

North Macedonia Special Focus Note: Primary Education - Seize the opportunity to build back better

While access to primary education has improved in the last decade, the quality of education remains a challenge. System deficiencies are visible even in the early years of primary education as shown by EGRA and EGMA assessments. Moreover, North Macedonia's results from international student assessments reveal comparatively weak levels of student achievement at the end of lower secondary grades, suggesting that learning deficiencies which start early in primary education persist through later grades. The COVID-19 pandemic now threatens to make primary education outcomes even worse. The pandemic has already had a profound impact on education by closing schools almost everywhere across the world. But it is possible to counter these shocks, and to turn crisis into opportunity. As the school system stabilizes, the country can use the focus and innovativeness of the recovery period to build back better. The key: don't replicate the failures of the pre-COVID systems, but instead build toward improved systems and accelerated learning for all students.

The North Macedonian Primary Education System Fails to Provide Quality Education for All

In the last decade, North Macedonia has been successfully working toward improving access to primary education but concerns over quality and equity have persisted. Multiple international student assessment surveys and reports indicate significant learning deficiencies for students in North Macedonia and provide evidence of disparities in learning outcomes based on the place of living, ethnicity, socio-economic status, gender and other variables.

The findings of the EGRA and EGMA¹ assessments from 2016 show that the results for oral reading fluency and comprehension in early primary education in North Macedonia are still significantly below international benchmarks.² The report further finds that the main predictors of student success in mathematics are (a) the higher education of parents, (b) education in central or urban schools and monograde classrooms, (c) attendance at preschool institutions, and (d) availability of books at home.

The performance of students in grade 4 in the TIMSS³ 2019 survey points to a similar trend, with the country's students ranking in the 45th place in mathematics and 51st place in science among the 58 countries that have undergone this assessment.⁴ Not only are students in North Macedonia showing weaker results than most of their peers internationally, but there are marked disparities in results between different peer groups within the country itself. Significant differences in performance between students are evident based on (a) the place of living (students from rural areas scoring 36 points less in mathematics and 50 points less in science compared to students from urban areas), (b) the language of the test taker (students

¹ EGRA and EGMA stand for early grade reading/mathematics assessments.

² USAID (2017). Nationwide Study of Early Grade Reading and Mathematics Assessment in the Republic of North Macedonia. Skopje: USAID.

³ TIMMS stands for Trends in International Mathematics and Science Study. North Macedonia has participated in TIMSS in 1999, 2003, 2011, and 2019.

⁴ Mullis, V. S. I., Martin, O. M., Foy, P., Kelly, L. D. and Fishbein, B. (2019). TIMSS 2019 International Results in Mathematics and Science. Boston: International Association for the Evaluation of Educational Achievement

taking the test in Macedonian language scoring 24 and 39 points more in mathematics and science respectively compared to students taking the test in Albanian language), and (c) resources for learning at home (students with many learning resources outperform students with only few learning resources by almost 150 points in both mathematics and science).

North Macedonia's results in PISA⁵ from 2015 showed that most of 15-year-olds in the country lacked basic science, reading and mathematics skills⁶, suggesting that learning deficiencies which start in primary education persist through later stages. In the PISA 2018 testing, however, the country has substantially improved outcomes in all three subjects – but the results remain well below the score for the Europe and Central Asia region, the EU, and the OECD group of countries. Still, even in the latest PISA there are wider performance gaps between the top and bottom income groups, with students from the latter lagging behind by 90 PISA points (roughly equivalent to two years of schooling). Additionally, the gender gap is significant, with girls largely outperforming boys, particularly in science (by 19 score points) and mathematics (by 7 score points).

According to the World Bank's 2020 Human Capital Index, children born in North Macedonia today will be 56% as productive when they grow up as they could be if they enjoyed complete education and full health. Poor educational outcomes largely explain this loss of lifetime productivity. As noted in the North Macedonia Systematic Country Diagnostic, gaps in human capital start early and expand over time. The education system fails to provide students with the skills they need to successfully complete each stage and move confidently to the next.

Given all this evidence, it is of paramount importance to improve the quality of the primary education system since a large share of students in North Macedonia continue to move past primary education without mastering basic competencies needed for further education and life. In addition to efforts to address the issue of low quality, the system needs to simultaneously tackle the problem of inequity and close the performance gap between the students from different ethnic groups, socio-economic background, gender, and place of living. That will help North Macedonia heighten its human capital, boost labour productivity and encourage a more inclusive labour market participation.

The COVID-19 Pandemic Threatens to Deteriorate Primary Education Outcomes

Even before the start of the COVID-19 pandemic, the learning deficit of primary-school age children in North Macedonia was already prevalent. Despite a swift education sector response to COVID-19 in the country, the pandemic now theatens to make primary education outcomes even worse, creating unequal opportunites for learning especially for disadvatanved and vulnerable students who face the greatest risk of learning loss. World Bank estmitates suggest that such losses will be in the order of a 6- to 10-point decline¹⁰ for the mean PISA score for North Macedonia (393 in 2018) (Figure 1).

⁵ PISA stands for Programme for International Student Assessment. North Macedonia has participated in PISA in 2000, 2015, and 2018.

⁶ OECD (2019). OECD Reviews of Evaluation and Assessment in Education: North Macedonia. Paris: OECD Publishing.

⁷ World Bank (2019). North Macedonia: PISA 2018. Washington, DC: World Bank.

⁸ World Bank (2020). The Human Capital Index 2020 Update: Human Capital in the Time of COVID-19. Washington, DC: World Bank

⁹ World Bank (2018). Seizing a Brighter Future for All: Former Yugoslav Republic of Macedonia Systematic Country Diagnostic. Washington, DC: World Bank.

¹⁰ World Bank (2020). North Macedonia Country Brief: Estimate of COVID-19 Impact on Learning Loss. Washington, DC: World Bank.

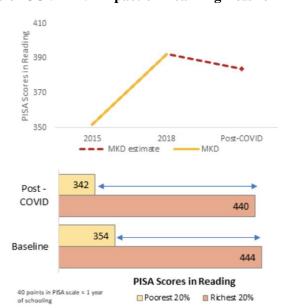


Figure 1. Estimates of COVID-19 Impact on Learning Loss for North Macedonia

Source: North Macedonia Country Brief: Estimate of COVID-19 Impact on Learning Loss, World Bank 2020.

But it is possible to counter these shocks, and to turn crisis into opportunity. As the school system stabilizes, the country can use the focus and innovativeness of the recovery period to build back better. A forward-looking vision and proactive actions will help not only mitigate the damage from the current crisis and the failures of the pre-COVID system, but could turn recovery into a real opportunity to ramp-up the quality of education in the country. Learning recovery should be a top priority, to prevent permanent impacts on the opportunities of children and youth. Education institutions will require additional funding to implement new health and safety requirements, undertake the outreach activities needed to persuade students to return, and facilitate remedial teaching to minimize learning losses. Funding will also be needed to ensure that the pandemic's impact does not fall disproportionately on the poorest and most vulnerable students. Targeting resources on those that fall behind the most and providing additional learning support (e.g. through tutoring) to disadvantaged children will be critical to ensure that they return to school and have opportunities to make up any learning lost during the school closure.

Improving Quality and Equity of Primary Education in North Macedonia

The Government of North Macedonia is cognizant of the above-mentioned shortcomings of the primary education system and is committed to carry out comprehensive structural reforms as the basis for long-term improvements. Within this process, the Government could consider the following reforms to improve the conditions for learning in primary education:

1. **Placing student learning at the centre.** By the time students in North Macedonia are about to finish primary school, they have nearly 900 hours less instruction than students on average across OECD countries. This limits the breadth and depth of their learning and the scope to pursue additional subjects of interest. The instructional time could therefore be extended, while making sure that the learning process is more enjoyable and engaging for students. As part of this effort, the curriculum must be designed in a way to equip students with the skills they need to develop into critical thinkers as well as active and relevant participants in social life. It also needs to help students make a better connection between different

¹¹ OECD (2019). OECD Reviews of Evaluation and Assessment in Education: North Macedonia. Paris: OECD Publishing.

subject areas and how to apply their knowledge in real-life situations. The process of learning should also be organized in a way which ensures that students' voices are heard and that they are aware of the actions taken based on their feedback.

- 2. **Increase public investment in primary education and improve the fiscal efficacy of the system.** Despite a diminishing spending in education over the past decade, the country is making efforts to invest more in primary education, with the 2020 education budget allocating 57% of the total amount to primary education, compared to an average of 47% from 2009 to 2018. This positive trend should be sustained in the future. Investing in primary education is not only morally advisable but has been empirically proven to provide greater returns compared to later-stage education and training ¹²¹³ and to contribute to human capital development in a decisive manner. The Government should also consider developing a new funding formula for primary education since the current one is outdated, does not adequately cover capital investments and contributes to growing fiscal inefficiency. The formula revision, which is already featured in the Government plan for 2020-2024, should be designed in a way that supports better optimization, while prioritizing the most vulnerable students in the system.
- 3. **Providing support to teachers is essential for quality.** Teachers are at the heart of the learning process and need to be continuously supported and empowered. This support means allowing for career advancement as a foundation for capacity building, and providing continuous professional development so that they can better identify and understand the learning needs of students, especially of those at risk. Teacher support should also be encouraged through recognition and incentives provided by a new performance-based teacher career path. All these steps should help teachers become better and more effective educators, equipped with the competences needed to help students succeed both in the face of shocks (as in the COVID-19 period) and in normal times.
- 4. **Establishing mechanisms to provide reliable and objectively verifiable data on the standards of achievements of students.** While the Government of North Macedonia is committed to evidence-based policy making, the current system in the country does not provide enough data on the levels of achievements of students in learning domains considered to be of special importance during primary education. The Ministry of Education has recently adopted a Concept for national assessment in primary education that reflects the learning objectives contained in the national curriculum, while drawing on good practices from several well-know global assessment practices and EU norms and standards in this area. Such data will provide an accurate snapshot of the standards achieved by learners, establish a reliable baseline against which future progress may be monitored, and offer evidence for developing and advancing educational policies in the country in order to achieve modern world educational standards.
- 5. **Improving physical infrastructure and learning environment in schools.** Physical conditions of school facilities and sanitary installations in schools are often inadequate for ensuring a safe and inclusive learning environment, a problem made more urgent by COVID-19 and the necessity for maintaining minimum standards to ensure proper hygiene. Schools therefore need to have sufficient resources, equipment, and appropriate physical and sanitary conditions particularly given the strong global evidence on how school conditions affect student learning. ¹⁴ This effort should also include the updating of learning resources, such as age- and level-appropriate books provided in all official languages in North Macedonia, learning aids (objects, toys, and games), multifunctional ICT rooms, science laboratories, and libraries.

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¹² Liu, J. (2018). The Economic Case for Investing in Basic Education: Returns to Individuals, Society, and Impact on Youth Employment. Bem: Swiss Agency for Development and Cooperation.

¹³ Boissiere, M. (2004). Rationale for Public Investments in Primary Education in Developing Countries: Background Paper for the Evaluation of the World Bank's Support to Primary Education.

¹⁴ Barrett, P., Treves, A, Shmis, T, Ambasz, D. and Ustinova, M. (2019). The Impact of School Infrastructure on Learning: A Synthesis of the Evidence. International Development in Focus. Washington, DC: World Bank.

The World Bank has been a partner of choice of North Macedonia for over 25 years and will remain committed to helping the Government in addressing the issues in the education sector through human, technical and financial assistance. Previous World Bank operations in North Macedonia have already been successful in establishing the institutional preconditions required for more substantive reforms in the primary education sector. The World Bank will leverage this experience while tapping into its extensive experience in developing education projects elsewhere in the region that support the development of teaching practices and content, fostering access to quality and inclusive physical learning environments, and strengthening institutional capacity. Through the new Primary Education Improvement Project (2021-2026), the World Bank will continue to support and strengthen the Government's broader reform program in primary education by refining the articulation, alignment, and implementation pace of different aspects of the reform and by improving the institutional capacity of the Ministry of Education and Science and other key institutions.