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SDG indicator 4.1.5: Proposal to change the out-of- school rate calculation

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Current calculation method of the out-of-school rate

The primary (lower secondary, upper secondary) out-of-school rate is calculated by dividing the number of children not enrolled in primary, secondary or higher levels of education by the number of children of primary (lower secondary, upper secondary) school age. Children enrolled in pre-primary education are considered to be out of school.

Proposed calculation method of the out-of-school rate

The primary (lower secondary, upper secondary) out-of-school rate is calculated by dividing the number of children not enrolled in pre-primary, primary, secondary or higher levels of education by the number of children of primary (lower secondary, upper secondary) school age. Children enrolled in pre-primary education are considered to be in school.

Reason for proposed change

The current calculation method for the out-of-school rate dates back to 2005, when it was proposed in a report by the UIS and UNICEF (UIS 2005). The report gave two reasons for counting children of primary school age or older in pre-primary education as out of school. First, on the background of the Millennium Development Goal of universal primary education, the content of pre-primary education was not seen as always appropriate for children of primary school age. The second reason was more technical: enrolment data on pre-primary education by age, which are needed to identify primary-age children, were missing for too many countries to calculate regional and global estimates.

The Education 2030 Framework for Action (UNESCO, 2016) encourages the provision of at least one year of free and compulsory pre-primary education of good quality. SDG target 4.2 calls for universal access to early childhood development, care and pre-primary education. A comparison of the calculation methods for the different out-of-school rates shows that the treatment of pre-primary education is inconsistent with the treatment of participation in other levels of education. While adolescents and youth of lower and upper secondary age enrolled in primary education are counted as in school, children of primary age in pre-primary education are considered out of school, thus inflating primary out-of-school rates in countries where children tend to stay in pre-primary education beyond pre-primary age.

A further inconsistency is introduced by the fact that indicators 4.2.2 and 4.2.4 count children in pre-primary education and early childhood educational development as in school. Although there is no pre-primary out-of-school rate per se among the SDG 4 indicators, children of pre-primary age in pre-primary education become part of the out-of-school population when they reach primary school age and remain enrolled in pre-primary education.

Impact of proposed change on out-of-school rates and numbers

The UIS database contains information on participation in pre-primary education for 124 countries that are home to 21 million of the 64 million primary-age children out of school worldwide. Pre-primary education is part of compulsory education in 35 of these 124 countries. 3.4 million of the 21 million children are in pre-primary education and if they are counted as in school, the global out-of-school rate in 2017 is reduced by 0.5 percentage points from 8.9% to 8.4% (see Table 1). Across the 124 countries with data on enrolment of primary-age children in pre-primary education,

this corresponds to a 1.3 percentage point decrease in the primary out-of-school rate. If the 3.4 million children in pre-primary education are counted as in school instead of out of school, the global number of primary-age out-of-school children in 2017 falls from 63.7 million to 60.2 million (see Table 2).

Table 1: Rate of out-of-school children of primary school age, 2017

Region	Countries with data on enrolment in pre-primary education*	Current out-of-school rate	In pre-primary education (based on countries with data)	Revised out-of-school rate
Central Asia	4 of 5	2.5	0.5	2.0
Eastern and South-Eastern Asia	10 of 18	3.8	0.1	3.6
Europe and Northern America	34 of 57	2.9	1.8	1.1
Latin America and the Caribbean	26 of 49	4.7	0.8	3.9
Northern Africa and Western Asia	11 of 25	10.5	0.3	10.2
Oceania	11 of 25	9.2	7.4	1.8
Southern Asia	2 of 9	6.3	0.0001	6.3
Sub-Saharan Africa	26 of 51	20.5	0.6	19.9
World	124 of 239	8.9	0.5	8.4

* Out of total number of countries and territories in the region.

Source: UNESCO Institute for Statistics database, October 2018

Table 2: Number of out-of-school children of primary school age, 2017

Region	Countries with data on enrolment in pre-primary education*	Current out-of-school number (in millions)	Number in pre-primary education (based on countries with data)	Revised out-of-school number
Central Asia	4 of 5	0.1	0.03	0.1
Eastern and South-Eastern Asia	10 of 18	6.6	0.2	6.4
Europe and Northern America	34 of 57	2.0	1.2	0.8
Latin America and the Caribbean	26 of 49	2.8	0.5	2.4
Northern Africa and Western Asia	11 of 25	5.7	0.2	5.5
Oceania	11 of 25	0.4	0.3	0.1
Southern Asia	2 of 9	11.6	0.0002	11.6
Sub-Saharan Africa	26 of 51	34.5	1.1	33.4
World	124 of 239	63.7	3.4	60.2

* Out of total number of countries and territories in the region.

Source: UNESCO Institute for Statistics database, October 2018

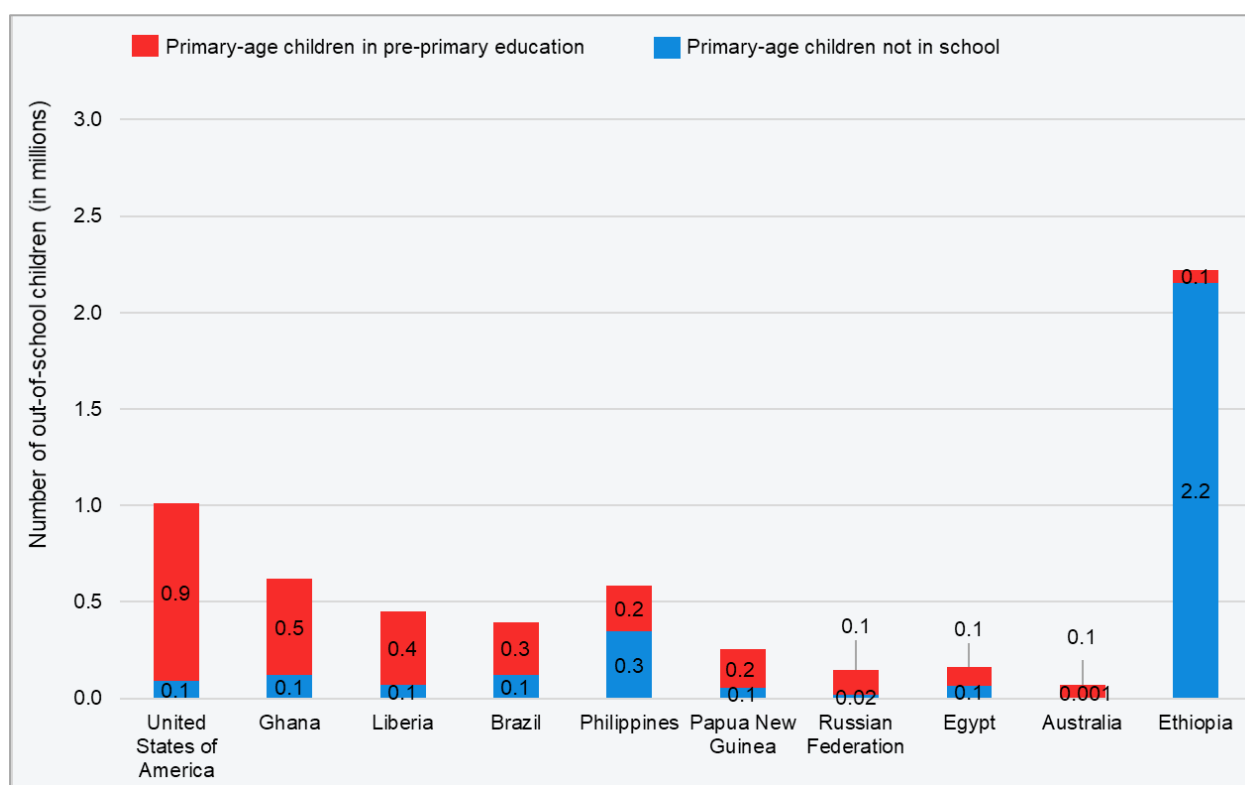
Regional analysis of the data from the 124 countries shows that two-thirds of the 3.4 million children of primary school age enrolled in pre-primary education live in Europe and Northern

America (1.2 million) and sub-Saharan Africa (1.1 million). If these children are considered in school instead of out of school, the rate of out-of-school children falls from 2.9% to 1.8% in Europe and Northern America and from 20.5% to 19.9% in sub-Saharan Africa.

In Oceania, 83% of the current out-of-school population of primary age are enrolled in pre-primary education. If these children are considered in school instead of out of school, the primary out-of-school rate in the region drops by 7.4 percentage points from 9.2% to 1.8%. In the 34 countries in Europe and North America with data, 69% of all out-of-school children are enrolled in pre-primary education. In the four countries in Central Asia with data, 40% of all primary-age out-of-children are in pre-primary education.

At the national level, the highest numbers of out-of-school children of primary school age enrolled in pre-primary education in 2017 or the most recent year with data are found in the United States (0.9 million), Ghana (0.5 million), Liberia (0.4 million), and Brazil (0.3 million) (see Figure 1). Together, these four countries account for 60% of the total number of out-of-school children of primary school age enrolled in pre-primary education. If these children are counted as in school, the number of out-of-school children drops by 91% in the United States, 84% in Liberia, 81% in Ghana, and 69% in Brazil.

Figure 1: Number of out-of-school children in selected countries, 2017 or latest year



Source: UNESCO Institute for Statistics database, October 2018

For many countries in the UIS database, no information on participation in pre-primary education is available. In sub-Saharan Africa, data are missing for 25 of 51 countries that represent 22 million of the 34 million primary-age out-of-school children in the region. In Southern Asia, the two countries with data on participation in pre-primary education (Iran and Maldives) represent a miniscule proportion of the 12 million out-of-school children in the region. Data coverage is also low for Northern Africa and Western Asia, and for Eastern and South-Eastern Asia. Globally,

information on enrolment in pre-primary education is missing for 43 million out-of-school children of primary school age.

Improved data collection and imputation can fill some of these gaps. As a result, the regional and global decrease in the out-of-school rates and numbers is likely to be greater than indicated by the preliminary estimates in Tables 1 and 2.

Summary and conclusion

In summary, the analysis in this document demonstrates that modifying the calculation of the out-of-school rate by counting children of primary age in pre-primary education as in school instead of out of school would result in a more accurate description of participation in education and a noticeable reduction of the global rate and number of out-of-school children. With more complete data coverage, this effect is likely to be even greater.

References

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