

**Syrian Arab Republic**  
**Ministry of Education**

**The Syrian Arab Republic Discussion Paper for the Transforming Education Summit to be held in New York in September 2022, during the 77<sup>th</sup> session of the UN General Assembly (UNGA 77)**

**Transforming Education in Wars and Disasters**

**"The Case of Education in the Syrian Arab Republic"**



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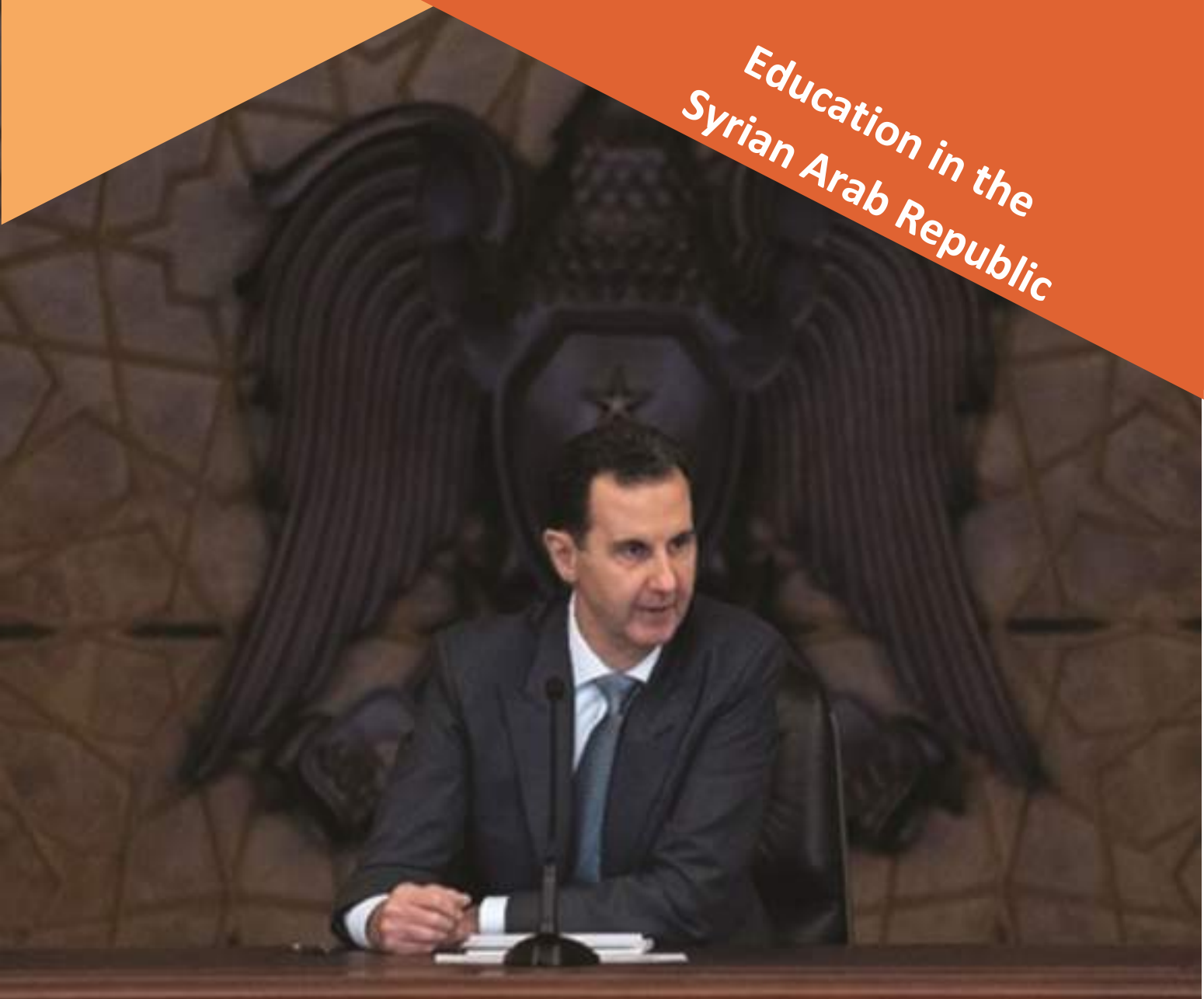
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## Education in the Syrian Arab Republic



Education for the Syrian Arab Republic means every member in society, means every family, and means every expert educator; in a nutshell and in practice, education means the whole nation, indeed, the very homeland. If education rises the whole nation shall rise, and if education declines, the whole nation shall eventually decline. We have to think of the way to create a generation with a proper system of thought. We need to create a generation that faces challenges rather than escapes from them. We need a generation that takes initiative, that is active, and that looks for solutions rather than waits for them to come on their own. We need a generation that masters modern technologies and social media, and turns them to its service and benefit.

**President Bashar Al-Assad**  
President of the Syrian Arab Republic

The paper presented by the Syrian Arab Republic for the Transforming Education Summit to be held during the 77th session of the UN General Assembly, in New York in September, 2022, addresses an important topic about:

## **Transforming Education in Wars and Disasters: “The Case of Education in the Syrian Arab Republic”**

This paper addresses three key topics pertaining to transforming education: (1) Programmes for the prevention from the risks of COVID-19; (2) Topics related to transforming education and its challenges in situations of disasters and wars; and, (3) the requirements of young people to develop education in the Syrian Arab Republic.

The second topic related to transforming education addresses issues such as the national policy on education, and its consistency with the requirements of transforming in education. The topic also encompasses education indicators in Syria, and their relevance to the 17 SDGs, early childhood programmes in Syria and improving the school environment to promote a quality equitable education that caters for the rights of children with disabilities and promotes lifelong learning through multiple educational pathways. The topic also addresses modern learning methods and the linkage of education with the national product and the labour market.

## Foreword

Significant progress has been achieved in education in the first two decades of the 21st century, nevertheless, we are still far from reaching the fourth Sustainable Development Goal which aims at ensuring good education for all by 2030. Millions of children around the globe are still out of school, and many of those who go to school still lack the ability to really benefit from education in serving their society, improving their lives and strongly entering the labor market.

The invitation by the United Nations Secretary General to hold the Transforming Education Summit, which aims at encouraging social and political commitment to promote the transformations necessary for enabling countries worldwide to ensure good education for all learners as per SDG4, is a clear and significant declaration by the international community of its understanding that education needs to be given a distinguished place in joint international action to ensure the fulfillment of all SDGs. The Transforming Education Summit is a turning point that will contribute to developing and turning education into a systematic emotional process that seeks to discover and develop the individual self in order to recognize, identify and care for the collective structures so that every learner gets the best opportunities for prosperity, excellence and creativity. Education for the Syrian Arab Republic means every member in society, means every family, and means every expert educator; in a nutshell and in practice, education means the whole nation, indeed, the very homeland. If education rises the whole nation shall rise, and if education declines, the whole nation shall eventually decline. Therefore, we have always given utmost attention to education and learning, and we have focused on the importance of numeracy, literacy, and scientific thinking skills. These essentials are necessary to improve our students' critical thinking and ability to distinguish between valid and invalid false arguments. We are seeking to implant the values we have been brought up with through education that will develop our ability to live together in a world of morality, equity and justice, armed with an understanding of civil responsibility, democracy and human rights, while respecting human diversity and ensuring its sustainability.

We are working hard to develop our students' ability to enjoy life and live in their homeland in good health to be active constructive members of society. This is one of the most sublime aspects of human endeavors, as we seek to show our creative potential and ability to enjoy the beauty of life and to express ourselves through the different arts; while we attempt to strengthen our preparation to live a healthy life through physical activities, sports, entertainment and the desire to share this opportunity with others. Through education, we aspire to give a chance for every young man and young woman to pursue their ambition, expand their dreams and to work hard to make them come true. We seek to encourage them to actively participate in building the world they want to live in through transforming schools into comprehensive, safe, healthy, and stimulating learning platforms. Each school with its surrounding educational community should be transformed into a space for human integration and complementarity, just as Syria has always been for the world throughout its long renowned history.

This transformation in education certainly comes through the efforts of the messengers of science and knowledge, those who are entrusted with the future of the nation's generations, the guardians of the principles and values that constitute our nation's identity, the essence of its civilization and

the basis for its existence. Those are the teachers who have proven their full capacity to adapt to all circumstances until they became an example to follow.

Finally, we really hope this summit will be successful, and we express our full commitment to actual and effective transformation in education so that the Syrian Arab Republic will become an example to follow in overcoming all obstacles and in achieving sustainable development for the protection of our planet and in love and service of our peoples.

**Mr. President Bashar Al Assad**  
**President of the Syrian Arab Republic**

## Introduction and Background

The Syrian Arab Republic is facing serious challenges represented by the Israeli occupation of the Syrian Golan since 1967, a terrorist war and unilateral coercive measures imposed on it that reached the point of an economic blockade, in addition to the US and Turkish foreign occupation of parts of its lands and theft and looting of its wealth and capabilities. Forced violence inside and outside the country, and the widespread destruction of civil and social services infrastructure due to the terrorism it has been exposed to, and the devastating effects on the economy. As a result, today the majority of Syrians live in very harsh economic living conditions and most of them are unable to fend for themselves or afford food. Moreover, household resources were exhausted with the limited employment opportunities, the dramatic price increase, and the lack of basic supplies. Current social and economic challenges represent, for most people, some of the harshest circumstances they have faced since the beginning of the war on Syria, 12 years ago. In 2022, 14.6 million people were in need for humanitarian assistance. This is the largest number of people in need registered in Syria since 2011. The number of children in need – more than 6.5 million – increased by 7% in 2021 alone. This is attributed to the continuous displacement, the unprecedented economic crisis, and the aggravation of poverty and unemployment. Moreover, the COVID-19 pandemic, and the price increase of goods caused by the overall global economic situation, in addition to the impact of the unilateral coercive sanctions, represent factors that further exacerbate the dire situation for Syrian citizens.

Because of the war, children in Syria still live a life hampered by fear; fear of violence and losing friends and loved ones, and fear of mines and explosive remnants of war. They also suffer physical and psychological injuries. If their traumas are not addressed, they may have a long-lasting impact and severe consequences on the children's health, wellbeing and future.

The life of Syrian children has changed in the past decade; a great number of them know nothing but war and destruction, as many of them were born during war time. The future of all children is uncertain as a result of their suffering from the adverse conditions imposed on them because of blockade and destruction. There are 2.4 million children inside and outside Syria, aged between 5 and 17 years, who are out of school. They represent about half of the 5.52 million children of school age. Unfortunately, those children are victims of child labour, early marriage, forced marriage, trafficking, and recruitment by armed terrorist groups that still exist in some areas of the country outside the government-controlled areas. More children are likely to end up not-enrolled in schools and be at risk of permanent dropout. The longer children remain out of school, the more difficult it is to track them, and some children have already lost 10 years of schooling. Such challenges have varied and complicated impacts on the education and lives of Syrian children. Long-term effects include decreased life expectancy, and the loss of human capital and economic productivity, while short-term effects of education disruption can affect the safety and well-being of Syrian children. Loss of access to school can lead, in most cases, to spikes of child labour and child marriage, among other major protection concerns. This severe reduction of access to education, and its consequences, represent a complete reverse of the pre-war capacities, where young people were welcomed and attracted from all over the region, as a source of positive political, economic and social change. Before the war, the State would boast of an 98% attendance rate in the basic education, cycle 1, and about 90% literacy rate for men and women. But today, children who were born in the first year of the war on Syria are about to celebrate their 12<sup>th</sup> birthday, and they might have lost many years of formal education, leading them to become part of the “lost generation” of Syrians.

Furthermore, one in three schools in Syria is no longer used for educational purposes, either due to its destruction or damage, or because schools are still used for accommodating displaced families or for other purposes. The decreased number of rehabilitated schools increases children's lack of access to education. Classrooms are crowded, and tens of thousands of teachers and other educational staff members have left the country.

However, and in spite of these massive challenges and their dire impact on Syrians, the Ministry of Education in the Syrian Arab Republic is fully aware of the risk of education loss and the importance of transforming education, to enable young people to overcome war difficulties and the negative impacts of conflict on generations. To this end, in 2015, the Ministry started, in collaboration with the UNESCO and UNICEF, to mobilise experts in education for sustainable development, global citizenship education, and education for health and wellbeing, in order to discuss best practices and development, and to monitor and mainstream transforming education towards SDG 4.7. Those experts started by defining specifications for the national learning standards that achieve citizenship and national requirements, building on local competencies. Figure 1 depicts the core competencies as designed in the Syrian Arab Republic national curriculum framework (Syrian Arab Ministry of Education & National Center for Curriculum Development , 2018).

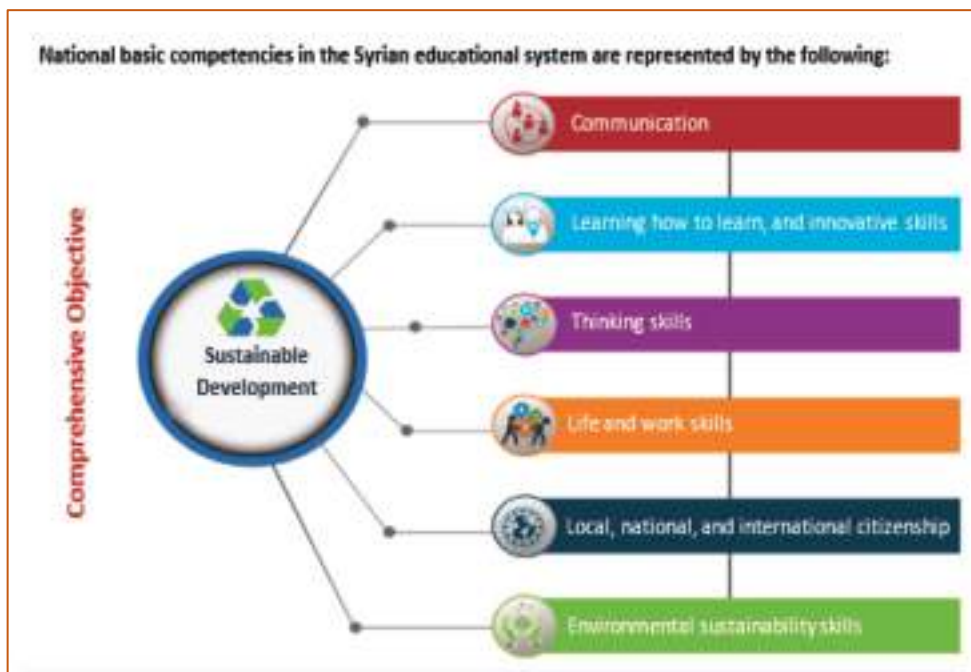


Figure 1 National core competencies according to the National Curriculum Framework

At a second stage, the MoE in collaboration with the experts, compiled the curricula philosophy and orientations into a national curriculum framework document which constitutes a reference guide for defining the road map for transformative learning. National education curricula were

then redesigned on the bases of education for sustainable development, global citizenship education, and education for health and wellbeing.

National curricula were designed with a view on learner-centerdness and active learning. As such, the new curriculum placed the learner at the centre of an interactive learning process where the learner has a space for self-development and growth enabling him/her to adapt his/her perceptions, behaviours, and values in accordance to what s/he is learning. The learner is then empowered to improve his/her life and the lives of those around him/her, and to live peacefully and build a community where she/he can practise life and work skills thus leading to global citizenship.

The curricula of education for sustainable development adopted all seventeen sustainable development goals (SDGs) as defined by the United Nations to determine nature-friendly skills and societal behaviours. The curricula also included global citizenship education through enhancing the learners' life and work skills along a continuum starting with personal empowerment, moving to learning skills, then to employability followed by active citizenship skills. Figure 2 reflects the Life Skills and Citizenship Education framework adopted in the Syrian Arab Curriculum.



Figure 2 Life Skills and Citizenship Education Framework adopted in the Syrian Curriculum

The new Syrian curriculum that was developed during the war on Syria helps learners face challenges caused by that terroristic war, including, environmental degradation, diseases, violence, extremism, discrimination, and poverty, in addition to facing the challenge represented



by the decline of educational standards and results in some basic domains, such as literacy and numeracy. This curriculum also highlights the long-established Syrian educational heritage in the Arab World, and works on reviving it. Moreover, it transforms crises into opportunities to enhance concepts of advanced thinking, while keeping pace with the scientific, educational, and technical updates.

This massive undertaking was conducted under the shadow of the war against Syria, where terrorism attacked the infrastructure of the educational system. Most schools in Syria were damaged, and extremists attempted to disrupt education, and divide the society on an abhorrent sectarian basis, that is unusual to the Syrian social environment. They also attempted to establish ideas and practices in the society, based on extremism, violence, and lack of the sense of belonging and loyalty to the home country and its symbols, in addition to perceiving democracy as being a creative mess that reorders society haphazardly. All that led to millions being displaced from their areas threatened by terrorism, to safer areas under the control of the State's control, or they emigrated to nearby countries, or countries around the world.

In the light of these circumstances, reviewing the Syrian curricula was a must. It was important to identify their capacity to deal with the consequences of the war on Syria, and to building the human being according to the national standards. The curriculum standards are designed to suit all members of the community, while taking into account that educating the Syrian citizen, wherever s/he is, and whatever his/her situation is, is a duty by the State to build a healthy, recovered, cohesive, and united society, away from the painful repercussions of the war on Syria. Furthermore, the Ministry of Education provided on its website a freely downloadable version of all school textbooks developed within the frame of the new curriculum. Figure 3 reflects a sample of the newly developed national textbooks.



Figure 3 The national curriculum textbooks available on the MoE website (moed.gov.sy)

In addition to designing curricula, work has commenced to improve the schools' infrastructure, and rehabilitate schools that were damaged by terrorism. In 2021, 13,600 schools were put into service, after rebuilding more than 2,000 schools; bearing in mind that the number of schools in 2010, before the war, exceeded 22,000.

Educational loss as a result of the war on Syria was a key priority as the number of male and female dropout students exceeded the 2.5 million both inside and outside Syria.

The new curricula aiming at transformative learning defined the teachers' role as facilitators, guides and mentors in the children's learning process. Teachers help learners scaffold their areas of strengths and address the areas for improvement. As per the new curriculum, the learning process involves a comprehensive and integrated methodology, including cognitive, intellectual, moral, emotional, social, motor, and practical aspects relevant to real life. Teachers encourage interaction in the classroom, and urge learners to participate by adopting effective methods, and building on their different experiences, environments, and interests. Moreover, teachers collaborate with learners parents and the entire community to provide the learners with a safe and enabling learning environment. Teachers address learners' different needs, and work

simultaneously on developing their core competencies, leveraging the high-quality accessible curriculum resources.

Textbooks and other educational resources continue to hold a major role in the learning process. They are, however, considered as means for interactive learning for learners. Books are supplemented with new resources and models made available by modern technology including the Internet, social networking sites, digital tools, and platforms. Figure 4 reflects how technology enhances children's learning experiences.



*Figure 4 Learning resources extend beyond textbooks and leverage technology*

Teachers' guides and assessment guides take into consideration the new possibilities leveraging information and communication technology (ICT) in the educational domain. Teachers, learners, and parents are encouraged to adapt and use a variety of learning resources as a means for enhancing creativity in teaching and learning.

The Coronavirus pandemic denoted a new threat to the world in general, and disrupted the education system in particular. However, the government of the Syrian Arab Republic, represented by the Ministry of Education, decided to continue the education process despite all circumstances. The interruption of education did not exceed the two months since the onset of the pandemic. The Directorate of School Health in the Ministry of Education developed a strict health protocol to control the spread of the pandemic. All requirements to implement the protocol were provided, including sterilising tools and sterilisers, health awareness programmes, vaccination supplies, and detergents. Temperature scanners were also provided for all schools and education centres, and many campaigns were organized to raise awareness on preventing the spread of the pandemic.

## Transforming Education and the Future of Youth

We are currently at the end of the first quarter of the 21st century, in a world filled with disasters and catastrophes. Climate change affects most undertakings that we sought to build and develop during the 19<sup>th</sup> and 20<sup>th</sup> centuries, under broad headings that aim for the human wellbeing. We aspired to embrace the 21<sup>st</sup> century using science and technical development to solve most of the life problems that were inflicted by the industrial revolution, including aspects of pollution, destruction of forests, the decline of habitats under the pretext of agricultural revolution, and the intensive production to cover the needs of people due to the population explosion. We aspired for a century of equal rights and duties, an age of the democracy, which means equal distribution of natural wealth for the wellbeing and happiness of the human. However, we found ourselves in this century with increased misery, and increased abuse of our natural resources under multiple titles that put the life of people all over the world at risk.

Continuous and diverse wars and conflicts have impacted the development of affected countries. Citizens have become exposed to the mafias of modern slavery, which is the slavery of skilled labour. Efficient human resources were withdrawn from developing countries to the West under the titles of immigration, refuge, and displacement, and most poor and middle-income countries have become poorer, after the emigration of their qualified populations, and the new generations are preparing to emigrate.

The world has become irrational despite the attempts of its educational system over the history to develop rational thinking. Despite the proliferation of schools, teachers, and students, the world is deteriorating alarmingly on the economic and technical levels, and consequently on the social one. Despite talks about sustainable development in the 1990s, natural and human resources are being extremely exhausted every day.

The world has reached crossroads; it has become crucial to act in a concerted effort to adopt a new life style that preserves the natural resources and our planet. An effort that builds a society that can meet the needs of its citizens and improve their lives is critical at this stage. Transforming from traditional education that responded to the need of the industrial age during the 19<sup>th</sup> and 20<sup>th</sup> centuries, to the transformative learning that should characterize the educational systems in the 21<sup>st</sup> century is the centre of the world's thinking today.

Education represents the cornerstone in human development, which was defined as the widening of choices and freedom for people. It also plays a major role in building a productive labour force, and it performs a significant task in raising the generations to citizenship, rights, and duties, and in developing the critical mind that will help in the process of building, development, and social change, and in advancing production and productivity. It is acknowledged that education is the foundation of achieving economic, cultural and social development, and it levels up the performance of the society when human resources are used optimally through linking education with transformation, and recognising the right of education for all. This perspective was also adopted in the Millennium Goals that were adopted by the international community in 2000 at the UN headquarters. They expired in 2015, and were replaced by the sustainable development goals that address education from a holistic perspective that focuses on its links with the economic and

social goals and on maintaining environmental sustainability. Figure 5 summarises the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. The national efforts exerted to achieve the goals of the educational process in light of the grave challenges facing Syria reflects the Syrian state's commitment to the right to education for all Syrian children. And as such, the state emphasizes the significance of ensuring sufficient financial resources to support the national efforts and to ensure its success. The state also recognizes the key role of international cooperation in this context to support the existing national efforts.



Figure 5 The 17 Sustainable Development Goals adopted by world leaders in 2015 at an historic UN summit.

Addressing the issue of education requires redefining the objective of the educational system to reflect skills, knowledge, and values that can enhance critical thinking. Thus, children need to learn in an active, cooperative, and self-directed manner in order to contribute to building and developing their communities. Education for sustainable development requires making radical changes in the education methodology to include emphasising the right to education, and ensuring the achievement of social justice, and providing quality education and training on necessary skills for the continuity of lifelong learning. Hence, the educational system can represent a driver of economic growth and development through the following:

The first factor is improving the quality of curricula and teaching and their different supplements. This can happen only by modifying policies and systems to design curricula, tools, and methods that respond to the needs of economic and social environment.

It is worth noting that expenditure (whether in quantity or equal distribution between quantitative distribution and qualitative concentration) is part of policies in this context.

The second factor is concerned with the major role of education and its outputs, as an engine of competitive development, not at the national level, but at the regional and global ones in the future. This extends beyond creating job opportunities; it is the creation of a legal, technological, social, and economic environment for new jobs other than traditional ones. In order for governments to make a qualitative breakthrough in changing traditional educational pathways, it is imperative to create a feedback loop that provides reliable data on the outcomes of education and its appropriateness to inform curricula and educational institutions.

We estimate that such a feedback is intersectoral between many ministries in our central administrative environment, which complicates its feasibility. Thus, it is necessary that one entity addresses it, such as a higher council that focuses on freeing laws and regulations from the control of overlaps and intersections that were imposed by the historical accumulation of the conflict of roles in education and development, and that restructure this environment away from distracting initiatives whose outcomes cannot be predetermined.

Syria is at the threshold of a new era different than the one predominant in 2011, and the first required step is to acknowledge the different shortcomings and development practices that were deepened by the war and the successive crises, including COVID-19. A real evaluation must be conducted to be the starting point towards a better future. When tracking the policies of different ministries, one reaches the important conclusion that future actions and policies of development follow a stereotypical method, as if it is required to restore the aspects of Syrian development to their pre-crisis state, implying that such development pathways were perfect and optimum for the Syrian economy and society.

All that makes it necessary for the parties concerned with the education sector, including countries, education systems, and governmental and private organisations, to invest in education on the human level, i.e. building a modern learner. In addition, it is important to involve all educational, academic, technical, and youth energies in planning for the future of education, for the optimal use of information technology, and increasing the investment in educational developmental programmes, without neglecting the position of the teacher as the cornerstone in the educational process. Furthermore, and despite the importance of distant education, we still have some caveats regarding the absence of the human aspect in distant learning, in addition to shaping and polishing the integrated human personality that in-person learning provides through the interaction of the learner and the teacher, and with the colleagues.

# Learning and Skills for Life, Work and Sustainable Development

## First: Foundation education from the perspective of lifelong learning

### 1 Adopting the methodology of lifelong learning in the educational policy for community development in the Syrian Arab Republic in line with the transformation in education.

Harmonizing the educational policy to support lifelong learning skills, involves: (1) designing the educational system as a whole in a way that fosters ongoing learning; (2) adopting new educational methods that correspond to the changing needs of life; (3) providing opportunities for quality and comprehensive education moving from knowledge-based education to learning for personal development; and, (4) preparing a general document (the general framework) and making lifelong learning one of the general objectives of the curriculum. Learning is continuous and prepares learners for life and work, so that they can lead full lives and contribute to the well-being of their families and communities. They will be supported to meet challenges and take advantage of new opportunities, and will benefit from foundational competencies (reading, writing and arithmetic) and more advanced competencies including science, mathematics, and information and communication technologies, economics, arts, sports, social and media studies, as well as emerging/common fields. These constituted the guiding principles informing the Syrian National Curriculum Framework.

### 2 Setting the principle of learning as one of the basic national competencies in the Syrian educational system.

The development of the Syrian curriculum addressed all aspects of learning and personal development. The curriculum was designed to provide for the individual learners' needs and the needs of community development alike. It encourages the concerned parties to participate by seeking an effective link between the school and community. It also adopts the principle of relevance and comprehensiveness. The national curriculum provides learners with useful skills for life and job. It is noteworthy that the curriculum is up-to-date, easy to use, and sensitive to the needs of learners and their environments through learning how to learn and innovative skills (reading, writing and arithmetic - ICT - excellence and creativity). Learners would be able to:

- Master reading, writing, arithmetic and ICT knowledge and skills because they are essential tools for developing learning in a variety of fields.
- Independently, ethically, responsibly and effectively identify and process appropriate information and knowledge available in the pool of traditional and digital resources, appropriate to the specific learning needs and surrounding circumstances
- Apply competencies to solve new problems in an accurate, individual and creative manner

- Self-assess their learning by identifying strengths and building on them and identifying areas that need attention, strengthening or compensation
- Identify and explore new areas of learning and needs in line with developments in knowledge, society, and the needs of personal development
- Update various elements and linking them to form a new structure
- Build on knowledge/learning foundations and benefiting from past experiences, including mistakes.
- Work with others based on a fair and logical division of tasks.
- Pursue excellence and creativity in the academic field and in the development of social, emotional and motor skills.
- Value and care about others and the planet, by ensuring they value and appreciate diversity, promote peaceful coexistence, and adopt sustainable behaviours to protect nature and the planet

Such an endeavor necessitated developing the role of teachers in collaboration with parents and learners and the entire community to provide a safe and enabling learning environment for learners, using a variety of learning resources as a means to promote creativity in teaching and learning and to tailor them to their needs and changing assessment methods to ones which: (1) Care more for the assessment of learning; (2) link learning assessments or summative assessments, through tests and exams, with the new curriculum from the point of view of developing learners' competencies; (3) understand all forms of assessment as effective and constructive learning experiences.

In more precise terms, such assessments are called: assessment for learning. In addition to the assessment of knowledge, they place attention on the assessment of skills and attitudes.

### **3 Opportunities for lifelong learning**

In the Syrian educational system, the concept of not restricting the acquisition of knowledge and skills to a specific age was adopted through finding equitable formal and nonformal quality learning opportunities for beneficiaries of all age groups. The coherent structure of the Syrian curriculum standards promotes, across topics and levels, clear and quantifiable mapping across all learning formal and non-formal offerings whether it is the national or accelerated curriculum or other distance learning non-formal options. Furthermore, the clear and transparent designation of curriculum standards creates coherence in children's learning choices and ensures their smooth transition to general formal learning when access becomes available.

In addition, the clear structure of the national curricula standards allows mapping to other curriculum standards and global standards such as the UNESCO Global Proficiency Framework (GPF). The GPF is a global, research-based initiative that describes the numeracy, reading and writing skills that learners should develop in elementary and middle school. It also provides



prescriptions for what learners should demonstrate if they meet or exceed the global minimum proficiency level (UNESCO, 2019). The overarching purpose of the Global Proficiency Framework is to provide countries and assessment organizations with a common benchmark for reporting on the SDG indicator 4.1.1: “Proportion of children and young people (1) in grades 2/3; (2) at the end of primary; and, (3) at the end of lower secondary achieving at least a minimum proficiency level in reading and mathematics (UNSTATS, 2022).

The curriculum standards in the Syrian Arab curriculum adopts a human-rights-based approach and extend beyond depicting the scope and sequence of the academic disciplines to mainstream gender and child safety issues and to integrate Social Emotional Learning & Life Skills within the umbrella of psychosocial support to foster an enabling learning environment.

Informed by robust standards and performance indicators, the national formal curriculum has been approved for all educational levels (basic education, general secondary education, secondary vocational education, technical institutes affiliated with the Ministry of Education). The curriculum is the regular learning programme implemented in all public and private schools. Moreover, and based on the same curriculum standards, additional learning pathways were designed to mitigate the impact of the protracted crises on education. These pathways include the formal accelerated curriculum (known as curriculum B) and the non-formal Empowered Learning Programme (ELP) designed for distance learning.

Figure 6 provides an overview of the multiple formal and informal learning opportunities provided for children. The figure reflects how human-rights principles and principles of social and emotional learning and psychosocial support as well as gender and safety issues are mainstreamed across the learning programmes. The figure reflects the coherence of all programmes as they are guided by the national curriculum standards. It is noteworthy that, within the curriculum standards, a set of performance indicators were designed to the respond to the specificities of each learning programme. Hence, coherence as achieved and the programmes allow for a smooth transition for learners as needed.



Figure 6 Multiple equitable and quality learning opportunities in Syria

- The Formal Accelerated Curriculum (B):

The accelerated curriculum aims to provide learning opportunities for children who have dropped out of basic education for an academic year or more, or who have not been previously enrolled in schools and have outgrown their classroom level. It is accelerated at a rate of two school years into one, designed to cover grades 1 till 8 of basic education in four levels.

The accelerated curriculum runs in public schools to help children catch up on the years of education they have missed due to the on-going crisis. It is designed to then integrate children into formal education. The Ministry of Education made the strategic policy choice to consider the accelerated curriculum as a formal education option in accordance with the provisions of the articles of the bylaws for the basic education stage.

Learners follow this educational pathway temporarily until they reach the stage of their peers of the same age group, at which time the learner returns to the formal public education classes.

An updated version of the Curriculum B that corresponds to the new national curriculum was developed in 2022, and six educational subjects were approved (Arabic, mathematics, general sciences, social studies, music education, English and French).

A pilot round of the accelerated curriculum involving a representative sample of 2,612 learners in 116 schools from all governorates is rolled out in 2022. The pilot round is designed according to rigorous scientific research methods. It provides the opportunity to gather reliable feedback.

In addition, the pilot round provides the opportunity to pilot assessment tools and a refined national evaluation strategy. The significance of the pilot round is that it created the opportunity to select and adapt reliable assessment tools in line, to design a new unique national placement test with versions adapted and modified for children with disabilities, and to enhance the national teacher observation and teacher appraisal tools.

It is worth mentioning that the pilot round provided the opportunity to programme all learner and teacher assessment tools and strategies on the Student Information Management Integrated System (SIMIS). It is expected that as a result of the pilot round recommendations can be drawn and generalized at system level with implications for the national curriculum. Also, SIMIS digitization and mapping of all assessment tools according to national standards, as well as the UNESCO Global Competency Framework, will provide data on indicator 4.1.1 of the SDGs for the Syrian Arab Republic.

- Empowered Learning Curriculum:

The Empowered-Learning Materials (ELM) is a non-formal learning modality to support learning, including self-learning if needed, of the Syrian curriculum for Levels 1 to 9, corresponding to Grades 1 to 9. The ELM specifically targets out of school children who have no access to formal education. The ELM is being developed in alignment with the National Curriculum Standards to facilitate the transition of students into formal education or to support them to sit for the national exams.

The ELM is anchored in principles of instructional design and responds to a thorough needs and context analysis to ensure appropriateness to educational needs of the out-of-school children. The ELM adopts an innovative educational approach designed for distance learning. This approach is expected to allow for the inclusion of neutral content that adopts a human-rights-based approach that is gender sensitive, promotes child friendly pedagogies and has a dignified portrayal of children with disabilities.

The design of the new empowered-learning material is guided by a consensus-based specification document and adheres to the principles of instructional design and teaching methods in active learning.

The self-learning tool is the core content of the national curriculum for grades 1-9, designed for standalone distance learning books but also for digitization into interactive content. Thus, in

addition to responding to the needs of out-of-school children who do not have access to schools, self-learning tools are an interactive format focused on engaging the child with the core content of the national curriculum which may also support continued learning if schools close due to a pandemic or other force majeure.

The ELM is a vanguard and innovative project that provides an interactive version of the national curriculum.

- Prepare to Go to School project:

The Ministry of Education in the Syrian Arab Republic, through the Regional Center for Early Childhood Development, aspires to SDG4 as a primary goal in improving the quality of education and in facing the challenges resulting from the protracted crises in Syria and the deteriorating economic and social conditions. It is also a primary goal of this project to ensure that the largest number of kindergarten children (kindergarten 3) attend school and it is expected to provide them with skills to be ready to move smoothly to the first grade of Primary Education. This project was launched in cooperation with UNICEF by allocating a classroom in basic education schools, developing an integrated project plan aiming to spread kindergartens according to quality education and lifelong learning standards, and preparing a training package for training kindergarten teachers and developing appropriate curricula for them. The number of classes opened since the beginning of the project has reached 976.

## **Second: Employability and Entrepreneurship Skills:**

The philosophy of the national curriculum values personal development and successful performance in school, work and in life in general. As such, the curriculum seeks to meet the requirements of the knowledge economy and to keep up with the rapid progress of our world today. Hence, the Ministry of Education enriched formal learning with educational programmes that focus on competencies and foster 21<sup>st</sup> century skills and learning how to learn. The Ministry of Education in the Republic Syrian Arab has developed life skills programs in line with the skills foreseen under SDG Target 4.7 and based on the four dimensions or axes of the UNICEF Life Skills and Citizenship Education framework for the MENA region, namely: Learning to Be/ or the Personal empowerment axis, 'Learning to Know'/ or the Learning axis, 'Learning to Do'/ or the employability axis, ' , and 'Learning to Live Together'/ or the effective citizenship axis (UNICEF MENA Regional Office, 2017). Consequently, the curriculum enriched with the skills building material seeks to make a tangible impact on education outcomes, social cohesion, and economic development to improve employability and entrepreneurship.

### **1 Developing social and emotional learning (SEL) curriculum for grades one to the third secondary**

The Ministry of Education developed an SEL curriculum with a view on integrating it into the learning experiences of children. SEL is one of the channels that support and promote lifelong learning skills. The SEL curriculum and it is based on scientifically established pillars informed

by the Collaborative for Academic Social and Emotional Learning CASEL framework (CASEL, 2020). A period within the weekly schedule was allocated to the SEL curriculum, as it is an opportunity to build the learner’s self-awareness and boost his/ her readiness to practice learning.

## 2 Developing Life Skills Guides to foster skills building

The Ministry of Education with the support of UNICEF developed seven Life Skills Guides in line with Regional UNICEF Life Skills and Citizenship Education Framework. The Life Skills Guides include over 200 child-centered activities that promote active learning. The developed guides include General Guides that can be implemented within any learning subject, subject-based guides specialized to align to the academic subjects and Life Skills Guides for Kindergarten. The specialised guides are mapped to appropriate units or chapters in the curriculum and the National Curriculum Framework.

The MOE, including the National Centre for Curriculum Development, are now considering enhancing the social and emotional learning curriculum to include a psychosocial support approach and its components.



Figure 7 The LSCE framework according to the UNICEF MENA Regional Office

The guides are designed to build the capacity of learners; to enhance and develop skills qualitatively and systematically; and to prepare the learner to be a positive, active and to meaningfully contribute to build and develop his/her community and able to meet the requirements of life, through activities that address four main axes depicted in the Life Skills and Citizenship Education as depicted in Figure 7.

### **3 Developing guides to foster a culture of lawfulness, a guide on child's rights as well as civic education books which promote a culture of peace-building:**

Education nowadays cannot be described as simply learning how to read, write and calculate. It also entails the acquisition of values and develop positive concepts (rejection of violence, tolerance, cooperation, acceptance of Others, etc.). This contributes to increasing creativity and innovation which lifelong learning needs and are part of sustainable development.

Hence the Ministry of Education developed guides to promote a culture of lawfulness for Basic and Secondary education. As to the children's rights guides and the booklets of peace education target early childhood, as it is considered a critical stage in the development of values, rights and duties, to inculcate such values in the minds and daily lives of children with a view on lifelong ownership thus and constituting preventive solutions that protects them from potential future conflicts, and provides them with positive coexistence skills in society.

### **4 Integrating individual's basic abilities (reading, writing, technical skills, etc.) with life skills to foster lifelong learning:**

It is a program that develops the knowledge necessary to read, write and apply the four basic mathematical operations. It targets children and youth who cannot read and write and do not have an opportunity to enroll in formal education. It is implemented in cooperation and partnership with the Ministry of Culture - Adult Education under the broad umbrella of Adult education or acquisition of official qualifications for work and life skills throughout life. The programme includes:

- On-the-job knowledge-building, which includes professional development and on-the-job training
- Self-learning
- E-learning, which is now available to individuals who learn independently and individually

### **5 Adopting the non-formal Vocational Education and Training Programme:**

The non-formal Vocational Education and Training Programme is directed at young people and adults in Syria. As it is the conviction that they are key candidates for lifelong learning. Such a programme helps build skills for the labor market and for social integration and contributes to the literacy of young people who do not have the opportunity to enrol in formal education, and provides them with the practical skills, management, and knowledge necessary for direct entry into a particular profession or trade (or a class of professions or trades). Successful completion of these programs usually leads to a professional qualification that is relevant to the labour market and recognized by the competent national authorities, such as the Ministry of Education, professional associations, etc.

### Third: Learning for sustainable development, including environmental education

The guiding principles informing educational policies are that education is a basic human right and is enshrined in the Syrian constitution. Education is a priority on the agenda of the Syrian government, and in line with the commitments of the Syrian Arab Republic and in support of the 2030 Agenda for Sustainable Development, an educational document (the general framework) for the national curriculum was developed in 2018 (Syrian Arab Ministry of Education & National Center for Curriculum Development , 2018).

The national curriculum framework depicts sustainable development as the overall goal informing the core national competencies in the Syrian educational system. Also, curriculum development was not limited to SDG4 (quality education) only, but also to SDG17 (partnerships for the goals).

#### 1 The general framework of the national curriculum includes environmental sustainability skills

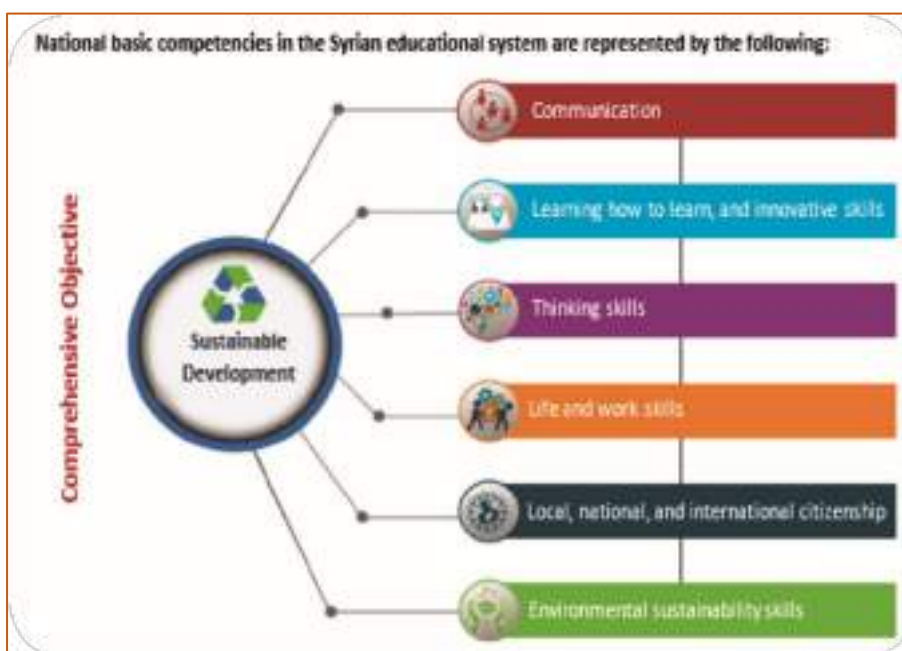


Figure 8 National core competencies according to the Syrian National Curriculum Framework

The national curriculum framework design, as shown in Figure 8, incorporates environmental and sustainability skills such as environmental awareness, rational management of resources, sustainable quality of life and the environment, with a view on enabling learners to:

- Develop their self-awareness of nature and the manmade environments, for the sake of preserving them.
- Demonstrate ability to use resources wisely.
- Promote a healthy lifestyle based on environmental concerns (concerning the quality of the environment including air, water, food, land, and the quality of life of the plant kingdom).
- Participate in and promote eco-friendly activities.
- Contribute to environmental research and identify related issues. Participate in environmental projects based on cooperation to solve problems through the implementation of traditional and modern technologies in the context of the three concepts of environmental rationalization: recycling, reduction, reuse; mitigating the risks of mines and other remnants of war; and addressing climate change.
- Introduce environmental issues in their personal and professional development plans, including combating pollution or any other type of environmental degradation, based on a better future perspective.

## 2 The national curriculum framework includes local, national and global citizenship skills

The national curriculum framework addresses key concepts such as identity, rights, responsibilities, participation, inclusion and sustainable development, to empower learners to:

- Highlight their national identity and traditions while respecting and appreciating the cultural diversity of others and their customs.
- Participate in democratic processes.
- Avoid bias, discrimination, violence and extremism.
- Identify the causes of the spread of these phenomena and address them, including vulnerability, poverty, ignorance and ideologies of extremism.
- Demonstrate global awareness, global citizenship, solidarity and intercultural understanding and engage in productive exchanges at local, national and global levels.

The general framework also includes learning skills, innovative skills, thinking skills, life and work skills.

## 3 Designing educational curricula to as flexible interactive activities



The national curricula adopt a child-centred pedagogy focusing on learner engagement to ensure a learning process that is interesting and enjoyable. Such a process empowers the learner to collect ideas, identify and analyze problems, develop hypotheses and prove them to reach scientific facts, while providing a great deal of flexibility for both the teacher and the learner, and giving the opportunity to enrich these curricula through their personal creativity in content and methods.

Thus, the curricula support the 17 SDGs through the diversity of the paragraphs and their presence in all books from the first elementary to the third grade of secondary school.

#### **4 Educational projects to promote learning for sustainable development:**

Inclusive policies in the Syrian Arab Republic provide universal access to quality education with a focus on rural education, vocational education, training and education for people with disabilities.

The Syrian government is committed to enhancing the efficiency of vocational and technical education, focusing on the practical and scientific aspects, equipping institutes with the required technologies, relying on modern methods in vocational education, and qualifying educational staff specialized in vocational and technical education. All these aim at supplementing the economy and the labor market with the skills and competencies necessary for the development process. These commitments were shared during the participation in regional High-Level Meeting on Young People's Learning, Skilling, Social Inclusion and Transition to Decent Work held in Amman between 23 and 24/5/2022, organized by United Nations Development Program - United Nations Population Fund - UNICEF - International Labor Organization with the aim of having the national recommendations and commitments of each country included in the TES input and, in particular, in the TES2 pillar "Learning and Skills for Life, Work and Sustainable Development". The Syrian government stressed its commitment to: (1) Establishing a labor market information system (LMIS) in a way that can support the employment strategy in Syria, facilitate youth access to the labor market and contribute to linking education and training outputs with job needs; and, (2) strengthening training and capacity building programs for new entrants to the labor market by empowering (YEP) youth through local community training centers.

According to a study conducted by UNESCO in 2021, the overall performance of youth aged 15-24 shows that the majority of young people meet the minimum expected proficiency levels in literacy (54.4%), numeracy (52.37%) and life skills (58.45%), where the minimum levels of proficiency achieved by Syrian youth seem promising despite the challenges they may face, especially in rural areas and despite their economic situation. Targeted programs such as alternative learning pathways and other non-formal education initiatives can go a long way in helping out-of-school youth acquire necessary literacy skills or further improve their skills. This, in turn, will provide them with better opportunities to find a decent job and live a better life. The performance of youth achieving minimum proficiency levels in literacy, numeracy and life skills shows a clear gap between rural and urban scores, suggesting that there is a need to target interventions more among rural youth.

The youth reported that the lack of a personal computer or laptop, followed by lack of power, problems with mobile phone signal, financial difficulties, unavailability of smart phones, and

unavailability of TVs were the main reasons for not attending online lessons. In addition, taking care of household chores and having to work are other reasons that have nothing to do with devices and connectivity. Hence the signal of devices, connectivity, and flexible classes are some of the elements to be considered while considering distance learning as a method for alternative learning programs.

The core skills related to active citizenship/learning to live together - also emphasized in SDG 4.7 - are critical.

The results of the study were very encouraging, with a high proportion of young people responding to social and emotional skills. This indicates that the components of life skills education, in both formal and non-formal learning programs in Syria, have a positive impact on learners. This can be further enhanced, especially for out-of-school youth seeking employment.

- Technical education books (from the fourth to the ninth grade) are being developed according to five axes (agriculture, industry, commerce, tourism, women's arts and crafts) in a way that promotes lifelong learning, entrepreneurship and learning for sustainable development so that learners can contribute to the well-being of humans and the planet.
- The Back to Learning Programme: The Ministry of Education, in cooperation with UNESCO Regional Bureau for Education in the Arab States - Beirut, has developed a remedial educational program (alternative learning programme) that guarantees the right to education for youths aged 15 to 24 who have dropped out of school. The programme proposes quick classes that enable youths gain basic skills in literacy, numeracy, and life skills so that they can resume education or get some basic skills for work and life.
- Completion Courses: students who fail in some subjects attend transitional classes (first to eighth grades of basic education), and intensive lessons are offered for two months during the summer vacation. Students are subject to an official exam to measure their progress in the completed subjects (in which they have failed), so they get an opportunity to adjust their deferred academic results, and determine their success or failure in their academic year.
- Remedial education and school club lessons: it targets learners who have lost study periods ranging from two months to a semester. These learners enroll in remedial courses in schools outside official school hours, to compensate for the educational loss and bridge the educational gap in basic subjects. It also targets children enrolled in public schools who are at risk of dropping out or being behind in school compared to their peers.
- Early Childhood Programs: The Regional Center for Early Childhood has launched a project to encourage reading in 2013, and it developed a booklet of activities for non-specialists in early childhood with the aim of arousing the child's curiosity and stimulating his/her imagination, promoting the process of lifelong learning more efficiently, and providing him/her with more knowledge and skills s/he will need to achieve success in the future and life. Thus, the activity booklet for non-specialists (parents - child caregivers -

the local community) was developed; it provides interactive and educational activities for the early childhood stage based on games, stories and questions to enable children to build their physical, mental and social capabilities necessary to qualify them to solve their problems and face challenges of life in a healthy, sound and efficient manner.

- The Ministry of Culture, through its directorates, has adopted several forms of education, including (vocational education, technical education, counselling culture, health education, family education, development skills education, developmental education, etc.). Example: (Project: My Heritage, My Language, My Identity, Nagham and Qalam, My Environment is My Responsibility, Social Cohesion and Local Development, Gender Justice, My Rights).

#### **Fourth: The future plan to promote lifelong learning:**

##### **1 The general vision: lifelong learning to promote the well-being of community.**

Permanent, self-motivated learning that aims to develop the life skills of the Syrian citizen scientifically, socially and professionally, leading to a comprehensive educational development that paves the way for a quantitative and qualitative expansion in the concept of lifelong learning.

##### **2 Objectives**

- Building an educated citizen, who participates positively in the issues of his/her community for the sake of quality and continuity of life.
- Transformation at all levels and forms of education, whether formal or non-formal, to provide lifelong learning opportunities.
- Acquiring skills and providing the opportunity to highlight and harness the potential of innovation to integrate into the labor market, and social and economic integration.
- Adopting self-learning as a supplementary education system for general formal learning.
- Adopting an adult education curriculum that is compatible with the general school curriculum, including life and work skills.
- Conducting a continual assessment of performance and investing all available high-reliability assessment tools to study the impact of lifelong learning.
- Expanding the implementation of the measures of professional tendencies and multiple intelligences on different age groups to contribute to determining the professional tendencies and trends of all individuals, even those who are not affiliated with a specific official authority.

- Developing assessment tools for the adult education curriculum based on alternative assessment methods, and applying them to include the largest possible segment of citizens.
- Implementing training courses and performance tasks in which the trainee is required to apply the principles of lifelong learning in various examples and topics, to learn best practices and be able to spread skills.
- Expansion in opening Prepare to Go To School. Working to launch a regional early childhood story competition.

## **Inclusive, Equitable, Safe, and Healthy Schools**

Educational systems encompass several dimensions: (1) the physical environment; (2) the teacher; (3) the learner; and, (4) the curriculum as well as the social services provided inside the school. Additionally, the quality of education also depends on a supervision and monitoring system. Without quality, performance, along all mentioned dimensions cannot really be ensured. Quality also requires meaningful interactions with parents and the community. As such it is guided by proper policies and a data system that generates relevant evidence for verification of achievements and for planning purposes.

The Ministry of Education worked on taking all necessary measures to improve education and increase enrolment rates, through the following:

### **First: School Environment**

Securing the appropriate school environment for students ensures having child-friendly, inclusive, safe, harmonious and hygienic studying atmosphere in terms of basic services, including securing regular classrooms, which have all the comfort factors for students in terms of appropriate ventilation, adequate lighting, and warmth in winter and cooling in summer, and providing adequate desks for students, at an average of two students per desk, based on the model approved by the Syrian Ministry of Education, in addition to having appropriate classroom equipment, and painting walls with bright colours that attract students to the school and make them feel happy while they are there. Added to that is having wide, bright, and clean corridors that provide safety conditions for students when they leave classes at the time of breaks and departure. For safe and inclusive schools, accessibility standards need to be set and actualized. The school environment should also provide students with a spacious courtyard to practice all their sport activities during breaks, and it should be equipped with drinking water taps, through a direct supply from the city's tanks or through tanks designated for drinking water. The installation of the tanks must take into account all the requirements of hygiene and periodic sterilisation of water, and they should be tightly closed to prevent insects, birds, or dust from going into them. Providing gender-appropriate, clean and comfortable toilets, water taps, and personal hygiene materials for both female and male learners are also part of the appropriate school environment. When the architectural environment of schools reflects the image of the local community, culture, natural environment, and the family, schools become more than just physical structures or buildings. They rather transform into interactive places for learning and teaching. This means places where teachers facilitate and manage a child-centred education process, and students learn and discover new possibilities that match their capacities and abilities. The school becomes an integrated and comprehensive system that enjoys self-sufficiency from the surrounding elements, and grants them a kind of identity.

### **1 Modern schools seek the following in their design:**

- New design models for learning spaces that can be utilised by the learner and harness harmonious interactions of children and teachers. Through these models, learning can be linked to learners' interests and their future life.
  - These new models provide learners with a wide range of learning possibilities based on the 21st century skills.
  - Providing effective designs in terms of quality and cost to support project-based learning for schools and kindergartens.
  - Meeting the local requirements and reflecting the actual needs of different concerned entities.
  - A smart and developed model, in line with the nature of the modern and advanced curriculum.
  - Creating motivating classrooms that support effective learning for everyone.
  - Availability of facilities, services, and equipment that serve the purpose and are environmentally sustainable, and that support children's needs, including children with motor disabilities.
  - Child-friendly models that are flexible, adaptable, and appropriate.
  - Providing educational and empowering environments, including ones that are appropriate for persons with motor, sensory, and learning disabilities.
  - Defining a kind of harmony between buildings, school spaces, and the environment as children interact with it
- 2 Main standards for planning and designing gender sensitive and children with disability appropriate educational facilities:**
- Topographic features
  - Sources of clean water
  - Sources of energy (electricity and alternative energy)
  - Natural and industrial climate aspects
  - Safety conditions
  - Health conditions
  - Involving the local community

- School greening (plan life)
- 3 In this regard, modern and developed school models were adopted, according to four models**
- The education sector in Syria was particularly affected by the crisis through partial or total destruction of schools. This resulted in a negative impact on the entire educational process. Thus, the Ministry of Education, in collaboration with the Ministry of Local Administration and Environment (as part of the reconstruction plan), and also in collaboration with INGOs, worked on rehabilitating schools in Syria. The number of damaged schools in Syria is reflected in Table 1. Additionally, Table 2 reflects the number of rehabilitated schools.
  - The Ministry of Education, in cooperation with UNICEF and the Public Corporation of Engineering Studies, and the General Organisation of Education Buildings classified the levels of damage to schools as follows:

<b>Table 1 Statistics on school status in Syria</b>	
Type of damage	Total number of schools
Schools with partial damage	8,625
Schools with total damage	555
Inaccessible schools	4,192
Ready but inactivated schools	2,490
Schools as accommodation centers	27

Table 1 Statistics on school status in Syria

<b>Table 2 Statistics on rehabilitated schools in Syria</b>	
The number of rehabilitated schools	
Total number of schools before 2011	22,500
Rehabilitated schools	3,000
Total number of governmental schools currently under investment	13,660
Total percentage of school rehabilitation	33%

Table 2 Statistics on rehabilitated schools in Syria

- The Directorate of Education Buildings in the Ministry of Education conducts regular maintenance for schools from the investment budget of the State.
- The Ministry of Education, in cooperation with UNICEF and the Public Corporation of Engineering Studies, and the General Organisation of Education Buildings classified the levels of damage to schools as shown in Table 3.

<b>Table 3 Statistics on levels of damage to schools</b>	
First level (A): (90-100%)	The building is completely damaged, and it cannot be rehabilitated and it has to be removed.
Second level (B): (75-90%)	The building is greatly damaged; 85% of the structural elements are either completely damaged or they need reinforcing.
Third level (C): (50-75%)	The building is partially damaged; 90% of the structural elements need reinforcing and rebuilding.
Fourth level (D): (25-50%)	The building is partially damaged; 30% of the structural elements need reinforcing.
Fifth Level (E): (10-25%)	The building is partially damaged, and the percentage of structural damage is around 10% that needs reinforcing.
Sixth level (F): (0-10%)	The building needs mild rehabilitation, and no structural elements are damaged.

*Table 3 Statistics on levels of damage to schools*

- The standards of schools map also defined the distance between schools as 1 km, in order to provide safer access for students to their schools, and register in the school nearest to their residence.
- Providing schools with high density of students who come from crisis-affected areas with prefabricated classrooms and all requirements of the educational process.
- Producing and providing educational tools and the necessary teaching and learning materials.

## **Second: The teacher (see also Teachers, Teaching, and the Teaching Profession)**

### **1 Educational methods**

Constant emphasis on adopting educational methods in delivering content, and facilitating active learning and cooperative and context-relevant learning not only of foundational skills but also life skills, as the foundation of the educational process, and staying away from old methods that might disengage learners. Emphasis is also placed on educational methods that support creating a classroom environment that is physically and psychosocially safe, and Managing overcrowded classrooms and ensuring ‘positive discipline’



## **2 Teacher training**

Regular courses for teachers to train and acquaint them with the most recent teaching and education methods, in order to provide active learning and child-centered methodology to maintain student engagement and on-task behavior thus making the schools child-friendly spaces that cater for children's wellbeing. Additionally, specialized educational supervisors can support teachers and monitor the quality of teaching. Also, building teacher capacity for conducting formative and summative learning assessments is essential for monitoring child progress and ensuring the quality of learning.

## **3 Serving rural areas**

Incentivizing teachers to teach in distant areas through allocating financial compensations for them

## **Third: The learner**

### **1 Enrollment**

Providing facilitations for accepting and enrolling students with no school documentations in schools, based on a test, and putting them in the grade suitable for their age group and educational level.

### **2 Access for learners with no identification documents**

Issuing a document for estimating the age of children who have no personal identification documents, including non-registered children, children with unknown registry, and children without family care.

### **3 Back to school support**

Encouraging learners to go back to school, and providing uniforms and textbooks, and distributing school kits.

### **4 Support the learning of out of school children**

Providing specialized services as well as stationary and textbook support for out-of-school children or children who need to catch-up with schools

### **5 Extending learning days**

Extending the school year in many governorates as a result of the interruption of the educational process in their areas, and relying on the average grades of the second semester as a criterion for passing or failing.

### **6 Safe access to schools**

Providing safer access for children to schools through rehabilitating routes and crosswalks, and installing street lighting.

### **7 Activities to promote democratic practice**

Implementing a number of activities (vanguards parliament) in order to prepare children to take part in the process of election and decision-making. Also, encouraging participation in competitions and debates that take place at national and global levels.

### **8 Psychosocial support**

Providing psychological and social support for all learners and students who suffer from psychological and social difficulties and problems, or who have experienced an injury or trauma as a result of the crisis. Also, integrating psychosocial support in the teaching approaches and curricula with a focus on the SEL curriculum activities.

### **9 Game-based learning and physical activities**

Giving children the opportunity to perform physical activities through playing games, and providing them with the appropriate place and time.

### **10 Higher order thinking skills**

Teaching learners the skills of critical thinking, problem-solving, discovering, and inference, with the use of cooperative, collective, and competitive learning.

### **11 Communication and participation skills**

Activating the skills of participation, dialogue, and self-confidence, and giving the opportunity for all children to demonstrate their skills and excellence at the studying, education, and creative levels, to empower them in the Pioneers Competitions in all specialisations held by Al Baath Vanguards Organisation.

### **12 Recreational activities**

Catering for female and male children's well-being by providing psychological support and recreational and artistic activities including concerts, sport competitions and art exhibitions in all governorates.

### **13 Artistic skills**

Paying attention to the development of music skills and art appreciation among learners, and providing learners with opportunities to develop and demonstrate their talents.

## **Fourth: The School Management**

**1 Ensuring that schools are free of peer-to-peer violence**

**2 Uploading school data regularly to SIMIS and EMIS data bases**

**3 Creating mechanisms for rewarding positive teacher and student behavior**

**4 Establishing student councils who support the resolution and mitigation of conflict situations; as well as respect for the needs of both female and male student groups, as well as children with disabilities**

**5 Supporting Parent Teacher Associations (or Safe School Councils) to ensure constructive cooperation and interactions between teachers and caregivers**



# Teachers, Teaching, and the Teaching Profession

## First: Lack of teachers

The war and its ensuing repercussions such as deaths, abduction disability, emigration, and dropout – to mention but a few - resulted in a shortage in the quantity and quality of human resources that are necessary for the work of the education sector. To address this shortage, the Ministry of Education took several steps and issued several policies, namely:

### 1 The Ministerial decision no.3/443 on 05/04/2022

The Ministerial decision no.3/443 on 05/04/2022 was issued, stating the reopening of Intermediate Institutes due to their active role in qualifying human resources. This can cover part of the shortage in human resources in the education system, especially in the second cycle, and in four specialisation; mathematics, science, English language, and French language.

### 2 Qualifying teachers for pre-university education

The Ministry of Education worked on qualifying a number of teachers for pre-university education; including 24,694 male teachers and 102,516 female teachers, in addition to providing advanced training for 3,628 male teachers and 19,876 female teachers in 2021. On-the-job training is provided and available for all teachers based on their professional needs.

### 3 Practicum as part of the teacher pre-service university training

Teaching is assigned to university graduates who have studied 4 years in university after completing the secondary education, and received 6-month practical training divided as follows; two months in the second semester in the third year, and four months in the fourth year, equal to 120 training days for male and female teachers before employment.

### 4 Specialised preservice training for subject teachers

Specialised subjects are taught by teachers who have studied the same specialisation in university for 4 years after completing the secondary education, and have studied the Educational Qualification Diploma for one year, equal to 210 training days in the Educational Qualification Diploma year, before employment.

### 5 Identified training needs

Lack of teachers trained to attend to pedagogical needs of children who missed out on education for extended periods of time as a result of the conflict, so that they can catch-up, reintegrate and pass national exams successfully. Lack of teachers experienced in facilitating the Life Skills Curriculum. Also, lack of master teachers who can facilitate on-the-job training for junior teachers.

## Second: Initial and Continuing Professional Development – Teaching Principles

The government has worked with the concerned ministries, INGOs, civil associations, and the local community to face the repercussions of war, by issuing legislations and taking all necessary measures to secure the requirements and provide opportunities of learning and alternative learning, and improve its quality, in order to ensure the continuity of the educational process, and build the

capacities of staff members and provide them with the knowledge and skills necessary for developing their work. Teachers were trained on the new curricula over three stages as follows:

**1 First stage:**

In 2017, teachers of the 1st, 4th, 7th, and 1<sup>st</sup> year secondary were trained; a total of 22,631 teachers.

**2 Second stage:**

In 2018, teachers of the 2nd, 5th, 8th, and 2<sup>nd</sup> year secondary were trained; a total of 43,490 teachers.

**3 Third stage:**

In 2019, teachers of the 3rd, 6th, 9th, and 3<sup>rd</sup> year secondary were trained; a total of 25,281 teachers. In this year, training was also provided for teachers qualified to work in schools' management.

**4 Teachers' role in transformative learning**

The role of teachers in achieving transformative learning is represented by making them guides and facilitators for the learning process. They assist learners in building and enhancing their strengths and overcoming their weaknesses. The learning process involves a comprehensive and integrated methodology, including cognitive, intellectual, moral, emotional, social, motor, and practical aspects relevant to real life. Teachers address learners' different needs, and work on developing their core competencies, based on the major and shared experiences in the curriculum, that are of high quality and available to everyone.

The development of training programs for teachers, specialized and educational supervisors on the core competencies of learning is currently underway. These programs will focus on active learning strategies and develop individuals with a strong sense of citizenship, belonging, and social responsibility. Teachers will then be able to take initiative, solve problems, and be open to all cultures and societies. Work has also been implemented to develop the system of incentives and rewards for teachers, trainers, and trainees based on the actual needs on the ground for educational workers, in a manner that builds their capacities and develop their skills. This training was linked to the project of career paths and advancement opportunities under development in order to create positive impact on achieving sustainable professional development for those workers. The role of the teacher in modern education systems has transformed from the usual role in traditional systems to new functions in light of modern learning, and teachers are supposed to master these roles and functions. The teacher takes on multiple roles. These new roles have to be discussed also in the light of the Covid-19 experiences, when teachers and learners had to switch to online/remote and/or blended learning. including:

- Researcher: This function comes at the forefront of the functions that the teacher should perform. It means searching for everything new and related to the topic he/she presents to his/her students, as well as what is related to the methods of presenting courses online.

- Designer of educational experiences: The teacher has an essential role in designing the educational experiences and activities he/she provides his/her students with, because these experiences are complementary to what the learner acquires inside or outside the classroom. He/she should design active electronic learning environments to suit the interests of students.
- Technologist: There are many skills the teacher should master in order to be able to use the Internet and computer equipment in the learning process, such as mastering computer driving, web browsing programs, using file protection programs, technological innovations, etc.
- A guide and facilitator of the educational process: The teacher is no longer the sole source of knowledge, and his/her job is no longer to transmit content to learners, but rather his/her greatest role has become to facilitate access to information and guide learners while dealing with the content via the network or through their interaction with each other in studying the course, or with the teacher.
- Evaluator: the teacher is responsible for following up and identifying different methods of evaluating his/her students. In addition, he/ she should be able to identify the strengths and weaknesses of his/ her students and to identify the required diagnostic supplementary or remedial programs.
- Director or leader of the educational process: the teacher in learning systems is considered a director of the educational situation, as he/ she bears the greatest burden in managing courses, especially by integrating technology in education and diversifying the methods of content presentation, assessment methods, and learners' interaction.

## 5 Teachers' skills for transformative learning

To have teachers who are able to use modern learning methods, it is necessary to work on building their capacities through conducting interactive workshops and practical activities centred around the trainee, during which practical application is provided, in addition to explaining in detail the mechanisms for implementing each of the modern teaching methods. In addition to the specialized practical training using modern teaching methods, training programs must focus on enhancing the level of trained teachers, with the aim of developing the following skills in them:

- Modern learning methods implementation in the classroom in line with new concepts of and approaches to learning
- Flipped classroom management
- Digital and blended teaching management
- Using different types of physical and digital learning environments in the teaching and learning processes
- Transforming traditional academic content into interactive multimedia content

- Deploying mobile applications in the teaching and learning processes
- Developing different forms of digital content
- Utilizing the tools and resources provided by the Ministry and integrating them into the teaching and learning processes
- Digital communication skills with all elements of the educational process
- Skills of implementing the latest strategies in digital education (adaptive learning – digital games – flipped classroom – personal learning – learning by digital projects – learning by problem-solving and research and investigation in the web).
- Building web-based educational activities
- Effective research skills in digital resources and websites
- Deploying multimedia in the teaching and learning processes
- Producing a digital questions and answers bank and designing digital assessment in its different methods

## 6 Qualifying and training teachers of learning difficulties through the following procedures:

- Training courses and workshops on the integration guide, developing plans for the inclusive schools, and dealing with the students with disabilities in schools. These trainings are held for both the administrative and teaching staff in the schools selected for integration, with a rate of two to three trainings a year and in all the governorates of the country.
- Continuous trainings on learning difficulties for the teachers of the regular classrooms and the teachers of the resource rooms in the inclusive schools.
- Training courses for resource room teachers and classroom teachers on visual impairment, Braille, and how to deal with visual impairment in inclusive schools.
- Training courses to qualify teachers to work in the resource rooms with all the types of integrated disabilities and the students with learning difficulties, and support all students.
- Trainings on the integration guide, learning difficulties, resource rooms, and developing the individualized plan by members of the Special Education Department in the Ministry of Education.
- Raising awareness on the concept of inclusion and on the methods for dealing with PWDs and learning difficulties in the courses attended by psychological and social counselors in schools.

- Training courses on protecting children from abuse and harm, especially the children with special needs, for integration workers at the level of central and local administrations and for the psychological and social counselors; and disseminating the Code of Conduct at all levels of education from kindergarten to secondary education.
- A series of training courses were launched in cooperation with UNDP and ESCWA to increase the competence in the field of inclusive community development for the workers at the institutes.
- A training on quality physical education for the PWDs was carried out in January 2022 in cooperation with UNESCO for workers in the institutes for the care of the PWDs, physical education coaches, and physiotherapists.

### **Third: Professional Situation and Work Conditions:**

#### **1 Decrees and laws were issued to regulate working in the Ministry of Education, as follows:**

- Legislative decree no. 6 on 28/04/2022, which states granting special hardship allowance to workers in administrative and teaching positions in the Ministry of Higher Education and Scientific Research.
- Decree 27/2020 no. 452/542 on 19/02/2022, which states granting 40% compensation for a group of educational categories and 10% for administrative staff.
- Decision no. 843/543 (4/10) on 08/04/2022 issuing the creation of a committee responsible for developing the mechanism of assigning by a specialised temporary employment. This means assigning those
  - with a bachelor's degree or a vocational or technical institute certificate from the scientific specialisations accepted at the Ministry of Education as temporary workers for teaching with full teaching load, for the minimum wage of their category.
- Decision no. 2245/543 (4/6) on 21/10/2021 to ensure the stability of the educational and teaching process, and to control its quality and address the shortage in teaching staff in the basic education level, second cycle, and the general and vocational secondary education, by assigning temporary teachers from university students based on a specialised temporary employment.
- Decision 1419/543 (4/10) on 05/07/2021 including the creation of a committee to work on supporting the stability of the educational and teaching process, and providing education for everyone, through localisation and ensuring a suitable environment for employed teachers, who are working outside their original governorates.
- Decree no. 388 on 04/12/2014 stating the compensations for the staff members responsible for exams-related work.



- Law no. 9 on 03/03/2016 including the teachers' retirement pension and its executive instructions.

## **Fourth: Educational Leadership and Innovation**

### **1 Educational leadership capacity building**

The first stage of training schools' principals began, with the purpose of building the capacities of educational leadership, through training at the central and local levels. 172 teacher trainers attended a training of trainer session. They then conducted the training of 4,146 principals in the directorates

School principals were trained in a first stage, followed by a training of deputy principals and the principals who missed training, in a second stage.

### **2 Training design informed by context and needs analysis**

The design of the educational leadership training that aims at transforming teaching to learning was informed by a research-based SWOT analysis of education and training institutions as well as a thorough and scientific needs analysis.

The SWOT analysis yielded the following key findings:

- Strengths: The existence of staff with appropriate academic qualification.
- Weaknesses: The need to qualify this staff at the educational level, and to build the competencies and skills of human resources in the education field based on their actual needs.
- Opportunities: Studying the training needs in the field of education, and designing training programmes to build the capacities of the human resources.
- Threats: The difficult living conditions which reflect negatively on the training process, and refusing or resisting change.

A massive research-based analysis of the training needs of homeroom and specialised teachers was conducted on a sample of 4,683 teachers. 60 researchers were trained to conduct the study. The research included teachers from cycles 1 and 2 and from secondary education. The study informed the choice of training content for preservice and in-service training.

## Financing of Education

### First: Sufficient and sustainable financing that matches the needs of the country:

It is agreed that a more educated labor force is more productive, and that education is a long-term investment in human capital. It is considered as one of the most profitable investments that contributes to reducing the economic and social differences between members of society. It contributes, as well, to increasing national income and increasing the rate of economic and social development in the community.

The literature on the accumulation of human capital indicates that high quality education in the early stages generates the highest returns. Early investment in cognitive and non-cognitive skills results in a high return and reduces the cost of later educational investment, by making learning at later ages more efficient. When the quality of skills provided in the early stages of education is low, the basic skills and productivity of later educational investments will also be low

### 1 Expenditure on Pre-tertiary Education

- General budget and expenditure on education between 2011-2021 (thousand Syrian pounds) as reflected in Table 4 and Figure 9.

<b>Table 4</b> <i>General budget and expenditure on education between 2011-2021</i>			
<b>Year</b>	<b>General Budget of the State</b>	<b>Expenditure on Education</b>	<b>Percentage %</b>
<b>2011</b>	835,000,000	122,531,860	14.67
<b>2012</b>	1,326,550,000	124,604,815	9.39
<b>2017</b>	2,660,000,000	219,837,608	8.26
<b>2018</b>	3,187,000,000	264,556,907	8.30
<b>2019</b>	3,882,000,000	242,257,743	6.24
<b>2020</b>	41,500,000,000	390,429,645	9.50
<b>2021</b>	8,500,000,000	487,755,906	5.74

Table 4 General budget and expenditure on education between 2011-2021

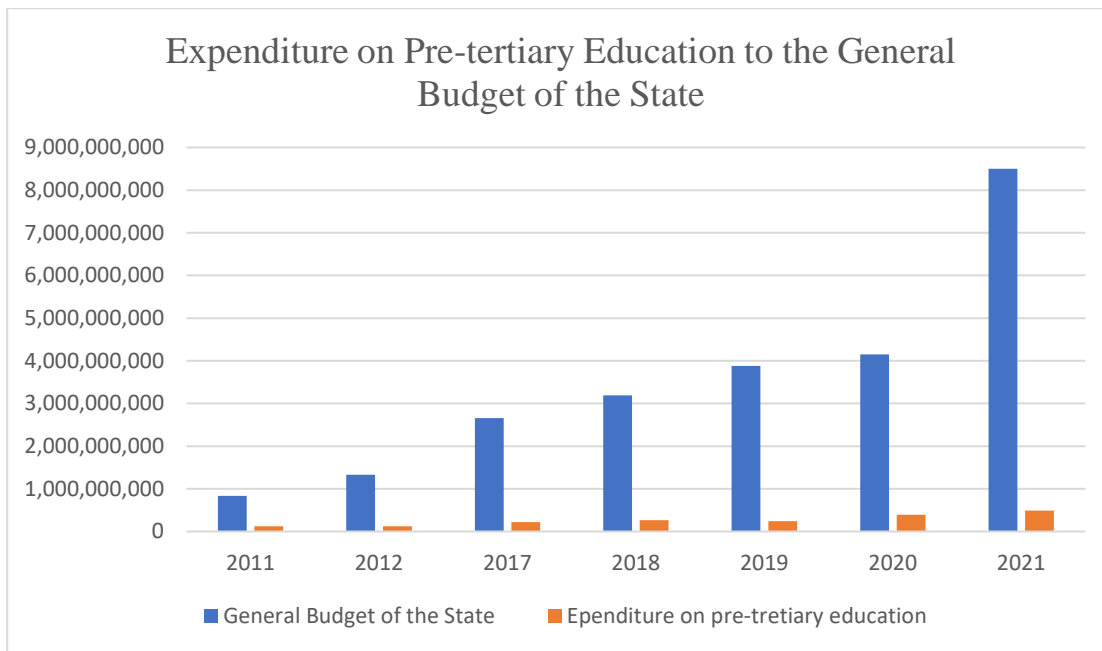


Figure 9 Expenditure on Pre-tertiary Education to the General Budget of the State

Government expenditure on the educational sector has been reduced since 2012, which imposed on the MOE the challenge of maintaining the quality of education at the same time it is seeking to find remedial solutions that are suitable for the emergent cases like the rehabilitation of the damaged schools, the provision of the different types of teaching supplies, introducing special curricula for students living in the hot areas, and the students arriving to the safe areas, etc.

- Table 5 and Figure 10 show the budget allocations for and the expenditure on implementing the investment projects in 2011-2021

Year	Original Allocation	Adjusted Allocation	Final Expenditure	Percentage
<b>2011</b>	13,171,500	11,921,500	8,378,594	<b>70%</b>
<b>2012</b>	12,788,000	9,318,503	8,916,504	<b>96%</b>
<b>2013</b>	6,000,000	6,000,000	5,664,126	<b>94%</b>
<b>2014</b>	6,746,400	6,746,400	6,242,270	<b>93%</b>
<b>2015</b>	8,651,000	11,655,500	11,354,016	<b>97%</b>
<b>2016</b>	13,942,500	15,942,500	15,785,420	<b>99%</b>
<b>2017</b>	28,375,000	28,375,000	28,039,574	<b>99%</b>
<b>2018</b>	33,927,000	35,957,000	35,628,982	<b>99%</b>
<b>2019</b>	50,000,000	28,000,000	9,242,355	<b>33%</b>

<b>2020</b>	54,667,975	54,667,975	45,910,811	<b>84%</b>
<b>2021</b>	41,525,000	44,865,376	44,087,207	<b>98.3%</b>

Table 5 Tracking the implementation of investment projects in 2011-2021

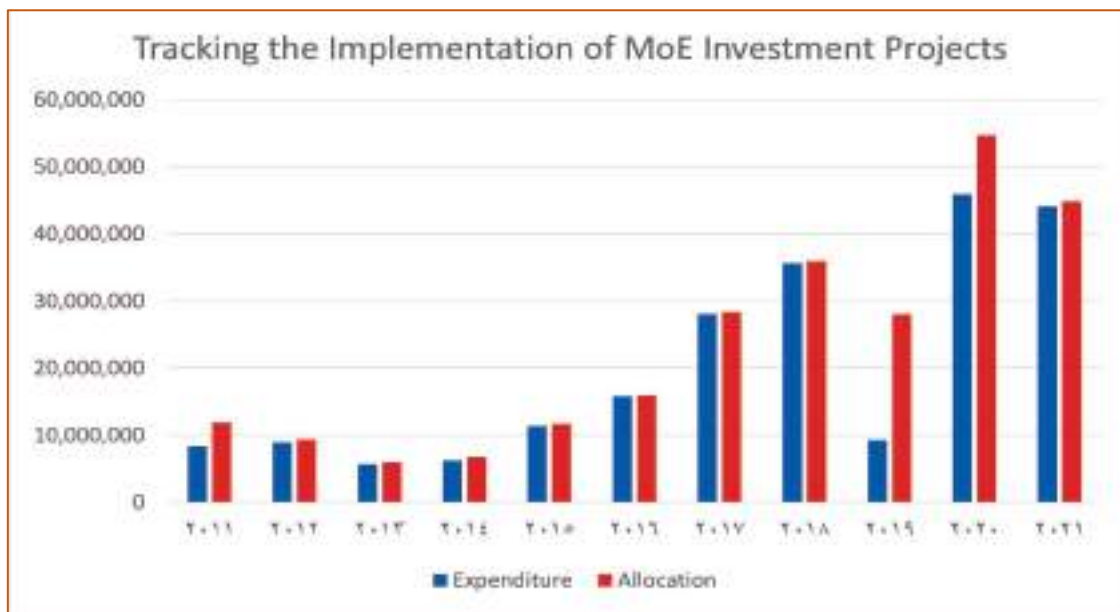


Figure 10 Tracking the Implementation of MoE Investment Projects

- Development of the cost per student (SYP) in 2011-2021 as shown in Table 6 and Figure 11:

Year	Primary Edu.	Secondary Edu.	Vocational Sec. Edu.
2011	18,600	30,027	51,535
2017	38,185	87,690	314,423
2020	78,385	158,361	451,933
2021	162,780	85,764	517,189

Table 6 Development of the cost per student (SYP) in 2011-2021

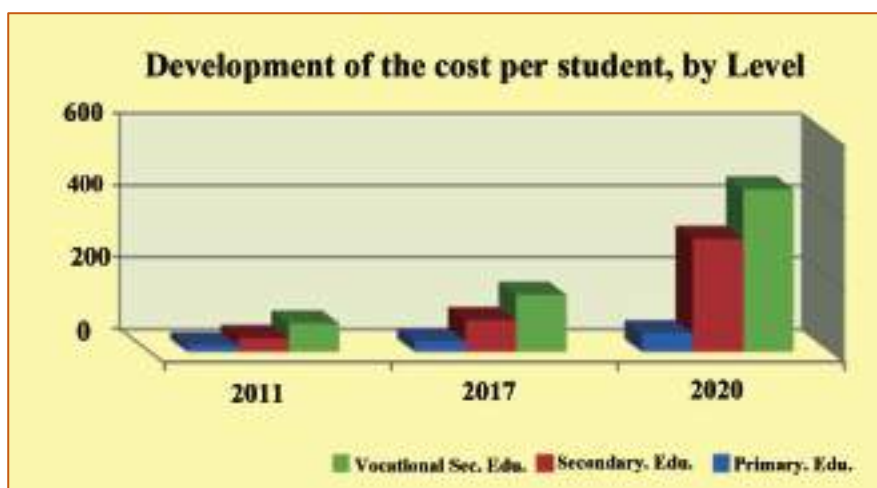


Figure 11 Development of the cost per student, by Level

## 2 Educational Sector's Needs of Financial Resources

These needs are meant to secure the stability of the education system and introduce some improvements to the axes of access to education and the quality of education, in addition to improving the levels of internal capacity of education. This includes gender sensitive and children with disabilities sensitive rehabilitation and simple maintenance costs and the provision of prefabricated classrooms, as well as the teaching and learning materials; without the costs of personnel, school textbooks, teacher guides, or the regular expenses of school administrations and the administrative offices on the central level and at the level of the governorates and directorates. Particular attention must be paid to the needs of children whose education was interrupted by the conflict, and who stand in need of learning programmes that help them to catch up with learning (for example, accelerated learning and remedial education). Investments are also necessary for preprimary education, and for inclusive education that

benefits children with disabilities. There is furthermore a need to invest in teacher salaries that incentivize Syrian nationals of capacity to take up the teaching profession. Education finance must also consider how transportation costs hamper or facilitate commuting to and from school. These costs were calculated for a targeted number of schools or learners, and the costs vary according to the different enrolment rates and the targeted values regarding the teachers and other staff.

Based on above, these costs were calculated with the education simulation model in Syria and then added to the costs listed in the operational plan so that the outcome represents the sum of the total cost required for implementing the Education Development Plan in Syria.

The total value of the financial needs for the educational sector reached 613,405 million US Dollars<sup>1</sup> over the three coming years.

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<sup>1</sup> At the fixed exchange rate for USD in 2019

## Second: Equity and efficiency of education expenditures:

The need to monitor the resources available for implementing the MOE plan is a key element in the M&E system in the plans. This applies whether these resources are coming from the general budget of the government, other donors in Syria, or the private sector. Monitoring aims at ensuring that the investment of the financial resource is characterized with efficiency and efficacy, and that they are linked to the most pressing needs as listed in the MOE plans. It also seeks to rationalize the use of the resources through coordinating and directing the resources in a way that prevents financing duplication (government and donors) and achieves justice and equity in distributing these resources on the governorates.

The MOE works on distributing the allocations from the Ministry of Finance with the justice needed to achieve efficiency of the expenditure on education at the local level. That is to ensure provision of the needs and the equipment required for the educational process in accordance with the priorities, and to contribute to achieving quality education at the national level.

### 1 Provision of teaching aids:

The number of teaching aids provided to the schools of the Syrian Arab Republic in the different governorates in 2011-2021 is reflected in Table 7 and Figure 12:

Year	Number of teaching aids distributed	Implementation Percentage	Percentage of teaching aids available in schools
2011	529,524	100%	50%
2012			
2013	114,764	100%	
2014			
2015	65,696	100%	
2016	18,245	100%	
2017	34,542	100%	
2018	43,481	100%	
2019	33,647	100%	
2020	80,080	100%	
2021	23,465	100%	

*Table 7 Provision of teaching aids*

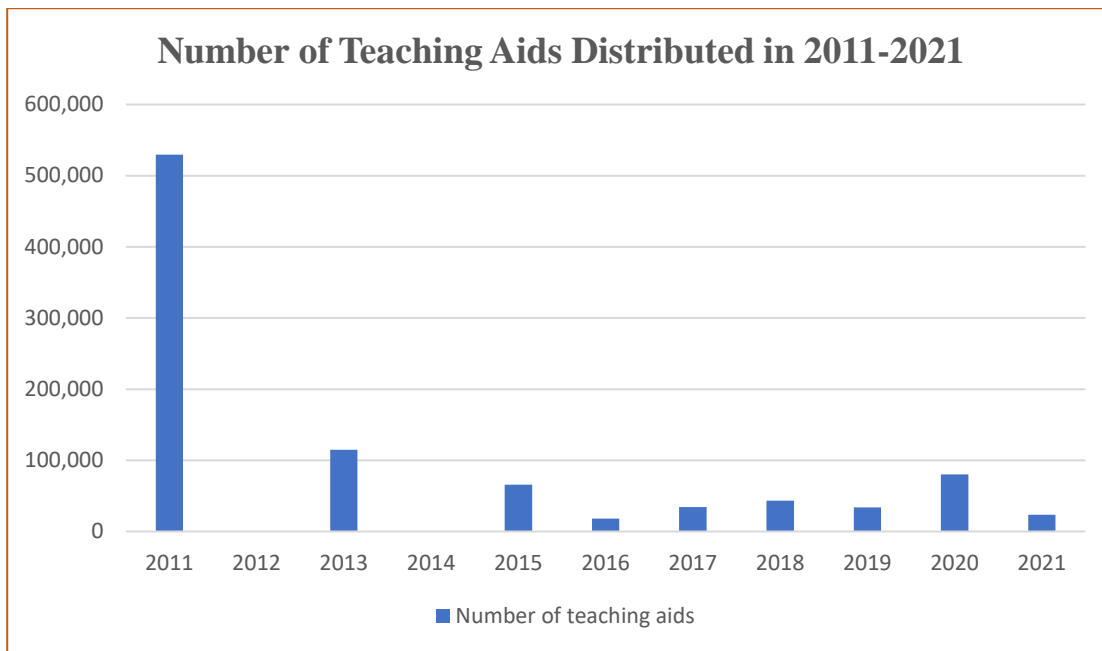


Figure 12 Number of Teaching Aids Distributed in 2011-2021

Table 7 shows a decrease in the number of teaching aids distributed between 2011 and 2021. This decrease is attributed to the decrease in the purchase power of the Syrian Pound, as the MOE secures its needs from the governmental financing, i.e., the investment budget allocated for the MOE. The decrease in the expenditure on education led to reducing the financing dedicated for the provision of the educational needs of the MOE, including the teaching aids and the computing and technical equipment required for all the educational levels in addition to vocational education.

## 2 Provision of school textbooks:

In the early days of 2013, due to the escalation of the terrorist acts in Barzeh District, the General Institution for Printing was affected. The Press was closed permanently, and its workers have been, up till today, distributed on the directorates and branches of the Organization. The school textbook has been being provided by having it printed in public presses in addition to UNICEF contribution to printing part of the requirements. When the capacity of public presses is surpassed, private presses are used to print the rest of the need.

The General Institution for Printing has returned to its building in Barzeh since the beginning of this November, after it underwent restoration and rehabilitation. Currently, the building of the press and the belonging warehouses are under restoration.

The General Institution for Printing continued the implementation of its printing plan by executing the contracts concluded for the provision of raw materials, paper rolls; and through printing contracts with the public presses; as follows:

- Number of Textbooks Printed and Provided to Learners and Students in 2011-2021 as reflected in Table 8 and Figure 13

<b>Year</b>	<b>Planned</b>	<b>Implemented</b>	<b>Percentage</b>
<b>2011</b>	94,860,200	96,622,525	102%
<b>2012</b>	100,000,000	79,590,200	80%
<b>2013</b>	30,221,634	28,920,634	96%
<b>2014</b>	44,314,000	42,156,326	95%
<b>2015</b>	2,262,200	24,058,149	106%
<b>2016</b>	12,275,000	11,896,739	97%
<b>2017</b>	31,385,500	29,546,504	94%
<b>2018</b>	51,019,300	48,668,800	95%
<b>2019</b>	33,119,000	33,119,000	100%
<b>2020</b>	40,000,000	39,000,000	97.5%
<b>2021</b>	40,000,000	39,000,000	97.5%

Table 8 Number of Textbooks Printed and Provided to Pupils and Students in 2011-2021

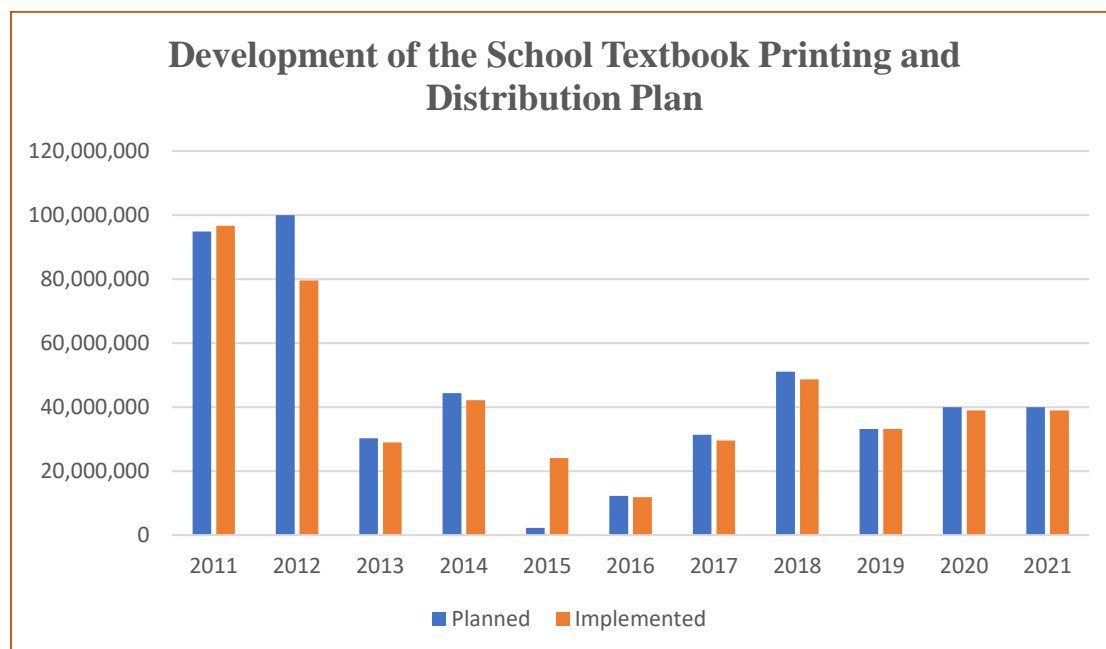


Figure 13 Development of the School Textbook Printing and Distribution Plan



It is worth noting that the Organization struggled to secure raw materials due to the fluctuating exchange rates and because importers refrained from submitting their quotation as a result of Caesar Act and the difficulties that face the import process.

### **3 Challenges and Difficulties:**

- Reduced expenditure on education.
- Low opportunities for investing the facilities of the MOE.
- Weak employment of the outputs of education in the job market.
- Schools being out of service.
- Lower purchase power of the Syrian currency leading to reduced value of the salaries and wages of the workers in the educational sector.
- Weakness of the resources provided from the private education to the educational sector.
- Low teacher salaries
- Low transportation capacity to support supervisors to monitor teacher's performance in schools

## Advancing Education Through Health-Promoting Schools

### **First: Providing government funding necessary for transforming every school in the Syrian Arab Republic into a health-promoting school:**

#### **1 The budget allocated to school health**

The budget of school health is defined as part of the Ministry of Health budget. It is used to develop health services provided in schools, such as equipping school health centres with furniture and different medical equipment. This budget was raised to 1,500,000,000 SYP in 2021, and to 2,700,000,000 SYP in 2022.

#### **2 The budget allocated to the school's physical environment**

Necessary funding to improve the situation of the school's physical environment (health facilities) is provided from the general budget of the directorates of education and the general commission for education buildings. It is worth noting that there is no special funding for water and sanitation in schools, but it is part of the general budget for school maintenance.

Working on providing funding for creating a medical point in every school, and equipping it with some medical equipment and appropriate medications.

Working on providing funding for the supplies of mobile clinics that provide health care services for distant and recently liberated areas that do not have school health centres.

### **Second: The commitment of all supervisors, officials, teachers, and administrative staff in schools to support health promotion plans in their schools:**

#### **1 Health supervisors and coordinators**

Appointing health supervisors or coordinators in all schools to provide some simple health services, and defining their tasks, and giving them relevant training and following-up on them constantly. There were 5,994 assigned trained health supervisors, and they covered 66% of the total 9,068 basic education and secondary schools in the country.

#### **2 Health-related training for health and school staff**

Training and qualifying health educators, and training the education staff and supervisors on school health programmes, particularly those on health education. Training was provided for 1,178 health educators, 2,538 administration staff members, 15,000 school teachers, and 2,950 supervisors of exam centres on the prevention measures for coronavirus, and on spreading health education among students to adopt proper health behaviour during the pandemic in 2021.

### **Third: Accepting and encouraging the local community initiatives the support health-promoting schools:**

Cooperation between the Ministry of Education and civil associations concerned with public health, such as the Family Planning Association, Al Razi Association for Supporting Persons with Disabilities, and others, in addition to public organisations such as Al-Baath Vanguard

Organisation, and the Revolutionary Youth Union, and coordinating with the Syrian Arab Red Crescent in particular during general exams, and providing meals and transportation for students in host centres, who come from instable areas and want to take their final exams in safe areas. Civil associations also provide in-kind aids, education sessions, and psychosocial support for those students.

## **Fourth: Adhering to a school curriculum that supports children's physical, psychological, social, and emotional health and wellbeing:**

### **1 Health education programme**

Developing the health education programme developed in 2020, which included the most important health education topics, including nutrition, physical activity, smoking and substance abuse, infectious diseases, integrating persons with disabilities, safety and security, healthy lifestyles, smart devices and electronic games, COVID-19 pandemic and its prevention.) The programme was integrated within the health education activities in schools, and an implementation programmes was defined through school visits. In the school year 2020-2021, 17,700 educating sessions were implemented for 1,765,252 students.

### **2 Health-education projects**

Implementing the projects of school health curriculum in schools of basic education, cycle 1, and they are: Personal hygiene, oral and dental health, nutrition and digestive system health, infectious diseases and preventing them, safety and security, respiratory diseases and air pollution, eye diseases, skin diseases, smoking, noise pollution, sport and playing and sleeping, urinary system health, first aids, taking care of plants, taking care of animals and their relation to humans, reproductive health, taking care of older persons, vaccination and immunity.

### **3 Training on the health programme**

- Local workshops are held annually in the governorates to train teachers of cycle 1 and educational supervisors on the projects of the school health curriculum for the 3rd, 4th, 5th, and 6th grades in the basic education level. In 2021, 1,260 teachers and educational supervisors received training.
- Local workshops are held annually for health assistants and educators in all governorates on important education topics, in addition to updating the educational toolkit based on the needs. In 2021, 420 health educators received training.
- Forming health education and outreach teams to cover both schools and the local community.
- Education teams were formed about leishmaniasis in the countryside of Hama, Aleppo, Idlib, and Deir Ezzor, in addition to conducting regular examination for leishmaniasis in schools by monitoring teams in the governorates of Damascus, Rural Damascus,

Quonaitra, Hama, Idlib, Deir Ezzor, Aleppo, and Raqqa. 400 cases of leishmaniasis were detected in Aleppo, 65 cases in Rural Damascus, and 14 cases in Deir Ezzor in 2020-2021.

#### **4 Integrating health education in the curriculum**

Adopting developed education curricula that support health education and outreach, and constantly updating the health information they include in accordance with scientific advances.

#### **5 Creating health-awareness through the media**

Promoting society's important health issues in the media, and involving the media in health education, with special focus on social networking sites that interest young people, in order to bridge the gap of health education among teenagers.

#### **6 Inter-ministry coordination around health issues**

Connecting with the ministries, public organisations, INGOs, and the local community.

### **Fifth: Providing a safe school environment that supports psychological and social aspects:**

The Ministry of Education worked on providing a safe and psychologically supportive school environment through allocating psychological and social counsellors in all schools, and building their skills with different workshops. Moreover, staff members in charge of school health received training on psychological health programmes in order to provide psychological health care, and psychosocial support for students. The training targeted the following: (1) Training 413 psychological and social counsellors on the school mental health programme, since 2017; (2) Training 300 doctors in the School Health Directorate on the programme of bridging the gap in psychological and mental health, since 2019. (3) Training 419 health assistants and educators on the programme of the basic skills in psychological support, since 2019.

### **Sixth: Providing a healthy and safe physical environment:**

The war that was inflicted on the Syrian Arab Republic resulted in the destruction of a lot of schools and school health centres, in addition to the significant decline in water and sanitation services in most existing schools.

#### **1 Water and sanitation:**

A special card was adopted to monitor the physical environment in public schools by the School Health. In 2021, it was adopted to monitor sanitation in schools within the response plan for the effects of COVID-19.

The situation of sanitation was checked in all governmental schools in the country (9,068 schools), and data were collected about the following: (1) availability of drinking water; (2) source of drinking water; (3) water tanks; (4) water taps; and, (5) toilets

Table 9 describes the results of monitoring the physical situation at schools:

<b>Table 9</b>	
<b>Results of monitoring the physical situation in schools</b>	
Schools with no drinking water	20.1%.

Schools that get water from wells or tank trucks	26.5%.
Schools where water tanks are inconvenient in number or in specifications	47.4%.
Schools where water taps are insufficient	41.1%.
Schools where toilets are insufficient	27.4%.

Table 9 Results of monitoring the physical situation in schools

## 2 Safety and security:

Training workshops were held on how to deal with war remnants in 2019, 2020 and 2021. The number of trainees was as reflected in Table 10.

<b>Table 10</b>			
<b>Workshops on dealing with war remnants</b>			
Year	Teachers trained	Learners	Governorate
2019	1,771	30,000	All governorates
2020	1,935	20,000	All governorates
2021	200	10,000	Daraa

Table 10 Workshops on dealing with war remnants

## Seventh: Ensuring and providing comprehensive health services for all students to meet their physical, emotional, social, and psychological needs, and that achieve the concepts of preventive and remedial health

### 1 To guarantee the continuity and preserve the quality of education in the light of COVID-19 and other communicable diseases several measures were put in place:

Working on detecting pandemics including COVID-19 and combating them to limit their spread in schools, through a Rapid response for the pandemic by the Ministry of Education, in addition to adopting a health protocol for the prevention of coronavirus in schools, and activating emergency centres and a hotline for the Ministry of Education. The existence of a strong and trained health system prior to the pandemic boosted the quality of the response.

Epidemiological monitoring for COVID-19 through a series of steps, namely:

- Training medical staff in the School Health Directorate on monitoring COVID-19 cases through identifying the disease, and the suspected and confirmed cases.
- Coordinating with the Ministry of Health to do PCR tests, and to follow-up and treat cases.
- Providing rapid coronavirus antigen test (70,000 tests) and taking swabs in health centres of the Health School Directorate (143 centres).

- Training 297 health workers (doctors and health assistants) to conduct rapid tests in all health centres of the Health School Directorate.
- Monitoring coronavirus cases in schools: in the school year 2020-2021 there were 2,795 positive PCR tests; 1,030 among students, and 1,765 among teachers. There were 24 deaths; one student, 18 teachers, and 5 doctors from the School Health. The school year 2021-2022 registered a total of 8,269 swabs in the school community, with 3,293 positive cases (2,752 PCR and 541 RT). There were also 14 deaths, and 48 classrooms were closed. There were 6,088 positive tests since the beginning of the pandemic; 1,587 students and 4,501 teachers, including 38 deaths
- Utilising the vocational training workshops in women’s arts and crafts secondary schools to produce cloth face masks, and introducing a production line for medical face masks in the curricula of vocational education.

## 2 Vaccines:

The vaccination coverage target for children under the age of 5 years, as well as for school-aged children for 2030 is of 95% as reflected in Table 11 and Table 12:

<p><b>Table 11</b> <i>Vaccination coverage for children under the age of 5 years</i></p>
--

	2020		2021	
	No.	Percentage	No.	Percentage
Polio; 3 doses	400,878	69%	387,252	68%
MMR, one dose; measles, rubella (German measles), and mumps	440,312	76%	435,170	76%
DPT vaccine 3 and 4; tetanus, diphtheria, pertussis	378,411	68%	382,780	67%

Table 11 Vaccination coverage for children under the age of 5 years

<b>Table 12</b>						
<i>School vaccination</i>						
	School year 2020-2021			School year 2021-2022		
	Targeted	Vaccinated	Percentage	Targeted	Vaccinated	Percentage
1 <sup>st</sup> grade: DT vaccine for children (tetanus and diphtheria) Polio	521,696	398,656	76.4%	400,290	379,273	94.70%
6 <sup>th</sup> grade: DT vaccine for older children (tetanus and diphtheria)	424,088	329,962	77.80%	318,528	308,179	96.75%

Table 12 School vaccination

**Remark:** The reduction of vaccination percentage in 2020-2021 is because of closing schools due to coronavirus pandemic.

As to the COVID-19 vaccine, the population of the Syrian Arab Republic is 22,923,000, of which 1,334,638 are vaccinated (two doses), a percentage of less than 10% as of 30/04/2022.

The number of educational staff members in the Ministry of Education is 250,004, of which there are 81,438 vaccinated people, a percentage of 33% as of 30/04/2022.

### 3 Combating helminths and parasites:

In the school years (2016-2017, 2017-2018, 2018-2019), a campaign was held to combat helminths and parasite among school learners aged between 6 and 14 years old, in cooperation with WHO. The medication (Mebendazole) was provided, along with spreading different awareness messages on these diseases. The campaign was not held in 2019-2020 due to coronavirus pandemic.

The campaign was resumed in 2020-2021, the results are displayed in Table 13

<b>Table 13</b>					
<b>Results of combatting helminths and parasites</b>					
First cycle 6-12			Second cycle 13-15		
Targeted	Treated	Percentage	Targeted	Treated	Percentage
2,075,047	1,900,479	%91.6	915,119	834,434	%91.2

Table 13 Results of combatting helminths and parasites

#### 4 School feeding:

School feeding includes implementing a number of nutrition programmes in schools, in collaboration with WFP and UNICEF, with the aim of providing nutrition support to learners in the first cycle of the basic education level, and to stop dropping out and support students whose education was disrupted and reintegrate them in the school community through Curriculum B Education Programme. Table 14 describes the nutrition programme and its beneficiaries:

<b>Table 14</b>	
<b>Statistics on the nutrition programme at schools</b>	
Date biscuits fortified with vitamins and minerals:	
School year 2020-2021	826,271 beneficiaries from learners in the basic education, first cycle, in all governorates, with a rate of 28%.
School year 2021-2022	454,757 beneficiaries from learners in the basic education, first cycle, in all governorates (1,586 schools), with a rate of 15%.
School snacks and sandwiches:	
School year 2020-2021	30,000 beneficiaries from learners in the basic education in Aleppo Governorate.
School year 2021-2022	30,615 beneficiaries from learners in the basic education in Aleppo Governorate
School year 2022-2023	The plan is to target 11,000 learners in Rural Damascus Governorate
Electronic coupons: Each student receives a 35,000-SYP coupon	
School year 2020-2021	44,039 children in 11 governorates; Idlib, Raqqa, and As-Sweidaa were excluded
School year 2021-2022	63,000 children in 12 governorates; Idlib and As-Sweidaa were excluded



	* The value of the coupon is 50,000 for one child, 80,000 for two children from the same family, and 100,000 for three children from the same family
The total beneficiaries of the school feeding programme	
School year 2020-2021	900,310, a rate of 30%.
School year 2021-2022	548,372, a rate of 18.5%.

Table 14 Statistics on the nutrition programme at schools

Two nutrition surveys were conducted on learners aged between 6-12 years, in the school year 2021-2022: The first one is a measurement of urinary iodine concentration in children.

The second one is a nutrition survey to measure the weight, height, and haemoglobin for targeted students. Results are still under scrutiny and will be published soon.

## 5 Psychological health:

Trainings that were provided for doctors, health assistants and educators, and psychological and social counsellors on different psychological health programmes were used through an awareness campaign on psychological health and test anxiety management among students and learners in the basic and secondary levels. The campaign was implemented in April in 2022.

The campaign was implemented in 2,715 schools in all governorates:

- 1,233 schools of the first cycle, ages 6-12 years
- 683 schools of the second cycle, ages 13-15
- 560 high schools, ages 15-18
- 237 combined schools, ages 6-18

The total number of students covered in the campaign was 1,111,109 students, including 538,641 males and 573,597 females. The campaign addressed the following topics: GBV in all levels, health awareness on COVID-19 for all levels, bullying for the first cycle aged 6-12 years, test anxiety for the second cycle of the basic level and the secondary level aged 12-18 years.

The campaign was implemented by 715 staff members from the Ministry of Education, including doctors, nurses, educators, and psychological and social counsellors. It identified 8,267 cases that required an intervention, either in the form of psychological treatment or psychosocial support.

## 6 Combating smoking:

An initiative for smoke-free schools was implemented in 2019, in collaboration between the Ministry of Education and the Ministry of Health, with intention of protecting students from smoking and passive smoking.

The intervention targeted 22 schools of the basic education level, second cycle, in 11 governorates, with 1,220 targeted students aged 13-15 years. Currently, there are preparations for conducting a survey about smoking in schools for the same age group.

## **7 Regular medical examination:**

Regular medical examination is conducted for learners registered in the 1st grade of basic education, and the 6th grade of basic education, and 1st grade of secondary education.

Data are registered on the section about health in the student's card, which was modified in 2019. Upon registration in the 1st grade, data are filled about the medical history of the child and the family, and the vaccines before school age, and at school age (1st and 6th grades). There is also a registry of diseases and emergency incidents that occur with the student in school years. Different measurements and tests (growth, development, and senses examination, and medical examination) are also conducted during school years through the visits of school health staff to schools. The mental state of new learners at the age of 6 is also evaluated, and in case of any health conditions, they are referred to integration committees that evaluate children according to international criteria of PWDs, and they are registered in inclusive schools.

Number of students examined in the academic year 2020-2021:

- 1st grade in the basic education level: 320,744 learners, representing 78% of registered learners.
- 6th grade in the basic education level: 303,754 learners, representing 82% of registered learners.
- 9th grade in the basic education level: 129,000 learners, representing 60% of registered learners.

## **Eighth: Ensuring and providing comprehensive oral health care services and programmes for all students to enhance their oral, psychological, and physical health; and working on correcting speech issues resulting from oral and dental diseases; and supporting and prioritising preventive and educational programmes:**

The interest of the Ministry of Education in the oral and dental health of students stems from the deep understanding of the close relation between students' oral and dental health and their general and mental health. Many studies and researches over the world proved that bad state of oral and dental health can have a significant effect on developing systematic and immune diseases. Based on that, The Directorate of Oral Medicine in the Ministry of Education provides oral health services and programmes to complement the general health services, in collaboration with relevant INGOs, through the following programmes:

- 1 The oral health education programme and practical training on using the means and tools of preserving the oral and dental health.**

This programme aims at making learners from the early age group acquire healthy and ecofriendly behaviour, correcting wrong behaviours among learners from the older age group, and educating personnel in the field of education (principals and teachers) and giving them information, they can transmit to learners.

## **2 The comprehensive regular examination programme,**

The programme aims at inspecting injuries and controlling the spread of oral and dental diseases, defining appropriate solutions based on the conditions and factors that affect the spread of the diseases and examining all reasons behind speech issues caused by tongue diseases, and the incorrect jaw relation, and the early falling out of primary teeth, and cracks in permanent front teeth.

## **3 The preventive treatment programme:**

This programme aims at providing necessary treatment for all injuries that were diagnosed through the examination, whether they are injuries in the teeth, the mucus membrane, or the gums, and working with learners' parents to remove poor speech causes that are related to oral, dental, and tongue diseases.

## **4 The preventive programme:**

This programme aims at preserving the oral health of children, and preventing dental caries or gingivitis, through using different types of fluorides in different ways and using dental sealant.

## **5 Epidemiological studies and evaluation researches:**

The Directorate of Oral Medicine regularly conducts studies and researches with the aim of:

- Continuing oral health screening for learners aged 7-9 years, and 13-16 years.
- Following up and evaluating the effect of oral health programmes on learners two years post implementation.
- Following up and evaluating the effectivity of preventive programmes implemented on learners.
- Following up the effect of educational programmes on changing the health behaviour of students.

## **6 The ongoing training programme:**

The directorate holds training courses every year for workers in the domain of oral and dental health, and this includes dentists, dental assistants, health educators, and school principals and teachers.

The Directorate of Oral and Dental Medicine provided in 2021 and the first quarter of 2022 more than 2 million health care services, including the services and programmes of oral health care through regular and mobile clinics, according to the following statistics:

- Health education programme, which benefitted 1,985,000 learners in the basic education level.
- Comprehensive examination programme, which benefitted 195,800 learners.
- Preventive treatment programme, which benefitted 87,950 learners.
- Preventive programme using fluoride, which benefitted 675,850 learners.
- Preventive programme using dental sealant, which benefitted 54,670 learners.

Added to that, 12 training courses were held on different topics and for all groups. More than 90 doctors, 150 physician assistants and health educators, and more than 500 school teachers and principals benefitted from these courses.

The Directorate of Oral and Dental Medicine in the Ministry of Education hopes that support from the government of the Syrian Arab Republic, and from INGOs, and the civil community associations will increase, in order to provide work tools to increase the targeted group (learners) and to increase the implementation of oral health care programmes and services by 5-10% every year and continuously, in order to cover all students, especially in rural areas and distant villages, and to help in transforming oral health programmes and services for targeted groups with the aim of focusing on the group of affected learners, and those with disabilities as a result of poverty and destitution due to the blockade and the deterioration of economic and financial situation in the society.

## Digital Learning and Transformation

### Digital transformation of educational systems:

#### 1 Connectivity / Narrowing the Global Digital Divide / Assistive Technologies

Modern information technologies are used in education through:

- Providing the necessary computer programs and educational techniques.
- Developing the use of smart classroom techniques.
- Conducting a competition for designing educational situations for teachers using information technology and educational technologies
- Developing an interactive website supplementary to the curriculum.
- Developing interactive electronic educational programs for all curricula.
- Making available arabised education video content that matches education standards from the national curriculum
- Making available digitized learning materials, learning games and simulations that offer new pathways for children for knowledge and skill acquisition.
- Increasing the effectiveness of modern technology use in curricula.
- Preparing interactive educational programs through the Syrian Education TV and the corresponding digital content like YouTube and Facebook.
- Activating information technology in program-content lessons on Syrian Education TV.

### Developing teachers' technical skills through:

- 1 Enabling teachers to integrate technology with education and distance learning tools to achieve impact, effectiveness and the principle of equal opportunities.
- 2 Enabling teachers to use modern technology for distance student tracking of learning progress
- 3 Strengthening the axes related to distance learning, such as creating a virtual classroom, e-testing, interactive websites, and Syrian Education TV.
- 4 Constant search for new technologies that promote active learning strategies, inside and outside the classroom.

### Distance learning project:

The distance learning and virtual education system in the Ministry of Education aims to: Support formal and private virtual education, design electronic content in line with the national curricula, develop an educational portal to serve the purposes of virtual education (electronic - digital), training staff and develop their technical and educational skills, develop the infrastructure to serve e-learning, and explore modalities for online national exams. The distance learning project is accomplished through the axes presented in the next section.

## **First: Teachers' skills development courses in distance learning**

### **1 In light of the COVID-19 pandemic, the Ministry of Education has taken several steps to activate distance learning mechanisms, as follows:**

- A central team for remote learning has been formed during the pandemic following the lockdown.
- The team was trained through a training workshop by international experts, with the support of UNESCO.
- A teacher training plan has been developed
- A training package consisting of three levels has been developed, and it includes a set of topics:

**The first level:** 900 trainees were trained on the basics of distance learning, and the training included: Introduction to distance learning, Virtual class programs: Google Meet – Zoom, Interactive Electronic activities: Mentimeter – Padlet, Advanced skills in Adobe Acrobat and MS Word, Questionnaires and electronic tests: Google Form. Cloud storage, Google Sites

**The second level:** 500 trainees were trained on electronic content design, and the training included: Designing interactive electronic activities: Thinglink site - learning apps. Advanced skills in designing presentations using MS PowerPoint. Preparing educational lessons and using OBS - AVS screen recording software and applications.

**The third level:** 300 trainees were trained to develop and embed electronic content, and the training included: Introducing electronic content: Google Sites, Animation design: Plotagon, Interactive worksheet design: Liveworksheets, Montage using mobile: Kinemaster, Photo editing and screen recording: Snagit

## **Second: Virtual schools**

The Syrian educational system has a pioneering experience in the field of virtual education, as: An approval for a trial year was granted to three virtual schools (Al Mustaqbal Virtual School, Syrian Smart Virtual School - Shams Virtual school). 2600 students were registered in all educational levels. Also, dozens of applications for licenses are currently being studied.

## **Third: Syrian Education TV**

The Ministry of Education believes in the significance of media education in light of globalization, the vanishing of temporal boundaries, and preparing individuals for a world

characterized by the power of video, written and audio messages, protecting them from penetration and making them able to choose between contents and being aware of their meanings and knowing why and how they receive them, and to have a critical sense of dealing with everything they receive. Thus, the significance of Syrian Education TV appeared in building an interactive communicative relationship in the educational process and to broadcast safe, credible and reliable content to parents to immunize their children and make them aware of the nature of the contents on the various means of communication.

Syrian Education TV was an educational and pedagogical empowerment project, especially in light of the political and health crises and the integration of individual teachers and learners in participatory a content, especially in light of the interruption of the internet or the absence of computers for students.

The channel has played an important role in distance learning in light of the COVID-19 pandemic and has worked to broadcast educational lessons for various educational segments throughout the Syrian lands, even those that suffer from the siege of terrorism, at the right time for the targeted segments.

The lessons were presented in an interesting way, and they helped teachers communicate their ideas in an easier way by providing them with the accompanying visual content through educational lessons and enrichment content, believing in the tremendous impact of picture, as well as presenting content in an interactive way by receiving students' inquiries and questions directly via telephone calls or even receiving their inquiries through the channel's page on Facebook. In addition, it has a role regarding the COVID-19 epidemic and psychological support during their absence from their schools.

As well as, it had a role during the crisis by providing quality education and disseminating content regarding curriculum (B) to compensate for educational loss, through direct lessons on TV, in parallel with digital broadcasts on its Facebook page and YouTube channel, as well as direct interaction with students through direct calls.

Furthermore, it assists peer learning by engaging students in the delivery of educational and pedagogical content, focusing on the creative aspect of students, and working to focus on media education in an accelerated digital age.

## **Challenges accompanying distance learning and education:**

### **1 Technology preparedness:**

- Availability of devices for students and teachers.
- Internet connection (students, teachers).
- Power outage

### **2 Digital educational content:**

- Availability of digital educational content covering learning outcomes in all subjects.
- Availability of digital educational content that provides students with practical skills

### **3 Socio-economic challenges:**

- Low household income.
- The ability of families to support distance learning
- Lack of access of IT devices and mobile phones especially for girls

### **Integrating technology with education**

The project aims to develop the technical and pedagogical skills of teachers by highlighting the various strategies that enhance the student's role in the educational process, such as cooperative learning, problem-solving, flipped classroom, and the use of the necessary techniques in implementing these strategies.

An annual training plan has been developed for courses of integrating technology into education as follows:

#### **1 Central courses**

- Target group: (120) trainers of integrating technology into education
- Number of courses: four
- Duration of a course: three days
- Training hours: 20

#### **2 Local courses**

- Target group: teachers and mentors from the educational field
- Number of courses: 24
- Course duration: 10 days
- Training hours: 60
- Number of trainees: 1500

### **The training material addressed the following topics:**

#### **1 The first axis (technical + distance learning): safety,**

information security (malware and viruses), the use of tangible technologies in the educational learning process, the basic principles of computer and its components, the operating system (Windows 10), the basics of dealing with the OS and its most important skills, networking, internet and communication (search and browsing skills, and uploading electronic files), social networking sites, objective tests (Quiz 7), Excel, Power Point, investing e-books with Acrobat pro and Snagit program, Means of distance learning



(Mentimeter), steps and design of the test (Google Forms), uploading files and cloud storage on Drive and Dropbox, and creating a virtual class (Google Meet)

## 2 The second axis (pedagogical):

personality - communication - management - study planning - education and teaching strategies - cooperative learning - stages of implementing of some teaching methods (learning by debate - self-learning) - teaching aids - evaluation (strategies and tools) how to build tests - intellectual and sensory skills - levels of objectives - method of building the test.

### Training statistics for the previous three years:

Course title	Type		Date	Target group	Number of trainers	Number of trainees
	Central	local				
Integrating technology into education	3	13	2019	Teachers and mentors	118	1016
Integrating technology into education	3	13	2020	Teachers and mentors	111	1090
Integrating technology into education	3	13	2021	Teachers and mentors	117	945

*Table 15 Training statistics for the previous three years*

### Ministry of Education's National Educational Management Information System (EMIS):

A centralized system that provides accurate information at any time for educational decision-making.

Developing an information network for the educational sector by linking all educational sector premises to the educational data center.

Providing educational reports and indicators at all levels.

A flexible system that can be modified and developed according to work developments.

#### 1 SIMIS was developed in the Ministry with the support of UNESCO, and it contains:

- Detailed information about the student.
- Detailed data about the school and school building.

- Detailed data about the school's teaching and administrative staff.
- Permits communication between the school, teacher, student and parents.
- Provides reports at different levels, of the Directorate of Education and the Ministry.
- It was launched at the beginning of the 2018-2019 school year in 25 schools in Damascus, and the data for these schools was entered, but it was not optimally invested due to the change in school transcript and grades calculation.
- An offline version has been developed so that all schools that we could not network with the Ministry are covered.
- The offline version is currently being developed to cover the modifications that have occurred to the educational system with regard to Curriculum (B).
- With the support of UNICEF, the following was executed:
- Providing us with a local network for 2406 schools.
- Establishing the local network in 1500 schools over all governorates.
- Training 3 employees from each of 1500 schools over all governorates.

### **Networking:**

This is executed by providing the fast (optic) infrastructure and high speeds for all educational sectors buildings, which helps in the speed of data transmission and visual communication.

### **Computerization:**

#### **1 The work in the Ministry of Education is computerized using of following programs:**

- Personnel Data Software, where Id-cards of workers in the Ministry of Education and its sub-departments are computerized and printed, and statistical reports are extracted.
- Salaries and Wages Software, in which employees' salaries are registered, and from which documents can be printed: salary scales, nominal and total lists of compensation and deductions, salary data and wage vouchers.
- Bureau Software: within it, the Ministry of Education's general and classified registry are computerized
- IT equipment Software: in it, the information of the Ministry of Education's contracts for the materials of the Informatics Directorate is computerized, and then inventories of material are extracted.

- Computerizing all of the above and computerizing the TV programs broadcasted by the Syrian Education TV in all its stages, from the concept to its appearance on screen.

## **A Free, open, high-quality digital educational content: Blended learning**

### **1 Hybrid learning**

A method based on the use of a hybrid model of e-learning, which allows the presence of traditional teaching methods alongside modern e-learning resources and activities in one course.

### **2 Blended learning**

Blended learning is defined as: learning that is a mixture of traditional learning and e-learning. It relies mainly on the use of the Learning Management System (LMS).

### **3 Learning management systems**

Updated versions of the Moodle learning platform have been used. This allows the use of the Moodle Mobile application via phones, which means easy, fast and simple browsing for students, in addition to the notification feature that allow easy communication, messages, exam reminders, grades, activities and dates.

Implementation currently covers four governorates (As-Suwayda - Hama - Lattakia - Aleppo). In 16 classrooms (from the seventh grade to the third secondary). Most of the students were provided with tablets.

## **Digital Content Design:**

The global educational website Moodle has been utilized to design the Digital content for the grades 7 to 12 curriculum. The lessons in the textbook have been converted into interactive electronic lessons in a thoughtful educational, technical and artistic way. Each lesson includes an introduction, activities and quizzes. The activities include tasks that activate high-order thinking, through which the student performs a process of analysis, application, research and investigation of the tasks assigned to them through pictures, videos, interactive sites designed by the teacher, and scientific sites that include extensive information through which the student extracts the required information. Each task is followed by an interim assessment rich with immediate feedback to guide the student towards the correct information. It shows the extent to which the student has comprehended the lesson and whether s/he has obtained the required information through the task. Then, delayed feedback is given to them to check their information. Afterwards, they sit a test through which s/he obtains grades that assess their understanding of the lesson. Finally, the lesson is concluded with a topic about scientific research in which the student uses the information gained from the lesson and shares it with their colleagues.

This work is carried out by an extended team consisting of a ministerial team and a team of teachers and technical and administrative supervisors throughout the governorates, under the supervision of the Informatics Directorate in the Ministry of Education.

Also, designing digital content parallel to the work of the Syrian Education TV by including the lessons produced in the satellite and the educational and pedagogical content, and interacting by placing students' questions and answering them by specialists.

### **Advantages of blended learning**

#### **1 Efficient and effective use of resources**

- Saving time, effort and cost by delivering information to learners as quickly as possible, and by assessing and evaluating learners' performance.

#### **2 Enhancing the teaching and learning process**

- Improving the general level of academic achievement.
- Providing an attractive learning environment.
- Getting rid of the negative aspects of traditional learning through effective participation between the teacher and the student.
- Permitting participation with others from various regions.
- Taking individual differences between learners and their special needs into account.
- Flexibility in terms of abundance of activities and alternatives.
- Helping to provide and create an atmosphere of opportunities for cooperation between students.
- Students feel appreciated by getting feedback quickly on their progress in the lesson, thus increasing their level of achievement gradually and effortlessly.

### **Challenges to blended education**

#### **1 Infrastructure**

- Lack of technical requirements in all environments.
- Internet problems cause aversion to this strategy.

#### **2 Human resources**

- The learner does not accept this method.
- Inability of trainer (teacher) to professionally deal with the techniques.

### **Number and distribution of blended learning students for the academic year 2021-2022 as reflected in Table 16:**

**Table 16**

*Number and distribution of blended learning students for the academic year 2021-2022*

<b>Governorate</b>	<b>Schools</b>	<b>Classrooms</b>	<b>Students</b>	<b>Teachers</b>
<b>Aleppo (5)</b>	Al-Bassel High School for Outstanding Students	7 <sup>th</sup>	30	15
		8 <sup>th</sup>	27	
	Nablus	10 <sup>th</sup>	29	11
	Al Maari	10 <sup>th</sup>	31	14
		11 <sup>th</sup>	20	
<b>Lattakia (4)</b>	Rafiq Skaf	7 <sup>th</sup>	30	17
		8 <sup>th</sup>	29	
	Saleh Mahmod (Jableh)	10 <sup>th</sup>	29	15
		11 <sup>th</sup>	22	
<b>As- Suwayda</b>	Mamdoh Nassar	10 <sup>th</sup>	26	14
		11 <sup>th</sup>	22	
		3 <sup>rd</sup> secondary	17	
	Ahmad Qassem Jumaa	7 <sup>th</sup>	26	14
		8 <sup>th</sup>	24	
		9 <sup>th</sup>	19	
<b>Hama</b>	Abdulkader Shaqfeh	10 <sup>th</sup>	19	15
		11 <sup>th</sup>	19	
	Mutafawiqin second high school	7 <sup>th</sup>	30	15
		8 <sup>th</sup>	30	
		9 <sup>th</sup>	245	61
		10 <sup>th</sup>	234	69
<b>Total</b>	<b>9 schools</b>	<b>19 classrooms</b>	<b>479 students</b>	<b>130 teachers</b>

Table 16 Number and distribution of blended learning students for the academic year 2021-2022

### Teaching Robotics in schools of outstanding students:

Robotics is a significant modern educational field that has recently spread in the world. It opens for the student prospects for development through the application of the skills and scientific principles s/he acquires.

The Ministry of Education trains students in schools of outstanding students, which are a school in the governorates: Damascus - Rural Damascus - AsSuwayda - Homs - Hama - Aleppo - Lattakia - Tartus. 44 trainers were qualified.

### **1 Training is provided on assembling and programming the robot and developing students' creative skills according to the following axes:**

- The physical components of the robot, its types and requirements.
- Developing robot software
- Sensor software
- Engines software
- Matrixes

Students of these schools are provided with robotics training starting from the seventh grade, at a rate of 20 students in each batch. Also, outstanding students who are in schools near the schools of outstanding students can obtain the training on robotics, and teachers of academic subjects are trained on robotics to participate in competitions of the Ministry of Education, locally or internationally.

## **Digital citizenship, well-being, privacy and security**

Digital citizenship is promoted through a set of initiatives, namely:

### **1 Educational**

- Enhancing scientific research and innovation capabilities against to global competitive standards.
- Developing the capacities and building partnerships in the field of scientific research.
- Developing the scientific research sector.
- Providing qualitative academic support to learners by providing highly efficient educational resources, solutions and electronic infrastructure. (Incubators of innovation and technology)
- Spreading successful experiences among a group of schools at the level of governorates and educational complexes.
- Providing educational and interactive lessons via Syrian Education TV (presenting the curriculum and lessons in an interesting and illustrated manner, in addition to educational videos in an attractive method based on technology, and technology education programs)

- Digital literacy to enable the safe use of technology and encourage continuous learning with the continuation of technological development and teaching digital etiquette (through educational lessons and programs on Syrian Education TV).
- Introducing digital laws, protecting data privacy, preserving intellectual property, and limiting violations and fraud cases through educational programs on Syrian Education TV.

## 2 Community

- Optimal investment in human resources management by administrative and educational authorities and organizations, and university participation (software competitions and Olympiads).
- Enhancing the efficiency and effectiveness of vocational education communities in continual training through training students outside the school setting (robotics and artificial intelligence).
- Activating participation and community competitiveness and consolidating the culture of innovation (exhibitions of creativity and innovation in technology, programming and robotics).
- Digital education and awareness to achieve a safe digital society through the educational and pedagogical content of the Syrian Education TV to come up with a responsible user of technology and social networks.
- Focusing on outstanding students in the field of innovation through media content on Syrian Education TV.

## 3 Financial

- Optimal investment of school buildings and technical equipment with an appropriate return (educational clubs outside school hours for training in design, programming, networks, etc.).
- Additional appropriate return for teachers (in the field of training in technology incubators, training in robotics and artificial intelligence, or other domains).
- Optimal investment of the human intellect by empowering the educated for the labor market with only intellectual capital.
- Relying on outstanding students in software to the benefit of schools and the educational community
- Optimal investment of time and effort by broadcasting programs with educational and awareness content regarding digital citizenship through the Syrian Education TV.