure.
- Type 5 DCPs have full enrolment with similar numbers of children enrolled in each grade as there are in the relevant age cohort. Enrolment curves are linear and track the population growth of single age cohorts of children. There is no tipping point. There may also be evidence of demographic transition where the number of children in the single age population declines each year. These systems have achieved universal enrolment up to the end of lower secondary. They are likely to have problems with quality, achievement, and equity that would benefit from additional investment.

All the systems may also have quality and achievement issues not evident from enrolment flow data. LICs are concentrated in Types 1, 2 and 3. LMICs are predominantly Type 4 and Type 5 systems. Thus LIC and LMICs are not distributed evenly between the enrolment types and their rates of progress vary. This is evident from detailed charts showing changes in enrolments over the last 10 years (in main report).

The probability is that the Type 1 LMICs will graduate to become Type 2 or Type 3 within the next decade. It is also probable that Type 1 LICs will become Type 2 systems and Type 2 become Type 3. There remains a distance to travel for most DCPs to become Type 5 full enrolment systems (Lewin 2015).

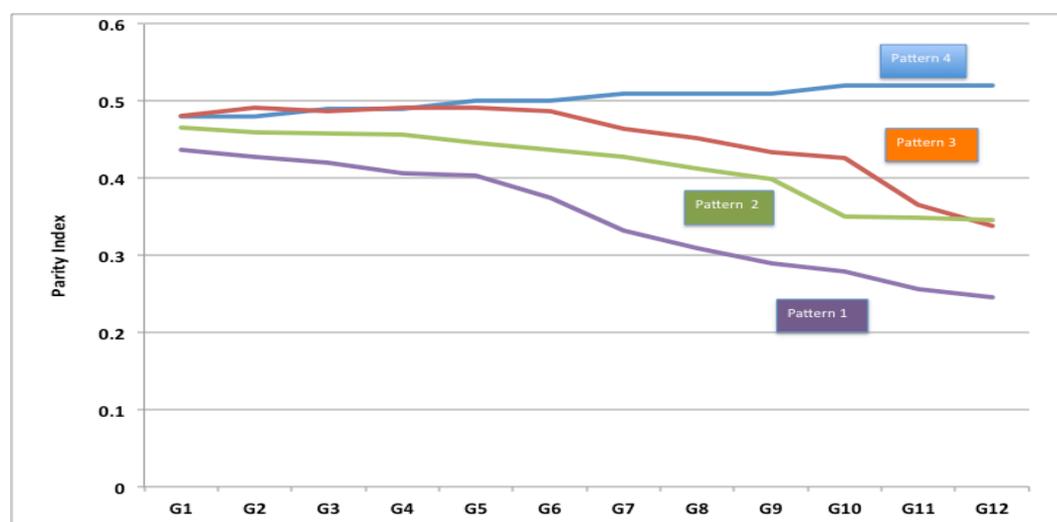
Figure 7 DCPs Classified by Enrolment Types for LICs and LMICs

| Pattern | LICs | LMICs | Comment |
|--|--|--|--|
| Type 1 Low Enrolment High Drop Out Concave Curve | Burkina Faso, Eritrea, Gambia, Guinea, Haiti, Liberia, Mali, Niger, South Sudan, Sierra Leone | Cote D'Ivoire, Mauritania, Pakistan, Senegal | Intake rate and enrolment to grade 1 low and likely to include over-age children; low primary completion rates and very low lower secondary completion; progression to higher grades strongly associated with household wealth |
| Type 2 Over Enrolment in Grade 1 and High Drop Out Strongly Concave Curve | Benin, Burundi, Chad, CAR, Comoros, Congo, DRC, Ethiopia, Madagascar, Malawi, Mozambique, Rwanda, Timor | Cameroon | Intake rates and enrolment to grade 1 very high with double the number of children in lower grades than in the age group, high drop out with less than 75% successfully completing primary; less than 50% completing lower secondary; progression to higher grades |

| | | | |
|--|---|--|---|
| | Leste, Togo, Uganda, | | strongly associated with household wealth |
| Type 3 Middle Level Enrolment and Drop Out Linear Attrition curve | Afghanistan, Bangladesh, Cambodia, Lao PDR, Myanmar, Nepal, | Lao PDR, Yemen, Nigeria | Intake rates and enrolment to grade 1 up to 40% more than in the age group; most but not all complete primary but substantial drop out such that less than 50% reach the end of lower secondary; children from richer households survive longer |
| Type 4 Middle Level Enrolment and Low Drop Out Convex Curve | Tanzania | Bhutan, Ghana, Kenya, Honduras, Lesotho, Nicaragua, STP, Tanzania, Vietnam, Zambia, Zimbabwe | Intake and enrolment rates in grade 1 up to 10% more than in the age group; low drop out through primary with high completion rates; drop out accelerates through lower to upper secondary; children from richer households survive longer |
| Type 5 Full Enrolment and Low Drop Out Linear Curve | Tajikistan | Albania, Georgia, Kyrgyzstan, Moldova, Mongolia, Uzbekistan, | Full intake and enrolment in primary grades though to grade 9 with little drop out. |

Patterns of enrolment of girls and boys can also be synthesised into a single chart using typical examples to profile participation by grade. This highlights the need for different strategies to accelerate progress towards gender equitable enrolments in different DCPs.

Figure 8 Percentage of Girls by Grade in LICs and LMICs by Pattern



Source: Lewin 2017

- DCPs with Pattern 1 have differential enrolment by gender throughout their education systems. They also are likely to have low level of participation for both boys and girls. It must be a priority to invest in interventions that increase participation of both girls and boys to much higher levels.
- Countries with Pattern 2 have fewer than 45% girls enrolled through primary and an important question is whether this kind of exclusion is concentrated amongst particular

sub-populations e.g. the poorest households, specific social groups and geographic areas.

- Pattern 3 countries have equal enrolments of girls and boys up to the end of primary if equity is defined as 40% +/- 2%. The problem in these DCPs is that at secondary level girl's participation falls off. The common reasons are over-age progression, early marriage, under-achievement, low returns for household investment, and social prejudices against the education of girls. Which factors are most important are country specific.
- Pattern 4 exists where there is full enrolment. There is a tendency for girls to out enrol boys in some higher enrolment countries. In Pattern 4 DCPs there are no strong and systematic gender differences at an aggregate national level. This may or may not conceal differences within particular groups and regions that are country specific.

In Pattern 1 countries 80% of girls and boys have similar enrolment status. In Pattern 2 and 3, 90% girls and boys have the same participation rates. The problem of more equitable enrolment is concentrated amongst those out of school or at risk of drop out. This does not mean that problems of equity are resolved when almost all girls and boys have a similar enrolment status. It does mean that indicators other than enrolment and completion rates may be needed to identify, monitor, and reduce forms of gendered preference and exclusion of girls and boys. This is a challenge for the indicators used by the GPE to assess progress on gender equity. Strongly targeted interventions are likely to be needed.

Figure 9 Patterns of Participation in DCPs by Gender for LICs and LMICs

| Pattern | LICs | LMICs | Comment |
|---|--|--|--|
| Pattern 1 Very Low % of Girls in All Grades | Afghanistan, CAR, Chad | | 40%-40% girls in grade 1 falling to less than 35% by grade 9 |
| Pattern 2 Low % of Girls in All Grades | Benin, DRC, Eritrea, Guinea, Mali, Niger, Togo, | Cote d'Ivoire, Pakistan, Yemen | 40-46% girls in grade 1 falling to below 45% by grade 6 and below 40% by grade 9 |
| Pattern 3 Near Equity in Primary but Not Secondary | Burkina Faso, Burundi, Congo, Guinea Bisau, Ethiopia, Liberia, Mozambique, , Sierra Leone, Tanzania | Cameroon Lao PDR, Nigeria | 46% to 50% of girls in grade 1 with at least 45% up to grade 6. Grade 9 averages about 45% but some DCPs have fewer girls at grade 9 level |
| Pattern 4 Equitable Enrolments of Girls and Boys | Bangladesh, Bhutan, Cambodia, Gambia, Myanmar, Madagascar, Malawi, Nepal, Rwanda, STP, Timor Leste, Uganda, Vietnam, | Ghana, Guyana, Honduras, Kenya, Lesotho, Nicaragua, Senegal, Vietnam, Zambia | Average of 48% of girls in grade 1 and 50% in grade 6 and grade 9; higher enrolment DCPs have more girls than boys with a tendency for the proportion of girls to increase with grade level. |

There are implications for strategy for aid on eligibility and performance related to patterns of enrolment and gender equity.

Aid in Transitioning Countries

Development is happening in many low income countries . The current threshold of the World Bank for Low Income Country status is \$1045 and for Low Middle Income \$4125. Just over 50% of the 64 countries receiving concessional aid fall into the LIC group¹.

• **Table 1 LICs and LMICs and GDP/Capita**

| LICs | | GDP/Cap | LMICs | | GDP/Cap |
|------|---------------|---------|-------|---------------|---------|
| 1 | Burundi | 260 | 32 | Senegal | 1050 |
| 2 | Malawi | 270 | 33 | Mauritania | 1060 |
| 3 | CAR | 320 | 34 | Kenya | 1160 |
| 4 | Niger | 400 | 35 | Kyrgyzstan | 1210 |
| 5 | Liberia | 410 | 36 | Cameroon | 1290 |
| 6 | DRC | 430 | 37 | Yemen | 1330 |
| 7 | Madagascar | 440 | 38 | Pakistan | 1360 |
| 8 | Guinea | 460 | 39 | Côte d'Ivoire | 1450 |
| 9 | Ethiopia | 470 | 40 | Lao PDR | 1450 |
| 10 | Eritrea | 490 | 41 | STP | 1470 |
| 11 | Gambia | 500 | 42 | Lesotho | 1500 |
| 12 | Togo | 530 | 43 | Sudan | 1550 |
| 13 | Guinea-Bissau | 590 | 44 | Viet Nam | 1740 |
| 14 | Uganda | 600 | 45 | Ghana | 1770 |
| 15 | Mozambique | 610 | 46 | Nicaragua | 1790 |
| 16 | Rwanda | 630 | 47 | Zambia | 1810 |
| 17 | Sierra Leone | 660 | 48 | Uzbekistan | 1880 |
| 18 | Mali | 670 | 49 | PNG | 2020 |
| 19 | Afghanistan | 690 | 50 | Honduras | 2180 |
| 20 | Nepal | 730 | 51 | Bhutan | 2330 |
| 21 | Burkina Faso | 750 | 52 | R Moldova | 2470 |
| 22 | Benin | 790 | 53 | Congo | 2590 |
| 23 | Haiti | 810 | 54 | Nigeria | 2710 |
| 24 | Comoros | 840 | 55 | FSMicronesia | 3280 |
| 25 | URTanzania | 860 | 56 | Georgia | 3560 |
| 26 | Zimbabwe | 860 | 57 | Guyana | 3750 |
| 27 | Cambodia | 950 | 58 | Mongolia | 3770 |
| 28 | South Sudan | 950 | 59 | Marshall Is | 4310 |
| 29 | Tajikistan | 990 | 60 | Albania | 4510 |
| 30 | Bangladesh | 1010 | | | |
| 31 | Chad | 1030 | | | |

Source: World Development Indicators

Economic growth will move some LICs into the Lower Middle Income Category (LMIC) and some to the Upper Middle Income category (UMIC). These transitions might make some countries DCPs ineligible for aid. Growth in GDP amongst DCPs is anticipated to average nearly 5% p.a. based on the most recent five year projections of the IMF (2014-

¹ GNP per capita, GDP per capita and GNI per capita have different meanings and need to be interpreted in the

2018). The range is wide from less than 2% p.a. to over 8%. At 4% growth GDP will increase by 50% in ten years. At 7% it will double in ten years.

GDP per capita will grow more slowly depending on the rate of population growth and whether demographic transition occurs. Annex 1 shows that demographic transition to low growth has occurred in China, is underway in India, but has yet to happen in Africa. Population growth rates in DCPs average about 2.1% for the population as a whole. The age group of 1-4 years olds is growing much more slowly at about 1.3% on average. There are wide variations between DCPs from below 1% to well over 3% p.a.. Within countries it is clear that in about half the cases the school age population is growing at less than 50% of the rate of the population as a whole. The reasons differ for different DCPs and include increased longevity, declining fertility, and differential migration. This means fewer children per adult of working age and should make it easier to finance universal participation.

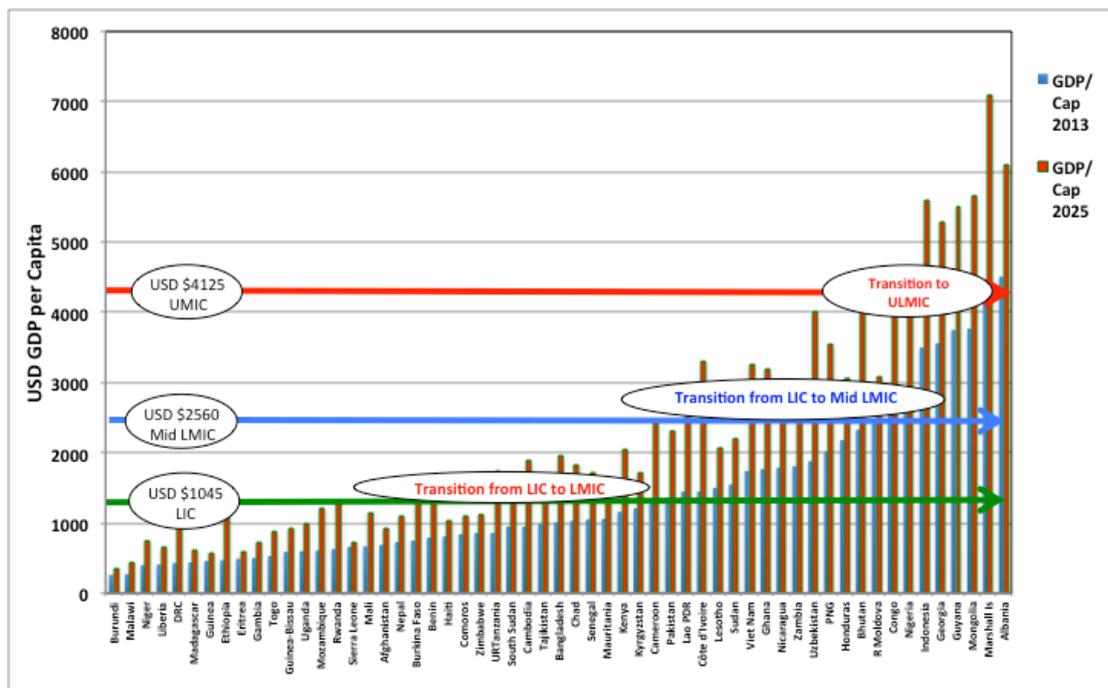
Six DCPs have declining populations of school age children – Moldova, Georgia, Vietnam, Micronesia, Nepal, and Afghanistan. Some other DCPs have very high rates of growth above 3% per annum e.g. Kyrgyzstan, Cote d'Ivoire, and Tajikistan, Tanzania, Eritrea, Mali, Burundi, Gambia, Zambia, South Sudan, Uganda, and Niger. In these GNI per capita will be reduced by high rates of population growth. Conversely growth out of LIC status will be enhanced if demographic transition begins to take place. Since fertility is related to educational attainment GPE support that increases participation, especially of girls, may increase the rate at which GNI per capita increases towards eligibility thresholds.

The consequences of growth in the economy and population will be to cause some DCPs change their status in relation to gross national income (GNI) related eligibility for implementation grants assuming the criteria remain constant (GPE 2017).

The likely transitions can be anticipated by taking the real and projected growth rates for the economy and population over the five year period from 2013 -2018 as anticipated by the World Bank and UN Population estimates, and overlaying these onto current GNP per capita for the next decade. It is assumed the thresholds for defining LMICs and UMICS do not change in real terms and are therefore adjusted appropriately if measured in current prices.

This then allows a new profile of countries to be constructed showing which DCPs will have transited across the two national per capita income thresholds by 2025 if the projections turn out to be reliable.

- **Figure 10** Transition from LICs to LMICs by 2025 as a Result of Economic Growth



Source: Authors Infographic from World Bank Data

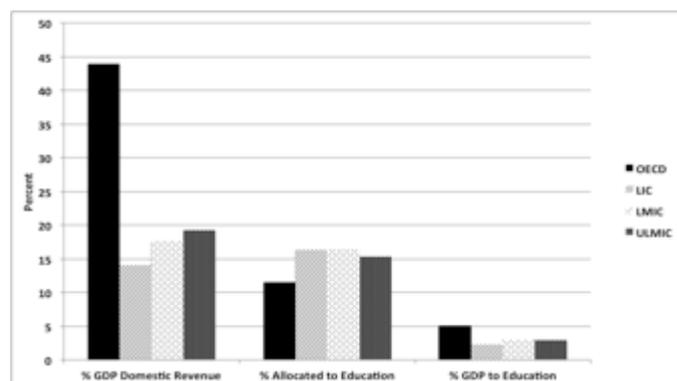
The result of the projections country by country is that some DCPs that are LICs, or are borderline cases become LMICs. Thus Tanzania, Mauritania, Tajikistan, Chad, Kyrgyzstan, Cambodia and Bangladesh cross the threshold from LIC to LMIC. Senegal and Kenya are confirmed as LMICs. Benin, Rwanda, Burkina Faso, Nepal, Ethiopia, and Mozambique approach transition to LMICs. Georgia, Guyana, Mongolia, Albania become UMICs with Bhutan approaching the threshold. Despite these transitions about 50% of existing DCPs that are LICs remain LICs. They would therefore retain poverty related eligibility.

Financing Gaps

The financing dilemma facing the DCPs can be described simply and have not changed dramatically since the early 200s (Lewin 2008, UNESCO 2013). Europe and North American (ENA) countries raise 43% of GDP in domestic revenue on average. This finances all their government services including education. In LICs domestic revenue only averages 14% of GDP, and in LMICs about 18% (International Finance Commission (2016:118)). This is what supports the public budget. Public educational spending in ENA averages about 12% of the government budget, or about 5% of GDP (12% of 43%). In contrast DCPs that are LICs and LMICs allocate about 16% of public spending to education (UIS 2016). This is well below the normative benchmark of 20% suggested by the SDGs and GPE but well above the allocations in high income countries (UNESCO 2016). An allocation of 16% of the public budget coupled with domestic revenue between 14% and 18% translates into less than 3% of GDP (i.e. 16% of 14% = 2.24% and 16% of 18% = 2.88%). UIS statistics indicate that spending on education in DCPs averages about 4%. The difference between this and the amount generated by domestic revenue is made up from external resources. Thus as much as a third of all spending on education in DCPs may already be aid related.

The dilemma and the challenge for financing and for aid can be explained graphically. Figure 14 shows domestic revenue and amounts allocated to education based on typical values for OECD, LICs, LMICs and ULMICs. The parameters together determine the percentage of GDP allocated to education. Using these average values OECD countries spend about 5% of GDP and LICs, LMIC, and UMICs only about 3% (excluding aid).

• **Figure 11 Domestic Revenue, Education Budget and Education as 3% of GDP**

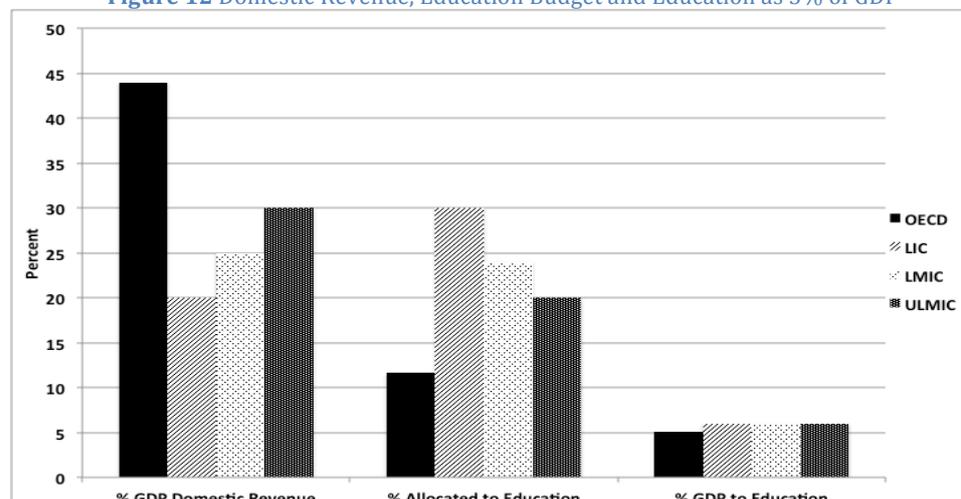


Source: Authors Infographic, 2016

DPCs that are LICs and LMICs currently allocate about 3.8% and 4.5% of GDP to education respectively according to UIS data. This is considerably more than is generated by allocating 15% of the government budget to education since this could only produce less than 3% of GDP as shown. The difference between these levels and the 3.8% and 4.5% shown by UIS data LICs and LMICs is a result of aid grants and loans to education.

Financial modelling in this report shows that at least 6% of GDP would need to be allocated to education to achieve the goals set by the SDGs. To achieve this LICs and LMICs would have to increase domestic revenue substantially to between 20% and 30% of GDP as shown in Figure 32.

• **Figure 12 Domestic Revenue, Education Budget and Education as 5% of GDP**



Large increases in domestic revenue will not be easy and require a large increase in taxation. It would also require governments to allocate between 20% and 30% of the public budget to education. This is as much as double current spending. To generate more resources from domestic revenue beyond 30% of GDP, or increase the proportion of the budget to education beyond 30%, would seem fanciful in all but the long term. Aid has a role to play in ameliorating the gaps between domestic resources and the investment needed to ensure learning for all but it needs to be configured so that it does not create financial dependence. This is a long standing issue in the political economy of aid (Easterly 2013, Lensick and White 1999).

There is now a need for criteria for eligibility and balanced investment programmes that reflect the dynamic aspects of system growth that determine sustainable growth in participation and learning. Theories of change need to be based on empirical insights from the past about how systems actually behave, rather than how in an ideal world they should or could behave. The basis for generating these theories is provided by this analysis of existing patterns of growth which is a topic of interest to Comparative Education.

In summary demand for aid depends on national goals, starting points, demographic transitions, and political will. At least 6% of GDP is needed to finance universal access to education to grade 12: poor countries currently allocate about 4% of GDP. About 10% of DCPs receive more than 20% of GDP from external finance and half receive more than 5%; too much aid may increase dependence. Sustainable financing education depends on public funding which can be complemented by aid. However, alternative sources of finance are insufficient to support recurrent costs. Effective aid is catalytic, time limited, linked to purpose, and adapted to context for countries with different dynamics. The number of countries receiving aid should fall as effective aid reduces the number needing external support.

If the purpose of aid to LMICs is to accelerate development towards sustainable outcomes in education then two things are essential. Aid must be focussed on areas where there is a comparative advantage and long term benefits, and aid must be configured so that it is no longer needed at some point in the foreseeable future. This means that medium term sector plans should locate external assistance within a framework of sustainable development. It also implies that aid to education is not primarily about meeting short term targets defined by cross-sectional indicators, but it is about whether the achievements it supports can be sustained for the next generation of children, and the next. Comparative Education can enhance aid effectiveness and explore and explain how aid can best contribute to development without generating national dependence. The need is for historical analysis, comparative case studies, and theoretical reflection on different political economies of educational development.

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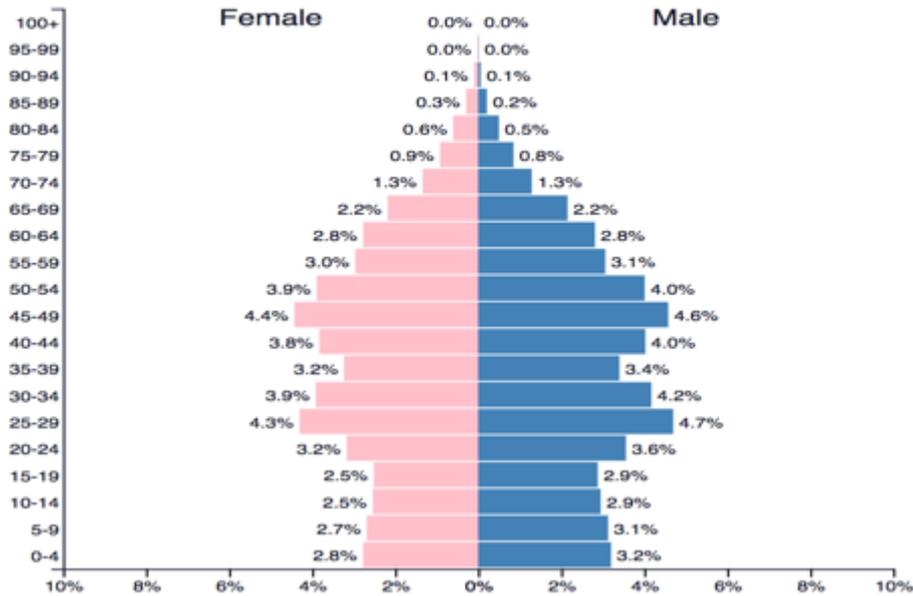
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Annex 1 Population Pyramids in China India and Africa.

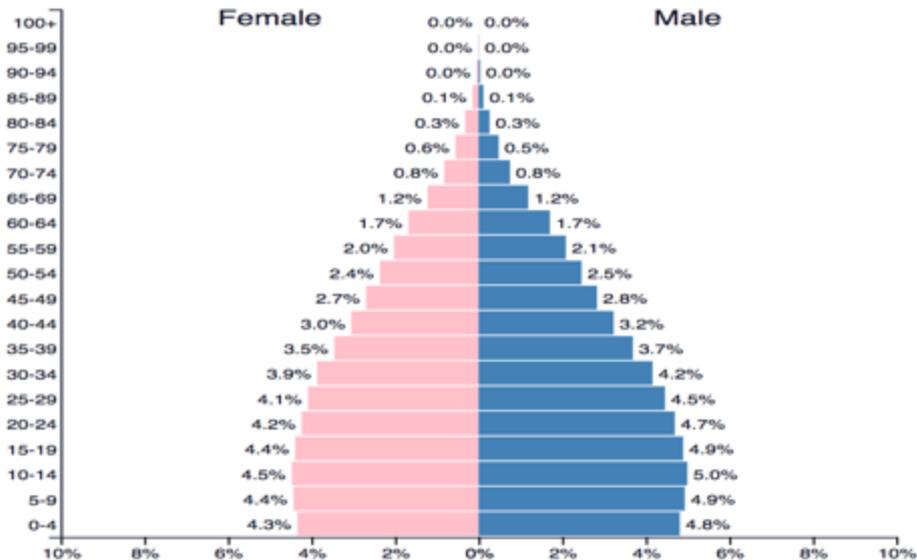
China ▼ 2017

Population: **1,388,232,692**



India ▼ 2017

Population: **1,342,512,705**



AFRICA ▼ 2017

Population: **1,246,504,864**

