



American Chamber of Commerce
North Macedonia

Education and Training Position Paper: Policy Actions

Recommendation

Expand access and improve the quality of preschool education for children

Expanding access and improving the quality of preschool education is essential for enhancing the educational system and creating a qualified workforce, as they are the foundational years for each child affecting their cognitive, social, and emotional development. Indeed, it sets a basis for lifelong learning and leads to better academic outcomes, higher graduation rates, and an increased likelihood of pursuing higher education, and higher workplace productivity. According to the State Statistical Office release, the total number of children in institutions for early childhood development across the country was 37,804 in 2023 (State Statistical Office, "Institutions for childcare and education - 2023", 2024), projecting that only about 40% of up to five-year-olds are enrolled in preschool institutions. This signifies a critical necessity for action. Additionally, early childhood education is pivotal in breaking the cycle of poverty and promoting social mobility, offering significant economic returns. According to Nobel-winning economist James Heckman, investing in early childhood education yields high returns, potentially up to \$13 for every dollar invested, through better outcomes in education, health, employment, and social behavior (Heckman, "The Lifecycle Benefits of an Influential Early Childhood Program", 2017).

Actions:

- Increase public investment in the development and maintenance of fully functional and safe preschool facilities.
- Implement continuous professional development programs and clear qualification requirements for preschool teachers.
- Develop a national curriculum framework for preschool education that emphasizes holistic child development, including cognitive, social, and emotional skills.
- Ensure that children from marginalized communities and those with atypical development have access to preschool education.
- Simplify regulatory requirements for opening private preschool facilities, and encourage the formation of public-private partnerships.
- Administer the professional exam required for licensing preschool teachers under the Child Protection Law throughout the year and make it accessible to teachers from a variety of educational fields to increase overall preschool staff intake.

- Introduce incentives for low-income households to improve children's access to preschool education institutions.
- Establish systems for regularly monitoring and evaluating the quality of preschool education.
- Ensure reliable and consistent financial and technical support for preschool facilities.
- Launch awareness-raising campaigns highlighting the importance and benefits of preschool education.

Improve the quality of formal education

The quality of education in the country remains a significant concern. Results from the Program for International Student Assessment (PISA) show that student performance in North Macedonia is below the OECD average, particularly in reading, mathematics, and science (OECD, PISA 2022), where the country is ranked in the bottom quarter of participating countries. In fact, overall student achievements have decreased between 2018 and 2022. Several factors contribute to this, including low education spending as a percentage of GDP, inadequate professional development activities for teachers, outdated curriculum and learning outcomes, and lack of data collection and utilization to inform policy decisions. There is a pressing need for targeted actions to improve the educational system, as these improvements ultimately contribute to a more educated and productive workforce. Indeed, high-quality formal education, spanning from primary school through to higher education, is fundamental for equipping students with the skills essential for success in the modern economy.

Actions:

- Allocate funds for modernizing existing educational facilities, including the development and maintenance of technology-enhanced classrooms and laboratories.
- Improve the societal standing of teachers, by improving salaries, offering continuous professional development opportunities, providing better tools and resources for organizing the educational process, including digitalizing processes to reduce administrative burdens as well as launching awareness campaigns to redefine and elevate the value of the teaching profession in society.
- Update the overall curriculum in the schools to be more relevant for the 21st century, particularly by emphasizing vocational education and the development of students' soft skills and introducing interdisciplinary subjects.
- Establish specialized STEM programs and schools that focus on nurturing talent in these critical fields. Additionally, introduce incentives for schools to increase student participation in STEM subjects.

- Adopt regulations to oversee private education at all levels (primary and secondary), ensuring high standards and equitable access, and allocate budget resources for private schools that educate children who would otherwise be enrolled in public schools.
- Reform public institutions that educate and license teachers and encourage private initiative in this segment.
- Update curricula for all pedagogical qualifications to reflect current developments in philosophical, pedagogical, psychological, and methodological knowledge, as well as implement programs that support the mental health and well-being of teachers, including access to counseling services and stress management training.
- Implement policies to ensure an inclusive and supportive educational process, particularly for students from diverse backgrounds and marginalized communities, by developing targeted programs for integrating students with disabilities into mainstream education, supported by specialized teacher training and appropriate resources.
- Strengthen accreditation standards for higher education institutions and apply them equitably to both public and private institutions.
- Strengthen the capacity of education inspection authorities to enhance oversight quality and shift the focus from solely bureaucratic oversight to more substantive, in class, evaluations.
- Establish transparent assessment frameworks to monitor student performance, teacher effectiveness, and school quality, while developing robust data collection and analysis systems to track educational outcomes, inform policy decisions, and ensure data accessibility for all stakeholders.
- Set strict criteria for square meters per student and teacher-student ratio to ensure effective learning and teaching conditions.
- Introduce social-emotional and career counselors in public and private secondary schools and higher education institutions to provide personalized guidance and support for students' career development and educational planning.
- Achieve a national and political consensus to develop and implement a unified stance on education system reforms, ensuring all stakeholders are aligned and committed to common goals for improvement, irrespective of election cycles and changes in government.

Enhance workforce
upskilling and reskilling
opportunities

There are significant obstacles in the current state of workforce development in North Macedonia. The country ranks fifth in Europe for brain drain, indicating a significant loss of talent (Global Economy, “Human flight and brain drain index 2007-2023”, 2024). On the other hand, Government measures to retain highly educated and skilled individuals have been deemed ineffective based on the report published by the State Audit Office (State Audit Office, “Effectiveness of measures to prevent the brain drain of highly educated and professional workers Report”, 2024). Furthermore, training programs are not adequately aligned with modern economic demands, and existing resources and infrastructure for vocational education and training are insufficient to provide high-quality training that meets market standards. On top of that, there is a lack of awareness about the benefits of upskilling and reskilling, especially within SMEs in the country. Insufficient collaboration among government, educational institutions, and the private sector exacerbates these issues. By addressing these challenges and implementing targeted actions, the country can significantly improve its workforce readiness and productivity, leading to a more competitive and resilient economy.

Actions:

- Encourage and facilitate partnerships between educational institutions and the private sector to co-develop curricula that meet industry needs, provide internship opportunities, and ensure that education aligns with job market demands.
- Ensure that certified adult education providers offer high-quality, updated education programs and modern infrastructure and resources to meet current labor market needs, including by strengthening the role and capacities of the Adult Education Centre.
- Foster collaboration between government, industry, and educational institutions to co-design and deliver upskilling and reskilling programs.
- Support workforce upskilling and reskilling by providing incentives such as tax benefits, subsidies, and grants for individuals and small and medium-sized enterprises investing in these initiatives.
- Ensure that occupational standards consistently match current labor market needs and regularly develop professional qualifications to address skill deficiencies.
- Provide robust career guidance and counseling services through the Employment Service Agency to help individuals identify suitable upskilling and reskilling opportunities based on their interests, strengths, and labor market trends.

- Develop and implement targeted upskilling and reskilling programs for industries identified as key growth sectors, such as information technology to align workforce skills with future economic opportunities and market demands.
- Develop and implement a program to facilitate the transition of individuals from administrative public employment to the private sector.
- Establish a framework for sharing best practices and success stories in upskilling and reskilling, including from other countries and regions, encouraging the adoption of proven strategies and innovative approaches in North Macedonia.

Strengthen Research and Development (R&D) capabilities

The country's notably low expenditure on research and development remains a persistent challenge. According to data published by the World Bank, in 2022, R&D expenditure was only 0.38% of the national GDP, significantly below the EU average of 2.28% (World Bank, "Research and Development Expenditure (% of GDP) - North Macedonia", 2022). The current state of R&D in North Macedonia faces several significant challenges. There are no activities to align R&D efforts with national economic priorities, and the existing infrastructure and resources for R&D are inadequate to support high-quality research. Addressing these challenges requires a multi-faceted approach that will boost innovation, drive economic growth, and enhance global competitiveness.

Actions:

- Create national funding programs to support relevant R&D projects, ensuring transparency and accountability in the funding process, along with continuous monitoring and evaluation of effectiveness.
- Provide incentives such as tax benefits to encourage private sector investment in research and innovation.
- Facilitate partnerships between universities and industries, particularly through joint research projects and knowledge and technology transfer programs.
- Strengthen the capacities of educational and research institutions by investing in modern infrastructure and laboratories and supporting the training and development of research and academic staff.
- Expand and enhance existing innovation hubs and incubators to support the implementation of new ideas, focusing on key areas such as technology, health, energy, and environmental sustainability



- Encourage participation in international research consortia, partnerships, and projects with foreign universities and research institutions, including involvement in European research and innovation programs such as Horizon Europe.