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# The Students' Overage Problem

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## Background

In most countries students are expected to start the first grade of primary school at age six, with a few exceptions where students enter first grade at age five or seven. Similarly, the expected age for completion of secondary education is 18 years. As part of multiple evaluations of early grade reading programs, funded by USAID, NORC collected data on students' ages. In several cases, we find that the student population was well above the expected age for their grade. We also see a large dispersion in students ages in the same grades and even in the same classrooms. Below we discuss these findings and the challenges associated with overaged students. We explore prevalence and severity of overaged students in schools in Liberia, Ethiopia, Zambia, and Malawi. In the case of Malawi, we have a sample of students attending the last four years of primary education, who we followed over time. This allows us to also study the relationship between student age and school retention.



## Liberia



**In Liberia most children enrolled in school are older than the appropriate age for their grade.** NORC at the University of Chicago used data collected from grade 2 students (Menendez and Monroy-Taborda, 2017) in a representative sample of public schools in six counties in Liberia -Montserrado, Margibi, Bong, Grand Bassa, Nimba and Lofa – to examine the prevalence and severity of overage students. Most students in the sample (78 percent) are from rural areas.

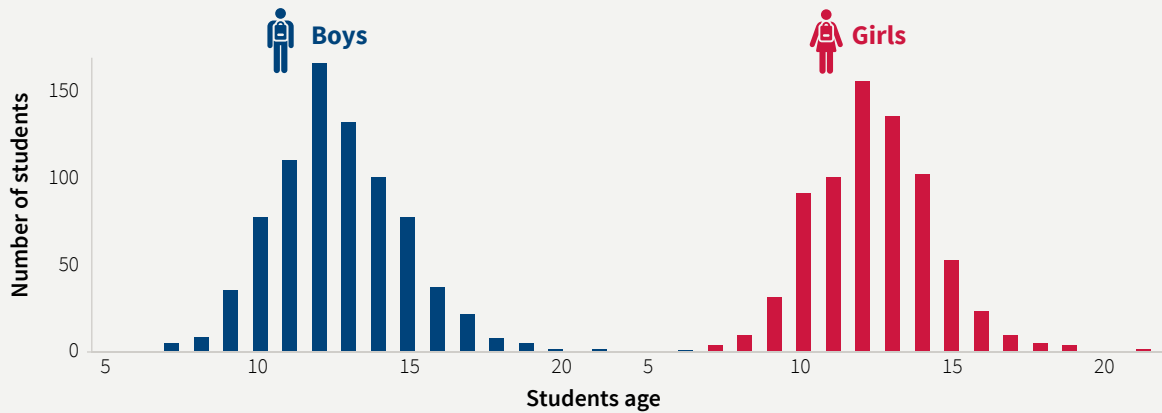
Officially, Liberian students should start first grade at the age of 6 and, therefore, the appropriate age for a second-grade student in Liberia is between 7 and 8 years, depending on the student's exact date of birth. Table 1 shows the average age of students enrolled in grade 2 by sex and location. The average age of a second-grade boy in the sample is 12.6 years, while the average age of a girl in second grade is 12.4 years. Second grade students in urban areas are on average one year younger than students in rural areas.

**Figure 1: Liberia, Average Student Age by Sex and Location, Grade 2**



Figure 2 shows the distribution of students age by gender. Less than two percent of the students are 8 years of age or lower, the expected age for grade 2. **A large percentage of grade 2 students are adolescents.** In all six counties, most of the students (75 percent) are between 11 and 15 years old.

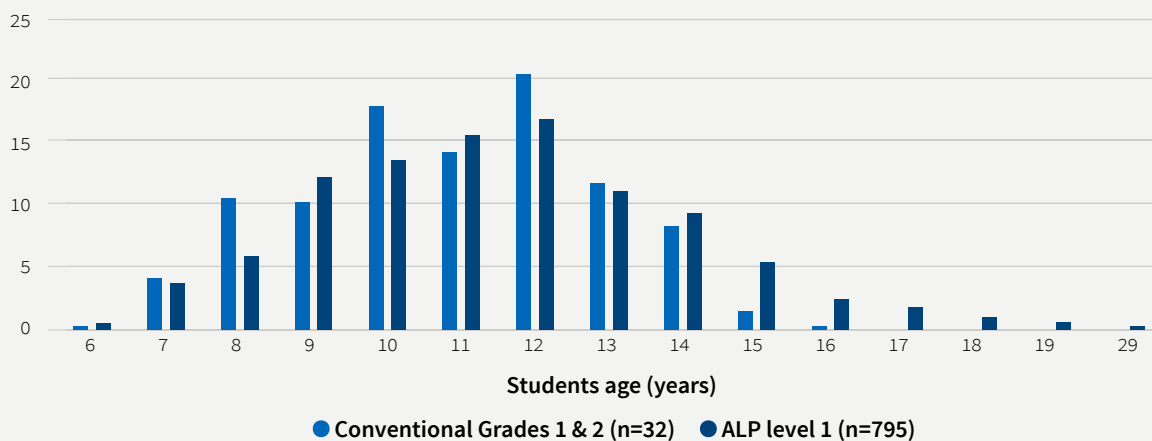
**Figure 2: Liberia, Distribution of Student Age by Sex, Grade 2.**



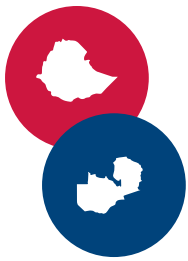
Data collected for the "Baseline Report: USAID/Liberia Read Liberia Impact Evaluation" (Menendez and Monroy-Taborda 2017)

The overage problem in Liberia is hardly surprising given the challenges the country has faced over the last few decades, including internal conflicts and health crises. Many Liberian schools have an accelerated learning program (ALP) program that condenses six years of primary education (grades 1 to 6) into a three-year curriculum (levels 1, 2 and 3), so overage students can catch up and eventually join the conventional school system. However, schools do not seem to be using the ALPs as an instrument to separate overage and on-age children. In a survey NORC conducted in 2021 in schools with both conventional and ALP classes, we found that the students age distribution is practically indistinguishable between the two systems. Figure 3 shows the age distribution of 1st and 2nd grade students in the conventional school system, and of level 1 students in the ALPs. The figure shows not only that there are many overage students (over 8 years of age) in the conventional system, but also the presence of many on-age (7-8 years old) students in the ALP system.

**Figure 3: Liberia, Distribution of Student Age by Sex, Grade 2.**



Results correspond to schools that have both conventional and ALP systems. Data collected for the evaluation of the AQE program transition to Liberia MoE management (Menendez et al, 2022)



## Ethiopia and Zambia

The case of overage students in Liberia case is severe, however, it is not unique. Data collected by NORC in Ethiopia also show that by 2nd grade, students are already overaged at the mean. As Figure 4 shows, the mean age for 2nd graders in Ethiopia is 9.3 years for girls and 9.8 for boys, while the expected age for that grade is 8 years. By contrast, in Zambia, where the expected age of 2nd graders is also 8 years, the mean age is 8.2 years for girls and 8.4 years for boys.

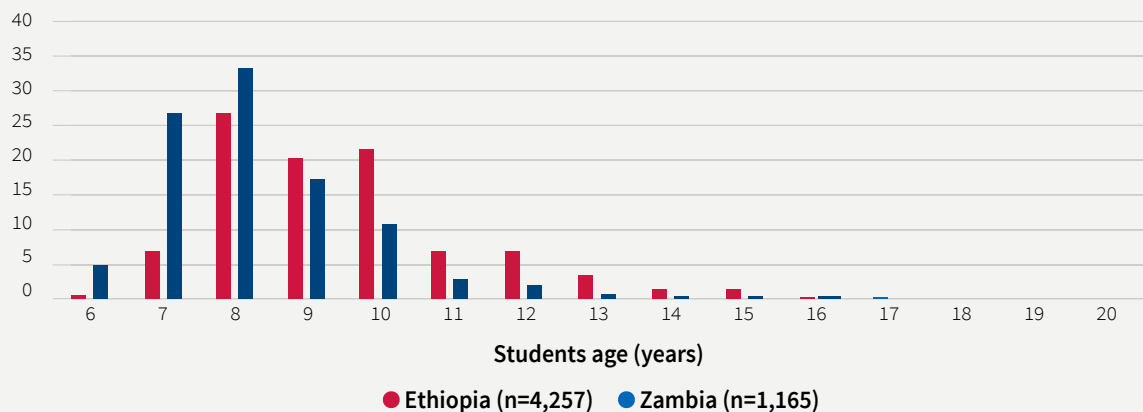
**Figure 4: Average Student Age by Sex in Ethiopia and Zambia, Grade 2**



Data for Ethiopia comes from the impact evaluation of the Reading for Ethiopia's Achievement Developed Community Outreach (READ CO) Program, which was conducted in the regions of Amhara and Oromia (Ome and Menendez 2018a). Data for Zambia comes from the impact evaluation of the program Makhaliwwe Athu, which was conducted in two districts of the Eastern province (Ome and Menendez 2018b).

Although in these two cases the average student is not as old as in Liberia, by looking at the age distributions, we can infer that the overage problem will get worse at later grades. As Figure 5 shows, in Zambia there is a non-negligible fraction of students that are adolescents and pre-adolescents. This is even more prominent in the case of Ethiopia.

**Figure 5: Age Distribution for Students in Grade 2 in Ethiopia and Zambia**



Data for Ethiopia comes from the impact evaluation of the Reading for Ethiopia's Achievement Developed Community Outreach (READ CO) Program, which was conducted in the regions of Amhara and Oromia (Ome and Menendez 2018a). Data for Zambia comes from the impact evaluation of the program Makhaliwwe Athu, which was conducted in two districts of the Eastern province (Ome and Menendez 2018b).

As we look at higher grades, the overage problem is likely to worsen, as the results for Malawi, below, corroborate.



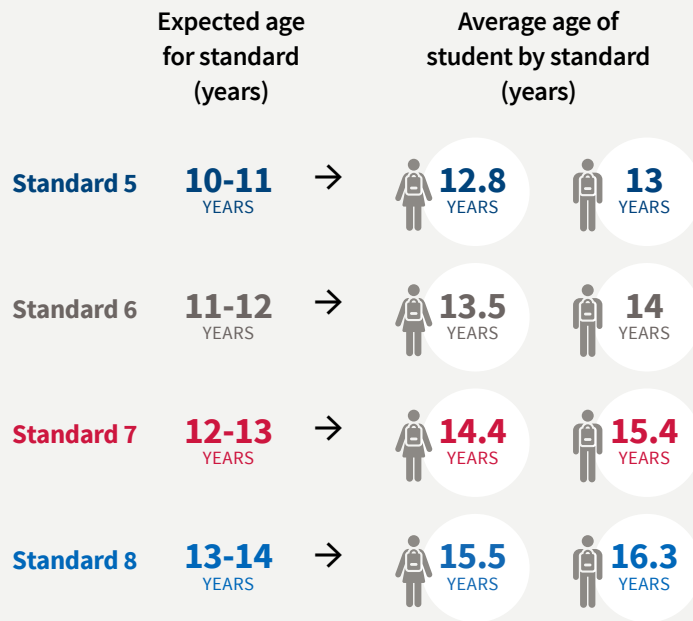
## Malawi

In 2018, NORC collected data from students in standards 5, 6, 7 and 8 (Menendez et al. 2018) in Malawi. Figure 6 shows the expected and actual average age of students in each standard by gender. If learners start school on time and advance one standard per additional year of age, their expected age by standard would span 10 to 14 years (see column 2). However, on **average, students are**

substantially older than expected for their standard (columns 3 and 4). While this problem affects both male and female students, it is more pronounced among males than females.

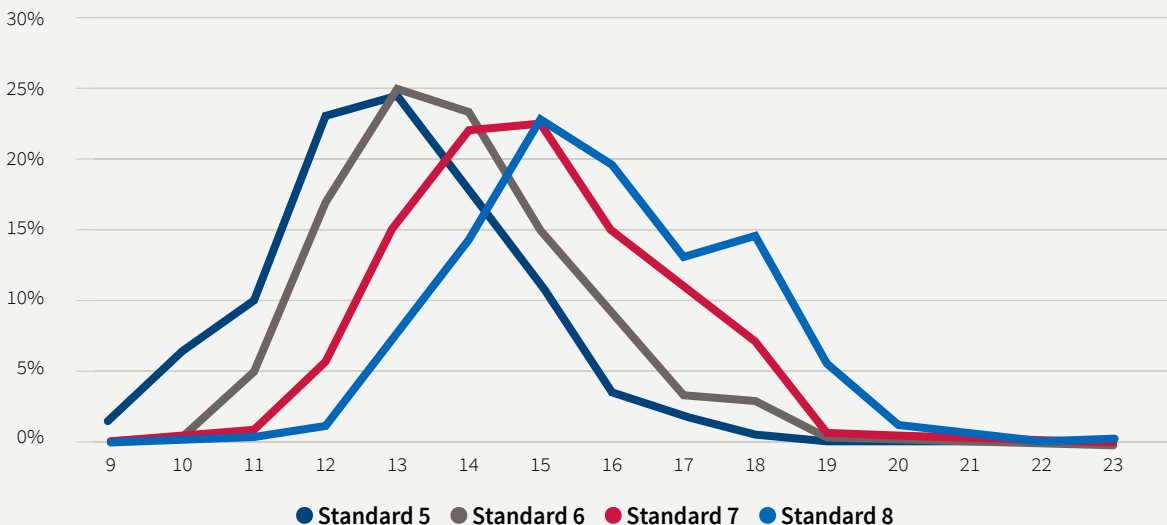
**Figure 6: Student Age, by Standard and Gender at Baseline**

Data collected for the Apatseni Mwayi Atsikana Aphunzire (AMAA) Evaluation and Research (Menendez et al 2018)



The overage problem could be explained in part by the fact that around 20 percent of the students in our sample were repeating the same grade level they attended in the previous academic year. On the other hand, these higher-than-expected ages may also reflect the fact that not all children start standard 1 at age 6 as expected. According to the Malawi Education Management Information System (EMIS) 2015/16 report, 35 percent of the learners were overaged, ranging from 7 to 12 years, when they first enrolled in primary school. Gaps in school enrollment (i.e. out of school spells) could also contribute to the overage problem.

**Figure 7: Age Distribution for Students in Standards 5 to 8, Machinga and Balaka, Malawi**



Data collected for the Apatseni Mwayi Atsikana Aphunzire (AMAA) Evaluation and Research (Menendez et al 2018)

Figure 7 presents the age distribution of students in standards 5 through 8, showing a broad dispersion of ages in all standards. **There are students that duplicate in age others in the same standard.**

We followed the Malawi 2018 sample of students for four years, updating their enrollment status every year until 2021. This allows us to observe students over time, whether they dropout from school and why, and whether they stay in school and transition to secondary education.

Dropout rates in the communities we studied are high (38.9 percent of the students in our sample dropped out of school between 2018 and 2021). Dropping out of school is more common among girls than boys. In our sample, around 35 percent of boys left school during the period under study, compared to over 42 percent of girls.

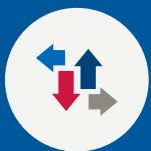
We collected and used detailed information about students' sociodemographic characteristics to study factors associated with dropping out of school. Using regression analysis, we studied the association of student characteristics with the probability of dropping out (Menendez et al. 2022b). We find that other things (gender, mother education, distance from school, socioeconomic status, absenteeism at baseline, etc.) being equal and after controlling for a student's standard, age is positively associated with dropping out. In other words, in any given standard, older children are more likely to abandon school.

**This strong association between student age and likelihood of dropping out indicates that the age of the student population is an important factor affecting student retention.** By the end of primary school (standard 8), most students in our sample are older adolescents (16 year of age and older) who are more likely to leave school than younger students. Competing interests and opportunity costs of attending school become more important as students age. Older students are more likely to want and find paid jobs or be more productive in the family farm or business. They also are more likely to start engaging in adult behaviors, even if they are still in primary school or the early years of secondary school. Older adolescent students are more likely to be sexually active, have romantic relations, get pregnant, and/or get married. These behaviors and opportunity costs increase the probability of dropping out of school.

## Conclusions



**Overage students are substantially more likely to drop out of school.** If students were to start school at the expected age, they would complete secondary education before the age of 18 when interests external to school begin to play a more important role. Starting school on time reduces the risk of dropping out by aligning the student age during the years spent at school with the interests, behaviors and opportunities that encourage school completion.



**There are also important disadvantages associated with having on age and overage students in the same classroom. Mixing young and older students tends to be detrimental to learning and safety.** Teaching and learning materials and pedagogical approaches should differ depending on a student's age. If the level and speed of teaching and class discussions are targeted at older students, younger students may not be able to follow nor fully participate in the program. In turn, slowing down the pace and using materials developed for young students might infantilize and frustrate older learners.



**In mixed-age learning environments, younger students may face a higher risk of being subjected to gender-based violence**, including physical, sexual, or emotional abuse (Baxter et al. 2016). Older learners can be humiliated by being in classes alongside very young children, who may ridicule them (Menendez et al, 2022a).



**Efforts should be devoted to promoting student enrollment in school at the official age and to reducing absenteeism and enrollment gaps.** The probability of completing education is higher for on-age students. Furthermore, older and younger student's needs, experiences, interests, agency, cognitive and physical development, including motor skills, are all very different and, therefore, they are not well served in mixed-age classrooms. Moving away from mixed-age classrooms and the challenges associated with them, will require more focus and reliance on ALPs to bring older students up to speed, while younger students attend conventional schools with peers of the same age.

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