

***The Strategic Plan of the Ministry of Education and Technical Education
2024/2029 AD***

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The Strategic Plan of the Ministry of Education and Technical Education 2024/2029



The plan seeks to set a future vision for the Egyptian education reform project with a national development vision and determine strategic priorities in areas that fall within the jurisdiction of the Ministry of Education and Technical Education.



Enhancing education, scientific research and innovation was and still one of the state's most important priorities, hence the keenness to meet innovative and talented young people to listen to their ideas and problems and the best ways to support them. These are ideas that were explained in launching an initiative towards a society that learns, thinks and innovates, and recreating the tradition of celebrating Science Day is a clear indication that the state attaches utmost importance to science and scientists.

From this standpoint, we have completed the stages of developing the basic education system as a strategic approach for the state; to build human beings with increased attention to improving implementation mechanisms to reach the desired goal of acquiring knowledge and skills, so that these values become a basic pillar of learning in the society and serve as a culture that transcends the ancient legacy that reduced the educational process to obtaining a mere certificate.

In order to reach the best educational system, we conducted an extensive community dialogue and created questionnaire platforms in the field of educational development, with a focus on discovering and nurturing gifted and talented people as they are the nation's asset and its engine towards progress, as well as paying attention to the teacher sector as they are the cornerstone of education and the main artery in the educational process by selecting a thousand teachers of distinguished young cadres and qualify them at the highest level to become at the forefront of the future generation of school principals of young teachers.

The time has come for the Egyptian economy to transform into an economy based on science and knowledge, and for Egypt to be blessed with its capabilities, preferring the efforts and creativity of its youth and scholars. The civilizational race is one of the features of our contemporary world, which depends on the culture, science and technology produced by peoples, and the gigantic economic growth associated with them and based on them. The challenges of the era we live in now are in fact scientific and technological challenges, and it is an era in which there is no competition or global participation. There is no access to foreign markets, except through science, technology and innovation.

From the text of the speech of the President during the follow-up of the state's strategy for developing the educational system - November 2022 AD



The Arab Republic of Egypt, under the leadership of His Excellency President Abdel Fattah El-Sisi, has taken steady, confident and rapid steps that have defined the features of development and renaissance in a country whose compass is directed: to leadership and people towards a future whose title is development and leadership, and whose pillar is building human capabilities, which in turn makes education and knowledge the cornerstone of this development, and even one of the most important goals of this development is the launch of an educational renaissance that establishes quantitative and qualitative expansion in all aspects of the educational system.

The updated Egypt Vision 2030, which represents the basic compass; To determine the state's directions in achieving sustainable development in its various aspects: (economic - social - environmental); This is in line with the Global Agenda 2030 AD and the seventeenth United Nations Sustainable Development Goals in general, and the fourthly goal (on education) in particular, as well as the Africa Agenda for Sustainable Development 2063 AD, and the government's work program (Misr Tantalek).

To achieve such change and development at the overall level of education, the plan applies three basic axes; To implement the goals of the National Agenda for Sustainable Development: Egypt Vision 2023; Believing that the success of the educational process in every time and place is mainly related to the fact that the learner is the axis of development and that the success of the vision must be included for international standards; To ensure that the goals lead to achieving sustainability and lifelong learning, and based on Egypt's updated Strategic Vision 2030, the strategic plan of the Ministry of Education and Technical Education provides a future

roadmap; To confront the ongoing challenges through a clear vision for reform, specific axes, strategic priorities, and necessities for action.

Therefore, this plan came to establish upcoming educational development projects and to complement the previous education development in various fields and achieve principles, the most important of which are building the Egyptian character, preserving national identity, rooting the scientific method in thinking, developing talent and encouraging innovation, consolidating cultural and spiritual values, and establishing concepts of citizenship, tolerance and non-discrimination, and the state is committed to taking into account its objectives in education curricula and methods, and providing it in accordance with international quality standards.

The formulation of this strategic plan, which aims to go beyond purely formal changes towards a comprehensive reform of the current system, is intended to be a stable reference during the coming years and to include among its details the guidelines and priorities that will shape the features of education and face its future challenges.

(Live signature before printing.....)

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Introduction

The world is facing a number of challenges of global dimensions, which have far-reaching implications for the economic, social and environmental future of Egypt, and more specifically for the education sector. At the crossroads of crises ranging from climate change to geopolitical conflict to recovery from covid-19, countries around the world are working hard to turn these challenges into opportunities for Sustainable Development and transformation. It is based on the background that the United Nations held the Education Transformation Summit in September 2022, where countries around the world shared their aspirations to transform education in the future. Within the framework of this summit, the Arab Republic of Egypt issued a national statement of commitment to transform education, in which it renewed its commitments to implement Egypt's Vision 2030 and ensure access to high-quality education for all.

In 2018, Egypt embarked on education reform at all levels to achieve consistency with the government's work program and the National Strategic Vision 2030, in which education plays a key role in achieving the country's basic goals of sustainable development, social justice and sustainable growth. This vision is based on the economic, social and environmental dimensions, which are achieved by eight strategic goals. Although "education and training" represents its own pillar, it includes other strategic pillars, especially in the targeted areas of economic development and social justice. The design of the strategic vision of Education 2030 includes the values of universal and equitable access, sustainability, flexibility, and efficiency.

To further refine the vision of Education set by Egypt's Vision 2030, the Egyptian education reform project was developed and new foundations were formulated for the development of education in a more realistic way. Building on previous education reform efforts that began in 2014, the Egyptian education reform project focuses on learning and life skills and addresses critical issues such as the transition from memorization-based learning and indoctrination to competency-based learning, preventing discrimination against women, addressing the challenges of globalization and citizenship, climate change, and creating a stronger alignment with the pursuit of the UN Sustainable Development Goal 2030 on education (the fourthly goal). Egypt has also taken a bold step towards integrating technologies into education, ensuring the continuity of learning throughout the country during the period of school closures due to the covid-19 pandemic.

Egypt's official accession to the Global Partnership for education came as a step in support of the ministry's efforts in achieving the goals of developing the educational system and implementing the ministry's strategic plan (2024-2029). Through this plan, Egypt aspires to occupy its place among the eighty countries in the Global Partnership for education, and the mission of the Global Partnership for education "GPE" is based on mobilizing global efforts to contribute to the provision of education and learning for all in a fair and quality manner by focusing on effective and efficient education systems. The partnership also aims to develop education by accelerating access to goals, learning outcomes and gender equality through fair, inclusive and flexible educational systems that keep pace with the successive developments imposed by the industrial revolutions, artificial intelligence and digital transformation.

Considering the ministry's efforts to achieve the best desired results from this plan, the Ministry of education and Technical Education launched a community dialogue on the ministry's strategic plan (2024-2029), in which various segments and community groups are represented through workshops to come up with the most important recommendations and ideas that can enrich the axes, dimensions and directions of the plan.

Through this plan, the Ministry of education and Technical Education seeks to prepare new tricks from competent, highly qualified and globally competitive Egyptians. It proposes high-level foundations of change in the plan if digital transformation and innovation can be harnessed and if learners are supported and empowered; to increase access and participation, improve the quality and feasibility of learning and teaching, promote equality and inclusion, strengthen governance and management, including education financing; then inclusive quality education for all will be achieved with strong basic skills, and learners will graduate with the necessary knowledge and skills they need to learn and progress for life; leading to the realization of the vision of the Ministry of education plan and technical education.



We believe in the importance of achieving an effective practice of community participation when formulating the strategic plan that outlines the future roadmap, so the idea of conducting an expanded national community dialogue was a necessity to derive the best visions, identify the most important priorities and goals, and come up with the most important recommendations and ideas that enrich the axes of the plan with its dimensions and directions.

From the speech of Dr. / **Reda Hegazy**, Minister of education and technical education, community dialogue on the strategic plan-Cairo-August-2023



Strategic vision of education until 2030

The strategic vision of education until 2030 aims to provide high-quality education and training to all without discrimination within the framework of an institutional system. It is based on a learner and trainee who is able to think and is technically and technologically proficient. An education also contributes to building an integrated personality and unlocking its potential to the maximum extent that the citizen is self-proud, enlightened, creative, responsible, accepts pluralism, respects differences, is proud of the history of his country, is passionate about building its future and is able to deal competitively with regional and global entities.



Vision of the Ministry of education and technical education

Education and training based on quality and excellence, based on sustainability and fair access preparation of a learner capable of creativity, innovation , and global competitiveness



Vision of the Ministry of education and technical education

Methodology of the strategic plan

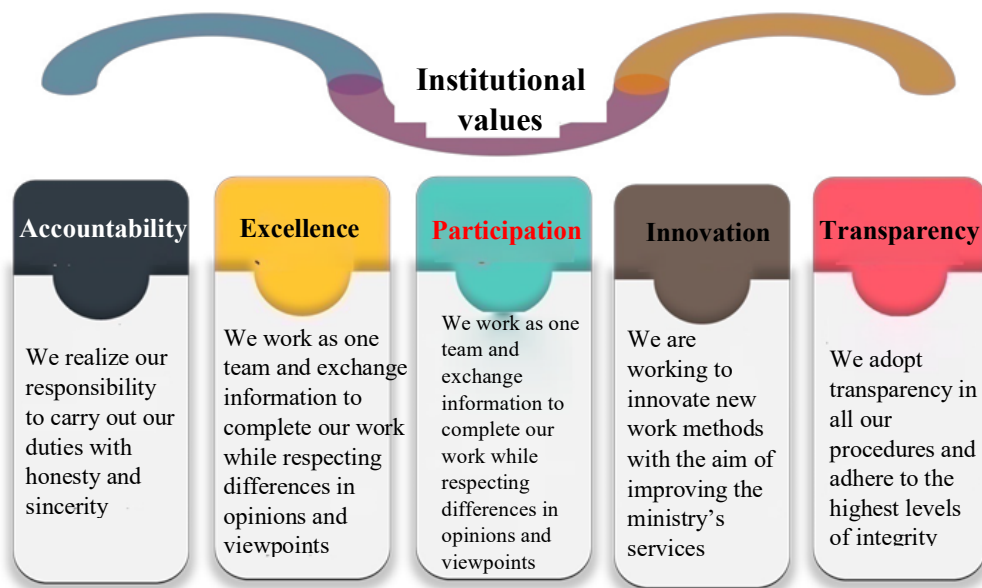
The process of developing this plan was a participatory and evidence-based process through the analysis of the pre-university education sector. A team was formed including the points of contact in the Ministry of education and technical education; to coordinate and unify contributions to this plan, qualitative and quantitative data were collected from the relevant departments in the Ministry of education and technical education and other ministries. A series of consultations were organized at the national and local levels with the participation of various stakeholders. This plan has been prepared to respond to the comprehensive set of evidence provided by the education sector analysis, based on the strategic plan of the Ministry of education and technical education 2024-2030 and integrating the basic principles of the New Vision 2030 and the mission of the Egyptian education reform project.

It is worth mentioning that the recent analysis of Education conducted by the ministry and the UNESCO International Institute for Educational Planning (GPE/IIEP-UNESCO as a reference for the preparation of education plans have thoroughly reviewed the current state of the education system, highlighted the progress achieved and identified obstacles that must be overcome in order to ensure quality education and lifelong learning opportunities for all - not only-, but also in order to respond to the aspirations of the state to achieve a competitive economy and sustainable development.

In this context, the Ministry of education and Technical Education has developed the education plan, which is a strategic plan for education and technical education for the period 2024 - 2029, it should be noted that the plan provides a set of policies and programs to activate the Egyptian education reform project from kindergarten to the third grade of general and Technical Secondary, as well as literacy and adult education over the coming years until 2030, clarifies the long-term vision of the Egyptian education reform project and sets strategic priorities, provides a roadmap for implementation, and responds to the dynamically changing economic, social and environmental contexts at the global and national levels.

The values on which the strategic plan of the Ministry of Education is based

Citizenship, belonging, participation, accountability, parity, justice, excellence, mastery, responsibility, leadership, respect for opinions and other opinions, transparency, and accountability.



The principles adopted by the strategic plan of the Ministry of Education and Technical Education:

- Planning in partnership with all Ministry entities, teachers, students and development partners.
- Consistency and integration with global, regional and national strategies.
- The student is the focus of the educational process through high-quality education in accordance with international standards.
- Achieving justice by providing gender-responsive education in remote and marginalized areas.
- Achieving sustainability and shifting towards green and smart learning and enhancing creativity and innovation.

Pre-university education systems and influential contexts

Egypt has the largest pre-university education system in the Middle East and North Africa region, and in the 2022/2023 academic year, more than 25 million students enrolled in public, private, and Al-Azhar schools in Egypt.

Article 19 of the 2014 Constitution stipulates that education is compulsory and free from the primary stage until the completion of secondary school or its equivalent. It also stipulates that government spending on pre-university education should not be less than 4% of the gross domestic product.

As a result, the government allocated a constitutional budget equal to 4% of the GDP, and the latest data indicate that the constitutional budget for the fiscal year 2020/2021 amounted to 241.6 billion pounds, or approximately 4% of the GDP for the year.

The functional budget share currently stands at 1.8%, supplemented by an additional budget of 0.8% of GDP and given expected increases in the school-age population over the next five years. Additional funding for education will be needed. To accommodate the increasing number of students while trying to increase the quality of education services within the framework of the Egyptian education reform project.





The education, teaching and technical education system consists of four administrative levels:

The Ministry of Education and Technical Education in Cairo, the education directorates at the governorate level (the directorate), the education departments at the regional level (administration), and the schools. From a legal standpoint, the 2014 Constitution is the highest regulatory framework for education and stipulates that it is the right of every citizen. At the next level, education laws and legislation regulate: public and private education, in addition to national and subnational education authorities, and at the third level come ministerial decisions. A document issued by the Ministers of Education to regulate the establishment of schools. New education, recruitment of education leaders, regulation of examinations (including timetable and procedures), introduction of new types of schools, and accreditation; To run international programs in private schools and more. Ministerial memorandums are also part of the regulatory documents issued by the Ministry of Education and Technical Education, for example central for schools to prepare school schedules and curricula that will be taught at the classroom level.

Pre-university education falls under the responsibility of the Ministry of Education and Technical Education, and includes four levels:

- Two years (kindergarten) from (4-5 years)
- Six years (primary education) from (6-11 years)
- Three years (preparatory education) from (12-14 years)
- Secondary education from (15-17 years), with options for general and technical education (3 years) and some technical education schools up to (5 years) and vocational education.

Structure of the education system in Egypt

| Secondary | | Preparatory | Primary | Pre- Primary | Level |
|--|--------------------------------|---|--|---|-----------------|
| General | | General | | Kindergarten | |
| Technical -5years / 3years | | Vocational | | | |
| | | Sports | | | |
|  | |  |  |  | Grade |
| | | | | | Theoretical age |
| | High school/talent development | Talent development for adults | Basic education certificate | Primary education certificate | Certificate |
| ← Adult literacy programs | | | | | |

The Ministry of Education and Technical Education currently runs 15 different types of schools: official Arabic schools, official language schools (formerly experimental schools), distinguished official language schools (formerly “future schools”), special education schools, national Arab schools, and national language schools. International government schools, Egyptian Nile schools, Egyptian-Japanese schools, community schools, schools for outstanding students in science, technology and mathematics (STEM), technical education schools, dual education and training schools, applied technology, private schools of various types, all of which provide education from kindergarten to the third year of secondary school. Some public schools charge fees, even if they are lower than private school fees (Ministry of Education and Technical Education, 2021). The private sector owns and manages private schools under the supervision of the Ministry of Education and Technical Education, and all of them provide education from kindergarten until the end of the year secondary school, Fees vary greatly between them, and they offer three models of education: private Arabic schools, private language schools, and private international schools.

The Ministry of Education and Technical Education is the largest organizer and provider of education and has (29,691) school buildings, including (27,361) government buildings and (2,330) private buildings. There are additional providers: the private sector (national and international), and Al-Azhar Al-Sharif (Azhari education). The latter, whose institutions are referred to as Al-Azhar Institutes, provide education for Muslim students. The Al-Azhar Education System is managed by the Al-Azhar Institutes Sector at Al-Azhar Al-Sharif, independently of the Ministry of Education and Technical Education, but under the supervision of the Egyptian Prime Minister. Al-Azhar has 9,400 Azhari schools and 6,500 private schools.

In total, there are (29,691) school buildings in Egypt, and these buildings contain (58,807) schools and more than 539,980 classrooms that can accommodate 25,062,294 students in the year 2021/2022, the vast majority of whom are enrolled in public schools: 91% for the primary stage, 93 % for preparatory school, 81% for general

secondary school, and 87% for secondary technical education (Ministry of Education and Technical Education, 2021).

Contexts affecting the education system in Egypt:

Macroeconomic context:

Egypt is a lower-middle-income country that has been under enormous economic pressure over the past decade, and its economic growth is declining and volatile. Since the start of the government's comprehensive economic and structural reform program in 2016, the macroeconomic situation has improved significantly. However, the growth rate has declined. The annual economic growth was greatly affected by the repercussions of the Covid-19 pandemic. Before the Covid-19 pandemic, the per capita GDP increased from 3.2% in 2018 to 3.3% in 2019. The Covid-19 years caused the per capita GDP to decline to 1.6% in 2020 and a further decline to 1.4% in 2021.

After the outbreak of the pandemic, unemployment reached its peak, reaching 9.6%, but it decreased to 7.6% in the third quarter of 2020. Workers with low educational attainment were the most affected, losing jobs, while the richest and most educated workers in urban areas were more capable. On working from home.

Government debt also constitutes an eye on development in all its fields, with the decline in the value of the currency being an aggravating factor that threatens the gains achieved over the past six years, which represents a strain on fiscal space, which in turn puts pressure on spending on the main human development sectors, including education.

Education in Egypt depends on government support; the education sector occupies a large proportion of the state's general budget.

Since this is the case, there is no doubt that the education system is directly affected by the state's economy. The performance of education directly affects the economic performance of the country. Studies have proven that there is a close relationship between the level of education and the performance of a particular economy, as societies with a high level of education tend to be more productive. There is general agreement among economists on the importance of education for the national economy because of its role in increasing rates of growth and economic development, as well as because of the pressure that spending on education places on countries' budgets.

In Egypt, the education sector faces many economic challenges that prevent it from providing an educational service that meets development needs in a free economy primarily governed by competition, including the following:

- The education budget is directly affected by the state's economic performance. Where (decline/decrease) in funding directed to the education sector at fixed prices; As the latest budgets are not in line with the inflation movement in the country.
- The education sector is affected by open market mechanisms: as the general economy has become directly affected by the movement of the global economy, and this has direct effects on the movement of foreign investment, the volume of cash flows directed to the state, and the availability of foreign currency or its absence, all of which negatively or positively affects the preference for an activity Or more on financing education and investing in it.
- Because education in Egypt has become mainly dependent on the economic capacity of families, the high rates of poverty among families represent one of the main challenges to the spread of education among people, and a major reason for dropouts, interruptions, and failure to complete education to the

end: where the child belongs to a poor family in which he grows up in poverty that deprives him of education and acquiring. He lacks the skill, struggles to get a job, fails, and ends up creating a poor family and the vicious circle of poverty grows.

- Related to the previous challenge is the high direct and indirect cost of education, which constitutes a major obstacle to the family's decision to invest in children's education, as well as the high cost of alternative opportunities.
- The weak salaries of teachers, their resort to private lessons, and the lack of supervision over them.
- Prevalence of the phenomenon of private lessons and the high cost of it to families is also a major economic challenge if the state wants to prevent it or limit it by compensating teachers for what they are expected to lose when it is prevented with appropriate financial incentives.

Weak participation of the private sector in financing formal government education, or implementing projects based on partnership between the public and private sectors in this regard, and in financing and sponsoring scientific research

- Weak communication channels between education and economic sectors in the country, and the subsequent economic policies in isolation from education policies and vice versa.
- The lack of legalized mechanisms to increase education resources, through community contributions such as gifts and donations, and monitoring it to ensure that it reach to those who deserve it.
- Private education expenses have increased exaggeratedly while the average family income has decreased.

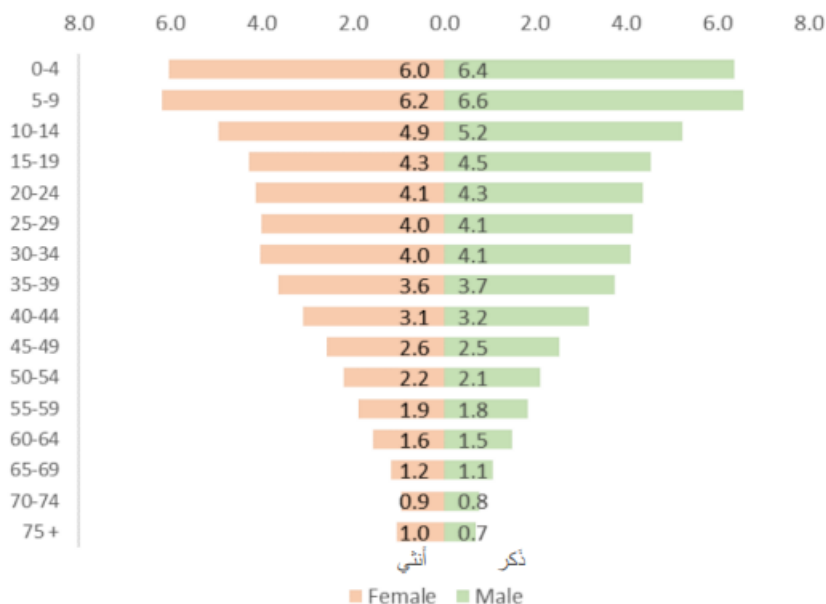
Socio-demographic context:

Egypt's youth population is about 34% under the age of 14, and 54% under the age of 25 in 2021 AD, which means that the country is in the first phase of a potential demographic dividend with an increasing working-age population and a decrease in the child dependency ratio. It's expected that it moves to the phase of late returns in the decade that begins in 2030 AD, during the period from 2015 to 2030 AD,

The youth population (15-24 years) is expected to increase by 5.5 million (33) (according to UNICEF, in 2019), despite declining fertility rates (according to United Nations Population Fund in 2019), and child survival rates have improved significantly in the recent years, with the mortality rate for children under five years of age decreasing to 27 deaths per 1,000 live births in 2014. According to Ministry of Health and Population in 2014.

The population pyramid in Egypt

Population by five year age range (millions of people)



The education system will need to provide graduates with the necessary and relevant skills and competencies required by the evolving labor market, to achieve the demographic dividend. One of the most important of these challenges is the system's ability to accommodate the increasing number of students as a result of the growth in the school-age population, which will lead to a rise in demand for School facilities, infrastructure, human and financial resources around the world at all levels of education.

According to the latest estimates, 29.7% of Egypt's population lives in cash poverty, and some Upper Egypt governorates record a higher prevalence of poverty (for example, Assiut (67) (Central Agency for Public Mobilization and Statistics 2020). Government interventions to address poverty include the "Hayah Karima" program, which supports 5,000 poor villages with improved basic services, good job opportunities, and women's empowerment, as well as "Takaful & Karama" a cash transfer program and the comprehensive health insurance system.

It's worth noting that Egypt has achieved tremendous progress in the field of maternal and child health during the past two decades. The mortality rate of children under the age of five decreased by nearly 60%, reaching 20 deaths for every 1,000 live births in 2020 AD. Progress in child survival has slowed due to the COVID-19 pandemic and remains irregular, the death rate of children under the age of five before they the age of five is 28 children per 1,000 children (According to Egyptian Household Health Survey Report 2021 AD).

The triple burden of malnutrition, undernutrition and micronutrient deficiencies and overweight - threatens the survival, growth and development of children and adolescents, especially in the poorest communities. 12.8% of children under five years of age suffer from dwarfism, while 3% suffer from low weight for height, while 11.5% suffer from being overweight, while 43% suffer from anemia, According to Egyptian Household Health Survey Report in 2021.

On the other hand, estimates indicate that 81.2% of children are exposed to some form of violent discipline at home (According to Egyptian Household Health Survey Report in 2021). Obstacles to preventing violence include: harmful sexual and social standards, limited knowledge of non-violent discipline methods, Weak community platforms for children's participation, inadequate prevention and response services, and institutionalization is the dominant form of alternative care in Egypt.

Although the prevalence of FGM has decreased, the practice of FGM remains high. The latest available estimates indicate that 66.5 percent of women and girls between the ages of 15 and 19 have undergone FGM (Egyptian Family Health Survey (2021) report). Several key mechanisms to prevent and address violence against children are now in place under government leadership, although progress is constrained by traditional obstacles and insufficient resources.

Social challenges facing the education sector:

The quality of education depends on the extent to which the society adheres to and possesses the tools to achieve it. There is no doubt that the education system is directly influenced by the general aspects of society, including its culture, educational level, health status of its citizens, and cohesion. Moreover, the performance of education directly affects shaping the characteristics of its society, given its significant impact on it.

In Egypt, the education sector faces many social challenges that hinder the provision of an educational service that meets the development needs in a free-market economy governed primarily by competition. Some of these challenges include:

- Weak societal trust in the outcomes of education in its various forms, which increases the lack of interest in participating in the implementation of the strategy. This challenge leads to neglecting the issue of education, weakening the process of family and community involvement in supporting education and addressing its issues through study, scientific research, and finding practical solutions to help solve its problems. It even extends to preventing children from continuing their education in schools, resorting to child labor, and the spread of child labor despite its prohibition by the law.
- High rates of dropout, failure, absence, and cheating in the primary education stage, and these challenges significantly affect the quality of education outcomes at this stage and society in general. All of these factors contribute to the creation of an environment lacking in the knowledge, skills, and competencies required for self-development, as well as for the development of one's family and community, and they prevent individuals from pursuing lifelong learning.
- The problem of private lessons has spread, and the phenomenon of violence in Egyptian schools has become widespread from the primary to the secondary education stage, with its tendency to increase year after year. This phenomenon leads to dropout rates, lowers the quality of the educational process, depletes public and private resources, and leads to serious social consequences such as addiction, crime, unemployment, and others.
- Lack of attention to the issue of citizenship in the manner required in education at its various stages.
- Lack of attention to people with special needs.
- The population increase (the overpopulation in Egypt) and its impact on various development programs, especially education reform programs: all the educational facilities provided by the government do not enable the sector to accommodate this increase.
- The cultural heritage of some local communities in educating children, especially females.
- The level of family education and its direct impact on the decision to educate children; educational literature indicates that the higher the level of family education, the more likely they are to prioritize their children's education in schools, and vice versa.

The level of its education is associated with the continuation of children's education until the end of its stages, and also the enrollment of children in early childhood education is directly influenced by the level of education of parents.

- The educational process is also affected by the level of illiteracy in the country; the higher the illiteracy rate, the more there are problems with the formal education system, as education in developing countries depends mainly on family support for children at home to complete their duties and recall their lessons as a kind of support for them.
- The marginalization (of some local communities, especially the Bedouin) of women, and its negative effects on society, especially the negative impact on the level of girls ' education, their continuation in it, and in obtaining their rights, including the right to education, and their effective participation in various aspects of life.
- The increase in the number of refugees arriving at Egypt, and its impact on availability, quality, and efficiency of system management.
- The problems of smoking and drugs are among the problems of the modern era, and the most dangerous to Egyptian society. These two problems jointly destroy generations' health, and they also destroy them financially and morally. They directly exhaust both families and the state, and they directly lead to the impoverishment of people, and the weakening of their productivity and concentration in their education and work, etc....
- - The low value of education in the opinion of people and society, and this is the core of the issue. Previously, Egyptian families were very keen on educating their children, as they were willing to give up her most precious possessions to educate their children. This was due to their firm conviction that they would receive the return from this in the future, but today the situation is completely different. There is an eagerness for children to leave school, be absent from it, and succeed without effort even in the best of circumstances, and this is an issue that must be dealt with carefully and smartly.

Security and climate contexts:

Geopolitical tensions since early 2022 AD have revealed the fragility of the global supplies on which food security depends in Egypt, as it is the largest importer of grains in the world, and among the ten largest importers of sunflower oil in the world. Egypt is highly vulnerable to suffering from rising prices and the accompanying pressure on national and household budgets. Education is often an easy target for cost reductions when resources are limited.

Egypt's dependence on the Nile River to provide drinking water and water for agriculture, industry, and power generation makes the country highly vulnerable to climate change. Climate change and other environmental hazards threaten the health and well-being of children, especially in poor communities. The new National Climate Change Strategy is expected to put climate change at the top of the policy agenda. Egypt's COP 27 presidency in November 2022 shows the increasing risks of rapid climate change and increasing water scarcity. Egypt has been categorized as "highly vulnerable" to climate change on the Notre Dame Global Initiative Index. As the national water supply depends solely on the Nile River, water scarcity is a major and growing issue, exacerbated by climate change and other external factors, resulting in UNICEF's "high" rating on the Climate Risk Index for Children. In relation to education, Egypt has documented - among its adaptation actions - the urgent need to integrate climate change-related content into education curricula. Risks to education include potential damage to infrastructure as a result of extreme weather events in the NDCs as outlined in Egypt's first update to the Paris Agreement's NDCs (According to UNCC 2022).

Environmental Challenges Facing the Education Sector:

Among its adaptation actions, Egypt has documented the urgent need to integrate climate change-related content into education curricula. Risks to education include potential damage to infrastructure as a result of extreme weather events in the NDCs, as outlined in Egypt's first update to the Paris Agreement's NDCs (UNCC, 2022).

Education systems are generally influenced by the prevailing ecosystem in the society that sustains them. The concept of the environment is not limited to the natural environment, but extends to include the environment in all its forms: "institutional, political, financial, social, etc." In Egypt, the education sector faces many natural environmental challenges that prevent it from providing an educational service that meets the needs of development in a free economy governed by competition in the first place, including the following:

- Climate change, global warming, and the accompanying change in society's consumption pattern, especially the increased reliance on electrical energy sources to operate air-conditioning and cooling devices. The reason for this change is what Egypt has been exposed to during the last two decades of the high bill for importing petroleum materials to operate power plants, car fuel, and so on. This warming affects the change in the volume and quality of agricultural activity, either by disappearing crops or by the appearance of others, and the consequent increase in food prices. This leads to a widening deficit in the balance of payments, increasing pressure on the state budget, affecting education resources, and shaping the interventions needed to address all of these issues.
- The shortage of water resources over the past years, and what threatens the country on the horizon as a result of Ethiopia's construction of what is known as the Renaissance Dam, has negative future effects on the state of agriculture in Egypt, drinking water, and the wheel of development in general. Education is directly affected by this aspect, as agriculture is affected in terms of the possibility of changing the quality of seasonal crops, especially strategic crops such as rice, and the consequent expansion of its imports: To fill the gap.

Consequently, the value of the deficit in the balance of payments also widened, and this may necessitate changing curricula to deal with the issue by increasing citizens' awareness of rationalizing consumption, or developing agricultural technical education curricula, and so on.

The problem of environmental pollution to which the country is exposed, represented by water pollution, the air resulting from open burning, and pollution resulting from the problem of garbage, sewage, lead foundries, chemical factories, etc., which have a direct negative impact on the health status of citizens. The health condition of learners affects their academic performance in school, and the completion of their assigned role during their years of education. A healthy learner has a higher probability of outstanding performance than a sick learner. This also applies to those working in the education sector, and the general health condition of people directly affects education.

- Lack of environmental awareness among people, and this aspect is considered one of the biggest challenges facing education in Egypt. Lack of environmental awareness, or even the absence of environmental awareness among people, leads to a sharp exacerbation of previous problems, and at a faster pace as a result of the sharp population increase, leading to what resembles a comprehensive attack on the natural environment. This is a major and main challenge facing the education institution: to modify its reality and avoid its problems that threaten society and all its institutions.

General framework of the strategic plan

The general framework of the strategic plan was built on a scientific approach, taking into account the following:

- Review previous strategic plans.
- The international 2030 AD Sustainable Development Plan.
- Africa Plan 2063 AD.
- Constitution of Egypt 2014 AD
- The National Agenda Plan for Sustainable Development 2030 AD (Updated)
- Government work program (Misr Tantalek)

The development of the education and technical education plan is strongly based on the country's national and sectoral policy frameworks; based on the Egyptian education reform project and guided by the strategic agenda of Egypt 2023 AD.

To achieve this, the Ministry of Education and Technical Education developed the Strategic Plan for Pre-University Education Reform 2024-2029 AD based on the achievements and lessons learned from the implementation of the previous National Strategic Plan for Education. The strategic plan 2024-2029 AD affirms the Ministry's commitment to ensure that every child has equal access to quality education in accordance with international standards, which will ultimately allow every child to contribute effectively to the social and economic development of Egypt and to compete regionally and globally. The strategic plan included four strategic policies to guide the reform process around which the education plan is centered: accommodating all children from the ages of 5 to 18 in school, (which relates to increasing access, participation, equity, and

inclusion), and adopting high-quality international curricula in mathematics, science, language, and geography, (which relates to the quality of learning outcomes), instilling the value of continuous learning in students (in pursuit of lifelong learning), and enabling students to effectively use technology to access knowledge (related to digital transformation and innovation).

In short, the new Egyptian education reform project aims to achieve a comprehensive goal of increasing access and participation in public education, improving the quality and comprehensiveness of its provision, and integrating and improving the use of information and communications technology in Egyptian classrooms. The Egyptian education reform project aims to contribute to the comprehensive strategic goals of Egypt's Vision 2030 AD by benefiting from the new education and technical education plan and achieving integration with the government's work program.

National Sustainable Development Plan: (Egypt's Vision 2030 AD):

Sustainable development strategy: Egypt's Vision 2030 AD (2016 AD) represents an important shift in Egypt's socio-economic and environmental development, which sets an ambitious path to achieve national prosperity in the future.

Egypt's Vision 2030 is considered a national development plan and an expression of the government's commitment to the 2030 AD International Sustainable Development Plan set by the United Nations and achieving its goals, especially its fourthly goal on education {ensuring equitable and comprehensive quality education for all and promoting lifelong learning opportunities}, in addition to the African Union's Agenda 2063 AD: The Africa we want, along with economic development and national competitiveness.

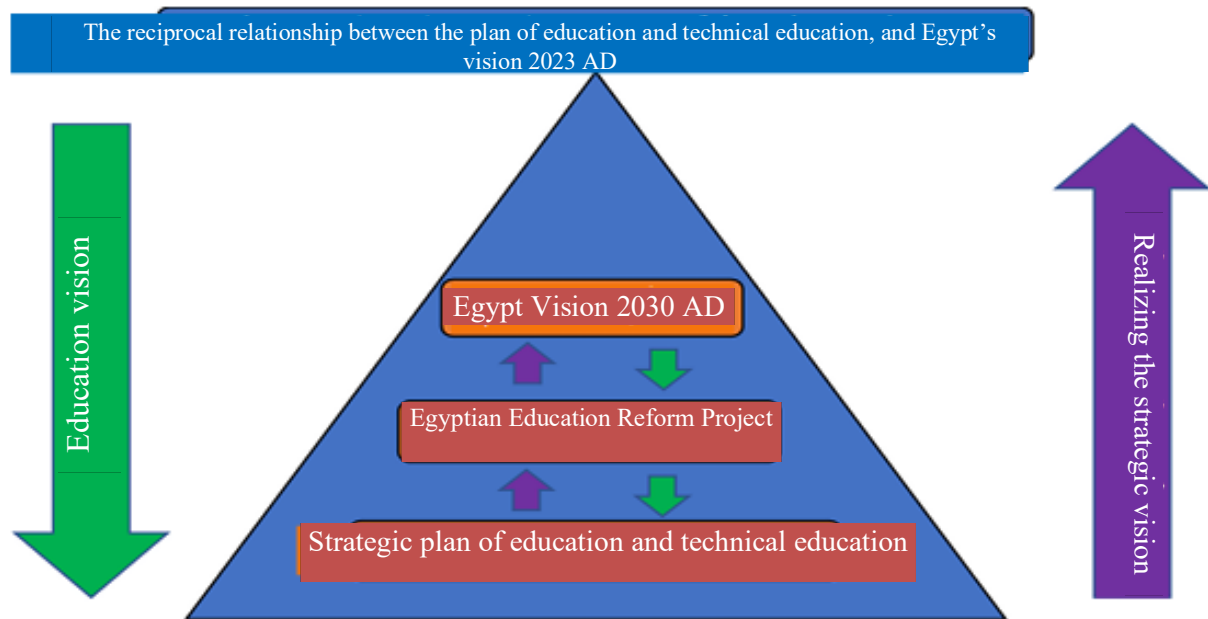
Human capital development is also a key component of the vision, and includes three limited priority areas: health services, education and social protection.



The education component is based on a core set of reforms that aim to improve learning outcomes and workplace skills for graduates of the reformed education system. These reforms, in turn, are expected to increase economic productivity and competitiveness in global markets; to support sustainable economic growth and social development in Egypt.

The strategic vision for education in Egypt until 2030 AD aims to:

“Providing high-quality education and training available to all without discrimination within the framework of an efficient, equitable and sustainable institutional system, and based on a learner and trainee who is able to think and proficient artistically, technically and technologically: education contributes to building the integrated personality and unleashing its potential to the fullest extent. The citizen is self-proud, enlightened, creative, responsible, and competitive. He accepts diversity and difference, is proud of his country’s history, and is eager to build his future. He accepts pluralism, respects difference, is proud of his country’s history, is passionate about building his future, and is able to deal competitively with regional and global entities.”



The Ministry of Education and Technical Education, through the development and implementation of the Education and Technical Education Plan, follows up on improving existing education and activating the new Egyptian (Technical and Vocational Education and Training Reform) project. The Education Plan provides a roadmap to address the urgent challenges identified in the plan through specific goals, strategic priorities, and a clear vision for reform.

The education plan aims to address the pillars of reform from the perspective of the system as a whole, such as:

- ❖ Ensuring coherence between the Ministry’s plan and the national agenda for Egypt’s Vision 2030 AD.
- ❖ Keeping pace with modern technological developments in education and learning.
- ❖ Enhancing the Ministry’s ability to withstand and adapt to challenges and crises.
- ❖ Emphasizing the interconnection of education with the three dimensions of sustainable development (economic, social, and environmental).
- ❖ Expanding the scope of recruitment of new teachers while ensuring equitable distribution of teachers, especially in certain specializations and in certain areas.
- ❖ Establishing continuous professional development frameworks for teachers and educational leaders.
- ❖ Efficiency and effectiveness of the education system in view of resource constraints.
- ❖ The governance, management and accountability of the system is crucial to its success.

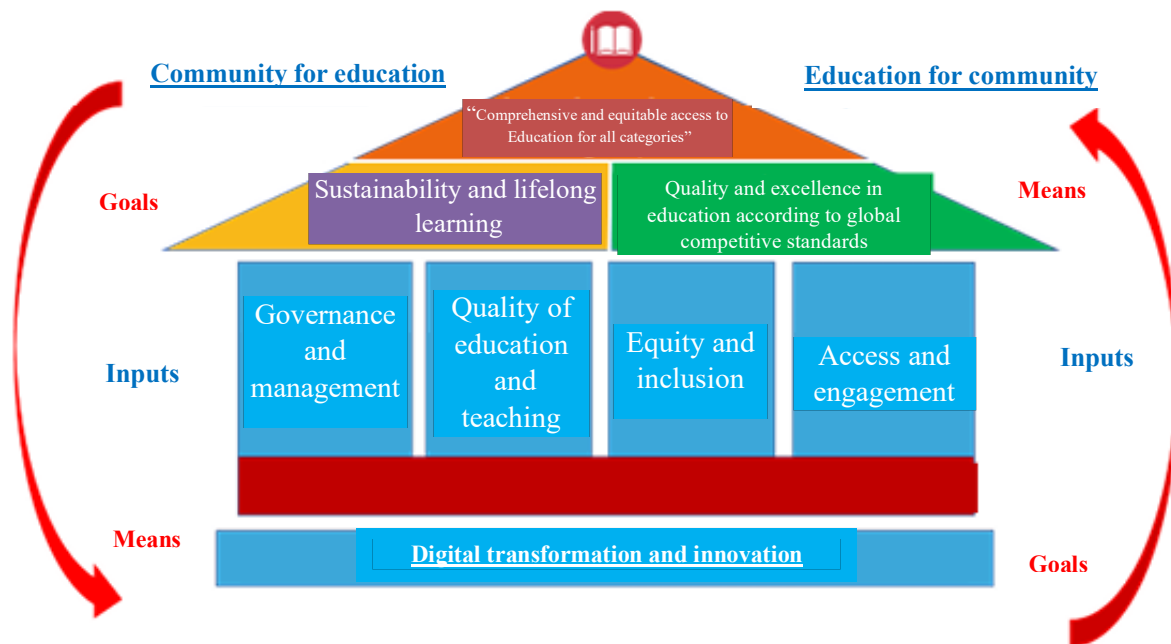
Directions of change for the education and technical education plan:

The vision of the Ministry of Education and Technical Education came from the vision of education in the National Agenda for Sustainable Development: Egypt's Vision 2030, which is:

Education and training based on quality and excellence, based on sustainability and equitable access to prepare a learner capable of creativity, innovation, and global competitiveness.

The vision of the Ministry of Education and Technical Education is to provide all Egyptians with access to good opportunities in education and training to flourish in the twenty-first century for individuals and the nation through basic axes to implement the goals, believing that the success of the educational process in every time and place is fundamentally linked to the fact that “the human being is the center of development”. The success of the vision must include “achieving equitable access,” and the need for education to be conducted with “quality and excellence” to ensure that the goals lead to “achieving sustainability”.

The challenges addressed by the Education Plan, as well as the policy priorities to achieve its vision, revolve around five policy areas: access and participation, equity and inclusion, quality of learning and teaching, system governance and management, digital transformation, and innovation, in line with the immediate reform focus of the Ministry of Education and Technical Education and the main policies described above.



A diagram showing the directions of change for the education and technical education plan

The basis of the plan is based on benefiting from digital transformation and innovation for economic and social development, and this is reflected in Egypt's Vision 2030, which emphasizes that the digital transformation of individuals and governments is one of the main enablers; to promote the development of all social and economic fields.

The diagram shows the five main inputs and policy priorities that the Ministry of Education and Technical Education will benefit from in order to achieve the three axes of educational development (comprehensive and

equitable access, achieving quality and excellence in education in accordance with international standards, sustainability, and lifelong learning).

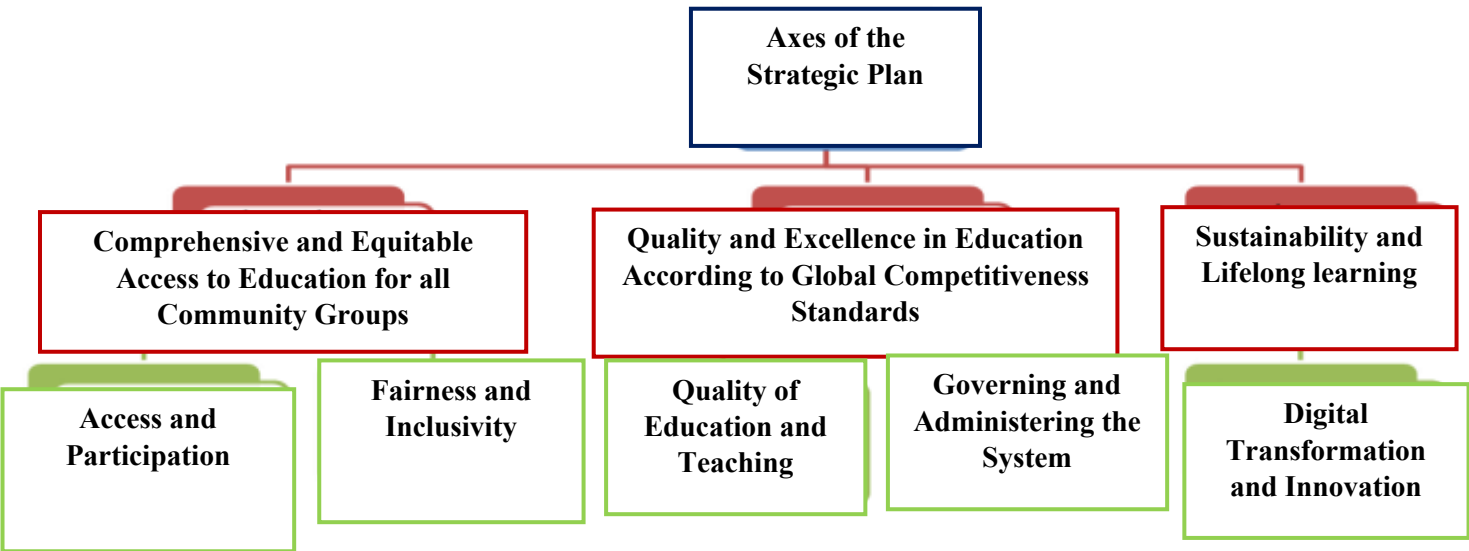
The foundations of change suggest that if the stimulation of digital transformation and innovation can be expanded and if access and participation are expanded, the quality of learning will be improved, equity and inclusion will be ensured, governance and management, including Finance, will be strengthened and, consequently, learning outcomes will be enhanced.

Axes and priorities of the strategic plan:

At the level of education and training, which is subject to the authority of the Ministry of Education and Technical Education, and to achieve the goals of the Egyptian education reform project, three axes have been identified: (1) comprehensive and equitable access. (2) Quality and excellence. (3) Sustainability and lifelong learning, and in line with the results of the analysis of education and in line with the framework of the foundations of change, five education policy priorities have been identified: (1) Access and participation. (2) Quality of learning and teaching. (3) Equity and inclusion. (4) Governance and management. (5) Digital transformation and innovation.

In recognition of the dual (digital and green) transformations that society is undergoing and their potential impacts on education, we outline the education plan and the measures taken to achieve digital transformation and green education. In respect to the green education, we have provided the UNESCO’s “Green Education Partnership” with the required resources in order to improve the education and the dissemination of many operational programs across educational levels and policy pillars, for example; integrating climate literacy into teachers training before and during their service, issuing accreditation for green schools, developing curricula in accordance with the climate and environment, engaging the society in this process through integrating climate literacy into lifelong learning, and engaging all the interested parties including the private sector in respect to making the educational initiatives climate/ environment friendly.

Policies and procedures mentioned in this chapter aim at becoming the systematic building blocks engaged by the Ministry of Education and Technical Education in order to create the systematic changes to achieve Egypt Vision 2030 and the vision of the Egyptian Education Reform Project.



The First Axis: Comprehensive and Equitable Access to Education for all Community Groups:

This is achieved by making education accessible to all and ensuring justice by providing education in remote, marginalized, and responsive to social diversity (children, women, and people with disabilities) areas, whether through formal or non-formal education.

This axis aims at reducing the gender gap, providing and achieving empowerment and equal opportunities, especially for the most vulnerable groups (women, children, and people with disabilities), and also reducing the disparities among social classes and victims of social disintegration, and finally enhancing education accessibility (both spatially and locally) to bridge gaps in various geographical areas.

1- Priority (1): Access and Participation:

Improving the rates of participation at all educational levels through addressing the challenges arising from the difference between supply and demand which block access to education and taking part in it.

Constructing and Equipping Schools: In terms of supply, the Ministry of Education and Technical Education will continue to construct schools, to which we are in a real need, in order to improve the physical availability of school infrastructure and establish safe schools capable of addressing climate changes, there will be an expansion of community education and non-formal education to provide additional educational spaces and opportunities, especially in border provinces.

Appointment and Distribution of Teachers: The shortage of teachers, that was specified as one of the key challenges in all the educational levels all over the country, is being addressed by ensuring the implement of the government plan, that aims at appointing 150 thousand teachers through the upcoming 5 years as a priority. In the very first year of the implementation of this plan the primary focus will be directed towards the lower levels of education, deprived areas, and subjects of science, technology, and mathematics in line with the directions of the Egyptian Education Reform Project.

Raising Awareness in Respect to The Importance of Education: In terms of demand, the Ministry of Education and Technical Education will continue to raise awareness among community members in order to prioritize education. The primary focus will be directed towards education in the early years of a child's life, including reframing the image of technical education as a positive career option, especially for girls.

Overcoming Financial Obstacles in Education: The Ministry of Education and Technical Education continues its efforts aiming at overcoming financial and social obstacles in education using the suitable means such as financial support, waiving school fees, and providing students with the school uniform and school meals with priority given to the neediest groups.

2- Priority (2): Fairness and Inclusivity:

Enhancing policies and practices to eliminate discrimination in education and remove barriers that hinder it, ensuring the integration of all children, especially the disadvantaged, in quality and inclusive education, and benefiting from it.

The Ministry of Education and Technical Education's plan will address the interconnected dimensions of multiple exclusions often as follows:

Geographical Marginalization: The Ministry of Education and Technical Education's plan will prioritize the investments in the neediest areas such as rural areas, especially border provinces and Upper Egypt in order to improve access to education and education quality by establishing additional schools and distributing teachers more fairly. This will be done in partnership with local communities and the private sector in order to achieve early childhood education.

Student with Disabilities: The Ministry of Education and Technical Education's plan includes insuring comprehensive curriculum dissemination and providing comprehensive school infrastructure and educational environment. Furthermore, awareness campaigns and capacity-building programs will be launched to integrate students with mild disabilities into mainstream and technical schools.

Income Inequality: The Ministry of Education and Technical Education's plan will put primary political procedures to reduce the financial and social obstacles in education, so that children and youth from low-income families can enroll in schools and stay in them. And also, by raising awareness that the widespread phenomenon of private tutoring is a negative factor that affects students from low-income families' access to education. The issues related to private tutoring will be addressed from the perspectives of fairness, quality, and management.

Gender Equality: The Ministry of Education and Technical Education is obligated to continue empowering girls and women through education to achieve gender equality in all fields by 2030 ED as mentioned in Egypt Vision 2030. This will include establishing schools for girls in order provinces (Upper Egypt), encouraging girls to study science, technology, engineering, and mathematics subjects, and improving the schools infrastructure to provide a healthy, inclusive, and gender-sensitive learning environment. In addition to establishing community education centers to reduce youth and adult illiteracy rates. At the same time the Ministry of Education and Technical education's plan will include the risks that boys are facing, especially in urban areas.

The Second Axis: Quality and Excellence in Education According to Global Competitiveness Standards:

Improving the quality of education in accordance with the global standards of quality and excellence (curriculum development - developing assessment systems and mechanisms - professional development for teachers and educational leaders - ensuring the quality of educational outcomes - ensuring institutional excellence).

3- Priority (3): Quality of Teaching and Learning:

Providing all learners with strong foundational education and the necessary skills, competencies, and values that enable them to engage in learning just for learning (lifelong learning), critical and creative thinking, and responsible citizenship, fostering their flourishing in the 21st century. This includes nurturing global competence with a particular focus on Egyptian citizenship and water security.

Curriculum Modification and Exams Reform: The Ministry of Education and Technical education will continue the transitioning from rote learning to competency-based education by introducing reforms in curriculum, teaching methods, and assessment procedures within the framework of the Egyptian (Education Reform and Technical Education Project). Teaching and learning materials and assessments will be updated in accordance with the revised curriculum.

Training Teachers before and during their Service: A comprehensive system will be developed for continuous professional development of teachers, school principals, and administrators. Teacher pre-service training will be better aligned with the Egyptian Education Reform and Technical Education Project to improve the learning experience and outcomes, especially in foundational learning. This will be achieved by enhancing coordination with the Ministry of Higher Education.

Improving Learning Environments: The learning environment is being improved by reducing the number of students in classrooms, reducing the number of classrooms in the double-shift schools, transforming teaching practices, taking advantage of advanced technologies, and promoting innovation.

4- Priority (4): Governing and Administering:

Enhancing the transparency, flexibility, financial sustainability, environmental sustainability, efficiency, and effectiveness of the system.

Egypt is totally aware of the importance of improving the governing and administering of the educational sector. The COVID-19 pandemic served as another call to establish a more flexible and sustainable education sector. Here are some of its critical areas:

Teacher Management: A comprehensive policy in respect to the teachers will be implemented (it includes recruitment, deployment, professional development, working conditions, salaries, bonuses, standards, and accountability). A system to manage the profession of the digital teacher will be implemented, such as a platform for continuous professional development for teachers and their associated learning management system, this platform will also be used for peer learning among teachers through streaming exemplary lessons and video conferences. Additionally, this system will be integrated into the human resources management system.

Funding: The Ministry of Education and Technical education will continue its efforts to increase financial allocations for pre-university education to achieve the commitment outlined in Article 19 of the Constitution (4% of the gross domestic product). At the same time, improving fairness and efficiency in public funding through: (1) Expanding the roles and responsibilities of schools and governorates in planning and managing public education resources. (2) Updating funding mechanisms. (3) Enhancing the use of financial data for planning and management. (4) Strengthening planning and budgeting functions at the ministry level. The process of budgeting for learning will be transformed into a formula-based funding to enhance overall efficiency.

Data and evidence: During the implementation period of the education plan, the Ministry of Education and Technical Education will work to develop systems to manage its education data. It aims to establish an integrated data management system that links existing systems, and the use of data in making evidence-based decisions will be enhanced and supported at all levels of education administration.

Decentralization of key education tasks: The Ministry of Education and Technical Education will ensure gradual decentralization of tasks related to planning, administration, and financial authority with institutional strengthening at all levels, including piloting appropriate models for decentralized planning and management. Gradual decentralization and delegation of tasks will bring the decision-making process closer to Beneficiaries and ensuring the implementation of governance with greater accountability and coordination and directing a comprehensive view of the system. Strengthening and empowering school leadership will be a top priority in this regard.

Partnerships: Cooperation and coordination with development partners, the private sector, civil society organizations, as well as local communities must be strengthened to improve access to and quality of education, and this will be facilitated by creating a favorable political environment for the participation of partners and raising the awareness of key stakeholders about the importance of investing in education.

The third axis: Sustainability and lifelong learning: “Achieving sustainability” in accordance with the National Sustainable Development Plan: Egypt’s Vision 2030, and its three dimensions (economic, social and environmental), the shift towards green and smart education, and providing lifelong learning opportunities for everyone.

5- Priority (5) digital transformation and innovation:

Digital transformation and innovation will be the driving force behind achieving the priorities, and it is expected that during the implementation period of the education, teaching and technical education plan, the number of students will increase by 29,3 % in kindergarten, 1,7% in primary education, and 14,3% in preparatory education. And 48,6% in secondary education (general and technical), and in addition to the financial constraints that the education sector is already facing, “business as usual” will not help achieve the

vision of the education, education and technical education plan; therefore, education must be transformed through digital technology and innovation. For example, a bold approach can be taken to reduce class sizes and improve the learning process by offering blended learning. Technologies such as educational programs presented on television and radio can help deliver learning to those who are difficult to reach, and the costs of teaching materials can be improved (learning through Use of digital platforms).

The strategic plan of the Ministry of Education and Technical Education for the period 2024-3029 A.D. During the implementation period of the plan for education and technical education, the Ministry of Education and Technical Education will work on enhancing the digital infrastructure by expanding the scope of communication between school and home, updating school equipment and classrooms, and providing devices for teachers and students.

Smart green education: Enhancing the resilience of the education sector in facing climate change and its contribution to environmental sustainability and green transformation, the Ministry of Education and Technical Education will incorporate climate education into pre-service and in-service teacher training, issue accreditation for green schools, and develop curricula that are responsive to climate and the environment, and also integrate development and community engagement through the inclusion of climate education in lifelong learning.

The relationship between the axes and the priority areas of the education plan and other national strategic programs:

Deploying and implementing the priorities of the education plan requires strong coordination and cooperation in design, implementation, monitoring, and evaluation, in addition to collaboration with other ministries, including those responsible for education and training, as well as with other local stakeholders and development partners. The axes and policy priorities have been designed to align perfectly with the objectives and strategic programs of the Egyptian government (Egypt Vision 2030) and the strategic plan of the Ministry of Education and Technical Education. However, their effective and efficient implementation requires further inter-sectoral cooperation, vertical collaboration, and joint actions. The table below illustrates the relationship of the priorities with these strategic documents.

Aligning the axes and priorities of the (education and technical education plan) with the national agenda for sustainable development, Egypt Vision 2030, and the government action program (Misr Tantalek).

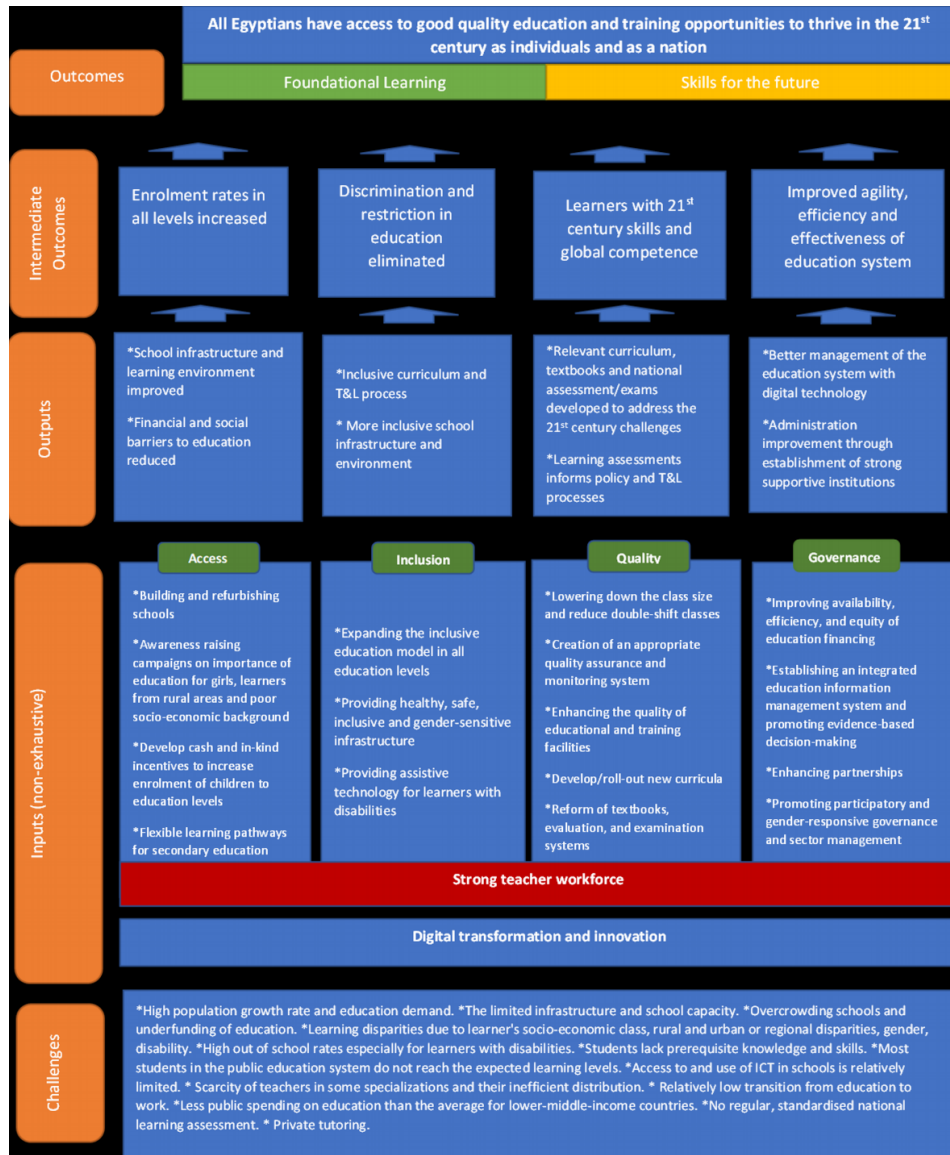
Strategic Objective: For the state's sustainable development plan - Egypt Vision 2030 - to enhance the quality of life of the Egyptian citizen and improve his standard of living.

General Objective: To enhance the education system (which the Ministry of Education strives to achieve)

| Axes | Priorities | Strategic Objectives of the Government's Action Plan | (Sub-programs of the Ministry's Main Government Action Plan) | Implementation Responsibility |
|---|--------------------------------------|---|--|--|
| The first axis: Comprehensive and Equitable Access to Education for all Community Groups | A) Access and Participation | ➤ Building the Egyptian citizen - The Second Strategic Objective | 1) Providing Education for All Without Discrimination (Formal/Non-formal) | <ul style="list-style-type: none"> - The General Office (General/Technical) - General Authority for Educational Buildings - The General Authority for Literacy and Adult Education - Regional Center for Adult Education - Fund for supporting and financing educational projects - Educational directorates - Teachers Welfare Fund - Students' insurance |
| | | | 2) Developing technical education | |
| | B) Fairness and inclusivity | ➤ Economic Development and Enhancing Government Performance Efficiency - The third Strategic Objective ➤ Improving the standard of living of the Egyptian people - The fifth Strategic Objective | 3) Developing applied technical education | |
| | | | 4) Expanding the financing base in partnership with regional and international sovereign funds and the Sovereign Fund of Egypt | |
| | | | 5) Activating the untapped state assets and providing the necessary resources. | |
| | | | 6) Promoting social responsibility with the private sector | |
| | | | 7) Social Welfare | |
| | | | 8) Activating women's economic and social participation | |
| | | | 9) Supporting the activities of productive families | |
| | | | 10) Local development in Upper Egypt | |
| | | | 11) Integrated development in the Sinai Peninsula | |
| The second axis: Quality and excellence in education according to global competitive standards | C) Quality of education and teaching | ➤ Building the Egyptian citizen - The Second Strategic Objective | 12) Developing the pre-university education system | <ul style="list-style-type: none"> - The General Office (General/Technical) - Professional Academy for Teachers - National Center for Examinations and Educational Evaluation - National Center for Educational Research and Development - Educational directorates |
| | | | 13) Competitiveness of education systems and outcomes | |
| | | | 14) Improving the quality of the research and technological system | |
| | | | 15) Enhancing the role of scientific research in improving the business environment | |
| | D) Governance and Management | ➤ Improving employment levels - The fourth Strategic Objective | 16) Institutional development program | |
| | | | 17) Building and developing the capabilities of employees | |

| | | | | |
|--|---|---|--|--|
| | | | in the state's administrative apparatus | |
| The third axis: Sustainability and lifelong learning | E) Digital transformation, innovation and green education | ➤ Building the Egyptian citizen - The Second Strategic Objective | 18) Promoting the culture of science and innovation | - The General Office (General/Technical) - Educational directorates |
| | | | 19) 6- Controlling and treating addiction and drug abuse | |
| | | | 20) Promoting a culture of freelancing and entrepreneurship | |
| | | | 21) Industrial training | |
| | | ➤ Improving employment levels - The fourth Strategic Objective | 22) Promoting citizenship values and responsibility among youth | |
| | | | 23) The urgent plan for rationalizing and managing financial needs | |
| | | | 24) Awareness of water security issues | |
| | | ➤ Maintaining national security and Egypt's foreign policies - The first Strategic Objective | | |

Details of the foundations of change



The government's action programs that the ministry is working to achieve

The first axis: Comprehensive and equitable access to education for all community groups and the programs being implemented to achieve it.

- 1- Providing Education for All Without Discrimination (Formal/Non-formal)
- 2- Developing technical education
- 3- Developing applied technical education
- 4- Activating the untapped state assets and providing the necessary resources
- 5- Promoting social responsibility with the private sector
- 6- Activating women's economic and social participation
- 7- Supporting the activities of productive families
- 8- Social Welfare
- 9- Local development in Upper Egypt
- 10- Integrated development in the Sinai Peninsula
- 11- Expanding the financing base in partnership with regional and international sovereign funds and the Sovereign Fund of Egypt

The second axis: The quality and excellence in education according to global competitive standards and the programs being implemented to achieve it.


- 1- Developing the pre-university education system
- 2- Institutional development program
- 3- Competitiveness of education systems and outcomes
- 4- Improving the quality of the research and technological system
- 5- Enhancing the role of scientific research in improving the business environment
- 6- Building and developing the capabilities of employees in the state's administrative apparatus


The third axis: Sustainability and lifelong learning, and the programs being implemented to achieve it.

- 1- Promoting the culture of science and innovation
- 2- Industrial training
- 3- Promoting a culture of freelancing and entrepreneurship
- 4- Promoting citizenship values and responsibility among youth
- 5- The urgent plan for rationalizing and managing financial needs
- 6- Controlling and treating addiction and drug abuse
- 7- Awareness of water security issues

Curriculum development according to the new education system:

The Central Curriculum Administration prepares curriculum frameworks in accordance with Egypt's education reform system starting from the stage Kindergartens up to the sixth grade of primary school are based on three basic pillars (life skills, values, issues and challenges), where sustainable development dimensions have been incorporated into the 70% curriculum development process.

| | | | | | | | | |
|-----------------------------|--------|-------------------|------------------------|---|-----------------------------|-----------------|-------------|-----------------|
| Coexistence skills | | | | 1- Life skills (14 skills). | professional skills | | | |
| participation | empaty | Respect diversity | | | cooperation | decision-making | negotiation | productivity |
| Trust in others | | | | | Respecting Others' Opinions | | | |
| Knowing the roles | | | | | | | | |
| Persuasion | | | | | | | | |
| Forgiving others | | | | | | | | |
| respecting others | | | Determine the position | | | | | |
| Accepting the other opinion | | | Defining the problem | | | | | |
| Self-skills | | | | | goal Setting | | | |
| Resilience | reach | Accounting | self management | | scientific skills | | | |
| Crisis Management | | | |  | Critical thinking | | creativity | Problem Solving |
| Self-expression | | | | | Formulating questions | | | |
| Fulfilling obligations | | | | | Flexibility | | | |
| Self-control | | | | | Data collection | | | |
| | | | | | Propose solutions | | | |
| | | | | Implement solutions | | | | |
| | | | | Problem analysis | | | | |

| | | | | | | | | |
|-----------------------|---------------|------------------------------------|----------|---|-------------------|----------------------------|-------------------------------------|-------------|
| Values of coexistence | | | | <div>2- Value</div>  | Work values | | | |
| Respect | participation | Tolerance and acceptance of others | peaceful | | Perfection | Transparency and integrity | perseverance | cooperation |
| self-worth | | | | | Scientific values | | | |
| autonomy | mercy | love | dream | | honesty | Curiosity | Appreciating science and scientists | Objectivity |

| | | | | | | | | |
|------------------------------|-------------------------|--------------------|---------------------|---------------------------------|------------------------------------|---------------------------------|--------------------------------|---|
| Globalization issues | | | | 3- Global issues and challenges | Discrimination issues | | | |
| Cultural communication | Technological awareness | leading businesses | Digital citizenship | | Religious discrimination | Discrimination against children | Discrimination against women | Discrimination against people with disabilities |
| Health and population issues | | | | | Citizenship issues | | | |
| Overpopulation | //illegible// | Therapeutic health | Preventive health | | Loyalty and belonging | National Unity | Awareness of rights and duties | Legal awareness |
| | | | | | Environment and development issues | | | |
| | | | | | Environmental pollution | Environmental responsibility | sustainable development | Community participation |
| | | | | | | | | |

| | | | | | | | | |
|--|--|--|--|--|--|--|--|--|
| | | | | | | | | |
|--|--|--|--|--|--|--|--|--|

Issues and challenges include several key themes related to society and the environment at the local and international levels, including (environmental and development issues that encompass environmental pollution, environmental responsibility, sustainable development and community participation).

It is one of the issues most relevant to the concept of green technology, and the curriculum addresses such issues through the learning outcome of subjects in all kind of subjects.

First: Then develop the curricula by preparing educational materials for the first grades from kindergarten to the sixth grade of primary school for all subjects, including textbooks and teacher guides in light of the curriculum frameworks for the first grades. Which was prepared in accordance with the Egyptian Education Reform Project. The physical, health, and artistic education teacher’s guide for the first grades was also prepared according to the new frameworks, and the English language teacher’s guide for the third year of middle school and the third year of secondary school was also prepared. Awareness booklets on the dangers of addiction and smoking were completed for the primary stage. The Second Foreign Language Curriculum Framework for Grades 1 to 3 Secondary was developed under the Curriculum Development Project, the translation of Science, Mathematics and ICT books was revised, the Study Guide was prepared for all subjects of secondary school, the harmonization of curriculum books (visual disability), and the adaptation of teacher manuals for integration students.

The subjects of science and mathematics have also been reviewed in their branches for the secondary stage and the subjects have been reviewed

(Community-primary education)

Second: Reform, review and modification of digital teaching materials (DLOs) provided by a number of companies in subjects: mathematics, science, Arabic language, social studies and philosophy, history and geography, English language for classes from kindergarten, up to secondary third.

Strategic Programs for the Plan of Education and Technical Education and How to Apply Them at Different Stages of Education

This part of the plan contains an overview of the current context, then a description of the organizational challenges within the four priorities of education and technical education followed by the expected results of the plan, ending with a matrix showing the relationship between the priorities, objectives and operational programmes, and each programme contributing to the achievement of the overall objective

The sub-objectives of the plan, hence the Egyptian education reform project and Egypt's Vision 2030. To operationalize the strategic vision, the four areas of the Education and Technical Education Plan's policy integrate access and participation, quality of learning and teaching, equity and inclusion, governance and administration - through (seven) components: (1) pre-primary education (2) and primary education (3) preparatory education. and (4) secondary education. (5) and subsectors of community education (6) - special education. and (7) adult literacy programmes.

Firstly Pre-primary education

The Government recognizes kindergarten education as a critical stage for school readiness, the formation of the child's personality and development, and lifelong learning. In the Government's view, early childhood investment provides a good return on public investment in addition to improving the life chances of the child. Attending high-quality kindergarten programs is coupled with high school readiness, basic skills acquisition, better educational outcomes, and learning completion, as well as improved equity outcomes among the most disadvantaged

On the other hand, increasing access to early childhood care and education in Egypt would create employment opportunities for teachers and teaching assistants and reduce the burden of childcare on women who want to find work outside the home. Therefore, investing in early childhood education is one of the best investments Governments can make to help break cycles of poverty and social inequality between generations. In the framework of Egypt's education reform project, increasing access to kindergartens is a key priority.

The Ministry of Education and Technical Education has identified priorities for strengthening early childhood education services such as increasing access to quality, equitable and inclusive education and improving the quality of kindergartens according to standards, and strengthening the capacity of the Department of Public Education in early childhood education services in the kindergarten general education plan ", under each policy area, a range of strategic programmes were planned to achieve the expected results of kindergarten education by 2027.

Current status and challenges of pre-primary education

Structure and framework: early childhood.

Egypt's early childhood care and education system consists of two types of service delivery with a division of institutional responsibility. The Ministry of Education and Technical Education manages formal education for children of four to five years, including kindergartens for children aged 4 to 5 years prior to first grade. On the

other hand, nursery services are provided (pre-kindergarten) The Ministry of Education and Technical Education and the Ministry of Social Solidarity worked together to create cohesion and cohesion between the educational components of nurseries and kindergartens to help move between the two stages and to support higher levels of school readiness.

While the Ministry of Education and Technical Education is the main institution supporting early childhood education (Kindergartens), many NGOs and community development associations throughout Egypt also run hosting classes "for children aged four and over. These classes are organized and supervised by the Ministry of Social Solidarity. The Ministry of Education and Technical Education has signed with(the Ministry of Social Solidarity) A memorandum of understanding whereby the Ministry of Education and Technical Education provides technical support "licensed hosting classes, curriculum preparation, training of facilitators and technical supervision. Clear guidance and processes have been developed for NGOs and civil society associations to apply for the licence in a ministerial decree and many of these chapters have already been licensed.

In 2021, the two ministries developed a unified approach at the nursery level to increase the interconnectedness between the nursery and kindergarten stages. This curriculum has been disseminated at the nursery level in public nurseries s education reform project supported by the quality assurance control framework under development, A protocol between the Ministry of Education and Technical Education and the Ministry of Social Solidarity permitted access to nurseries between the ages of 2 and 4 as a preparatory stage for kindergartens. A suitable database had already been established for that purpose.

The National Council for Childhood and Motherhood (NCCM) is the multi-ministerial body that oversees the National Council for Childhood and Motherhood.

All early childhood development activities led by the Ministry of Health and Population, although the Council is authorized to coordinate early childhood development activities across ministries; On the ground, coordination is weak, and the sector

Fragmented, services and messages to families are inconsistent.

On the other hand, early childhood care and education are strongly promoted in Egypt's legal frameworks. Support for early childhood development, care and education services is included in several key national documents and international frameworks to which Egypt has committed itself s rights ", which includes comprehensive national documents such as the Egyptian Constitution, article 80, which provides that every child has the right to free early childhood education. It should be noted that, although support is clearly defined across the Egyptian political landscape, There is no formal early childhood development policy, and a draft early childhood development strategy has been prepared, which sets out strategic priorities for a comprehensive approach: for early childhood development

and allowing coordination of activities across different agencies.

Overview of Commitment across Sectors to Early Childhood Development and Education

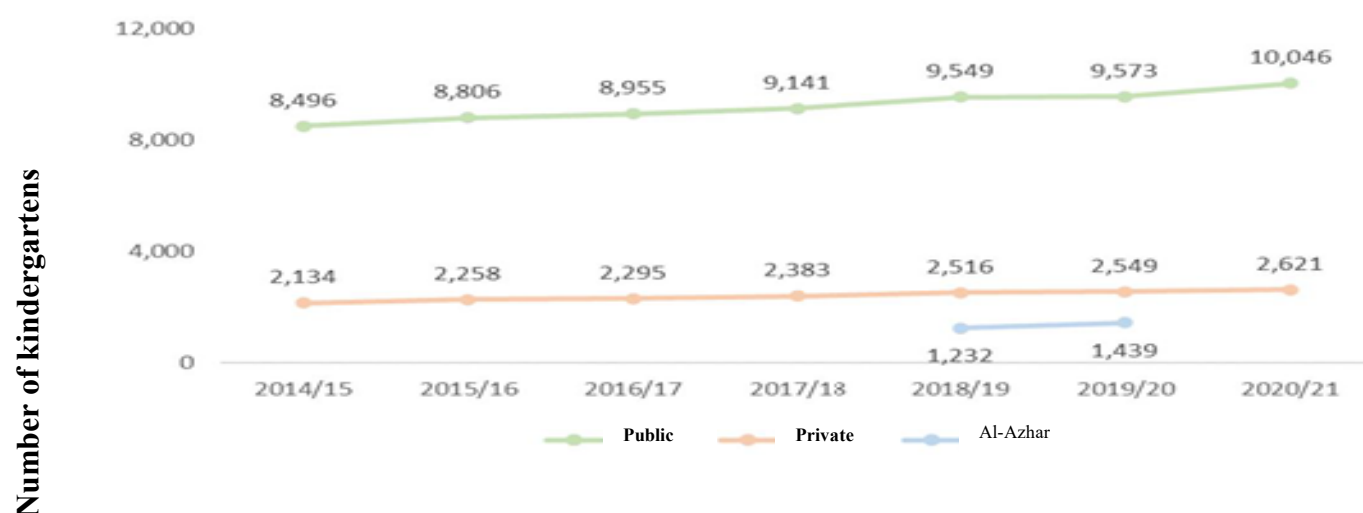
| Coordinating Agency | Executing agency | Pregnancy | 0 Year | 1 Year | 2 Years | 3 Years | 4 Years | 5 Years | 6 Years |
|---|---|-----------|--|--------|---------|---------|---|---------|---------|
| The National Council for Childhood and Motherhood | Ministry of Education and Technical Education | | | | | | Public Kindergartens | | |
| | | | | | | | Private Kindergartens | | |
| | Ministry of Social Solidarity | | Role of Public Nurseries | | | | Children aged 4-5 enrolled in kindergartens | | |
| | | | Role of Private Nurseries | | | | | | |
| | Ministry of Health and Population | | Preventive Healthcare and Vaccination Programs | | | | | | |
| | | | School Nutrition Programs | | | | | | |

Source: Ministry of Education and Technical Education, 2021

Kindergarten education consists of Kindergarten 1 and Kindergarten 2, for children aged 4-5 years. The General Directorate of Kindergartens at the Ministry of Education and Technical Education organize kindergartens in public schools and private schools, while Al-Azhar organize Al-Azhar kindergartens. This level is not mandatory, nor is it a prerequisite for enrollment in primary education. It is not free, and fees vary between different types of kindergartens, and also vary depending on the educational model used by the service provider. The only difference in curriculum between official kindergartens and Al-Azhar kindergartens is that Quranic recitation is an additional subject in the latter.

It is worth noting that kindergartens are official programs aimed at supporting the comprehensive development of children and preparing them for primary education (Child Law No. 126/2008). In 2019/2020, the total number of kindergartens in Egypt was 13561, enrolling 1,57 million children. In spite of shortcomings in service provision, the number of kindergartens is increasing relatively slowly. The number of public kindergartens increased from 8500 in 2014/2015 to over 10 thousand in 2020/2021, equivalent to an average of 220 new kindergartens annually, while the number of private kindergartens increased from 2134 to 2621 during the same period.

Graph: Overview of Different Kindergartens by Service Providers



The source: Education Management Information System for both public and private sectors, Central Agency for Public Mobilization and Statistics, 2019/2020, 2020/2021 (for Al-Azhar sector).

The Ministry of Education and Technical Education is the main respondent in terms of the number of kindergartens (70%), but the private sector (19%), including non-governmental organizations and religious organizations, and Al-Azhar education (11%) also play an important role (see the table below). Public, private, and Al-Azhar kindergartens are roughly similar on average, ranging from 112 to 128 students, but private kindergartens typically have four classes compared to three for public kindergartens and 2,5 for Al-Azhar kindergartens. Public kindergartens are more prevalent in rural areas (66%), while private ones are largely concentrated in urban areas (84%).

Number of Kindergartens, Enrollment Rate, and Average School Size by Service Provider, 2019/2020.

| | Number of schools (%) | Rural schools (%) | Number of students (%) | Average School Size | Average Number of School Classes |
|--|-----------------------|-------------------|------------------------|---------------------|----------------------------------|
| Public | 9,573 (70%) | 66% | 1,076,641 (68%) | 112 | 2.9 |
| Private | 2,549 (19%) | 16% | 326,849 (21%) | 128 | 4.0 |
| Al-Azhar | 1,439 (11%) | - | 165,981 (11%) | 115 | 2.5 |
| Total | 13,561 (100%) | - | 1,569,471 (100%) | 119 | 3.5 |
| Source: Education Management Information System - Central Agency for Public Mobilization and Statistics, 2020/2021 Note: - Share of rural schools according to 2021/2020 data. | | | | | |

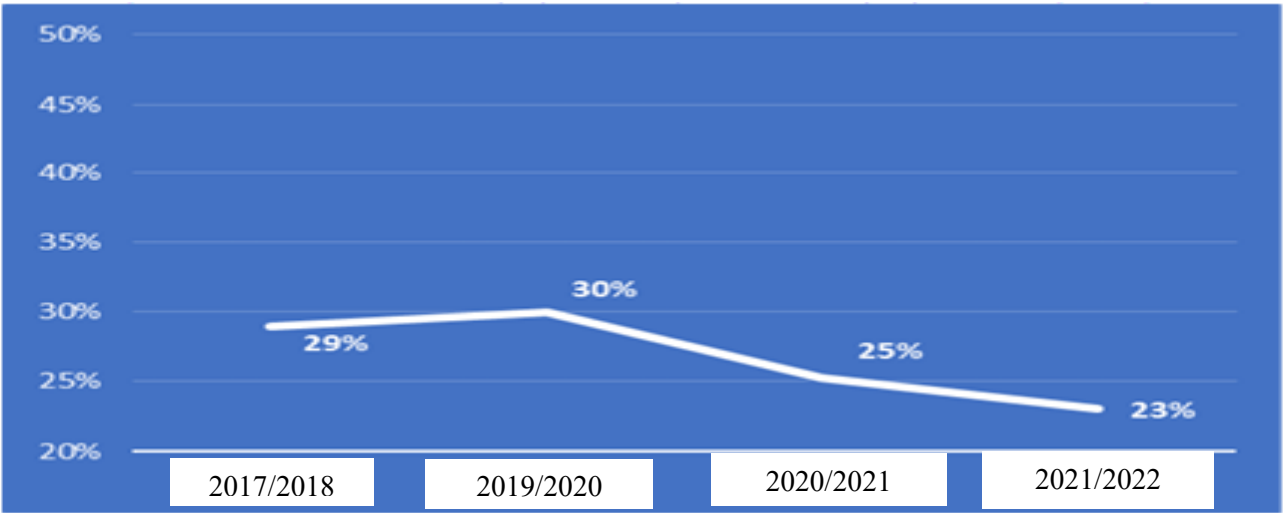
First Axis: Comprehensive and equitable access to education for all categories

A- Access and participation:

Since 2017, the commitment of the Ministry of Education and Technical Education to early childhood education has been evident through the Egyptian Education Reform Project, which represents one of the seven keys to providing every child with the best possible start to their educational journey by increasing access to and improving the quality of early childhood education. In 2018/2017, the kindergarten sector saw a significant increase in public funding with the implementation of the new kindergarten curriculum. The total number of enrolled children in kindergartens across all service providers increased from approximately 1.18 million in 2013/2014, the last year data was available for all service providers, to 1.57 million in 2019/2020. This increase is compared to around 392 thousand students, representing an increase of 1.3 million children in the kindergarten-aged population during the same period, indicating a significant gap in coverage. The increase in kindergarten enrollment continued at a low pace until the outbreak of the COVID-19 pandemic and remains low.

Despite the increasing investment in early childhood education, the education system falls far short of the necessary capacity to accommodate the population at kindergarten age and enhance the quality of existing facilities. The overall enrollment rate, including in public, private, and Al-Azhar kindergartens, stands at only 22,9%, indicating a supply problem within the education system suffering from severe shortcomings in its capacity to accommodate the population at kindergarten age. The actual overall kindergarten enrollment rate declined by five percentage points in 2020/2021, likely due to the spread of the COVID-19 pandemic.

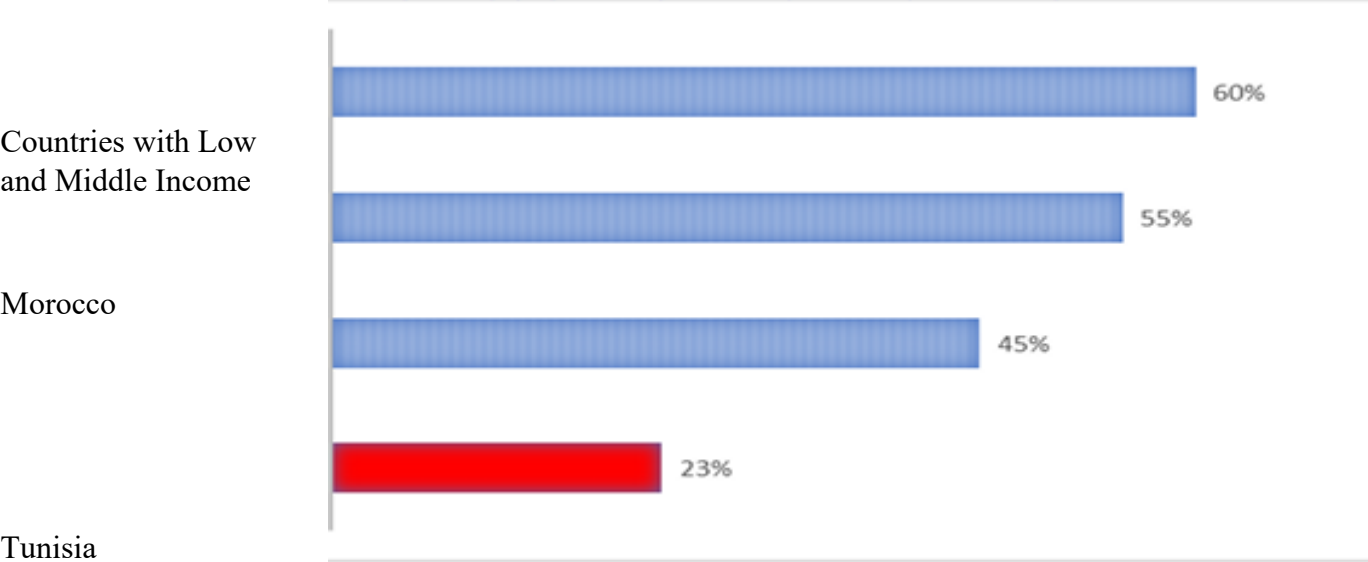
Graph: Kindergarten enrollment, total enrollment rates (all service providers)



Source: Ministry of Education and Technical Education, 2021

In terms of participation rates in kindergartens, Egypt ranks significantly lower than the average for countries with low to middle-income and some neighboring countries, with much lower rates. Egypt has significantly lower kindergarten enrollment rates compared to the average for countries with lower-middle-income, which stands at 60%, being lower than Tunisia (45%) and Morocco (55%).

Graph :International Comparison of Overall Kindergarten Enrollment Rates



Source: Ministry of Education and Technical Education, 2022; Open Data from the World Bank, 2019 (Comparison Basis).

A- Fairness and inclusivity:

Despite the increasing investments in kindergarten participation over the past decade, early childhood education still suffers from inequality in access, particularly based on income level, geographical region, and disability, limiting the chances of certain children to acquire school readiness (Ministry of Education and Technical Education, 2021). Achieving gender parity remains a challenge, with rural children less likely to attend kindergartens (enrollment rate: 19%) compared to urban children (enrollment rate: 44%) in 2017 (Ministry of Education and Technical Education, 2021). Additionally, a significant number of women remain at home to care for children due to cultural norms or because the cost of childcare outweighs the financial benefit of working.

Participation rates of children from the poorest households in pre-primary education decline significantly, with only 16% of children from the poorest 20% of households attending kindergartens compared to 65% of children from the wealthiest 20% of households (Ministry of Education and Technical Education, 2021)

Moreover, the limited evidence available indicates that there are huge disparities in children's willingness to learn when school starts and most Egyptian parents seem deeply concerned with educating and preparing their children well; To attend school, 67% of them reported that their children could perform reading and writing activities very well or moderately when starting primary school (PIRLS, 2016 there is a slight difference by gender with females in average, females are more likely to be able to read some words than males when starting primary school (73% and 67% respectively) (PIRLS, 2016), but there are significant differences in living standards between families, between the richest and the poorest, and a smaller difference between children in urban and rural areas. Less than five out of every ten children from the poorest 20% of families can read some words when start school compared to almost all children from the richest 20% of families (PIRLS, 2016), among the rural children, less than seven out of every ten children can read some words while eight out of every ten peers in urban areas can do so (PIRLS, 2016), the situation is very similar when it comes to being able to write some words when starting primary schools. These differences in the willingness of students of different categories to succeed at the beginning of their school life will be a major reason to expand enrolment in kindergartens, there are significant disparities in the participation in kindergartens between the four regions and the provinces and participation is much lower in Upper Egypt (the total enrollment rate is 21%) and Lower Egypt (24%) compared to the urban governorates (36%) and the border governorates (35%) (Ministry of Education and Technical Education, 2021), moving to the governorate level reveals significant differences within the regions: for example, relatively high average percentage of some border governorates show (the New Valley 43%, South Sinai 61%) while other governorates are located in the minimum range of (the Red Sea 18% and North Sinai 19%), and the Ministry of Technical Education 2020.

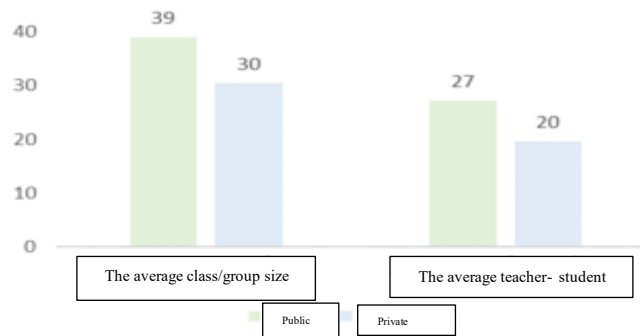
It was noted that there are no detailed statistics on disability during the education sector analysis and the education and technical education plan. Household surveys and censuses collect reliable and comparable data on disability among children and their access to education are necessary to understand inequalities and structural barriers in access between children with disabilities and those without disabilities.

Second theme: Quality and excellence in education in accordance with international standards.

A- Quality of learning and teaching.

In public kindergartens, student -teacher ratio is high and the size of groups is large, raising concerns about the quality of educational services provided. On average, there are 39 student per group in public kindergartens, the average student -to-teacher ratio is 1:27 in public schools compared to 1:20 in private schools, this compared negatively with the average EU-23 of 1:15, and the OECD average of 1:16 (OECD, 2019). Since small groups and low student -teacher ratios are linked to the provision of high-quality services and better outcomes for children, reducing student -teacher ratios is a key quality issue for the education and technical education plan.

Shape: Group Size and student -Teacher ratio, 2020/2019



Source: Weighted estimates based on Education Management Information System data

Almost all public kindergarten teachers have a degree: 98% university degrees, 1% non-teaching and less than 1% preparatory or secondary qualification with a teaching diploma.

Data are not currently collected at the national level to assess the readiness of young children to attend school and to understand whether services are reaching the desired goal of raising children's level of readiness for school. Assessing and evaluating early school readiness skills are essential to ensuring quality education at the primary level.

B- Governance and Management:

Improving the quality of kindergarten services is a priority. In the framework of the Egypt's education reform project, in order to achieve this goal, The Ministry of Education and Technical Education has developed quality standards and a framework to monitor quality assurance for kindergartens, the Ministry has adopted a quality assurance framework, conducted a process to collect the project's basic data while developing incentives and penalties to improve compliance.

Moreover, there is also no systematic and comprehensive collection of data on the quality of kindergarten services, the lack of data to evaluate the school readiness of young children and structural and ultimately practical quality factors preclude quality control and also limit sub-sector analysis, which in total hampers effective design, planning and overall quality assurance of kindergarten programs.

The branch sector of the pre-primary phase is also challenged by the lack of an official strategy; for early childhood development. The National Strategic draft Plan for early childhood development, which has not yet been approved, promotes the establishment of an inter-ministerial committee for developing early childhood. To provide coordination at the national level, it is supported from the common monitoring framework. This high-level committee will have the Ministry of Education and Technical Education and the Ministry of Social Solidarity, which will assume reporting responsibilities at the subnational level.

Several initiatives are under way with the joint support and participation of several Ministry officials. Key relevant ministries include the Ministry of Education and Technical Education, the Ministry of Social Affairs {the Ministry of Social Solidarity}, the Ministry of Culture and the Ministry of Health and Population. There is currently a lack of effective and formal coordination at the national or subnational level. For early childhood development, the result is a fragmented and unregulated sector, despite the fact that it receives high - level support, it lacks the necessary resources to implement his initiatives without external funding. Clearly costed policies, strategies and implementation plans that delegate roles and responsibilities, support cross-sectoral coordination and enjoy political support and leadership to secure financial and human resources to strengthen this sector.

The Education and Technical Education Plan proposes to reform kindergarten education by responding to the challenges mentioned above. In order to achieve the expected results listed below, the proposed operational program areas are considered critical to achieve priorities and expected results.

Expected results and programs for pre-primary education:

- Increase the supply and accessibility of pre-elementary schools, classrooms, and improve the material condition of pre-elementary educational institutions with special attention to children with disabilities.
- Increase availability of adequate numbers and fair publications for adequately trained teachers in kindergarten classes.
- Provide improved learning environments that are inclusive, safe, age-appropriate and child-friendly.
- Timely enrollment and school readiness for all children.
- Improve implementation, monitoring and evaluation capabilities with effective coordination.
- Engage communities, parents and NGOs with relevant capacity to cooperate with other ministries and coordinate with non-governmental service providers.
- Strengthen the capacity of development subsector management in early childhood to implement early childhood development policy.
- Increase funding and efficiency.

Projections for students, teachers and classrooms (pre-primary education, 2022-2027)

| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| Enrolment | | | | | | |
| The school-age population | 5,262,656 | 5,212,504 | 5,104,968 | 4,938,432 | 4,693,872 | 4,364,256 |
| Gross enrolment ratio (%) | 26.5 | 30.3 | 34.0 | 37.7 | 41.5 | 45.2 |
| Number of students enrolled | 1,395,131 | 1,576,794 | 1,735,204 | 1,863,167 | 1,945,768 | 1,970,676 |
| Public schools | 1,036,595 | 1,171,567 | 1,289,267 | 1,384,346 | 1,445,723 | 1,464,236 |
| Private schools | 358,536 | 405,227 | 445,937 | 478,821 | 500,045 | 506,440 |
| Teachers and classes in government schools | | | | | | |
| The required number of teachers | 48,980 | 56,606 | 63,731 | 70,047 | 74,923 | 77,764 |
| Number of teachers to be recruited (total) | 9,979 | 9,096 | 8,823 | 8,229 | 6,977 | 5,089 |
| Number of classrooms required | 33,998 | 39,325 | 44,314 | 48,748 | 52,187 | 54,212 |
| Number of classrooms to be built (total) | 7,062 | 6,722 | 6,168 | 5,172 | 3,760 | 2,409 |

Source: UNESCO Simulation Model (2022), estimates based on data from the Ministry of Education and Technical Education and the Central Agency for Public Mobilization and Statistics.

Key performance indicators 1: Pre-primary education, 2024-2029

| List of key performance indicators | baseline 2022/2023 | Goal 2027 | Goal 2029 | Source |
|--|---------------------------------|---------------------------------|---------------------------------|--|
| 1. Total enrolment rate in kindergartens | 23,1% | 40% | 50% | education management information system |
| 2. Net enrolment rate in kindergartens | 19,3% | 35% | 40% | education management information system |
| 3. Participation rate in organized learning (1 year before the age of net enrolment in formal primary education (male/female)) | Males 18,98% | 35% | 40% | education management information system |
| | Females 19,63% | 40% | 50% | |
| 4. Gender parity indicator in kindergartens (male/female) | Gender parity indicator 0,99 | Gender parity indicator 1,00 | Gender parity indicator 1,00 | education management information system |
| 5. Average density of classes in kindergartens | 30,44 | 27 | 25 | education management information system |
| 6. student -teacher ratio | 20,84 | 19 | 19 | education management information system |

Secondly, basic education:

Primary and preparatory together form the foundational education. The structure of education is the same in both stages regardless of the service provider. However, the education model and curriculum may vary among providers. Therefore, basic education should equip all learners with essential skills and confidence to prepare themselves, make informed choices, and select among different learning pathways at the secondary level.

The strategic objective of the basic education plan is to enhance equitable access and participation in quality basic education. It is worth noting that in recent years, access to basic education has significantly improved, but there are still several key challenges facing it (basic education), as outlined in the second chapter. This section provides further detail in this regard.

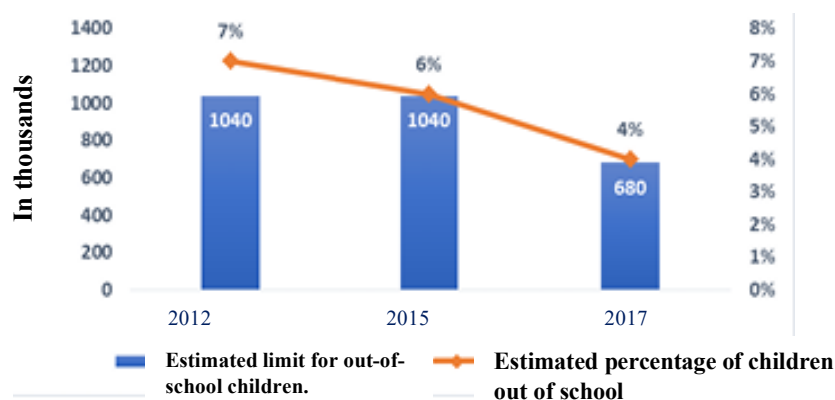
Primary education

The current state of primary education and the challenges that it faces

Access and participation:

During the past decade, Egypt has taken significant steps to improve access to primary education, with a notable increase in enrollment rates at the primary level. Enrollment in primary education rose from 10,8 million in 2011/2012 to 13,7 million in 2021/2022, representing a 27% increase. The overall enrollment rate in primary education currently stands at 107%, with no significant change observed during the past decade. The majority of children of primary school age enrolled in primary education are approaching global averages in terms of access to primary education. The overall enrollment rate is 98%, with most students completing their schooling. In the academic year 2020/2021, 85% of students enrolled in government primary schools, while private service providers accounted for 9% of enrollment in primary education, and Al-Azhar education accounted for 6% of it.

Primary and preparatory education are mandatory, but in the 2017/2018 , an estimated 680,000 children (4%) aged 6-14 years were out of school, with the majority being in the older age group within this age range. The number of children enrolled in primary and preparatory schools (aged 6-14 years) decreased from around 7% in 2013 to 4% in 2017/2018. Estimates between 2021 and 2027 indicate that an additional 250,000 students of primary school age will enter the education system.

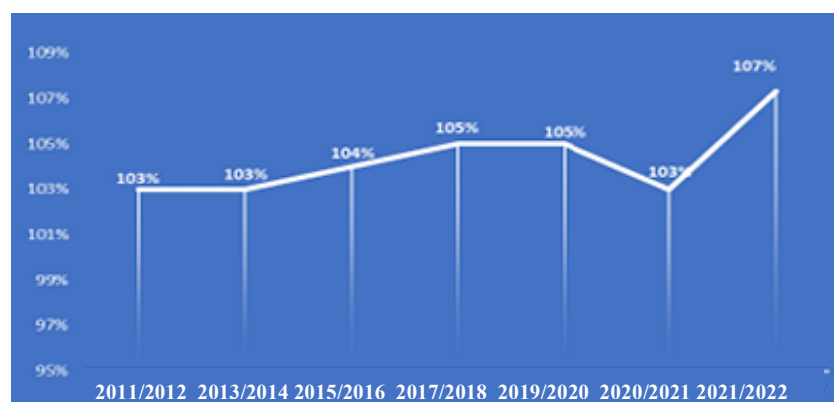


The estimated number and share of out-of-school children aged 6-14 years, in the academic year 2017/2018.

Source: Ministry of Education and Technical Education, 2021 AD

Regarding failure and repetition rates, there is no repetition of grades 1-3 of primary education because the transfer between them is automatic. Additionally, failure rates are low in the upper grades of primary (0,8-1,2%), and the transition from primary public school to private schools has increased. Preparatory school since 2016/2017 (96%), and most of the primary school graduates are now joining the preparatory education (102%)¹.

Gross enrollment rate in primary schools (all service providers %)



Source: Ministry of Education and Technical Education, 2022 AD

The high overall enrollment rate in primary education is achieved despite a large number of classrooms in most schools, which affects the quality of teaching. The current national standard for classroom size is 36 (for all levels) according to ministerial decree, with a government target of 30, expected to be reached by 2030 as part of sustainable development goals. Currently, the average class sizes are much larger in government primary schools, at 55 in 2020/2021, a significantly higher number compared to the OECD average class size of 21. It is worth noting that 23% of primary schools have class sizes exceeding 60 students, while class sizes exceed 80 students in a small number of these schools (3%).



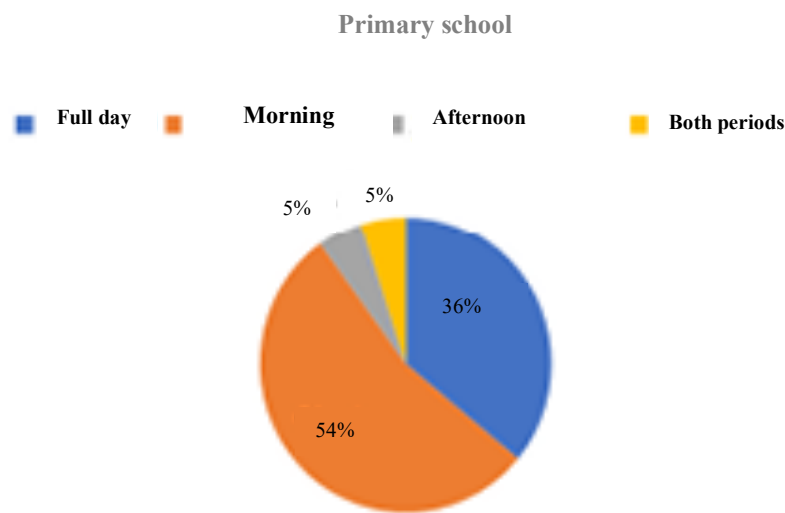
Trend in general primary education class sizes 2015/2016 - 2020/2021

Source: Estimates based on Education Management Information System data.

¹ The transition rate exceeds 100% because failure and repetition - which are often not included in administrative data - are used to calculate this indicator.

Over the next five years, pressure on the system at the primary education level will increase, causing growth in the school-age population. The school-age population is expected to grow by 3.9% for primary education between 2021 and 2027, to accommodate the additional students who move. To each level, it is necessary to expand the school infrastructure physically or use blended learning models that combine face-to-face and online activities. Otherwise, class sizes and the use of periodization need to increase further, which may harm the quality of education.

Full-day government primary school classes/periods 2020/21 AD

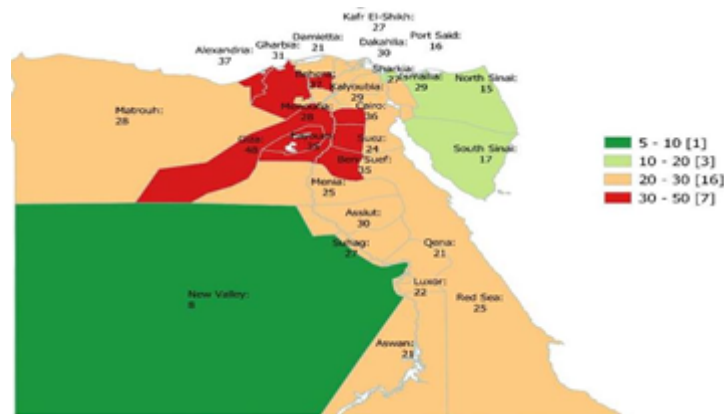


Source: Estimates based on Education Management Information System data

Equity and inclusion:

There are significant disparities in learning between the poorest and richest students. The data for fourth grade students showed that less than one in ten students from the poorest families had basic reading skills, compared to nearly three in ten students from the richest families in 2016 (PIRLS 2016).

Moreover, there are huge disparities in student-teacher ratios across governorates. At the primary education level, the five border governorates (Matrouh, New Valley, Red Sea, North Sinai, and South Sinai) have the lowest average student-teacher ratios, and this is related to its low population density and consequently the presence of a greater number of (very) small schools, which by definition tend to have lower student-teacher ratios. As for the primary level, the average student-teacher ratios are the highest (red areas) in Upper Egypt and the urban governorates.



Average student-teacher ratios in government primary schools by governorate, 2019/2020.

Source: Estimates based on Education Management Information System data. Note: Excludes contract teachers.

Children with disabilities are among the most educationally disadvantaged groups. Improving education for this demographic is one of the main goals within the framework of the Egyptian education reform project. Despite the Ministry of Education and Technical Education's efforts to collect basic data on children with disabilities enrolled in special education schools and official government schools, there is a lack of data on the prevalence of disabilities in Egypt. Additionally, there is a shortage of data to allow for in-depth analysis of the educational situation and learning outcomes among children with disabilities.

Students with mild disabilities represent a small percentage of the total enrollment in general and technical education schools. In 2020/2021, this category represented less than 1 percent of the total enrollment in primary schools, which requires comprehensive strategies designed to better integrate children with mild disabilities into the system the mother of national education.

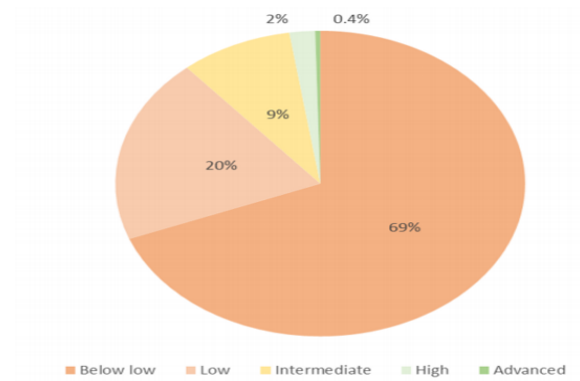
This Education, Teaching and Technical Education Plan proposes to reform primary education by responding to the above-mentioned challenges faced by this sector in order to achieve the expected results listed below. The programs proposed in each policy area are very important. To achieve the results and objectives of the education and technical education plan policy.

Quality of learning and teaching:

The quality of primary education is a critical challenge according to international assessments. Egypt ranked 49th out of 50 countries in the 2016 PIRLS assessment, and it is worth noting that the vast majority of fourth-grade students did not achieve the basic level of reading skills, which limits their ability to read Their ability to learn other subjects. In general, the performance of female students on average is somewhat better than that of male students, and the majority of fourth grade students (69%) did not even reach the low reading level² on the PIRLS index, and only 19% reached the low level , while no one has reached the advanced level.

² The lowest level of reading is that when reading a simple literary text, one cannot recall information, events, or ideas explicitly stated, cannot make direct inferences about events and their causes, and cannot even begin to interpret the events of the story and its main ideas. This means that students below the low level have not acquired Basic skills for learning other subjects, and this is one of the biggest challenges in the education system.

Public school students in the fourth grade according to the PIRLS reading standard for the year 2016 (%)

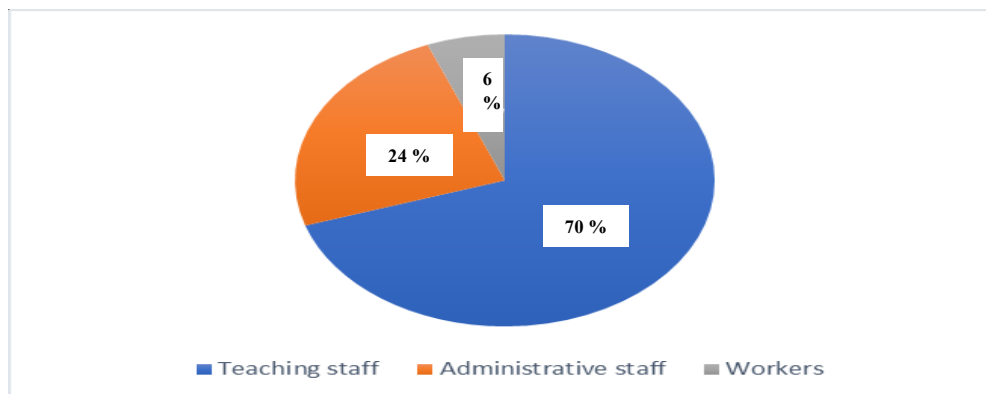


Source: Weighted estimates based on PIRLS data for the year 2016.

Nationally, the average student-teacher ratio in public primary schools is 1:32 for primary education in 2020/2021, and about 19% of primary schools have less than 20 students per teacher. However, there are large variations, about 26% of schools Primary School has student-teacher ratios higher than 1:40, and 7% of them are higher than 1:60 (specialization in subjects begins in the fourth grade, which means that these ratios in general practice it is higher than that.)

Moreover, the ratio of teaching staff to non-teaching staff is lowest in primary schools, at 1:2, and over the past five years at the primary education level, the number of administrative staff has increased by 24% the number of employees increased by 27, while the number of employees was reduced. Faculty members: 8%.

The workforce in general primary education by category 2019/2020



Source: Estimates based on Education Management Information System data.

The annual teaching hours targeted for the primary education level are at the lower end in international comparison, and fewer teaching hours translate into larger numbers of teachers required. To provide a certain number of teaching hours to students, or undesirably less teaching time to students, and in light of limited resources and budget constraints, this is costly and ineffective for the education system.

It should be noted that teacher absence from school represents one of the main concerns in many public primary schools, according to what school principals reported. Due to teachers being absent, arriving late, or leaving early, and thus the number of teaching hours is reduced; which harms the amount of learning that students receive. Moreover, in reality only 62% of primary school teachers have a university educational qualification (graduate or post-graduate, of whom 31% have an educational diploma, which may hinder the quality of education in primary education to a great extent. (Ministry of Education and Technical Education, 2021).

Expected results and programs for primary education:

- Equitable access to primary education for all and its successful completion, improving internal efficiency and addressing the causes of dropout, with special attention to excluded and marginalized groups; to reduce disparities based on gender, disability and geographical location.

- Availability of a sufficient number of schools and educational institutions close enough to the population; to meet the needs of universal primary education, meet pupil-to-class ratio standards and reduce regional disparities.
- Schools are safer, more inclusive and child-friendly; this encourages enrollment, attendance, and continuity at the appropriate time.
- Providing a sufficient number of teachers and deploying them fairly according to grade, subject and track, and meeting the standards of the student-teacher ratio.
- All current and newly recruited teachers have the required qualifications and teachers receive regular support and in-service training, in priority areas in line with their needs and the priorities of the education system.
- Improved and equitable learning outcomes for primary students with a particular focus on foundational skills and basic education.
- Develop competency-based curricula and update textbooks and teachers' guides accordingly.
- Introducing unified evaluation systems applied in the classroom, improving the capacity for implementation, monitoring and evaluation, and strengthening the governance of education management in the sub-sector.

Expectations of students, teachers, and classrooms (primary education) 2022-2027

| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|------------|------------|------------|------------|------------|------------|
| Register | | | | | | |
| Number of school-age population | 14,757,256 | 14,907,880 | 14,993,912 | 14,976,848 | 14,839,288 | 14,577,512 |
| Gross enrollment ratio (%) | 96.8 | 97.2 | 97.0 | 97.5 | 98.1 | 99.7 |
| Number of enrolled students | 14,286,854 | 14,488,119 | 14,549,665 | 14,607,149 | 14,563,470 | 14,533,283 |
| public schools | 13,033,121 | 13,216,690 | 13,272,836 | 13,325,268 | 13,285,417 | 13,257,867 |
| Private schools | 1,253,733 | 1,271,429 | 1,276,829 | 1,281,881 | 1,278,053 | 1,275,417 |
| Teachers and classes in public schools | | | | | | |
| The required number of teachers | 400,987 | 420,696 | 437,617 | 455,667 | 471,833 | 489,751 |
| Number of teachers to be appointed (total) | 40,651 | 31,739 | 29,541 | 31,179 | 29,836 | 32,073 |
| Number of classes needed | 249,613 | 266,748 | 282,538 | 299,462 | 315,544 | 333,191 |
| Number of classrooms needed to be built (total) | 29,761 | 28,416 | 29,550 | 28,707 | 30,273 | 24,618 |

Source: UNESCO simulation model (2022), estimation based on data from the Ministry of Education and Technical Education and the Central Agency for Public Mobilization and Statistics.

Key Performance Indicators – Primary Education 2024 – 2029

| List of Key Performance Indicators | Baseline 2022 / 2023 | Target of 2027 | Target of 2029 | Source |
|---|----------------------------|--------------------------|--------------------------|---|
| 1) Gross absorption ratio for the first grade of primary school. | 90.9% | 92 | 95% | Education Management Information System |
| 2) Net absorption ratio for the first grade of primary school. | 78.9% | 80% | 82% | Education Management Information System |
| 3) Gross enrollment ratio in the first grade of primary school. | 104.3% | 100% | 100% | Education Management Information System |
| 4) Gender parity index in primary education (males / females). | Gender parity index 1.01 | Gender parity index 1.00 | Gender parity index 1.00 | Education Management Information System |
| 5) Net enrollment ratio in primary. | 102.2% net enrollment rate | 100% | 100% | Education Management Information System |
| 6) Dropout rate at the primary phase (male / female) | Total 0.23% | 0.05% | 0.03% | Out-of-School Children Reports |
| | Boys 0.27% | 0.05% | 0.03% | |
| | Girls 0.18% | 0.05% | 0.03% | |
| 7) Transition rate from primary to preparatory phase. | Total 96.78% | 99% | 99% | Education Management Information System |
| | Boys 96.07% | 99% | 99% | |
| | Girls 97.52% | 99% | 99% | |
| 8) Percentage of children and youth (a) in grades 2 and 3, and at the end of primary phase who achieved at least minimum proficiency in (1) reading and (3) math. | No standardized testing | 80% | 100% | Education Management Information System |
| 9) Total comprehension rate in sixth grade. | 99% | 99.5% | 100% | Education Management Information System |
| 10) Average teacher-student ratio. | 32.63 | 30 | 26 | Education Management Information System |
| 11) Average class size in primary phase. | 50.65 | 40 | 37.8 | Education Management Information System |

1 According to the Statistical Yearbook 2022-2023, the net enrollment rate is 102.2, yet by definition it cannot exceed 100%, yet this statistic is correct because enrollment rate = number of children of enrollment age in public schools (6 years) + number of children of enrollment age in public language schools (7 years).

Preparatory Education

The Status of Preparatory Education and the Challenges It Faces:

The structure of preparatory education:

Preparatory education grades (7 - 9) for children between the ages of 12 and 14 years old is the second phase of basic education, and there are three tracks: academic (general), vocational (technical), and sports (physical education). However, the numbers of vocational and sports schools are small. Students who successfully pass the final exam of the sixth grade of primary education move to general preparatory education, regardless of their grades. Students who fail any two grades in primary education move on to vocational preparatory education, and parents can also choose to enroll their children in vocational preparatory education even if they do not fail any grades in primary education. Almost all students in junior high school are enrolled in academic schools (5.4 million) and the remaining small percentage are enrolled in either a vocational school (131,000) or a sports school (a little over 6000) (According to Ministry of Education and Technical Education, 2021). In 2020/2021, 87% of preparatory school students were enrolled in public schools, while private sector service providers represented 7% of preparatory school enrollment and Azhari education represented 6% (According to Ministry of Education and Technical Education, 2021).

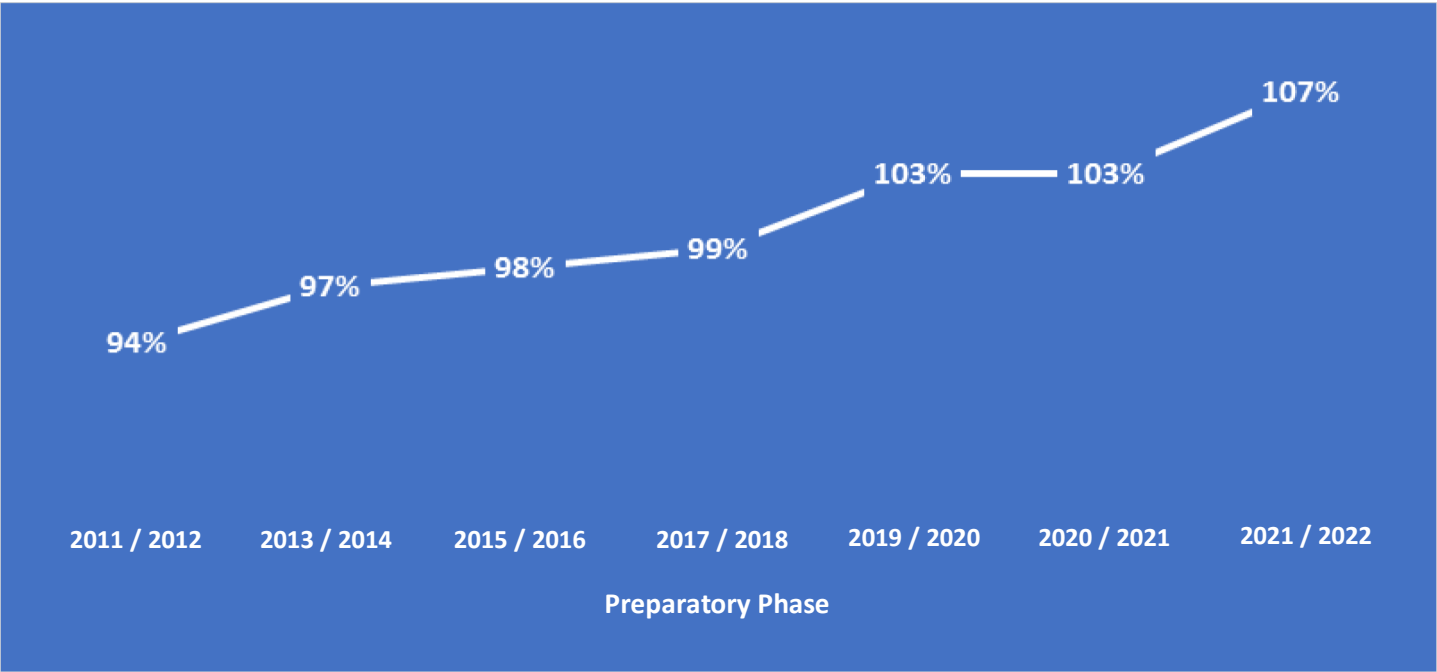
Students move from general preparatory education to general or technical secondary education according to their scores on the ninth grade final exam. Since the ninth grade final exams are administered at the governorate level, there is no national standard. The minimum score a student must obtain to move to general secondary education varies from one governorate to another and may also vary across years. Importantly, this means that students with the same knowledge and skills may pass or fail the exam depending on which governorate they live in.

On the other hand, exams in Al-Azhar schools differ, even for the same curricular subjects. The end of the preparatory phase exams are set at the governorate level and the results from each governorate are reported to the central Al-Azhar institutes sector in Cairo and all announced on the same day.

Access and participation:

Over the past decade, enrollment in preparatory education has increased significantly from 4.8 million to 5.8 million, equivalent to a 21% increase, and the preparatory school enrollment rate increased by 13 percentage points to 107% between 2018/2017 and 2022/2021 (According to Ministry of Education and Technical Education, 2022). In addition, completion improved from 88 to 99 in preparatory education. Moreover, the repetition rate is relatively low at the preparatory phase, ranging from 0.6 - 1.1, and in terms of gender parity, in 2021/2020, the gender parity index was 99% at the preparatory phase (According to Ministry of Education and Technical Education, 2022/2021).

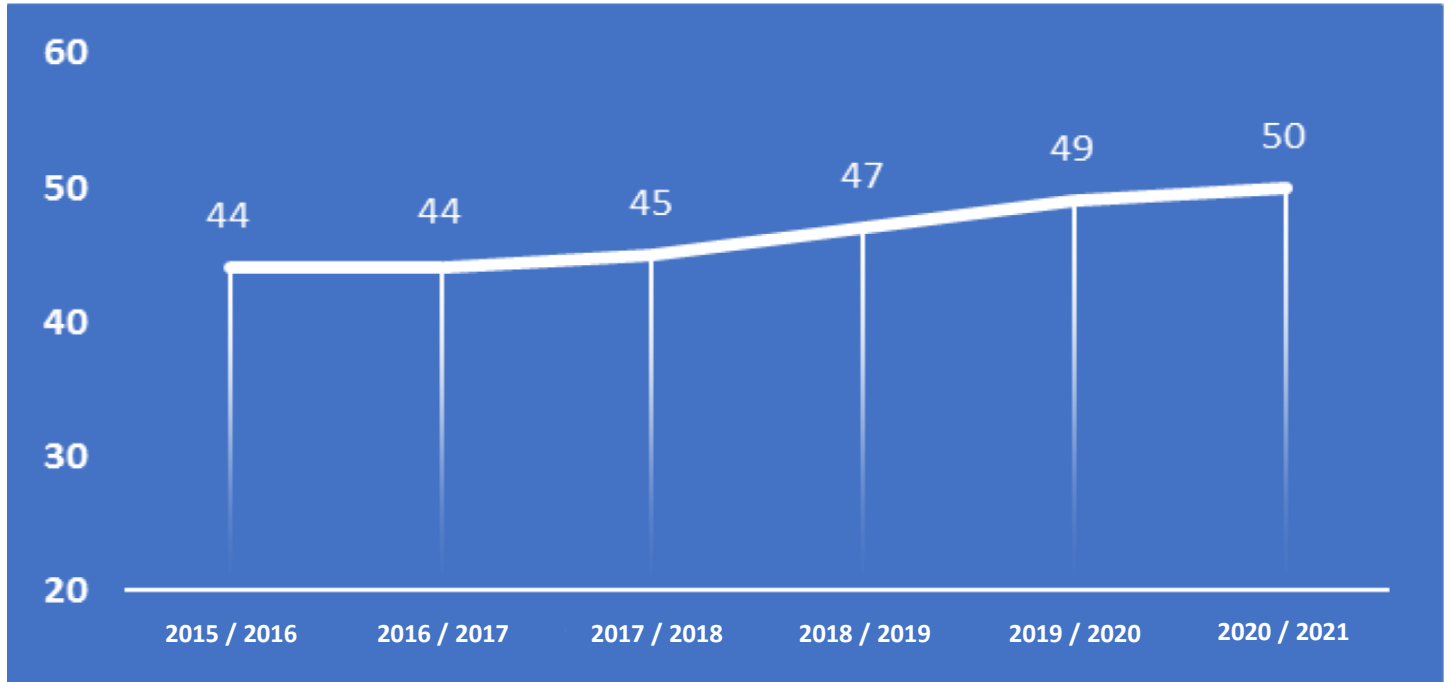
Gross Enrollment Ratios at the Preparatory Phase (all providers)



Source: Estimates based on data from the Education Management Information System.

The average class size is noticeably large at the preparatory education phase and is steadily increasing, and was around 50 students per class in 2020/2021, raising a serious question about the quality of education.

Trend of Class Sizes in Preparatory Education in 2015/2016 - 2020/2021

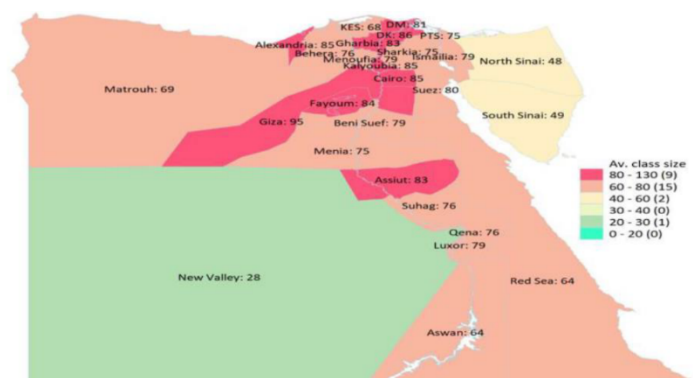


Source: Estimates based on data from the Education Management Information System.

Within the next five years, the pressure on the system at the preparatory education phase is expected to increase significantly due to the growth in the school-age population, which is expected to grow by 31.1% for the preparatory education phase between 2021 and 2027.

It is worth noting that large class size is affecting preparatory education, as the average class size is still 60 or more in most governorates, as shown in the graph below. Moreover, five governorates – Damietta, Fayoum, Gharbia, Giza, and Qalyubia – have average class sizes higher than 80 at the preparatory education phase. This indicates the urgent need to take measures to reduce class sizes (According to Ministry of Education and Technical Education, 2021). According to 39% of middle school principals, the lack of educational space (classrooms) reduces the ability of their schools to provide high-quality education (TIMSS 2019).

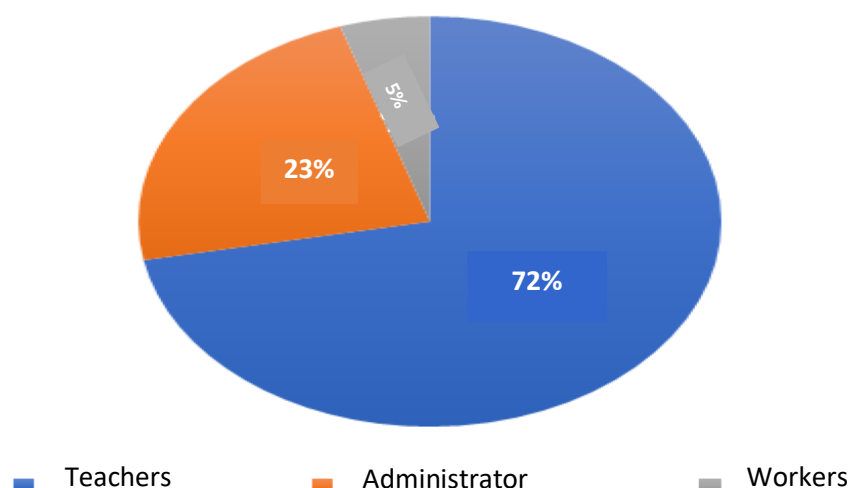
Average class size in public preparatory schools by governorate in 2019/2020



Source: Estimates based on data from the Education Management Information System.

Another major concern is the growing imbalance in the ratio of teaching staff to non-teaching staff in the public education workforce at the preparatory level. It should be noted that from 2015 to 2020, the number of administrative staff increased by 13% at the preparatory level, and the number of non-administrative and non-teaching staff increased by 20%, while the number of teaching staff decreased by 9% (According to Ministry of Education and Technical Education, 2021). This may reveal serious shortcomings in the allocation of human resources with huge negative implications for the quality of learning.

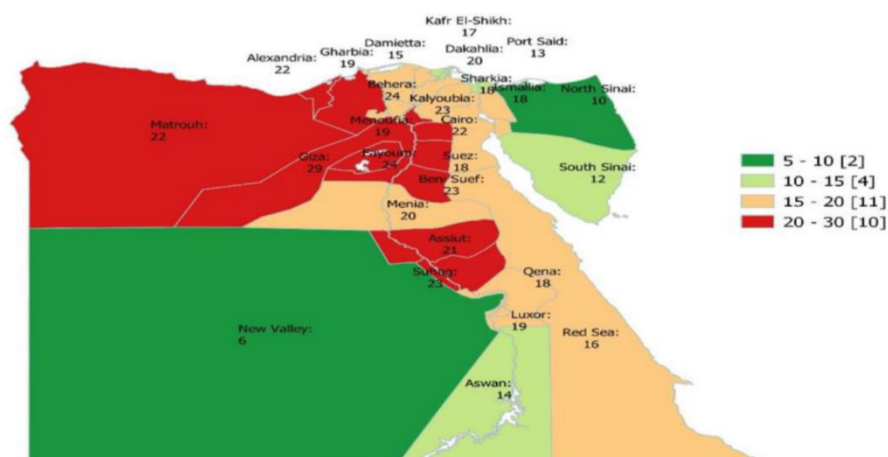
Public preparatory education workforce by category in 2019/2020



Source: Estimates based on data from the Education Management Information System.

There are also large disparities in student-teacher ratios across governorates. At the preparatory phase, the highest average student-teacher ratios (red zones) are in Upper Egypt and urban governorates, as shown below.

Average student-teacher ratios in public preparatory schools by governorate in 2019/2020

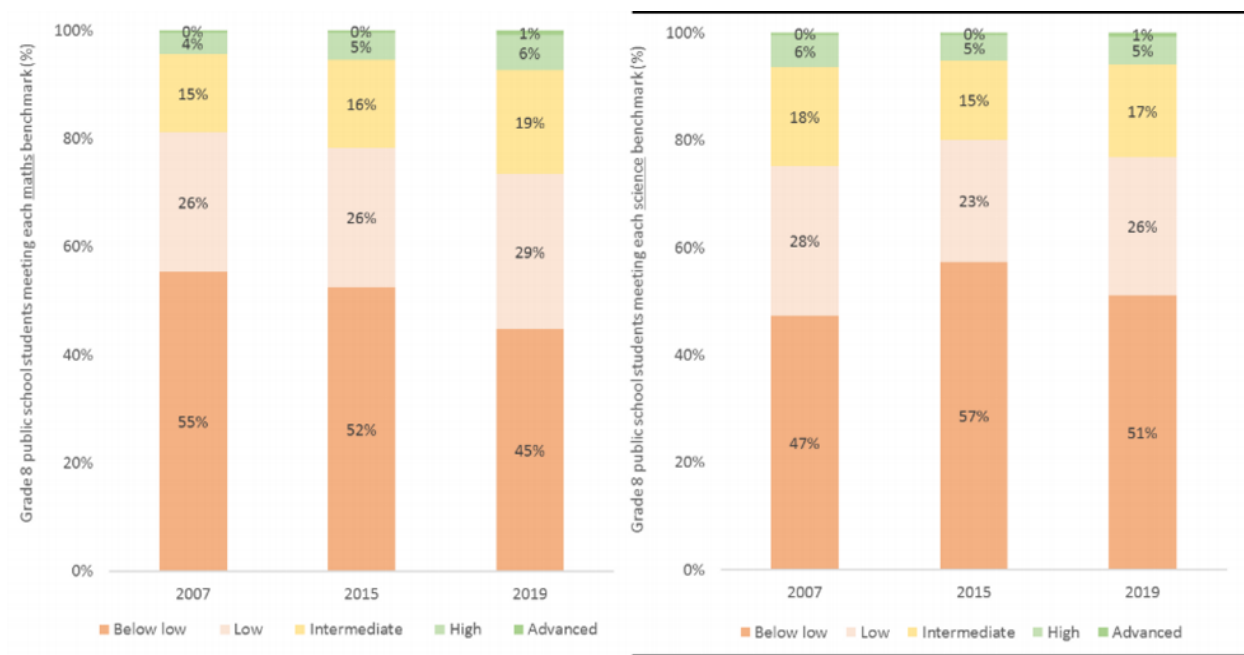


Source: Estimates based on the Education Department's information system data. Note: Contractual teachers are not included.

Quality of learning and teaching

International assessments revealed a low level of learning in preparatory education: the great majority of Egypt's eighth graders (74%) have only some basic knowledge of the right numbers and basic charts, or even less. Similarly, for science, the majority (77%) have only a limited understanding of scientific concepts and knowledge of basic scientific facts. However, there has been some improvement in mathematics performance since 2017. The proportion of students who have not reached the low level has dropped by 10 percentage points to 45%, while the proportion of students who have reached the low standard has increased by 3 percentage points to 29%, the proportion that meets the average standard has risen from 15 to 19%, and for science, there is no clear trend since 2007. 95% of teachers also reported that students did not acquire the skills required to learn successfully.

Eighth grade students by TIMSS Mathematics and Science Standards 2019 (%)



Source: Weighted estimates based on TIMSS data for 2007, 2015 and 2019

Similar to elementary education, the targeted annual teaching hours for preparatory school are also noticeably low. Also besides the fact that assistant teacher teachers teach more hours per week than expert teachers, and teaching tasks for Egyptian teachers are at the lower end of the range compared to the OECD average. In parallel with the level of primary education, the absence of the teacher is also a major concern in many government preparatory schools, according to school administrators in personal interviews. 47% of preparatory school principals believe that teacher absence is a moderate or serious problem, and 48% of them stated that there are problems resulting from teachers arriving late and/or leaving early, which indicates short interaction time and learning time.

Equity and Inclusion:

In contrast to the primary level, where the probability of reaching and completing school is very similar for children in the four regions, students in the border governorates and Upper Egypt are less likely to complete preparatory school. The completion rate for preparatory school education is 86% for students in the border and Upper Egypt regions compared to 92% in urban and Lower Egypt regions.. Nevertheless, the majority of public preparatory schools (69%) are located in rural areas, largely reflecting the school-age population in rural areas of the Ministry of Education and Technical Education, 2021). Given the interrelated gender aspects of learning inequality, 88% of the poorest girls in rural areas have access to junior secondary education, and only 74% are likely to complete it: a serious problem of high dropout rate is noted (Ministry of Education and Technical Education, 2021). At the post-primary stage, most girls who drop out of school consider marriage to be the reason, which is 33% in the preparatory stage, which indicates the social and cultural obstacles that prevent girls from completing their studies (Ministry of Education and Technical Education, 2021). Among children belonging to the poorest 20% of families, the adjusted net attendance for preparatory education increased by 15 percentage points between 2012 and 2018/17, compared with increases of 10 percentage points for children belonging to the richest 20% of families. (Open Access to Accurate Data Initiative, 2020). However, children from poorer socioeconomic backgrounds have significantly lower scores on indicators of access and participation. Furthermore, due to the shadow education or “tutoring” system, they are at risk of being left behind in terms of learning achievements by children from relatively higher socio-economic backgrounds.

Despite achieving gender parity in access and participation in the Preparatory school stage, gender differences in learning outcomes still exist, and the performance of female students in the eighth grade in mathematics and science is better than among their male peers. In 2019, 29% of females in eighth grade reached the intermediate or higher level of mathematics compared to 24 males (TIMSS, 2010). For science, it was

The corresponding percentages were 26% for females and 20% for male students (TIMSS 2019), and the difference in the percentages of females and males who reached at least the average standard was similar to its counterpart in 2007 for both mathematics and science. The Education, Teaching and Technical Education Plan proposes to improve preparatory education through response

The challenges faced by this preparatory education in order to ensure the achievement of the expected outcomes listed below. The proposed program is of critical importance to achieving the policy outcomes and objectives

Expected outcomes and programmes for the preparatory level

- Ensure equitable access to and successful completion of preparatory education for all students.
- Addressing internal efficiency and causes of dropout, paying special attention to excluded and marginalized groups.
- Availability of adequate schools and classrooms to accommodate school-age populations
- Meet the criteria of student-to-classroom ratio.
- Schools are safer, inclusive and child-friendly: encouraging timely enrolment, attendance and continuation.
- Publish relevant and updated curricula, textbooks and teachers' guides.
- Provide sufficient numbers of teachers and equalize them according to class, subject and course, and meet the criteria of pupils - to - teachers ratio.
- All current and newly recruited teachers receive the required qualifications and teachers receive regular support and in-service training, in priority areas in line with their needs and the priorities of the education system.
- Advanced and fair learning outcomes
- Limit the differences based on gender, disability and geographical location.
- Improved implementation, monitoring and division capacity and enhanced governance of education management in the subsector.

Projections for students, teachers and classrooms (preparatory education) for 2022-2027

| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|-----------|-----------|------------|-----------|-----------|-----------|
| Record | | | | | | |
| Population of school age | 6,092,346 | 6,273,051 | 6,549,386 | 6,866,306 | 7,240,189 | 7,677,458 |
| Gross enrolment ratio) %) | 99.3 | 99.7 | 100.2 | 97.6 | 95.3 | 90.1 |
| number of students enrolled | 6,048,190 | 6,253,327 | 6,563,238 | 6,704,298 | 6,897,848 | 6,913,970 |
| public schools | 5,626,774 | 5,817,658 | 6,105 ,980 | 6,237,232 | 6,417,257 | 6,432,261 |
| private schools | 421,416 | 435,669 | 457,258 | 467,066 | 480,590 | 481,709 |
| | | | | | | |
| Teachers and classes in government schools | | | | | | |
| The required number of teachers | 236,846 | 250,888 | 269,944 | 282,860 | 298,730 | 307,573 |
| Number of teachers to be appointed (total) | 20,582 | 21,147 | 26,583 | 21,014 | 24,356 | 17,805 |
| Number of classes needed | 117,794 | 127,357 | 139,806 | 149,404 | 160,858 | 168,782 |
| Number of classrooms needed to be built(Total) | 15,522 | 18,408 | 15,556 | 17,413 | 13,883 | 17,891 |

Source: UNESCO simulation model (2022). Estimation based on data from the Ministry of Education and Technical Education and the Central Agency for Public Mobilization and Statistics.

Key performance indicators 3: Preparatory education for the year 2024-2029

| List of key performance indicators | Baseline 2022/2023 | Objective 2027 | Objective 2029 | Reference |
|---|-----------------------------|--------------------------|--------------------------|---|
| 1)Gross enrollment ratio in the first grade of Preparatory school (seventh grade) | %104,6 | 100% | 100% | education management information system |
| 2) Net enrollment ratio in preparatory education | 96,4 | 96% | 97% | education management information system |
| 3) Gender parity index in preparatory education (males/females) | gender parity index 1,03 | Gender Parity Index 1,00 | Gender Parity Index 00,9 | education management information system |
| 4) Rate of transition from preparatory to general secondary | %37,59 General secondary | 45% General secondary | 50% | education management information system |
| | 43,4%(female) | 45%(female) | | |
| | 32,62%(male) | 45%(male) | | |
| 5) Rate of transition from preparatory to industrial secondary | 17,55% | 19% | 20% | education management information system |
| 6) Rate of transition from preparatory to agricultural secondary | 4,49% | 5% | 6% | education management information system |
| 7) Rate of transition from preparatory to commercial secondary | 63,15% | 16% | 17% | education management information system |
| 8) Rate of transition from preparatory to hotel secondary | 1,29% | 1,5% | 2% | Reports of out-of-school children |

| | | | | |
|--|---|-----------------|--------------------------------|---|
| 9) Preparatory school completion rate | 99% | 99% | 99% | education management information system |
| 10) The proportion of students in the eighth grade in the Government Orbit achieved the average level or more in (mathematics/science) in international evaluations (TIMES) (male/female). | Mathematics 2019 Science 389 2019 | No subscription | Mathematics 450 Science 470 | Trends in the study of mathematics and science at the international level |
| 11) Number of students divided by teachers | 25,23 | 21 | 20 | Reports of out-of-school children |
| 12) Dropout rate in Preparatory school (males/females) | Total 1,73% | 1,5% | 1,1% | Reports of out-of-school children |
| | Males 1,60 | 1,5% | 1,1% | |
| | 1,87% females | 1,5% | 1,1% | |
| 13) Average class intensity in the preparatory phase | 48,12 | 40 | 37 | education management information system |

Thirdly: Secondary education:

The current situation of secondary education and the challenges it faces

Structure of secondary education:

The secondary education system consists of two distinct certificates of secondary education (age 15-17), and is divided into three years in general secondary education, or three or five years in technical secondary education, based on the results of the final examinations in the ninth grade of the stage Preparatory school has a choice of tracks. The next level in this education: those who perform less well in the exams are placed in the technical secondary track, and the ninth grade exam is an exam that is conducted at the governorates level, meaning that each governorate prepares its own exam, and there are no exams at the national level. Until the end of education Secondary education, which is the “high school” exam, the result of which is the basis for selective admission to higher (university) education. Previously, the high school result was based on the results of grades 11 and 12 combined, but in accordance with Law 20 of 2013, then change it; To rely on grade 12 results alone.

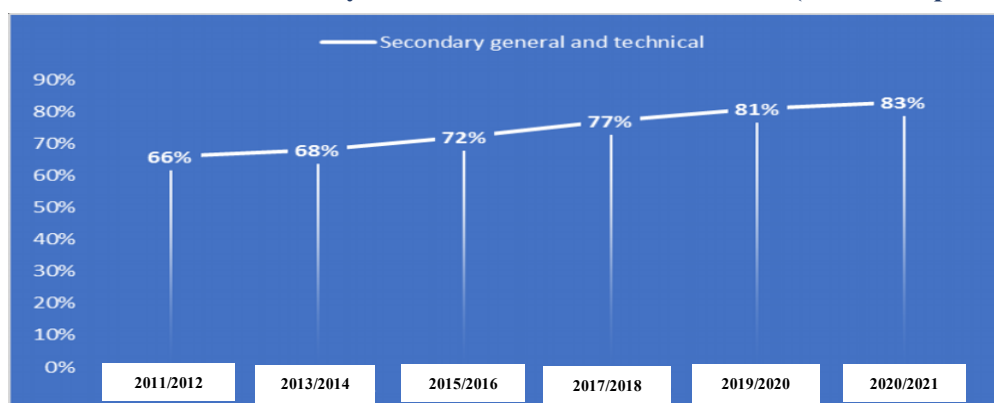
University admission is centralized, and students are enrolled in colleges based on the grades of the high school exam. Graduates of technical schools can join the university provided they obtain very high grades in the high school exam. As a result, almost all general secondary education students will move on to university, while most technical secondary school graduates will move into work after graduation unless they continue to attend a technical college.

Access and engagement.

Over the past decade, enrollment at secondary levels has increased significantly, and secondary education has seen the largest increase in enrollment at 33% from 3.3 million to 4.4 million, with nearly half of students enrolled in public schools (51) the other half is in technical schools (49%) (Ministry of Education and Technical Education, 2021), and in the period between 2018/2017 and 2021/2020, access increased to secondary education (both general and technical) by seven percentage points, respectively; The gross enrollment rate reached 83% (Ministry of Education, Education, and Technical Education, 2021), and the secondary school completion rate improved from 69% to 77% for secondary education (Ministry of Education, Education, and Technical Education, 2021). At the same time, the probability of reaching and completing secondary education was 86% and 76%, respectively, which indicates that a relatively large number of secondary school students do not complete their secondary education despite the progress they are making (Ministry of Education and Technical Education 2021).

It is worth noting that, despite the high gross enrollment rates in Egypt at the secondary education level compared to lower middle-income countries, the education system is currently unable to fully absorb the population of secondary school age. Despite the overcrowding of classes and the presence of many schools that operate on a shift system, there is currently not enough capacity; to accommodate all children in the population of secondary school age or to reduce class sizes at a given enrollment level.

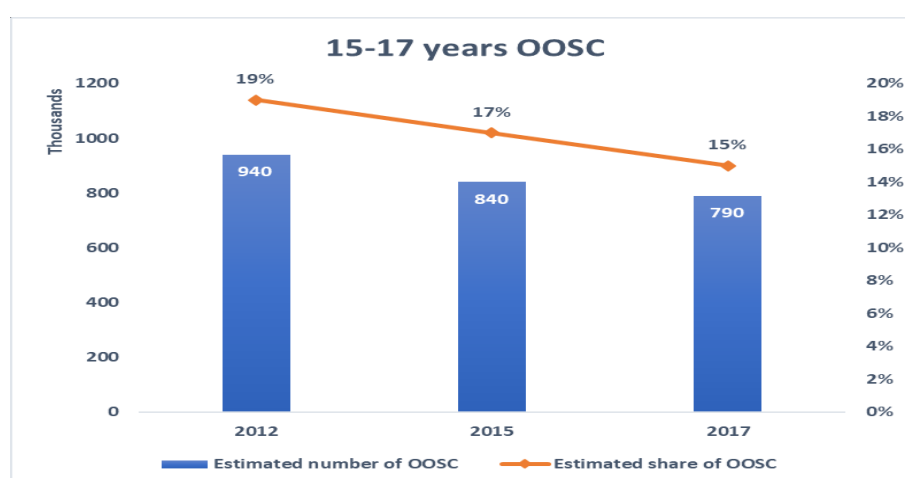
General and technical secondary education Gross enrollment rates (all service providers, %)



Source: Estimates based on Education Management Information System data.

Regarding the out-of-school cycle, recent trends are promising, such as the age group in the basic education stage; which shows a decrease in both the total numbers of children out of school and their shares, as the share of children out of school at the secondary level is in the age group (15-17 years) from approximately 19% to 15% between (2012 and 2018), (Accurate Data Open Access Initiative, (2014, 2017, 2020), the school-age population (15-17) is expected to grow. The secondary rate is 21.1 and is expected to increase by 1.1 million between (2021 and 2027), and if we take into account technical education for a period of 5 years between (2021 and 2027), it is expected that the number of school-age population between the ages of 15-19 will increase by 17.2%. The equivalent of 1.5 million people, and it is worth noting that such a massive increase in the number of school-age population at this level would undermine the progress that has been achieved recently, even if measures are not taken aimed at facilitating the absorption of the growth in the population of school-age age. The number of children out of school may increase in the future, and the number of children out of school will increase by 25% for those aged 15-17 years, assuming that the school dropout rate remains high. As of 2017/2018) (Ministry of Education and Technical Education, 2021).

Estimated number and share of out-of-school children, ages 15-17, 2017/18



Source: Estimates based on Education Management Information System data

Equity and inclusion.

Several different groups of young people are likely to be out of school in the 15-17 age group, especially children from the poorest families and children with disabilities, and on average young people with disabilities are the group most likely to drop out. School attendance is twice as high as those who do not have a 30% disability. And 15%, respectively (Open Access Accurate Data Initiative, 2020). However, the most important factor of disparity by far is socio-economic background, and for young people from the poorest 20% of households, 36% are out of school, while only 7% of these are from the richest households (Open Access Data Initiative, 2020), and onwards. In addition to socio-economic background and disabilities, disparities related to gender, the rural or urban gap, and regional differences were also clearly felt. About 18% of females were out of school compared to 13% of males, and 18% of those living in rural areas compared to 12% in urban areas (Open Access Accurate Data Initiative, 2020). There are also disparities across the four regions, with young people in Upper Egypt most likely to be out of school (21%), followed by those living in border governorates (17%), then governorates Urban (15%), and Lower Egypt (11%) (Open Access Accurate Data Initiative, 2020).

It is worth noting that there are noticeable disparities in educational attainment according to social and economic background and location at the secondary education level among children who belong to the poorest segment of families. The net adjusted attendance rate for secondary education increased by 11 percentage points between 2012 and 2017/2018, with an increase of 15 points. Percentage among children belonging to the top five families (Open Access to Accurate Data Initiative, 2020). However, despite these hardships, children from poor families still lag behind their peers from wealthier families in participating in secondary education (45% and 83%) (Open Access Accurate Data Initiative, 2020). Moreover, those from the poorest households are more likely to have completed secondary technical education than those from the wealthiest households (38 versus 22%); This reflects the selection process for secondary education through the results of the ninth grade examination and the noticeable low status of technical education (Open Access Initiative for Accurate Data, 2020). In addition, for secondary education, the probability of completing education is 68% and 73, respectively, for the Border and Upper Egypt regions, compared to 82% for the urban governorates and Lower Egypt (Open Access to Accurate Data Initiative, 2020).

Regarding the gender dimension of access and participation in secondary education, in 2020/2021, the gender parity effect was 98% (Ministry of Education and Technical Education, 2021). However, girls are much less likely than boys to enroll in technical secondary education, and are more likely to enroll in General Secondary schools, given that school education profiles are identical To a large extent with students - females and males alike - at the previous basic education level, Access to secondary education is somewhat lower among females compared to males (82% compared to 85%), while the probability of males completing that stage is lower than its counterpart among females (77 compared to 76%) (Ministry of Education and Technology Lim and art education 2021), and if we look closely at the rates of completion and dropout of books, we can notice the diverse gender responses of boys and girls, as 53 percent of girls who dropped out of school reported that their marriage This is the reason for dropping out, while the main reasons among boys are different. The first reason is low level of performance and lack of interest in continuing education (37%), and the second is getting a job (35%) (Open Access Accurate Data Initiative, 2019).

In contrast to basic education schools, which are located in rural areas and largely reflect the rural population of school age, General Secondary schools are more widespread in urban areas; There are 54% of high school, 56% of technical trade, 67% of agricultural technical, 74% of industrial technical schools and 89 of hotel technical schools (Ministry of Education and Technical Education, 2021). Moreover, the total enrollment ratio in the general and technical secondary schools in 2017 in rural areas was only 33% compared to 127% in urban areas, which strongly indicates a clear shortage in secondary education in rural areas, perhaps coupled with low demand due to high poverty rates Relatively And social norms related to girls' education.

General Secondary Education

The current situation of general secondary education and the challenges it faces

The Structure of General Secondary Education:

General secondary education in grades 10 to 12 is intended for students aged 15-17 years who have successfully completed their general preparatory education.

In public and private schools that teach the national curriculum and Al-Azhar schools, there are two divisions in general secondary education, and students choose one of the two different divisions in the general secondary path: literary and scientific divisions. Starting from grade 11, students can choose the literary or the scientific division, regardless of their grades in the final exam. For the tenth grade, all students in both divisions study Arabic, English, religion, and civic education, and students in the literary division study history, philosophy, psychology, and sociology, while students in the scientific division study biology, chemistry, mathematics, and physics. In addition, there is a group of optional subjects such as additional foreign languages, social studies, or music.

It is worth noting that Egypt is still thinking about the overall structure of the curriculum itself, how the progress students make leads to effective exit points that suit their needs, and how the various branches such as technical and general education are related to each other, and the curricula that are taught at the general secondary level are the same as in Public and Al-Azhar schools, with the exception that the Arabic language subjects in the latter are different and more diverse, and Shari'ah sciences are taught as an additional subject. The general secondary education curriculum is currently subject to review, and the Ministry of Education and Technical Education is currently conducting research to prepare new curricula for grades 10-12 of general secondary education.

Upon completion of general secondary education, students take the final exam: high school, and students' grades in the final exam for the twelfth grade have become the only factor that determines their possibility of enrolling in university education.

Statistics indicate that in the year 2020/2021, the vast majority of students (70%) in government general secondary schools took the high school exam, and private education and Al-Azhar education contribute the largest share to general secondary education (15% each). For the academic year 2020/2021, the average class size in General Secondary schools is 44 students, and compared to international standards, the current average class size is considered significantly high (Ministry of Education and Technical Education, 2021).

General Secondary Education class sizes through 2015/2016 AD - 2020/2021 AD.

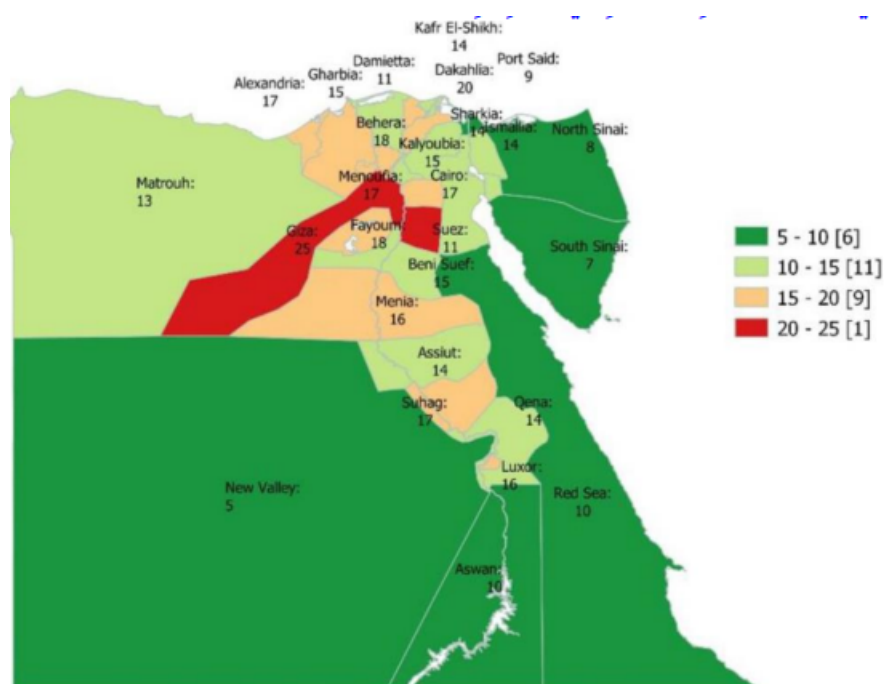


Reference: the estimations is based on the information system of education management

It is worth mentioning that among general secondary schools in Egypt, 31% of secondary schools have 20 or more students per teacher, compared to the OECD average of 1:13, and the percentage of students to teachers is higher than 1:40 in only 3% of those schools; Which makes any of them effective in providing education for all, but it is out of reach.

(Co-operation and Economic Development – 2019, Ministry of Education and Technical Education, 2021)

Disparities in the average number of students in classes in secondary schools across governorates 2020/2021



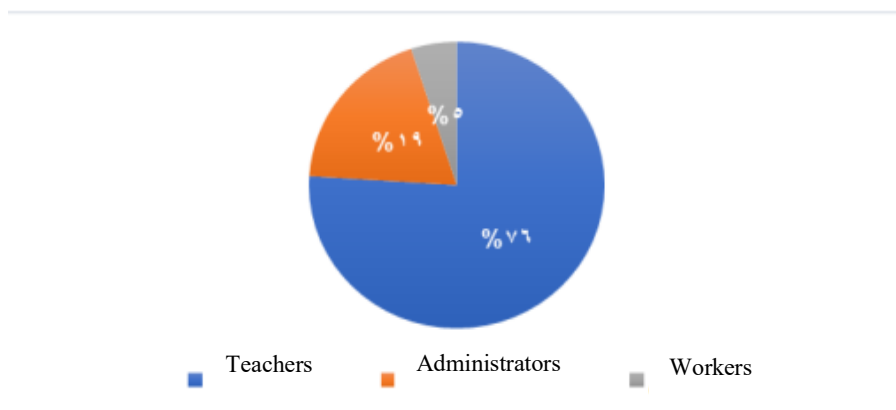
Reference: Estimates based on Education Management Information System data - Note: Excludes contract teachers

Quality of learning and teaching:

Regarding the ratio between teaching staff members and non-teachers, the number of teaching staff members increased by 24% in secondary education, while workers increased by 52%, and in 2019/2020, the ratio of teaching staff members to non-teachers was 1:3 in secondary education, according to Ministry of Education and Technical Education 2021. Taking into account that the targeted annual teaching hours for the secondary education level are at the minimum level in international comparison, the ratio of teaching staff to non-teaching staff will be considered somewhat ineffective, taking into account recent employment trends.

⁴ The green color refers to the small size of the class and the red color refers to the big size class.

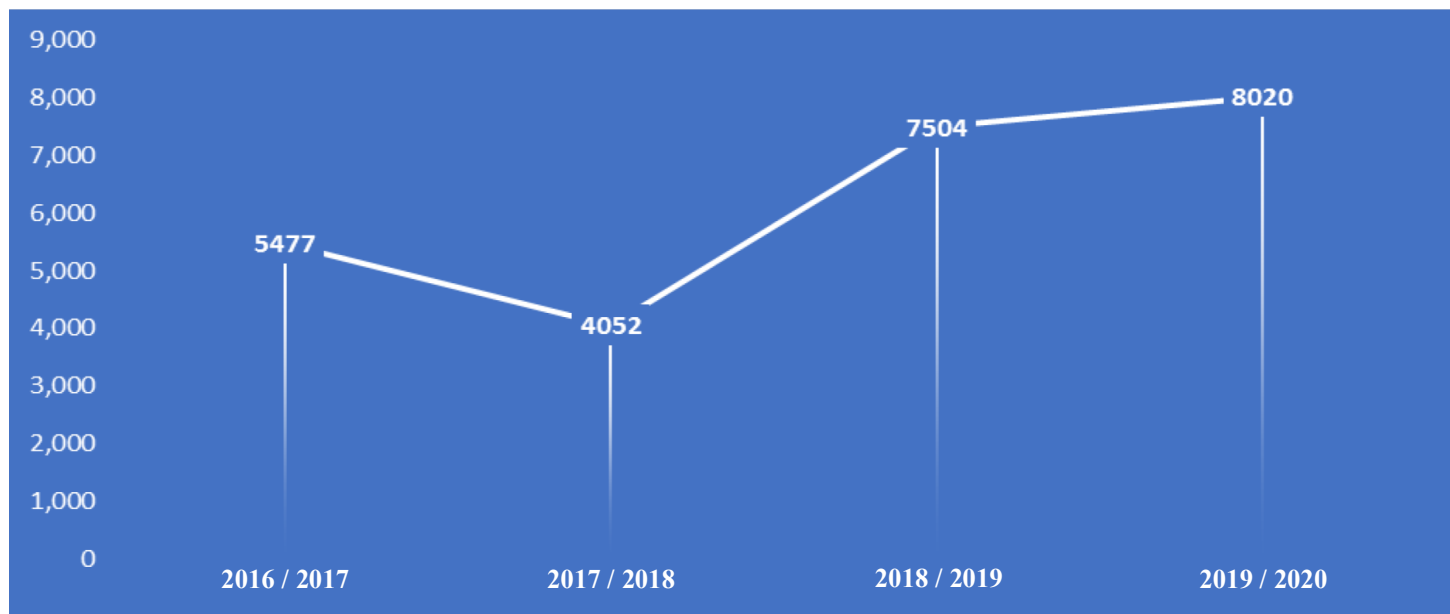
Manpower in public general secondary education by category 2019/2021 AD



Reference: Estimates based on Education Management Information System data

Due to the fact that the end-of-stage exam in grade 12 determines the student's possibility of enrolling in university education, the structure of the education system focuses on critical exams, which are a very important driver of private lessons and constitute a large demand for private lessons and ultimately an increase in equity and inclusion. In addition, in light of the challenges that facing general secondary schools - represented by overcrowded classrooms and limited interaction between teachers and students during the school day - the general demand for private lessons was very high, and in 2018, 81% of students in these schools received private lessons, and the increasing demand results in those from poor families being less able to afford these lessons, Which directly affects their chances of enrolling in university.

Total Expenditure on Public Education per Student in General Secondary Education (in Egyptian pounds, 2018)



Source: Ministry of Education and Technical Education. Note: Based on actual values

The Ministry of Education and Technical Education's plan proposes to reform General Secondary education by responding to the challenges faced by this subsector to ensure the achievement of the expected outcomes listed below. The proposed programs are critical to achieving the policy outcomes and objectives.

Expected Outcomes and Programs for General Secondary Education:

- Expanded access and participation with greater equity and equality with an appropriate mix of subject disciplines and a sufficient number of schools and classrooms to accommodate qualified graduates from basic education, especially in disadvantaged areas.
- Improve General Secondary education completion rates.
- Improve internal efficiency and address the causes of dropout with special attention to excluded and marginalized groups.
- Improve learning outcomes for General Secondary education graduates.
- Relevant, up-to-date and competency-based curricula, textbooks and teachers' guides.
- All current and newly recruited teachers have the required qualifications and teachers receive in-service training and ongoing support in priority areas in line with their needs and the priorities of the education system.
- Equitable access to and completion of General Secondary education for all and minimize disparities based on socio-economic background, gender, disability, and geographical location.
- Increase the use of technology to improve access to and quality of secondary education.
- Strengthen school leadership, management, monitoring and evaluation at the General Secondary education level.
- Ensure quality assurance in schools at the General Secondary education level.

Student, Teacher and Classroom Projections for General Secondary Education 2022-2027

| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|--|-----------|-----------|-----------|-----------|-----------|-----------|
| Enrollment | | | | | | |
| School-age population | 5,504,874 | 5,626,438 | 5,818,744 | 6,056,339 | 6,318,042 | 6,856,826 |
| Gross enrollment ratio (%) | 39.6 | 41.2 | 42.8 | 43.8 | 44.4 | 45.7 |
| number of enrolled students | 2,180,694 | 2,315,569 | 2,489,438 | 2,650,888 | 2,807,224 | 3,009,973 |
| – Public schools | 1,773,676 | 1,883,779 | 2,025,452 | 2,157,281 | 2,284,898 | 2,450,075 |
| – Private schools | 407,017 | 431,790 | 463,986 | 493,608 | 522,326 | 559,897 |
| Teachers and classes in public schools | | | | | | |
| Required number of teachers | 92,392 | 95,607 | 100,916 | 106,274 | 119,068 | 135,510 |
| – Required number of teachers (total) | 6,961 | 5,987 | 8,177 | 8,385 | 15,982 | 20,014 |
| Number of classroom needed | 43,548 | 48,908 | 55,738 | 63,090 | 71,223 | 81,669 |
| – Number of classrooms to be built (total) | 7,573 | 9,044 | 9,565 | 10,346 | 12,660 | 6,058 |

Source: UNESCO Simulation Model (2022), estimates based on data from the Ministry of Education and Technical Education and CAPMAS.

Key Performance Indicators 4: General Secondary Education, 2024-2029

| List of Key Performance Indicators | Baseline 2022 / 2023 | Target of 2027 | Target of 2029 | Source |
|--|---------------------------|--------------------------|--------------------------|---|
| Gross enrollment ratio in grade 10 | 35,1% | 40% | 45% | Education Management Information System |
| Net enrollment ratio in grade 10 | 30,4% | 35% | 40% | Education Management Information System |
| Gender parity index in General Secondary education (male / female) | Gender parity index: 1,34 | Gender parity index: 1,3 | Gender parity index: 1,0 | Education Management Information System |
| Secondary school completion rate | 92,75 | 95% | 98% | Education Management Information System |
| Secondary school completion rate (male / female) | 34% | 45% | 47% | Education Management Information System |
| Average teacher-to-student ratio | 22,09 | 20 | 20 | Education Management Information System |
| Average class size in schools | 40,94 | 35 | 30 | Education Management Information System |

The Structure of Technical Secondary Education:

Graduates of vocational preparatory education and those who did not receive a certain score in the final examination of the ninth grade in public preparatory education move on to technical secondary education. There are two different technical secondary education programs: The first is a three-year program and the second is a five-year advanced program. After completing technical secondary education, graduates can enroll in higher education, two-year intermediate technical institutes or four-year higher technical institutes, depending on their scores on the final exam.

The Ministry of Education and Technical Education is the largest provider of technical secondary education and offers agricultural, commercial, hotel and industrial specializations. There are also a small number of private technical secondary schools that offer commercial, hotel and industrial specializations. In 2020 and 2021, the vast majority of students (90%) were enrolled in public technical secondary schools (According to Ministry of Education and Technical Education, 2021). There are no technical secondary schools. The private sector contributes more to secondary technical education, as 10% of students are enrolled in private technical secondary education (According to Ministry of Education and Technical Education, 2021). In line with international trends, most private technical secondary schools (60%) offer training for careers in the commercial sector where much lower unit costs make funding funded by student fees more feasible (According to Ministry of Education and Technical Education, 2021). The private sector accounts for 31% of all commercial schools and 22% of schools offering hospitality courses, while only 4% of agricultural schools and 9% of industrial schools are privately owned (According to Ministry of Education and Technical Education, 2021).

It is worth noting that despite the remarkable increase in secondary technical education enrollment over the past ten years, the proportion of students in each type of technical school has remained relatively stable. Most technical education students enroll in industrial (47%) or commercial (38%) schools (According to Ministry of Education and Technical Education, 2021). The enrollment rate in industrial schools has increased from 162,000 students to 999,000 students in the past ten years (According to Ministry of Education and Technical Education, 2021). During the same period the number of students in commercial schools increased from about 621,000 to about 815,000, and for agricultural schools, the number of students in commercial schools has increased from about 170,000 to about 248,000. In the academic year 2015/2016, technical hotel schools were established, since then, these schools have witnessed remarkable growth in their enrollment numbers, with the number of students increasing from around 12,000 to 70,000 in 2020/2021. (Ministry of Education and Technical Education, 2021).

The Egyptian Education Reform Project has four main goals, one of which is to make technical secondary education a viable pathway to employment by increasing program relevance and increasing employers engagement.

To achieve this goal, the Ministry of Education and Technical Education has designed a framework and developed a methodology to modernize the current technical education curricula. All technical education programs have been replaced with skills-based programs. The ministry is developing the new curricula in partnership with employers to ensure that the learning programs provide the competencies sought by employers. Thus increasing the relevance of technical education to the modern labor market. It should be noted that many development partners have aligned their support with curriculum reforms in technical education. For instance, the Workforce Development Program has introduced two new specialized training courses in the fields of logistics and renewable energy with support from the United States Agency for International Development (USAID). Seventeen schools have been equipped with new equipment necessary for conducting these courses through additional funding for equipment provision from the European Commission through the Technical Education Project in Egypt; The European Commission is also supporting the reform of curricula in tourism and hospitality schools through the (Transformation In The Future) Program.

Through this support, (skills-based curricula) are now being introduced in 100 technical education schools. The ministry aims to introduce competency and skills-based training curricula in all schools by 2024. As part of broader curriculum

reforms for the technical education sector, the government announced its intention to introduce a preparatory year to address insufficient literacy and numeracy skills among ninth grade graduates entering secondary technical education.

In 2018, the government approved the establishment of five new technical universities. This move is not only aimed at increasing the available places in higher education sector but also at changing the perception of technical education in society and elevating the status of technical secondary education.

Furthermore, the Ministry of Education and Technical Education is working on establishing new agencies to promote quality improvements in technical secondary education. A new independent body called the National Agency for Education Quality Assurance and Accreditation has been established to ensure the quality performance of technical schools. It will report directly to the President and operate independently from service providers, aiming to create a specialized body concerned with the quality of graduates required for the job market. New accreditation standards are being developed, and within the Ministry of Education and Technical Education, a unit called the Quality Assurance and Accreditation Center in Technical Education has been established. It will provide developmental support to public technical schools, helping them prepare their accreditation applications, enhance infrastructure, resources, and teachers to meet the required standards. Additionally, there will be a new academy called the Technical Education Academy responsible for training technical education teachers in key areas of reforms, especially in competency-based training methodologies, teaching, and assessment, and report preparation.

It is worth mentioning that to enhance the links between all forms of technical education and training on one hand and employers on the other, the government is establishing Sector Skills Councils with support from the European Commission (the German Technical Education and Development Cooperation project). These intermediary bodies will facilitate employer participation in the sector, and educational service centers will provide - As part of its support for the skills sector- valuable information about the types of technical training programs demanded by employers, and they will also identify qualifications. Moreover, they will collaborate with major employers to develop specialized skills and on-the-job experience for a particular economic sector. Programs have encouraged the implementation of a " Dual education system" (Dual Education and Training Schools) in the form of a curriculum that combines periods of learning at school with periods of learning in the workplace. The private sector is responsible for the quality of what is offered and is required to establish a partnership with one of the relevant international accrediting bodies so that graduates obtain an internationally recognized qualification. Up until now, 24 independent schools have been established (Dual education system), 67 schools within training facilities, and 239 annexed schools were established. The number of students enrolled in Dual Education Schools for the academic year 2021/2022 reached 50936 students under the partnership between the public and private sectors. Additionally, the government introduced a new type of technical high schools in 2018, namely the Applied Technology Schools, established through a partnership between the public and private sectors.

Initially, only 3 schools started operating in Cairo and Menoufia. As of 2023, the number of Applied Technology Schools has reached 52 schools in 14 governorates across the country (Cairo, Giza, Alexandria, Qalyubia, Menoufia, Dakahlia, Suez, Minya, Assiut, Sohag, New Valley, Port Said, Ismailia, Qena).

Currently, students enrolled in Applied Technology Schools do not pay tuition fees. Instead, they receive a salary during their technical training supported financially by industry leaders and development partners.

In addition to the urgent need to transition to a more sustainable and environmentally friendly economy to address environmental challenges and climate change issues, Egypt's labor market requires skilled technicians to work in light of Egypt's reliance on solar and wind energy as important energy sources. Also, preparing and training teaching staff both pedagogically and technically is essential to achieve the goals of secondary industrial education and this focus has been ongoing for the past three years. Therefore, the Ministry has focused on expanding schools and specializations in this regard. The number of specialized technical education schools in wind and solar energy industry has reached 17 schools, divided into industrial schools with a three-year system totaling (10) schools, industrial schools for dual education and training totaling (3) schools, and advanced industrial technical schools with a five-year system totaling (4) schools.

The number of students enrolled in schools specialized in wind and solar energy manufacturing is 1335 across all academic years, and the number of technical teachers for theoretical and practical applications is 164, according to data from the academic year 2020/2021.

The schools specialized in wind and solar energy manufacturing are spread across 11 governorates (Cairo, Suez, Benha, Sharqia, El Beheira, Alexandria, Sohag, Qena, New Valley, Aswan, and Red Sea). Additionally, the specialization is being established in Giza, Luxor, and Menoufia governorates.

The number of specializations in wind and solar energy manufacturing includes (3) technical specialties: Renewable Energy Technician, Solar Installation and Maintenance Technician, and Wind Energy Technician.

In addition to electricity and sanitation schools. Furthermore, solar panels are being installed on technical education schools to generate electricity.

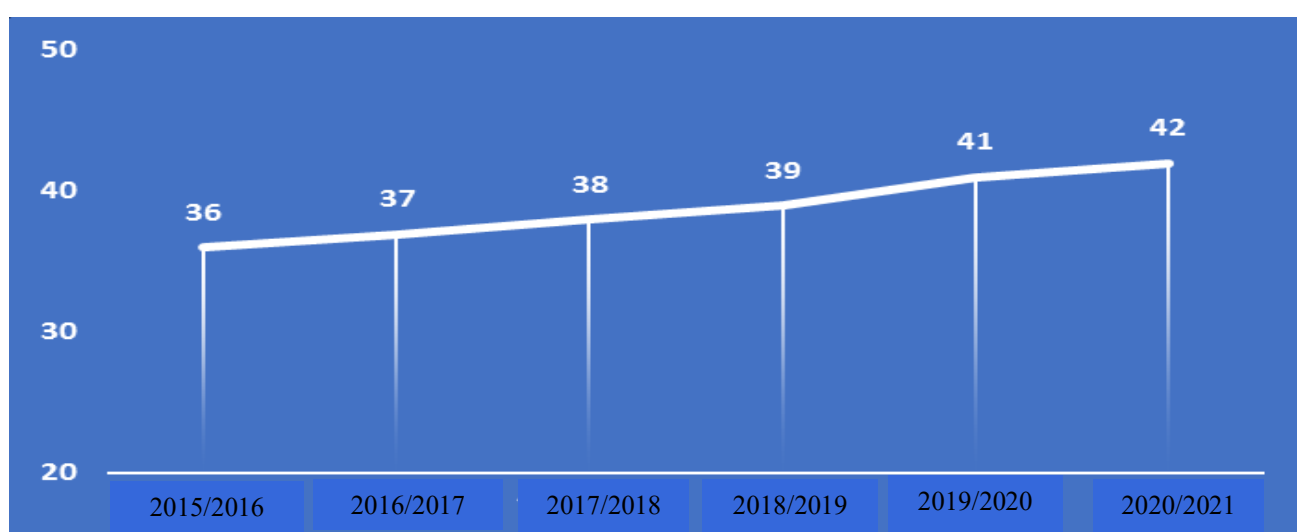
The Ministry of Education and Technical Education has added two additional years, the fourthly and fifth grades, to obtain a diploma in Renewable Energy "Solar Energy Installation, Operation, and Maintenance," aiming to serve the job market and achieve Egypt's Vision 2030 in the electricity and renewable energy sectors.

Technical and vocational education and training programs that incorporate skills and green knowledge can play a fundamental role in preparing students for green jobs, promoting sustainable development, and supporting Egypt's efforts to mitigate the negative impacts of climate change. These programs can also help students acquire the necessary knowledge and skills to work in fields such as renewable energy, sustainable agriculture, green construction, and waste management. By developing technical and vocational education and training programs that take into account the environment and the green economy, Egypt aims to enhance sustainable development, reduce carbon emissions, and contribute to mitigating the negative impacts of climate change while promoting economic growth.

Access and Participation

Despite commendable progress in technical secondary education in recent years, there is currently insufficient capacity to accommodate the population in technical secondary schools, equivalent to general secondary education. Although the current national standard for class size is 36 students in government technical secondary schools, the average class size in those schools is increasing significantly. For government technical secondary schools, the average class size was 42 students in the academic year 2021/2020, slightly higher than the national standard

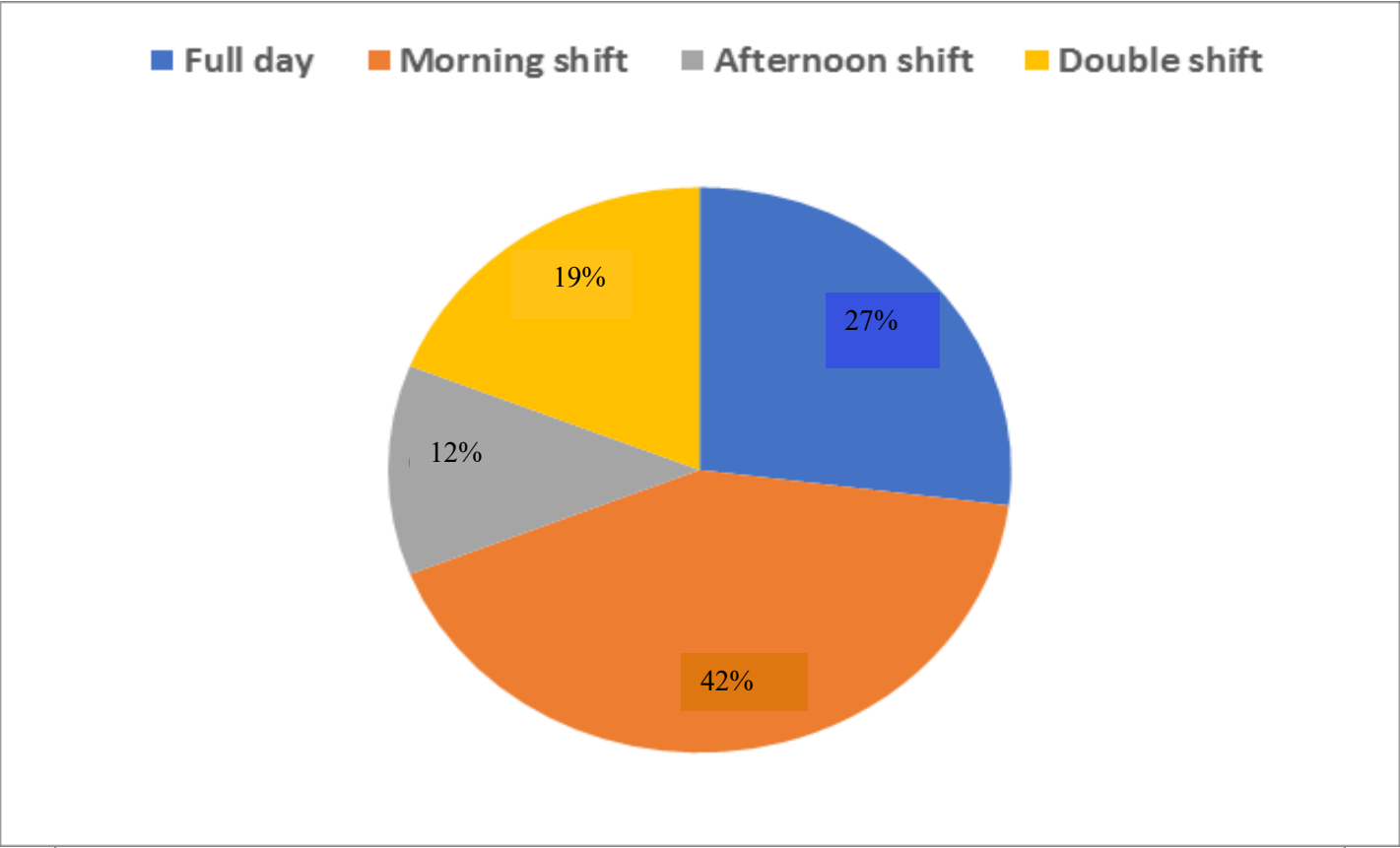
The trend in class sizes in technical secondary education from 2015/2016 to 2020/2021



Source: Calculations based on data from the Education Management Information System.

Moreover, the inadequate educational space (classrooms) in government technical secondary schools reduces their ability to provide high-quality education. Currently, only 27% of these schools operate on a full-day system, meaning that students in schools operating on a period system lose at least one teaching hour per day. This results in a significant decrease in learning opportunities for this group of students.

Classes for governmental technical secondary schools operating on a full-day and shift system 2020/2021

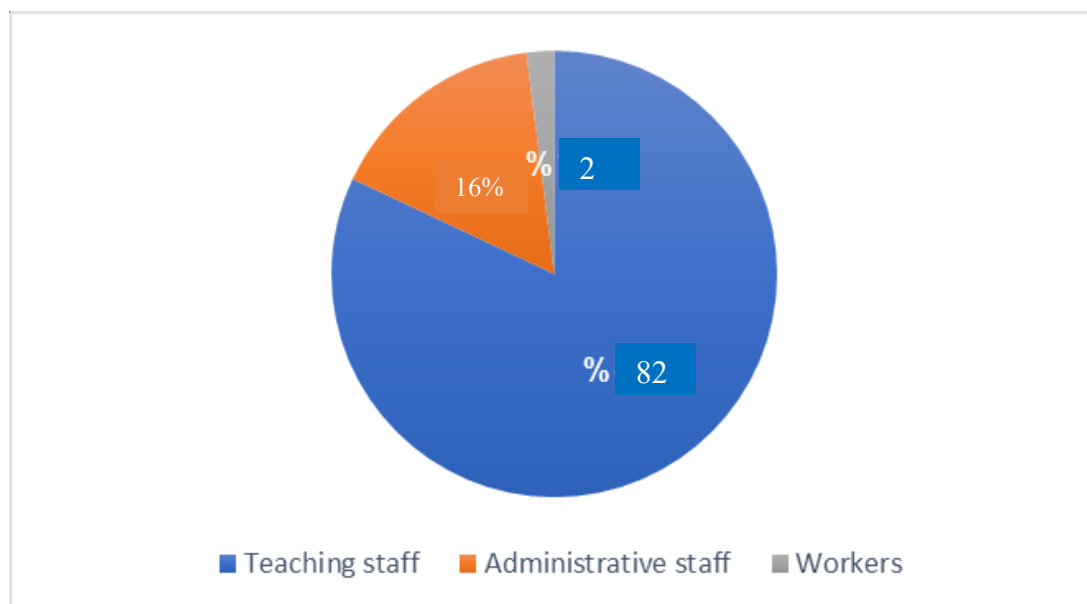


Source: Calculations based on data from the Education Management Information System.

Quality of Learning and Teaching:

Compared to other educational levels, the number of administrative and support staff did not increase significantly, with administrative staff increasing by 5% and support staff decreasing by 4%. Although the proportion of administrative and support staff is relatively higher in other education levels, teaching staff represent the vast majority (82%) in technical secondary education (Ministry of Education and Technical Education, 2021). Despite the encouraging ratio of teaching and non-teaching staff, in technical secondary education, 19% of teachers do not hold specialized education degrees or diplomas. This raises concerns about the qualifications of teachers.

Government Technical Secondary Schools operating on a full-day basis and periods 2020/2021



Reference: estimates based on Education Management Information System data

Since Technical Secondary School students perform less well in the secondary school exam, they are likely to have gaps in learning and additional assistance at the same time. However, technical education curricula have not been designed, and teachers have not been trained on how to implement an overall learning design so that learning activities take into account the specific learning needs of students, which as a result require customized interventions to address the learning gaps and additional needs of Technical Secondary School students.

It should be noted that the challenges in the labor market and the education system are reflected in the mismatch between educational achievement and profession. Graduates of Secondary Technical Education are not well represented in the professions for which Technical Education aims to prepare them. Among those with a technical secondary school certification, 52% work in professions that require skills compared to 61% who received a basic education or without education. While 42% work in low-skilled or unskilled professions compared to 36% of their less educated peers (open access to accurate data initiative 2019). Therefore, it seems that completing secondary technical education does not give any advantage over getting a small amount of education or not getting any education at all. In addition, the technical education system does not provide technical graduates with the knowledge and skills that employers are looking for, and from this point of view, the reforms of the Egyptian education reform project aim to make technical education more relevant to the variable labor market.

Equity and inclusion:

Technical and vocational education and training can enhance the productive participation of women in the labor market, and provide them with the skills necessary to take up future jobs, however, as mentioned earlier, Egyptian female students are more likely to enroll in general secondary education and are less likely to enroll in secondary technical education compared to males, and even within the technical schools themselves, achievement results vary by gender, it should be noted that females are overrepresented in commercial programs (58% of students) and very underrepresented in agricultural programs (14% of students) and industrial programs (Ministry of Education and technical education, 2021). Moreover, within the framework of the programs, females is concentrated in specific professional fields.

The education and technical education plan proposes to develop technical secondary education by responding to the challenges faced at this stage; to ensure the achievement of the expected results listed below, and the proposed programs are considered extremely important in achieving policy results and goals.

Expected results and programs of Technical Secondary Education:

- Ensure adequate and appropriate human resources for effective teaching and learning.
- Improve the quality and relevance of technical education programs so that they have a positive impact on socio-economic development.
- Improving the image of technical education and society's perception of it.
- The skills transferred through technical education are more responsive to the dynamic needs of the labor market and society.
- Systematically improve and sustain the competencies of faculty members.
- Provide appropriate and sufficient teaching and learning equipment and materials for training.
- Improving the mix of human skills in professional fields to achieve Egypt's Vision 2030.
- Measuring the performance and impact of technical education against national and international commitments.
- Provide graduates with more opportunities to obtain further education in order to effectively integrate into the labor market and prepare new programs in all sectors including environment friendly jobs, industry and modern agricultural jobs.
- Updating business education according to the needs of future jobs and specialties.
- Strengthening the mechanisms of technical education assessment and certification.

Expectations of students, teachers and classes -Technical Secondary Education-2022-2027

| | 2022 | 2023 | 2024 | 2025 | 2026 | 2027 |
|-----------------------------|-----------|-----------|-----------|-----------|------------|------------|
| Enrollment | | | | | | |
| School-age population | 9,063,000 | 9,231,000 | 9,486,000 | 9,805,000 | 10,161,000 | 10,532,000 |
| Total enrollment ratio (%) | 25.7 | 27.0 | 28.2 | 29.1 | 29.7 | 30.7 |
| Number of students enrolled | 2,327,387 | 2,492,043 | 2,677,945 | 2,849,827 | 3,014,950 | 3,229,533 |
| - Government schools | 2,036,079 | 2,176,141 | 2,338,709 | 2,488,605 | 2,632,850 | 2,820,461 |

| | | | | | | |
|--|---------|---------|---------|---------|---------|---------|
| - Private schools | 291,308 | 315,902 | 339,236 | 361,222 | 382,101 | 409,072 |
| For teachers and classes in public schools | | | | | | |
| The required number of teachers | 131,588 | 129,919 | 130,673 | 130,785 | 138,921 | 149,473 |
| - Number of teachers to be hired (Total) | 1,829 | 2,279 | 4,651 | 4,032 | 12,060 | 14,720 |
| The number of necessary classes | 29,357 | 32,434 | 36,897 | 41,448 | 46,234 | 52,094 |
| - Number of classrooms to be built (Total) | 8,571 | 9,627 | 9,601 | 9,778 | 11,484 | 6,921 |

Reference: simulation model for UNESCO (2022), estimates based on data from the Ministry of education and technical education and the central agency for public mobilization and statistics.

Key performance indicators 5: Technical Secondary Education, 2024-2029

| List of key performance indicators | Base line 2022/2023 | Objectives 2027 | Objectives 2029 | Reference |
|---|------------------------------|---------------------------|---------------------------|---|
| 1. Gross enrolment rate (Male / Female) age group 15 - 17 | 24,4% | 27% | 33% | Education Management Information System |
| 2. Gender parity index (male /female) | Gender parity index: 0,75 | Gender parity index: 0,76 | Gender parity index: 0,50 | Education Management Information System |
| 3. The rate of transition from the preparatory stage to the industrial secondary stage. | 17,55% | 19% | 20% | Education Management Information System |
| 4. The rate of transition from the preparatory stage to the agricultural secondary stage. | 4,49% | 5% | 6% | Education Management Information System |
| 5. The rate of transition from the preparatory stage to the commercial secondary stage. | 15,63% | 16% | 17% | Education Management Information System |
| 6. The rate of transition from the preparatory stage to the hotel secondary stage. | 1,29% | 1,5% | 2% | Education Management Information System |
| 7. Stage completion rate (Male / Female) | 98,28% The five-year system | 98,5% | 99% | Education Management Information System |
| | 91.89% The three-year system | | | |
| 8. Percentages of technical education graduates sorted by competence | 40% | 55% | 60% | Education Management Information System |
| 9. Percentage of students in technical education in secondary education as a whole (male/ female) | 52.1% | 53% | 55% | Education Management Information System |

| | | | | |
|---|---------------|--------------------|--------------------|---|
| 10. Percentage of females enrolled in technical education schools | 42% | Not determined yet | Not determined yet | Education Management Information System |
| 11. Number of accredited schools | 54 cumulative | 15 | 20 | Accreditation reports |
| 12. Number of partnerships with private sector companies | 14 | 50 | 100 in 2030 | Education Management Information System |

However, the construction of classrooms does not keep pace with the increase in enrollment, the Ministry has provided distinguished schools for middle-income students, which are subject to major expansion plans nationwide, including:

1. Official language schools and distinguished official language schools:

Which accepts a large percentage of families and the population to enroll their children in it, and was initially established under the name of Experimental Language Schools in 1989 AD. The name was changed to Official Language Schools and Distinguished Language Schools through Ministerial Resolution No. (285) of 2014 AD. These schools teach all subjects in this type of school in the English language, except for Egyptian identity subjects, what distinguishes these schools is that they provide the same language education service as private schools at a much lower cost. The number of these schools currently: 1138 official language schools + 119 distinguished official schools + 8 distinguished official language schools “French as the first language.” Each school has four stages (pre-primary - primary - preparatory - general secondary), the total number of schools (stages) reached 3,389 schools, including 30,344 classes, with 1.393772 million students, including 11 industrial technical education schools with 3,321 students, and a hotel technical secondary school with 472 students.

The total number of hired and contracted teachers also reached 48514 teachers according to the General Department of central data in the ministry 2022/2023

2. Government international public schools - The international public schools in Egypt is one of the promising national projects, which is characterized by retaining the curricula of the Arabic language, religious education and social studies in addition to the international curricula. It is an international education applied for the first time in a local environment and of high quality. Since 2014, the ministry has started applying the IBO International Baccalaureate curricula in three distinguished public schools with the assistance of the private sector to provide an opportunity in distinguished education at all levels in order to raise the level of education in Egypt as a step to keep pace with global developments.

First: two schools in 2014, where the International Baccalaureate Diploma “IBO” (International Baccalaureate) curricula are applied, namely: the Egyptian International School in Sheikh Zayed and the Egyptian International School in Al Mearaj (date of establishment 2014/2015), and the Egyptian school was established in Settlement city in 2018/2019.

The second: To teach the American curriculum (IG) in (10) schools, namely the Egyptian International School in {Shorouk - Obour - Port Said - Mansoura - Tanta - Alexandria - Damietta - Zahraa Nasr City - Mostafa El Nahhas in Nasr City – 6th October}

Then equipping and implementing (3) schools in 2020/2021; To reach 15 schools, and operate 3 schools in 2021/2022; Bringing the number of public international schools to (18) schools, and in 2022/2023 the number of official international schools reached (20) schools (International General) IGCSE (Certificate for Secondary Education), and the work of this type is organized by Schools Ministerial Decision No. (289) of 2016.

- (3) **Egyptian-Japanese Schools:** Egyptian-Japanese schools in Egypt seek to implement the Japanese model of educational activities, “Tokkastu” This word refers to the concept of comprehensive development of the child in all aspects, which focuses on building the child’s personality, represented by his behaviors, skills, values, and attitudes, with the same degree of importance for developing His knowledge, information, and mental skills. The number of schools nationwide in 26 governorates has reached 51, and the number of teachers working in the schools has reached 1,934 teachers in all academic specializations and activities, and the number of students enrolled in schools has reached the first level in kindergarten, up to the fifth grade of primary school it reached 11,481 students until 2022/2023.
- (4) **Nile Egyptian Schools (NES):** They are Egyptian international schools that offer a socially acceptable system, because it offers a foreign culture and foreign languages in addition to the Arabic culture, and it is a distinct model of interaction between students and teachers. These schools provides a high-quality educational model, based on qualified and experienced staff, and this model allows the student to obtain an accredited Egyptian certificate that is recognized internationally. The number of schools has reached 9 schools in the governorates and cities: Sadat - New Damietta - New Assiut - New Aswan - New Cairo (Andalusia and Yasmine) - Al-Shorouk - Sheikh Zayed - Obour – 6th of October - Menoufia - Luxor - Minya, and (5) schools were operated in 2021/2022, bringing the number of schools to (14) schools, and since on 5/4/2009, Then an agreement was concluded between the Education Development Fund and the International Examinations Authority at Cambridge Assessment International Education. According to this agreement, Under this agreement, the International Nile Certificate Unit offers a new educational system distinguished by international standards, providing every student enrolled in the Nile Educational System with a high-quality education that keeps pace with the latest international systems, through teaching new Egyptian curricula prepared in partnership between the Unit and the Cambridge International Assessment Authority Education according to international standards for the stages of education The teaching will be bilingual according to the Nile educational system, provided that this system includes teaching the Arabic language, and teaching religious education and social studies in the Arabic language.
- (5) **The Egyptian Model for STEM Schools: Schools for outstanding students in science, mathematics, and technology:**
Secondary schools for outstanding students in science and technology (STEM) were established in Egypt pursuant to Ministerial Resolution No. (369) of 2011. Work began on the first of these schools, which is the secondary school for outstanding students in science and technology for boys in the 6th of October at the beginning of the academic year 2011/2012, and in the year For the academic year 2022/2023, the number of schools reached 19 schools for those who excel in science, technology, and consumer sciences. In the long term, establishing a school of this type in every governorate. These schools have internal residence, and accept learners who have obtained a preparatory certificate through a set of admission tests. And Ministerial Resolution No (382) for the year 2012 AD explains the mechanism of enrollment in school.

Among the goals of establishing secondary schools for those who excel in science and technology are: nurturing those who excel in science, mathematics, engineering, and technology and paying attention to their abilities, maximizing the role of science, mathematics, engineering, and technology in Egyptian education, encouraging the orientation toward scientific specializations among a large percentage of students in the secondary stage. Applying new curricula and teaching methods based on investigative projects and the integrative approach to teaching, it also achieves integration between the science, mathematics, technology and engineering curriculum, revealing the extent of the connection between these fields. To prepare a student who has the ability to design, think, create, and think critically, teaching methods are used that rely on research and investigation, project-based learning, and learning by design, Emphasis is also placed on the practical and applied aspect of concepts by providing advanced laboratories, it (electronics - hydraulics - earth and space sciences - robotics). These laboratories have an activity whose grade is counted toward the student's total in the third year of secondary school. These schools have a manufacturing laboratory (Fab Lab). Students can use it in any academic subject, Capstone integrative scientific projects are also used as a separate subject within the academic subjects that students study, as such grade represents 60% of the student's total in the first and second years of secondary school, and 40% of his total in the third year of secondary school.

(6) Technical education: schools of applied technology:

The Ministry of Education and Technical Education launched the Applied Technology Schools system in 2018, during which studies began with (3 schools only) in Cairo and Menoufia Governorates, and the number of Applied Technology Schools in the current year 2023 (52 schools) in 14 governorates Republic (Cairo - Giza - Alexandria - Qalyubia - Menoufia - Dakahlia - Suez - Minya - Assiut - Sohag - New Valley - Port Said - Sharkia - Qena).

Where technical education in the Ministry of Education works to develop and modernize curricula, training and teaching methods; To keep pace with the needs of the Egyptian labor market for skilled technicians to work in light of Egypt's dependence on solar and wind sources as important sources of energy, as well as to prepare and train teaching staff educationally and technically; To achieve the goals of industrial secondary education, three years ago.

(7) Technical education schools specialized in the wind and solar energy industry:

It consists of (17) schools divided between industrial schools with the three-year system, and their number is (10) schools and industrial schools for dual education and training, and their number is (3) advanced industrial technical schools with the five-year system, and their number is (4) schools.

The number of students enrolled in schools specialized in the wind and solar energy industry is (1,335) students in all academic years, and the number of teachers for theoretical technical subjects and practical applications is (164), according to data for the academic year 2020/2021.

The number of governorates in which schools specializing in the wind and solar energy industry are spread is (11) governorates (Cairo - Suez - Benha - Sharqia - Beheira - Alexandria - Sohag - Qena - New Valley - Aswan - Red Sea), and specialization is being established in the governorates of Giza - Luxor. - Menoufia), and the number of specializations in the wind and solar energy industry is (3) specializations: renewable energy technician, solar energy installation and maintenance technician, and wind energy technician.

Among the most important challenges are limited infrastructure and access to sufficient school capacity. To accommodate the increasing numbers of students, at all levels of the system there is a shortage in the

supply of classrooms, which leads to overcrowding, a decrease in the effectiveness of teaching, and an impediment to the appropriate expansion of schools.

In fact, even with overcrowding, the classroom space itself is insufficient for the number of students. Among public schools, 19,1 (5,109 schools) have class sizes of up to 50 students, and 12.9 (2740 schools) with class sizes ranging from Between 50-60 students, 7.6% (2020 schools) have class sizes ranging between 60-70 students, and 6.7% (1797 schools) have class sizes of 70 students.

Fourth: Community schools. Current situation and challenges.

Community schools, or single-class schools, generally provide education for children who are over the age of primary school or who have dropped out of them. They are government schools that operate within the public education system. It applies a flexible approach that allows more than one level of curriculum content to be presented in the same semester. These schools take different forms to respond to the specific needs of the community.

It is worth noting that community education focuses specifically on primary education and targets children in the age group of 9-14 years, taking into account that children aged 6-8 years are not accepted unless there is no government school nearby or expensive This includes establishing community schools in the communities and villages located It is more than two kilometers away from the nearest public primary school. On the other hand, the community education model provides small class sizes, flexible timings, and a multi-grade learning method, and teachers are appointed Locally (from the community itself, often two teachers are appointed per class To enable better teaching and learning for multiple grades, new teachers are subject to pre-service teacher training and continuous in-service teacher training, and they are also subject to regular supervision. The curriculum of this system follows the standards of the Ministry of Education and Technical Education, but it is organized. In a way that allows dealing with the (multi-row) situation.

Community education has been implemented since 1992, and was initially envisioned as a partnership between the Ministry of Education and Technical Education and UNICEF. The Ministry provides technical supervision, textbooks, and a 75% share of teachers' salaries, and UNICEF provides technical and financial support; to ensure quality, The number of classes in these schools is one or two classrooms and they provide education following a multi-grade approach, with a special focus on ensuring equal access to girls. These schools are mainly established in areas outside public school clusters toxicity, and implementation is carried out through non-governmental organizations and civil society organizations at the local level, and community education is mostly found in remote rural areas (92% of community schools are located in rural areas in (2020/2021), which are the areas that most likely have the highest rates of school dropout.

- Providing community education for (144,364) male and female students: (45,752) male students, and (98,621) female students in (4,934) community schools.

| Number of one-semester schools | Girls-friendly | Community | Children in difficult conditions |
|--------------------------------|----------------|-----------|----------------------------------|
| 2435 | 959 | 1440 | 10 |

Enrollment system:-

- Children from the age of 6 to 14 years are accepted in poor and marginalized places far from educational services.
- For children over the age of nine years, they are given a placement test by enrolling them in the classes appropriate to their achievement level.

- Both males and females are accepted in these schools; to reduce the number of dropouts.

Classification of community education schools:

First: one-class schools:

One-class schools have been considered the starting point for community education in Egypt since 1993 AD. The idea began with 211 schools in poor, marginalized and deprived places of educational service.

The purpose of these schools is to provide a second chance for girls who have dropped out to learn in their places of residence without any financial burdens or obstacles preventing them from attending school.

The number of schools has now reached approximately 2435 schools.

Second: Girls-friendly schools:

Girls' education is a primary goal within the strategic plan for education in Egypt. Consequently, the Egyptian Ministry of Education has focused on expanding the establishment of community schools with various types, in partnership with the National Council for Childhood and Motherhood, civil society institutions, and international organizations. These schools were established and supervised by the National Council for Childhood and Motherhood in 2004 in eight governorates (Beheira, Giza, Fayoum, Beni Suef, Minya, Assiut, Sohag, and North Sinai), totaling approximately 988 schools. They remained under its auspices until they were handed over to the Ministry in 2012.

Third: Community schools (civil associations) are divided into two types:

Believing in the role of civil society institutions and NGOs in participating in the educational process and within the framework of the state's philosophy and efforts to expand educational services and activate community participation, the Ministry has authorized these organizations to establish schools similar to single-class schools. This is in accordance with Ministerial Decree No. 30 of 2000, which regulates the relationship between the Ministry and the role of NGOs in the educational process. The ministerial decree specifies the role of NGOs in providing school premises, furniture, selecting teachers in coordination with the Ministry, providing necessary human resources for teaching, supervision, and technical guidance, as well as supplying textbooks and educational materials.

The number of these schools reached approximately 1,458 schools by the year 2021 AD.

The second type: Schools that are friendly to children in difficult circumstances.

One of the most critical projects that everyone should be concerned about due to its significant danger to all segments of society is the project of Schools for Children in Difficult Circumstances. This pioneering initiative addresses the needs of child laborers and street children, offering a holistic approach to solving the challenges faced by these vulnerable groups. These children endure harsh conditions and suffer from feelings of fear and deprivation of basic rights, such as housing, food, and security. They are surrounded by various dangers, including illness, addiction, involvement in crime, exploitation by street gangs, and the physical toll of exhausting labor on their fragile bodies.

From this standpoint, the Ministry of Education collaborated with the UNESCO Regional Office in Beirut and local civil society organizations in Egypt to implement a strategic program aimed at caring for these children. This program includes the implementation of a pioneering model designed to reduce child labor and the number of street children.

The idea began in 2004 and continued until 2008 in three stages, with a total of 3 schools. The number has now reached approximately 10 schools.

The philosophy of these schools revolves around modifying the behavior of these children and reintegrating them into their families. They are taught the principles of reading, writing, and arithmetic through a rehabilitation period that may last up to a year. At the end of this period, they undergo a proficiency test to determine their educational level and are then placed in appropriate academic grades based on their academic achievement, enabling them to study the multi-level curricula of community education.

It should be noted that with the current level of enrollment in these schools, the number of students attending them will reach approximately 20% of the out-of-school children aged 6-14 years old (Ministry of Education and Technical Education, 2021). The number of students in the classrooms is small, averaging 28 students, and the student-to-teacher ratio is appropriate, currently averaging 1:18 (Ministry of Education and Technical Education, 2021).

According to previous evaluations, one of the distinctive characteristics of community education was building a model based on an in-depth understanding of the entire education landscape in Egypt, with all its needs, priorities, challenges, and long-term opportunities associated with it. This model is also credited with having a transformative impact on the education system as a whole. The Ministry of Education has and technical education by establishing community education principles such as school-centered management and engagement, child-centered active learning, and reliable assessment approaches.

However, community schools have often struggled to secure sufficient resources to operate effectively, leading them to rely on non-governmental external support (UNICEF, 2021). They have also faced challenges regarding teacher recruitment and retention, particularly in the face of frozen government staff appointments and issues related to salary payments.

It is worth mentioning that in addition to the financial constraints limiting the recruitment and retention of teachers, there is a concerning proportion of teachers lacking any educational qualifications, especially in community schools under the Ministry of Education and Technical Education (34%). These schools likely have students who are more in need of academic support than others (Ministry of Education and Technical

Education, 2021). Furthermore, similar to other levels of education, the distribution of workforce in education between teaching and non-teaching staff is extremely skewed, at about 3:2 (Ministry of Education and Technical Education, 2021).

The roadmap for community education, currently under discussion at the ministry, provides an opportunity to expand and enhance this educational model. The second phase of technical support provided by UNICEF is now focusing on supporting the alignment and evaluation of the community education curriculum, alongside those being developed as part of the Egyptian education reform project. It also involves establishing a framework for teacher competencies and capacity building, including support on how to supervise these schools.

It should be noted that strengthening coordination mechanisms in the Ministry through regular top-down and bottom-up updating and sharing of information on current needs and available resources will ensure better targeting and effectiveness of partnerships.

In addition,, strengthening links with other government sectors such as the Ministry of Social Solidarity, the Ministry of Youth and Sports, the Ministry of Communications and Information Technology, and others will ensure the integration of public services provided to this vulnerable group of children, leading to better long-term outcomes.

Furthermore, there is an urgent need for further development of the current monitoring and evaluation system, including data related to out-of-school children and tracking students' completion of their studies in community schools, as well as their continued enrollment and participation.

On the other hand, it has been observed that the use of different partners with different monitoring and evaluation tools hinders efforts to assess teacher progress. Therefore, it is advisable to utilize a unified monitoring and evaluation toolkit as the primary source for conducting assessment-related interventions. The Ministry of Education and Technical Education will undertake the continuous development of this toolkit with support from relevant development partners.

We propose an education and technical education plan to develop community education by addressing the challenges facing this sub-sector, aiming to achieve the expected outcomes outlined below:

The proposed programs are considered extremely important in achieving the policy results and objectives, which contribute to combating dropouts and supporting literacy programs through the General Administration for Literacy Eradication, which is affiliated with the Central Department of Dropouts from Education at the Ministry's General Office.

Expected outcomes and programs for community education:

- Enhancing national capacity to provide quality basic education for all, with a particular focus on girls, through the establishment of effective and adaptable community schools that contribute to community development.
- Reducing the number of out-of-school children by providing opportunities for high-quality and accessible basic education tailored to the needs of the community and friendly to girls in underserved rural communities in Upper Egypt governorates: Asyut, Sohag, and Qena.

- Enhancing the managerial and technical capacities of staff in community schools to expand the scope of a community-based, sustainable, and girl-friendly basic education model, relying on the efforts of the local community.
- Identifying the number of out-of-school children and directing them to the most suitable learning path or to the "catch-up program," and follow up on them thereafter.
- Gradually reducing the number of out-of-school children by swiftly reintegrating them into the formal school system.

Key Performance Indicators 6: Community Schools 2024-2029

| List of key performance indicators | Baseline 2022/2023 | Target 2027 | Target 2029 | Source |
|--|-----------------------|----------------|----------------|---|
| 1) The percentage of children who drop out of school at primary education age. | Total 0.23 % | 0.05 % | 0.03 % | Education management information system |
| 2) Percentage of gross enrollment in community schools | 1.1 | 1 | 0.9 | Education management information system |
| 3) Net enrollment ratio in community schools | 0.9 | 0.8 | 0.7 | Education management information system |
| 4) Average class density in community schools | 29.10 | 28 | 27 | Education management information system |
| 5) Average teacher share of students. | 18.47 | 16 | 15 | Education management information system |
| 6) Percentage of students who passed the Grade 6 exam (males, females) | 97 % | 100 % | 100 % | Education management information system |

Fifth: Special education schools, current situation and challenges

The most important beacons in the history of special education in Egypt

1984 The first private school to teach the blind and deaf.

1900 The first government school for the blind.

1939 The Ministry of Education established the first classes for the deaf.

1934 Beginning of establishing new independent schools for people with special needs.

1945 The Department of Special Education concerned with the care and education of students with disabilities began in Egypt under the name (Specials Administration) and is affiliated with the General Administration of Primary Education.

1964 Then the General Administration for Special Education was established, which included three departments: Al-Nour for Visual Education, Al-Amal for Auditory Education and Intellectual Education.

Legislation regulating special education and integration:

1969, Ministerial Resolution No. 156 was issued regarding the organizational regulations for special education schools and institutes.

1990, Ministerial Resolution No. 37 was issued regarding the organizational regulations for special education schools and classes.

Ministerial decisions to correct the educational integration system in line with modern changes in special education, such as:

- Ministerial Resolution No. 229/2016, regarding the integration of students with mild disabilities into technical education schools.
- Circular 2016/60, regarding the distribution of students with integration, mobility disabilities, and the blind in ground floor access.
- Ministerial Resolution No. 252/2017, regarding the integration of students with mild disabilities into general education.
- Ministerial Resolution No. 291/2017, regarding the organizational regulations for special education schools and classes.

- Ministerial Resolution No. 2019/20, regarding the establishment of classes attached to Al Noor Schools for the Blind and Al Amal Schools for the Deaf for students with double and multiple disabilities, and their admission system.
- Circular (3) of 2019, to implement the executive regulations of the Rights of Persons with Disabilities Law No. (10) of 2018
- Participating in a number of activities that support the rights of people with disabilities, including integration and special education students, such as: participating in drafting the executive regulations for Law No. 10/2018, regarding the rights of people with disabilities, and participating in developing The plan of the various ministries; To implement the provisions of the Law on Persons with Disabilities and Dwarves at the headquarters of the Egyptian Parliament, as well as participate in developing the national strategic framework; To eliminate violence against children, with UNICEF, the European Union, and the National Council for Motherhood and Childhood.

Special education schools and classes:

Education for people with moderate and severe disabilities in Egypt includes:

- Intellectual Education Schools, which include (29,420 students) distributed among 184 schools.
- Auditory education schools, including 10,965 students distributed among 123 schools.
- Visual education schools, including (3718 students) distributed among 31 schools.

These schools and attached classes cover all governorates of the Republic.

14 classes for people with multiple disabilities, for the first time in Egypt and the Arab world, in 8 governorates (Cairo - Qalyubia - Gharbia - Alexandria - Beni Suef - Giza - Fayoum - Sharqia) with a number of (125 students)

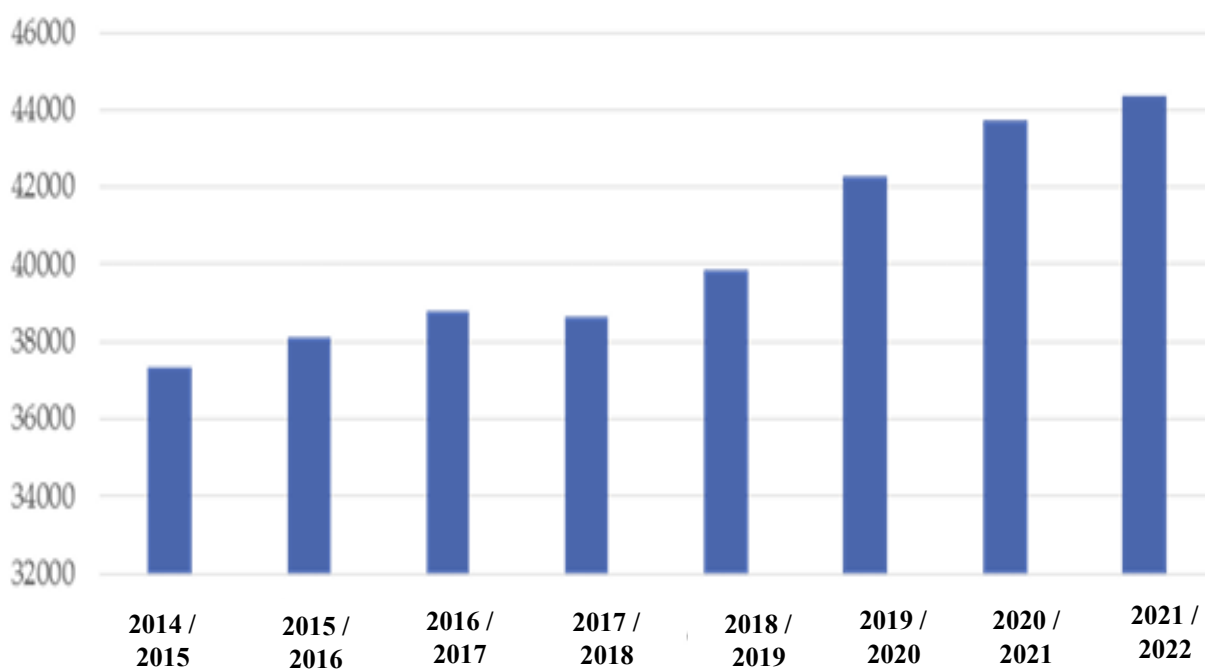
Census 2021-2022

Some schools provide a boarding system, whereby the student receives three meals a day, in addition to a full uniform (winter and summer, and shoes). In the event that a boarding system is not available, meals are provided cooked or dry.

Special education statistics

| School year | Total number of students (intellectual, auditory, visual) |
|-------------|---|
| 2014 / 2015 | 37331 |
| 2015 / 2016 | 38135 |
| 2016 / 2017 | 38792 |
| 2017 / 2018 | 38641 |
| 2018 / 2019 | 39859 |
| 2019 / 2020 | 42255 |
| 2020 / 2021 | 43719 |
| 2021 / 2022 | 44373 |

Total number of students (intellectual - auditory - visual)



Key ministerial decrees governing the process of educational integration:

Ministerial Decree No. 42 on the Committee for the Integration of Children with Minor Disabilities in Public Education Schools was issued in 2008

Ministerial Decree No. 229 on the inclusion of persons with minor disabilities in art schools was issued for the first time in 2016.

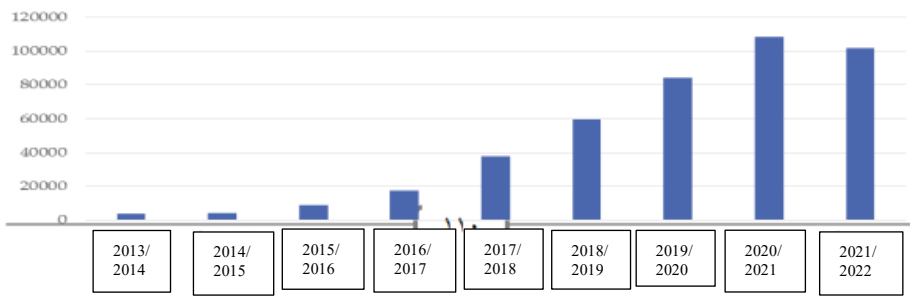
Ministerial Decree No. 252 amending Ministerial Decree No. 42/2015 on the inclusion of persons with minor disabilities in public education schools was issued in 2007.

Periodic Book No. 3 was published in 2019 to keep up with the Disability Act.

Integration Statistics

| School year | Total number of integrated students |
|-------------|-------------------------------------|
| 2013/2014 | 3613 |
| 2014/2015 | 4125 |
| 2015/2016 | 8800 |
| 2016/2017 | 17229 |
| 2017/2018 | 37519 |
| 2018/2019 | 59391 |
| 2019/2020 | 83952 |
| 2020/2021 | 108224 |
| 2021/2022 | 101500 |

Total number of integrated students



Integration Challenges:

- Limited number of source rooms.
- How teachers deal with integration students
- Old school buildings are not ready for integration students.

To meet these challenges:

- Train a group on how to produce Montessori tools to save the expenses of the source rooms.
- Specialized training for teachers.
- School infrastructure and rehabilitation for integration.
- All the new school buildings from 2016 have an integration code for general education schools.
- Develop some old schools with some parties.

Accessibility for people with disabilities:

Providing all governorates of the Republic with special education schools, including intellectual education schools, auditory education schools for the deaf and hard of hearing, Al-Nour schools for the blind and visually impaired, and classes for hearing, intellectual, or visual disabilities in general education schools. A number of kindergartens are opened annually in special education schools.

Equipping and operating 639 resource rooms in 19 governorates to serve students with minor disabilities in some governorates in cooperation with some local and international partners.

Equipping and operating 14 formal classes for multiple disabled for the first time in Egypt and the Arab world in eight governorates.

Provide Al Asher center to receive 300 cases per day.

Provide El Mataria center to receive 20 cases per day.

Curriculum development:

- The standards and indicators of the deaf curriculum as well as the indicative content of the textbooks of the deaf have been developed in the new education system "Egyptian Education Reform Project" with the knowledge of the experts of the Centre for Curriculum and Educational Materials Development and the Central Department of Special Education.
- A manual for extra-curricular activities for integrated students was carried out by cooperating with The National Council for Childhood and Motherhood and the Teacher's Manual for Integration of the first three years of Primary School in the light of the new primary education systems "The Egyptian Education Reform Project", and implementing adaptations in the fourth grade of primary school curricula to suit integrated students with disabilities.
- The development of diagnostics, evaluation and educational measurement of Schools for individuals with disabilities by defining the specifications of the examination paper for schools and classes of Schools for individuals with disabilities (deaf and blind).

Technological support for persons with disabilities:

- Supplying all special education schools with computers, printers and Data Show, as well as Supplying schools for deaf with copies of the standard electronic sign language dictionary for deaf, Braille printers and Screen Readers for speaking programs for schools for the blind.
- Provide technological support in computers, printers and Data Show for 300 inclusive general education schools throughout the Republic.
- It is planned to provide technological support to 1600 inclusive general education schools in three years' time (100 schools have been supported during 2022 to date).

Educational activities for persons with disabilities:

- The largest plan of sports and leisure tournaments in the history of Egyptian special education has been set up in all the governorates at some local, regional and republican levels for those with special needs from inclusive and special education schools, in five-a-side football, athletics, theatrical performances, artistic works, bike races. These activities culminated in the first Arab forum for special and inclusive education schools, under the auspices and attendance of His Excellency the President of the Republic in Sharm El Sheikh in 2018. These activities continue to be held periodically to date.

- Launching celebrations of international days for people with special needs, such as World Down Syndrome Day, World Autism Day, World ADHD Day, World Deaf Day, World White Cane Day, and World Sign Language Day in all public schools Promotion and special education at the republic level, with the participation of popular and executive leaders and governors and military advisors.
- Participation in the Egyptian delegation to the Special Olympics in Austria; to represent Egypt internationally.

Professional development for teachers to deal with people with disabilities:

- then training more than 75,000 teachers, specialists and school leaders from special education and inclusive general education schools from all governorates on specialized training packages in Educating people with disabilities, such as: (raising awareness of integration and its mechanisms and creating awareness campaigns - qualifying leaders Educational - Characteristics of people with integrated disabilities - Psychological tests and measurements - Manufacturing and using educational aids in teaching for people with disabilities - Modern strategies in teaching - Managing high-intensity classes - Maria Montessori's approach - Preparing the individual educational plan - Behavior modification and skills development - Raising K The quality of resource room teachers - Qualification of teachers of the deaf and hard of hearing - Qualification of teachers of the blind and visually impaired - Qualification of teachers of intellectual education - Sign dictionary for the deaf - Braille language for the blind.
- It is planned to train 100,000 teachers, specialists and school leaders from special education and inclusive public education schools on integration programs during the next three years (then 15,000 will be trained during 2022). Until its date.

Partnerships

Then a number of cooperation protocols were concluded with governmental institutions and civil work organizations. To support the workforce in the field of educational integration, such as: a cooperation protocol with UNICEF on developing the integration process and training teachers in inclusive public education schools in cooperation with specialized colleges (Faculty of Disability and Rehabilitation Sciences at the University of... Zagazig - Faculty of Science for People with Special Needs, Beni Suef University - Faculty of Early Childhood, Alexandria University - Faculty of Education, Ain Shams University - Faculty of Specific Education, Benha University), and a protocol with the Nedaa Association to serve and ensure quality education and rehabilitation for hearing-impaired children, hearing aid users, and cochlear implants People with disabilities, including those with multiple disabilities

and a protocol with the Archdiocese of Biba, Al-Fashn and Samta regarding providing technical and health support to the integration and special education schools in Beni Suef, and a protocol with the General Secretariat of Mental Health, the Specific Federation of Rotary Clubs, and the Housing and Development Bank. To provide technical support to inclusive schools, and a protocol with the Faculty of Disability and Rehabilitation Sciences at Zagazig University; To provide technical support to integration, special education and integration schools, and finally a joint cooperation protocol with the Ministry of Communications and Information Technology regarding supporting and developing inputs to the educational process; To improve the services provided to students with disabilities.

Sixth: Governance and management at the level of education, technical education, current situation and challenges.

Pre-university education is subject to the supervision of the Ministry of Education, Education and Technical Education and Al-Azhar Al-Sharif, and the Ministry is the largest organizer and provider of pre-university education, and in addition to the tens of thousands of government schools that it directly owns and manages It also organizes and supervises private education, and the public education system consists of four levels. : The Ministry of Education, Teaching, and Technical Education in Cairo, the directorates of education at the governorate level (the directorate), the education departments at the regional level (administration), and the schools.

As stated in the Foundations of Change, improving the flexibility, gender responsiveness, efficiency and effectiveness of the education system is one of the basic pillars and is referred to as an overarching goal of the education plan and technical education. Improving governance and management reform are closely linked to ways and means of achieving policy objectives and priorities and achieving high-level goals. The level specified in the Egyptian education reform project.

According to the analysis of the current situation of education conducted in 2021, in general there are challenges in managing the education system, and one of the main issues is the prevailing bureaucracy and centralization of the system: such that the ministry, governorates, directorates, and schools are subject to lengthy bureaucratic procedures; To obtain approval to allocate funds; and transfer of teachers; etc., which can prevent schools from implementing their development plans.

According to the analysis of the current state of education conducted in 2021, in general there are challenges in the management of the education system. One of the main issues is the prevailing bureaucracy and centralization of the system. The ministry, governorates, directorates, and schools undergo lengthy bureaucratic procedures to obtain approval to allocate funds, transfer teachers, etc., which can prevent schools from implementing their development plans. Furthermore, neither the ministry nor the governorates can make any decisions on hiring education staff, including teachers, without a long cycle of approvals from the Central Agency for Organization and Administration, and when decisions are made they may not be in line with needs due to government restrictions. Sometimes conflicting authorities between different entities result in schools receiving contradictory instructions. On the other hand, due to the lack of mechanisms for effective communication systems between management levels and top-down decision-making processes, there may be a mismatch between the resources required to fulfill the instructions of ministerial decisions and the available school resources. Moreover, there are challenges related to the effective participation of parents in school management. Some boards of trustees, parents and teachers are partially or completely inactive, and their ability to support school management varies according to the level of education and poverty in the community surrounding the school.

It should be noted that the structures of directorates and departments largely reflect the centralized form of the Ministry of Education and Technical Education. The Directorate of Education is headed by a deputy minister, an employee of the Ministry of Education and Technical Education who is technically subordinate to the

ministry and supervised by it, but at the same time administratively subordinate to the governor. The educational department is headed by a general manager who reports to the deputy minister and is also supervised by the local council of the region.

In many cases, decision makers in the field of education work on the basis of incorrect or contradictory educational data. In addition, hundreds of ministerial decisions and memorandums are issued annually and sent to schools. In many cases the old ones are used without reference to the latest updates; as there is no legal archive, which in turn leads to schools often not being aware of the updated rules and regulations and continuing to work on the basis of the old ones. Despite the existence of several departments concerned with follow-up and evaluation, the department faces the challenge of weak evaluation, monitoring and incentive systems and the lack of an integrated framework for results-based monitoring and evaluation. The ministry's departments also lack coordination and integration due to a flawed organizational structure and unclear obligations and responsibilities at different administrative levels.

Hence, as part of the Ministry's strategies to scale up digital transformation and innovation and in accordance with the governance and management reforms in the Education and Technical Education Plan, the traditional Education Management Information System (EMIS) will be further expanded beyond routine administrative tasks and student counts to become a real-time, integrated and accessible system. This can be used to guide education decision-making at all levels and promote accountability. This will lead to improved education. As such, the EMIS will become an effective digital tool to support: (1) day-to-day management at all levels, (2) strategic education planning and management, governance and accountability, and monitoring and delivery. It will also simplify and institutionalize access to the data generated by the various components of the education and technical education plan to maximize its use in shaping meaningful management and educational decisions and guiding continuous system improvements across the education sector.

It will be an integrated information system in that it: (1) integrates all relevant information about educational institutions, students, learning, human resources, buildings, equipment, digital content as well as the sector's strategic management processes beyond different administrative levels. (2) It integrates all digital management and learning systems into one interoperable system. (3) It is linked to the broader government digital ecosystem, including national identification systems for automatic verification of learners' identity and human resources.

It should be noted that this integrated system - the Education Management Information System - will streamline data collection practices across the education system as a whole: To prevent duplication of information across different data systems and will digitize and decentralize data entry processes to improve data efficiency and quality. On the other hand, the system will be accessible and effective with users and meet their diverse needs by providing useful information services to all stakeholders, including students, parents, teachers, school leaders, sector managers and the public, especially through dedicated web portals. The information services will be designed to provide accurate, timely and easily digestible information, serving stakeholders in the education management information system and categorized at different levels such as national, regional, zonal, supervisory group, school, department, classroom and student level by gender, highlighting inequalities and showing trends over time.

Effective governance is essential for achieving the results envisioned in the Education and Technical Education Plan. The various aspects of governance, system management and planning are discussed in the relevant parts of this document to contextualize these issues.

This Education and Technical Education Plan proposes education governance and management development to respond to the challenges facing the system to ensure the expected outcomes listed below. The proposed programs are critical to achieving the policy outcomes and objectives.

Expected results:

- Supporting teachers and school staff well, and managing them more efficiently and effectively to deliver high-quality teaching and learning.
- Develop new professional standards for teachers, certify teachers' qualifications and competencies, and motivate teachers through better recognition of their role and a merit-based promotion system and reward package.
- Develop a clear and coherent framework of professional standards and indicators for teachers and online professional development modules and courses designed to develop specific teaching skills.
- Strengthening and empowering subnational education management bodies, including school leadership, to be effectively accountable for implementing the sector plan.
- Progressive decentralization and delegation of functions to bring decision-making closer to beneficiaries, and governance with greater accountability, coordination, and a system-wide view.
- Creating an effective system of administration and management, including system-wide accountability and sustainable and equitable financing modalities.
- Develop the capacities of national, regional and local officials for system-wide planning and management and improve evaluation, innovation and research.
- A harmonized education management information system producing quality, reliable and timely data that can be accessed and utilized across all education subsectors.
- Adequate and timely disbursement of allocated budget and effective procurement.
- Modernize education sector legislation, regulations and standards in line with and adapted from national development strategies.
- Increase efficiencies to optimize the education budget to obtain greater impact from available resources and the sustainability of recurrent surveys as well as ways to integrate budget and financial data to prepare learning and education data.
- Develop an evaluation framework for each of the standardized summative evaluations required in the new Egyptian Education Reform Project system.
- Strengthen the management of multiple, mutually accountable partnerships.

Key performance indicators 8: Governance and management at the level of the Ministry of Education and Technical Education, 2024-2029 AD

| List of key performance indicators | Baseline 2022/2022 AD | Target 2027 AD | Target 2029 AD | Source |
|---|---|--|-------------------|---|
| 1) Education expenses (functional budget) as a proportion of gross domestic product (expenses after debt services) | 2,6% | 2,6% | 3% | Reports of the joint review of the education sector |
| 2) Education expenses (functional budget) as a proportion of total government expenses (expenses after debt services) | 6,6% | 15% | 20% | Ministry of Education and Technical Education/Ministry of Finance |
| 3) Percentage of female teachers (disaggregated data at all levels of education) | Kindergarten: 100% Elementary: 62% Preparatory: 54% Technical secondary: 49% General secondary: 43% Community schools: 97% | Not specified yet | Not specified yet | Ministry of Education and Technical Education |
| 4) Comprehensive and integrated information management system | No | Yes | Yes | Activities reports |
| 5) Issuing the review report to the Ministry of Education (annual) on schedule with full analysis | Yes | Yes | Yes | Reports of the joint review of the education sector |
| 6) Percentage of governorates that have annual operating plans | 100% | 100% is not just activities reports, but a complete operating plan, including activities | 100% | Activities reports |

Seventhly: Digital transformation and innovation

Current situation and challenges:

As a result of the spread of the Covid-19 pandemic, digital technology has become increasingly important in all aspects of education, from learning and teaching to administration and organization. The closure of schools has led to a new reliance on digital technologies for the continuity of education, new ways of using technology as an educational tool, and a new appreciation of its transformative potential. However, achieving the desired digital transformation requires a deep understanding of the systems and factors that enable the effective use of digital technology; to expand access to education and equality in education along with detailed knowledge of the context. On the other hand, the pandemic has exposed the gaps in digital communication, competencies and high-quality content in it, but also in the required platform and management structure: to enable effective, responsible and sustainable digital integration.

Given the dynamic complexity of digital technology, Egypt has realized the need for a comprehensive, long-term strategy for digital transformation in its educational system, and thus the government is making extensive efforts within the framework of “Digital Egypt” to expand the information and communications technology infrastructure and raise its quality throughout Egypt: with the aim of ensuring its accessibility, affordability and ease of use.

It should be noted that at the beginning of the major reform of the education system from kindergarten to Grade 12 - in 2018 AD, the Ministry of Education and Technical Education embarked on the process of preparing a comprehensive information and communications technology strategy for the future of education in Egypt, which was completed in 2022 AD. This strategy responded to the comprehensive aspects with a critical focus on the use of information and communications technology for education in the Egyptian Education Reform Project and Vision 2030 AD.

On the other hand, the strategy aims to integrate information and communications technology into education: to enhance learning, support teaching, professional development for teachers, and addressing diverse learning styles, inequalities, and increasing the overall performance of the educational ecosystem before announcing the Egyptian education reform project and moving to the education field.

The digital transformation plan is based on the information and communications technology strategy, which has four axes, which include: (1) infrastructure foundations (1) learning spaces (3) professional management for teachers (4) data systems, and it also aims to achieve the strategic goals as follows:

- Connecting all classrooms, teachers and students of secondary schools to the internet and digital resources created by the Ministry of Education and Technical Education, providing them with tablets and digital whiteboards and extending similar services to lower grade classrooms in a timely manner.
- Establishing an educational system with fully integrated digital components that support integrated learning and the goals of the new education system, or the Egyptian education reform project.
- Developing systems that use information and communications technology for the continuous professional development of teachers, which aim to simplify the in-service training process, provide classrooms with the

Egyptian Education Reform Project form for teaching, enable teachers to manage their professional development, and ensure that all training patterns are compatible with the new education system.

- Simplify and institutionalize the acquisition of data generated by the various components of the strategy, maximizing its utility for formulating meaningful management and educational decisions, and guiding ongoing system improvements across the education sector.

Efforts were accelerated to eliminate some specific obstacles related to the digital transformation plan planned under the Egyptian Education Reform Project have been accelerated before the Covid-19 pandemic; to mitigate the impact of the pandemic on education, these latest transformational initiatives include:

- Making existing educational television channels that broadcast lessons by grade and subject on national television a prerequisite.
- Accelerate and expand the usage of online educational platforms that provide students from kindergarten to grade 12 with access to educational materials, including curriculum, in response to the COVID-19 pandemic.
- Virtual classrooms for kindergarten, first and second grade, and first grade of elementary school have already been established and are rapidly expanding.
- The entire educational content (schoolbooks, instructions, virtual lessons, etc.) for grades four to twelve is currently available and can be accessed for all citizens through the e-learning website of the Ministry of Education and Technical Education.
- Creating online platform “Edmodo “ that enables students, teachers, and parents to communicate and access office programs (PowerPoint, Excel, and Microsoft Word)

Contents of the Egyptian Education Platform

| Primary level: fourth, fifth, sixth and preparatory grades | Middle and high school levels | Secondary school level |
|---|-------------------------------|------------------------|
| <ul style="list-style-type: none"> - Broadcasting the weekly class schedule on educational channels on television - An electronic library of all materials including schoolbooks lessons in PDF format, videos, and other resources. - “Edmodo”: A platform for communication between students, teachers, and parents. It provides the usage of Word, Excel, and PowerPoint Programs. - “Stream”: A platform for publishing lessons that were shown on educational channels on television. - “Hesas Masr”: A platform containing interactive lessons for grades nine to twelve. - A link to the learning management system that includes interactive digital content for curriculum topics. | | |

Source: Ministry of Education and Technical Education, interviews within the framework of education analysis 2021

These initiatives demonstrate the shift towards deeper integration of hybrid and digital curricula into Egypt's education system, in compliance with the Egyptian Education Reform Project that puts forward information and communication technology as a fundamental pillar and tool for education reform.

The ICT strategy targeted secondary schools at first (by introducing tablets, electronic exams, and digital textbooks to quickly influence the high school exam, to finish school education, and then enroll in university and the relevant learning culture at this educational level after that).

The strategy is to roll out the Internet infrastructure to the lower levels following a gradual approach to digital transformation. In future rollouts, device details may vary across school levels with the completion of the networking process, and upon completion of digital services for each educational level.

The new system is designed to transform the culture of learning and teaching through new curriculum frameworks. And updated learning and teaching methodologies, and a gradual approach to digital transformation through a multi-faceted strategy that includes building an integrated system with digital services, starting the operation of educational television channels (“Madrasatna” 1, 2, and 3), and constantly updating interactive content while making learning devices available to students and teachers, and The system aims to enhance learning while meeting the needs of students at different stages. Starting from 2021/2022, the Egyptian education reform project was introduced up to grade 4, with the expectation that by 2030 it will be fully integrated up to the third grade of secondary school.

The Information and Communication Technology (ICT) Strategy

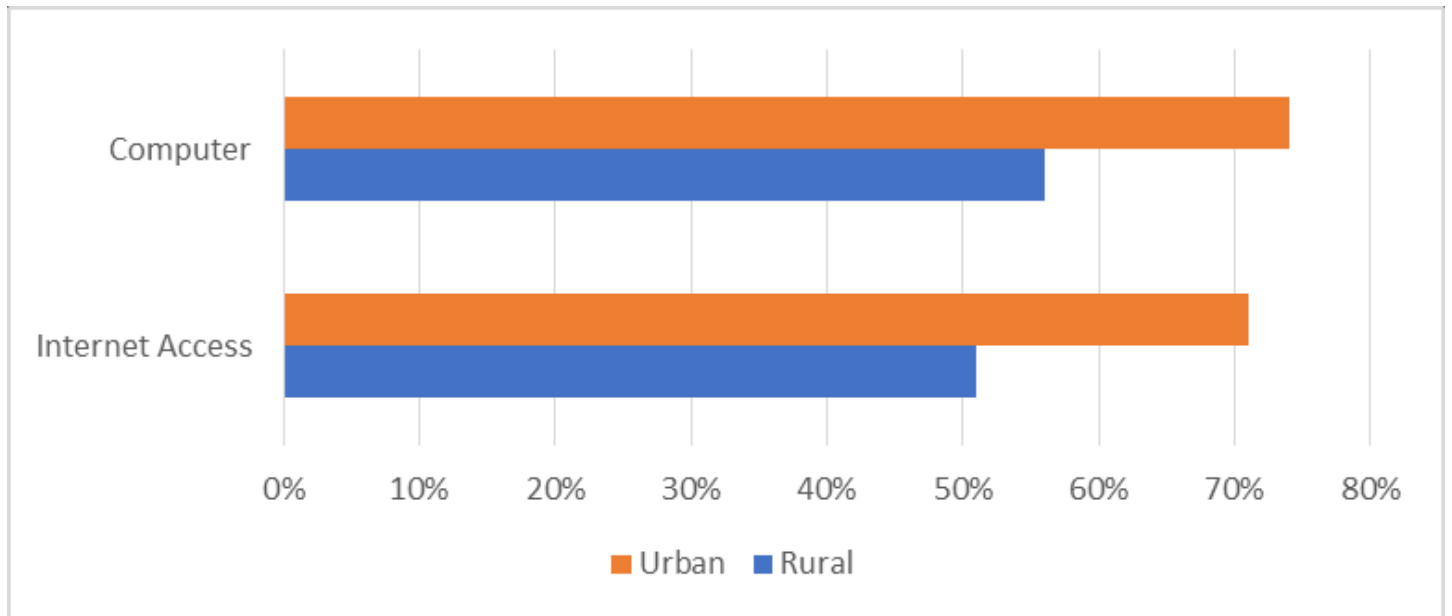
| | |
|--------------|--|
| Grades 1-3 | <ul style="list-style-type: none">• The non-utilization of technology except for email for teachers and Office programs.• Available supplementary resources on educational platforms. |
| Grades 4-7 | <ul style="list-style-type: none">• Interactive resources for the curriculum on the Learning Management System.• Introducing technology at incremental rates, gradually increasing up to grade 7. |
| Grades 7-9 | <ul style="list-style-type: none">• Providing tablets in exchange for installment payments.• Interactive resources for the curriculum on the learning management system. |
| Grades 10-12 | <ul style="list-style-type: none">• Providing all students with tablets for free.• All student books are digital. |

Reference: Ministry of Education, Education and Technical Education (2022), Information and Communications Technology Strategy.

It is worth noting that partnerships between multiple stakeholders and the comprehensive approach of the government may facilitate progress in expanding access to digital communication and content for both schools and individuals. In coordination with internet service providers in Egypt, schools have been provided with high-speed internet connections to address network and communication issues and reduce the need for downloading, each school is equipped with a server containing full educational content and a local network. As part of its plan to reform and digitize the education system, tablets loaded with content are also provided to teachers and supervisors. As of the academic year 2018/2019-2021/2022, approximately 2,500 secondary schools were connected to the internet, and a set of interactive screens were deployed in all secondary school classrooms, totaling 36,000 screens since 2018. Around 1.8 million secondary school students received tablets, while about 75,000 secondary school teachers also received tablets. Additionally, a new partnership was established with Microsoft to accelerate digital transformation in education and ensure the continuity of learning across Egypt during the COVID-19 pandemic. This led Microsoft to provide Office 365 for all teachers and students for free, easing software restrictions.

Despite the significant progress achieved by the Ministry in a relatively short period, access to information and communication technology and its utilization in preparatory schools remains relatively limited. In 2019, only 36% of preparatory schools used online learning management systems to support learning. Additionally, 67% were provided with access to digital books (TIMSS 2019). Among eighth-grade students, only 39% had access to computers during mathematics lessons, and 58% during science lessons (TIMSS 2019). It appears that the actual use of these computers is limited, as 62% of eighth-grade mathematics teachers and 47% of science teachers in the same grade either never used computers or rarely used them to support learning during teaching (TIMSS 2019). Moreover, the lack of internet access at home remains a barrier to distance learning for a large number of students and families. There are significant disparities in devices and internet access between rural and urban areas as well as between poor and wealthier families. In 2019/2020, 74% of urban households owned a computer, compared to only 56% of rural households. Among urban households, 71% had internet access, compared to only 51% of rural households (Ministry of Communications and Information Technology, 2020).

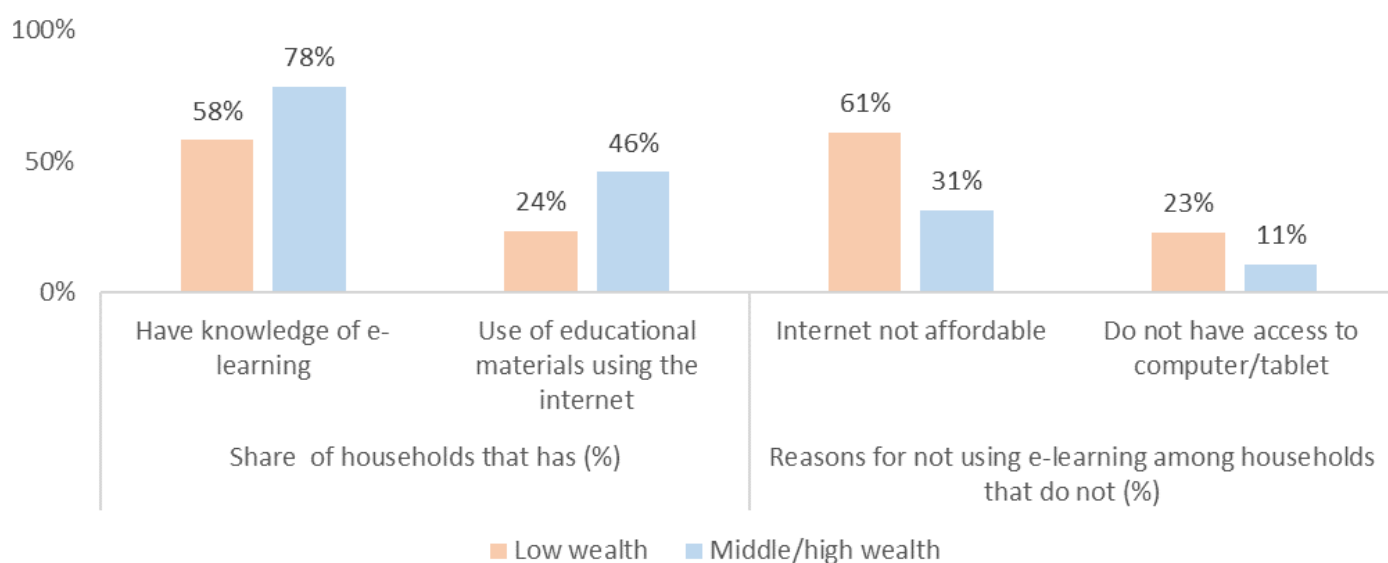
Figure: Household access to computers and the Internet by location, 2019/2020 AD



Reference: Ministry of Communications and Information Technology 2020 AD

In addition to disparities in access to devices and the internet, there are also significant differences in knowledge and use of e-learning among households. As of October 2020, an estimated 78% of middle and high-income families and about 60% of low-income families had some knowledge of e-learning, indicating a need to provide opportunities for remote and blended learning for students (Real-time Monitoring, 2020 AD). However, the use of online educational materials was only 46% among middle and high-income families and 24% among low-income families. During the 2020/2021 academic year, approximately 39% of students from fourth to ninth grades did not use any educational platforms or channels, indicating a low uptake of available remote learning options.

Knowledge of e-learning and its use, October 2020



Reference : Weighted estimates based on data from the third round of the real-time monitoring cycle, December 2020

Alongside the clear differences in knowledge and use of e-learning among families, cost was one of the main reasons for the relatively low use of online education and educational materials. About 61% of low-income families and 31% of medium and high-income families found internet access to be prohibitively expensive. However, the government worked with telecommunications companies;

To ensure the reduction of connection fees when students access educational platforms, and to provide free internet access to the relevant ministry sites, courses, materials, and learning portals in response to the COVID-19 pandemic. Moreover, the Ministry of Communications and Information Technology allocated increased internet bandwidth to support the system of electronic exams using tablets. However, it has not yet been determined how effectively these efforts have increased access to remote learning opportunities.

Introduction to the blended learning method for grades 10-12:

In the academic year 2020/2021, for example, the education system served 25 million students in 55 thousand schools, with classroom densities reaching 70-80 students in some areas. Among 1.6 million working teachers, there were only a million teachers in classrooms, while the rest worked in administration.

It's worth noting that technology can help alleviate some of the short-term and long-term challenges that the education sector faces. Therefore, the Ministry of Education and Technical Education has launched numerous initiatives to address these gaps, support learning, and update its tools and technologies to provide educational services suitable for the twenty-first century. One of these initiatives was the integration of hybrid (blended) learning curricula into the system, with the possibility of implementation, especially at the secondary school level.

Despite the model has not been subjected to long experimental periods, initial results indicate its ability to alleviate pressure on the education system in response to the increasing population growth, high classroom density, and high infrastructure costs. For example, according to estimates from the Ministry of Education and Technical Education, blended learning can reduce teacher needs by no less than 25%. In coordination with the ministry's strategy for information and communication technology, students and teachers will be provided with necessary content, materials, and training, entire classrooms will be equipped with the required digital infrastructure. To facilitate blended learning method in secondary education, much is known about teaching in traditional classrooms and online teaching. However, the specific conditions regarding the implementation of blended learning are still under investigation. Therefore, the Ministry of Education and Technical Education collects data on this process to ensure its frequent development and updating to meet changing needs and circumstances.

The continued implementation and expansion of blended learning aim to ensure the effective and efficient use of financial and material resources in the education sector. It also aims to increase overall enrollment rates in secondary education and allocate more resources to the early grades.

Innovation in education:

Innovation in education goes beyond just technology; it's about how technology is used and doing things in new ways to empower students to become lifelong learners. It encourages both teachers and students to explore, research, and utilize all available tools to discover something new. It's the best way to push education forward because it compels students to use higher-level thinking to solve problems.

Innovation in education always seeks to acquire knowledge that will support new and unique ideas in educational technologies that reach students more effectively and engagingly. It steps outside the box, challenging our methods and strategies to support the success of all students, as well as ourselves. This transformation may be small or comprehensive, allowing imagination to flourish and not fearing to try new things. Sometimes these new endeavors may fail, but they are wonderful when they succeed.

Fostering innovation among our employees and students is essential if we want to ensure their success in this constantly changing world. Innovation should be at the core of both work and education, and we must create an environment that nurtures creative skills and critical thinking. This enables our employees and students to come up with innovative solutions to the challenges of our real world.

Therefore, the Ministry of Education and Technical Education is working on developing and enhancing the efficiency of exploratory centers and centers for talented students.

The philosophy of exploratory centers relies on the belief that humans are the creators of civilization, the discoverers of laws, and the innovators of technology. It holds that civilization and technology are achieved as a result of human interaction with their surroundings. The series of educational exploratory centers are considered the forefront of experimental educational museums in Egypt, where they focus on nurturing the talented in sciences and developing their talents.

From this perspective, educational exploratory centers aspire to spread the idea of exploratory learning, innovation, and lifelong learning with the aim of building an innovative personality that serves its community. This is done according to a system that relies on active and productive community participation.

These exploratory centers are characterized by specialized activities and courses throughout the year (Science Club- Robot Club- Electronics Club- Arts Club- computer courses- photography courses-English, French, Italian and German language courses- Human Development Courses- Club for People with Special Needs, and other activities).

The number of exploratory centers affiliated with the Ministry of Education and Technical Education is (49) centers in (27) governorates. Their goal is to change the concept of education from memorization and rote learning to inquiry, experimentation, creativity, and innovation. They aim to provide interactive curricula for students and to discover and nurture talented individuals.

In addition to these exploratory centers, there are currently 75 centers for talented students and smart learning in 20 governorates.

The pre-university education plan proposes a digital transformation and innovation that facilitates responding to sector challenges to ensure the achievement of the expected outcomes listed below. The suggested areas of programs and key activities are of paramount importance in achieving policy priorities and specified strategic objectives.

The Expected Results of the Digital Transformation and Innovation

- The educational system's digital transformation involves fully integrated digital components that support blended learning.

- All classrooms, teachers, and students in grades 10-12 are equipped with internet access and furnished with interactive whiteboards and digital display panels.
- Ensuring quality and equitable access to information and communication technology and maximizing its utilization.
- Reviewing and updating the digital education system.
- Enhancing the learning experience and improving learning outcomes.
- Simplifying the in-service training processes to provide classrooms with the Education Reform Project's teaching materials.
- Empowering teachers to manage their professional development and providing them with training in information and communication technology.
- Enhancing creativity and innovation in educational institutions.
- Incorporating institutional and official identity into all data to support and formulate purposeful administrative and educational decisions.

Key Performance Indicators 9: Digital Transformation and Innovation 2024-2029 AD

| List of The Key Performance Indicators | The Baseline 2022/ 2022 | The Goal 2027 | The Goal 2030 | Reference |
|--|--|-------------------------------|--------------------------------|---------------------------------------|
| 1) The class in schools that use the internet in the teaching process (secondary education) | Secondary education 100% | 100% | 100% | Learning Management System (LMS tool) |
| 2) The class in schools that use the computer in the teaching process (data classified in all educational levels) | Primary education 78% Preparatory education 95% Secondary education 91% | 90% in all educational levels | 100% in all educational levels | Learning Management System (LMS tool) |
| 3) The percentage of the administrators and decision makers who are trained to use the digital technology (data classified by schools, directorates and levels of the Ministry of Education and Technical Education) | 60% | 90% | 100% | Learning Management System (LMS tool) |
| 4) The percentage of young people and adults have information technology and communication skills according to each skill | 60% | 90% | 100% | Learning Management System (LMS tool) |

Linking the Matrix of Policies of the Ministry of Education and Technical Education Plan 2024-2029 AD to Egypt's Vision 2030, and the Government's Action Plan (Misr Tantalek)

The Direct Links with the United Nations Goals 2030 AD



The Direct Links with the African Agenda 2063 AD:

- (1) A prosperous Africa based on inclusive growth and sustainable development.
- (3) An Africa of good governance, respect for human rights, justice, and the rule of law.
- (6) An Africa whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children.



The Direct Links with the National Agenda: Egypt's Vision 2030 AD (the updated one)



The Direct Links with the Strategic Objectives of the Government's Action Plan (Misr Tantalek)



| | | |
|--|--|-------------------------------|
| 5- Improving the Standard of Living for the Egyptian Citizen | Achieving the Economic Development by Enhancing the Efficiency of Government Performance | Building the Egyptian Citizen |
|--|--|-------------------------------|

➤ The Strategic Objective: of the State's Plan for Sustainable Development: Egypt's Vision 2030 AD (the updated one):

The First Strategic Objective: Elevating the quality of life of the Egyptian citizen and improving their standard of living).

The Main Objective: Elevating the education system.

➤ The Strategic Objective: of the State's Plan for Sustainable Development: Egypt's Vision 2030 AD:

The Sixth Strategic Objective: Governance and partnerships.

The Main Objective:

- Enhancing partnerships.
- Enhancing regional and international cooperation.

The Strategic Objectives of the Government's Action Plan.

➤ The Strategic Objectives of the Government's Action Plan:

-Building the Egyptian citizen.

The Main Programs of the Government's Action Plan:

-Affirmation of scientific identity.

The Sub-Programs of the Main Government Program of the Egyptian Ministry:

- 1- Make education accessible for all society groups without discrimination.
- 2- Improving technical education.
- 3- Provide applied technical education.

➤ **The Strategic Objectives of the Government's Action Plan:**

-Achieving economic development and enhancing the efficiency of government performance.

The Main Programs of the Government's Action Plan:

- Providing the necessary financial resources to implement the programs.

The Sub-Programs of the Main Government Program of the Egyptian Ministry:

- 1- Expanding the financing base through collaboration with regional and international sovereign funds, as well as the Egyptian Sovereign Fund.
- 2- Activating the unutilized state assets and providing the necessary resources.
- 3- Enhancing corporate social responsibility with the private sector.

Priority A: Increasing Access and Participation

| Sub-Programs of the Government Program, Main for the Ministry | Ministry's Sub-programs | Projects/Activities |
|---|---|---|
| (1) Ensuring Education for All Without Discrimination | Providing sufficient schools and classrooms for all stages. | <ul style="list-style-type: none"> - Identifying supply and demand for education at each stage to determine infrastructure needs for expansion, including risk analysis; Identifying schools located in areas prone to risks (natural or man-made disasters) and prioritizing construction and renovation needs. - Establishing new educational institutions based on identified needs. - Renovating/Rehabilitating existing schools based on identified needs. - Preparing vacant spaces for expansion to reach targeted educational access. - Establishing more facilities in border areas and prioritizing Egypt's top governorates and densely populated urban areas. - |
| | Facilitating educational activities | <ul style="list-style-type: none"> - Providing access to sports and play facilities aimed at developing students' skills |
| | Facilitating nutrition | <ul style="list-style-type: none"> - Providing nutrition for all stages. |
| | Learning resources | <ul style="list-style-type: none"> - Providing books and various learning resources. |
| | Providing distinguished schools for middle-income students | <ul style="list-style-type: none"> - Providing Japanese schools / STEM. |
| | Providing an insufficient number of teachers | <ul style="list-style-type: none"> - Appointing more teachers and IT specialists in proportion to the increasing number of enrollments, and in accordance with national standards for student-teacher ratios. - Developing and implementing a campaign to attract the best teaching profession candidates and motivate teachers. |

| Sub-Programs of the Government Program, Main for the Ministry | Ministry's Sub-programs | Projects/Activities |
|---|--|--|
| (2) Development of Technical Education | Expansion in modern specializations | <ul style="list-style-type: none"> - Expansion in specializations according to the state's investment plan and labor market needs, including specializations that match geographical distribution (coastal, rural, agricultural, etc.) and gender and social diversity. |
| | Adoption of curriculum based on competency-based methodology | <ul style="list-style-type: none"> - Completion of adopting competency-based curriculum with participation from development partners and businessmen. |
| | Improvement of teachers' skills | <ul style="list-style-type: none"> - Preparation of professional development programs for technical education teachers. |
| | Enhancement of societal perception of technical education | <ul style="list-style-type: none"> - Linking specializations to the job market. - Preparation of a plan for raising awareness about the importance of technical education. |
| | Involvement of businessmen in the development of technical education | <ul style="list-style-type: none"> - Establishment of partnerships with businessmen and development partners in the development of technical education. |
| Facilitation of applied technical education. | Expansion in Applied Technology Schools. | <ul style="list-style-type: none"> - Increase in the number of Applied Technology Schools in partnership with businessmen and development partners. |

| Sub-Programs of the Government Program, Main for the Ministry | Ministry's Sub-programs | Projects/Activities |
|---|---|--|
| Promoting social responsibility with the private sector. | <ul style="list-style-type: none"> - Expansion of establishing Nile and government international schools. | <ul style="list-style-type: none"> - Government international schools / Nile schools / Collaboration with the private sector. - Increase in the number of licensed institutions to provide education through partnerships between the public and private sectors and incentive programs |
| Activation of unused state assets and provision of necessary resources. | <ul style="list-style-type: none"> - Activation of services provided by the properties of the Ministry of Education. | <ul style="list-style-type: none"> - Activation of services provided by the Educational City of 6th of October. - Activation of services provided by the Student Union in Al-Agouza and Port Said. - Activation of services provided by the Educational Complex in Ismailia. - Utilization of assets and properties of the Ministry. |

Strategic Objective of the State Sustainable Development Campaign: Egypt Vision 2030

➤ Strategic Objective of the State Sustainable Development Campaign: Egypt Vision 2030:

First Strategic Objective: Enhancing the quality of life for the Egyptian citizen and improving their standard of living.

General Objective (2): Improving the education system.

➤ Strategic Objective of the State Sustainable Development Plan: Egypt Vision 2030:

Second Strategic Objective: Social justice and equality.

General Objective: a) Reducing the gender gap.

b) Integration and equal opportunities.

➤ Strategic Objective of the State Sustainable Development Plan: Egypt Vision 2030:

Sixth Strategic Objective: Governance and partnerships.

General Objective: a) Enhancing partnerships.

b) Strengthening regional and international cooperation.

Strategic Objectives of the Government Program:

➤ Strategic Objectives of the Government Program: Building the Egyptian human.

➤ Main Programs of the Government Work Program: Affirmation of the scientific identity.

➤ Sub-Programs of the Government Program Main for the Ministry:

1) Providing education for all without discrimination.

2) Development of technical education.

➤ Strategic Objectives of the Government Program: Improving the standard of living for the Egyptian people.

A. Main Programs of the Government Work Program: Social safety nets.

➤ Sub-Programs of the Government Program, Main for the Ministry: Social welfare.

B. Main Programs of the Government Work Program: Addressing developmental gaps.

- Sub-Programs of the Government Program, Main for the Ministry:

1) Local development in Upper Egypt.

2) Integrated development in the Sinai Peninsula.

C. Main Programs of the Government Work Program: Eliminating gender discrimination.

- Sub-Programs of the Government Program, Main for the Ministry:

1) Activating the economic and social participation of women.

2) Supporting the activities of productive families.

Priority: B- Equity and inclusion

| The main government sub-programs of the Ministry | Sub-programs of the Ministry | Projects/Activities |
|--|--|--|
| 1) Providing education for all without discrimination. | - Providing schools and adapting facilities / adapting curricular materials appropriate to different disabilities (special education) and gender / expanding the equipment of science education schools to integrate minor disabilities. | <ul style="list-style-type: none"> - Expanding the Universal education model in gender-sensitive schools, including those with special needs. - Developing educational materials and resources (digital and printed) that meet the needs of students, including those with intellectual disabilities and children in rural areas. - Providing schools / adapting buildings (special education schools) to suit the needs of children with disabilities, and providing assistive materials for education. - Adapting curriculum for students with hearing and visual disabilities in non-comprehensive schools, according to the Disability Curriculum Framework. |
| | - Providing activities for people with disabilities. | - Practicing competitions, sports, recreational and cultural activities for students with disabilities. |
| | - Providing adult education and literacy. | - blocking the sources of illiteracy |
| | | - Freedom from illiteracy. |
| | | - Post-illiteracy (continuing education). |
| 6) Promoting social responsibility with the private sector | - Improving access to education for marginalized children (second chance schools) | <ul style="list-style-type: none"> - Professional development for those responsible for eradicating illiteracy. |
| | | <ul style="list-style-type: none"> - Providing conditional family allowances in exchange for enrolling children in schools targeting underprivileged families. - Expand innovative, flexible and low-cost alternative education programs to enroll more children and students, especially from disadvantaged groups. - Building facilities/classrooms in rural areas. - Providing access to nutrition in schools by targeting household poverty and prioritizing the poorest areas with a geographic focus on regions such as Upper Egypt. - Develop and implement gender perspective measures to address the problem of adolescent girls dropping out of school due to early marriage. |
| | - Increase mobility/enrollment - completion of middle/secondary education for the poorest girls in rural areas/make schools available to refugees. | - Addressing social norms (for example by launching pre-secondary education campaigns, girls' clubs, parent-teacher councils), and cost barriers (for example: school uniforms, school bags, school supplies). |

| | | |
|---|---|--|
| 8) Activating the economic and social participation of women | Activation of the Equal Opportunities and Human Rights Unit | <p>_ Implementation of the National Initiative: Gender Empowerment and Consideration of the Groups Most in Need.</p> <p>_ Qualifying units for institutional excellence.</p> <p>_ Preparation of seminars and conferences on the national strategy for Human Rights.</p> <p>_ Making questionnaires and statistical cards on the total gender gap in leadership positions in pre-university education.</p> |
| 7) social welfare | <p>_ Student insurance.</p> <p>_ Access to education for all expatriate and refugee students and integration into Egyptian society.</p> | <p>_ Insurance for some students with (special circumstances).</p> <p>_ Social aid for (the non-indigents students).</p> <p>_ Contribution to the treatment of students' disability rate.</p> <p>_ Contribution to the treatment of students with diabetes / oncology.</p> <p>_ Implementation of the social welfare plan for international students of different nationalities.</p> |
| 4) Expanding the funding base in partnership with regional and international sovereign funds and the sovereign fund of Egypt. | <p>_ Access to schools in the neediest villages.</p> <p>_ (The "Hayah Karima" initiative participates in the "Hayah Karima" initiative for students and parents in the branches of exploratory centers in the governorates.</p> | <p>_ The neediest villages and Hayah Karima.</p> <p>_ Participation of students and parents in the branches of the exploratory centers in the governorates in small projects and scientific projects in addition to scientific and awareness seminars.</p> |
| 9) Support for productive families' activities. | <p>_ Developing students' skills. Training students with special needs to participate in projects with disabilities and integrate into productive school.</p> <p>_ Activating the productive school in community education schools.</p> | <p>_ Training students with special needs to participate in productive school projects.</p> <p>_ Accommodating and integrating students with special needs into productive school projects.</p> <p>_ Participation of community education schools in (27) directorates in productive</p> |

| | | |
|---|--|---|
| | <ul style="list-style-type: none"> _ Developing students ' skills on productive school projects. _ Preparing a small investor. | <p>school projects.</p> <ul style="list-style-type: none"> _ Participation of all students without discrimination in gender or creed in all manual skills development projects. _ Discovering and developing talents through productive school projects. _ - Exhibitions of handicrafts to preserve Egypt's cultural heritage and identity. _ Preparing an investor who is unable to prepare his own entrepreneurial project to reduce unemployment and prepare a productive citizen a productive school within the framework of collective action. |
| 10) Local development in Upper Egypt | Studying the current situation and preparing plans for the development of education in Upper Egypt | <ul style="list-style-type: none"> _ Analysis of the current situation in Upper Egypt schools, to identify weaknesses and strengths. _ Preparing executive plans to develop education for each educational Directorate in Upper Egypt. |
| 11) Integrated development of the Sinai Peninsula | Studying the current situation and preparing plans for the development of education | <ul style="list-style-type: none"> _ Analysis of the current situation in the educational departments and schools in North and South Sinai development; to identify weaknesses and strengths. _ Preparation of executive plans for the development of education in North Sinai (Al-Arish - Bir al-Abd-Sheikh Zuweid - Rafah - al-Hasna-Nakhl). _ Preparing executive plans to develop education in South Sinai (Al-Tur - Dahab - Abu Redis - Ras Sidr - Nuweiba - St. Catherine - Sharm El-Sheikh). |

The second Theme - quality and excellence in education according to global competitive standards.

Strategic objectives: for the state plan for Sustainable Development: Egypt's updated Vision 2030 AD.

The Direct Links with The United Nations Goals 2030 AD



The Direct Links with the African Agenda 2063 AD:

- (2) A prosperous Africa based on inclusive growth and sustainable development.
- (3) An Africa of good governance, respect for human rights, justice, and the rule of law.



The Direct links to the National Agenda Egypt Vision 2030 AD (updated).

The first goal:

**to improve the quality of life of the Egyptian citizen
and improve his standard of living**

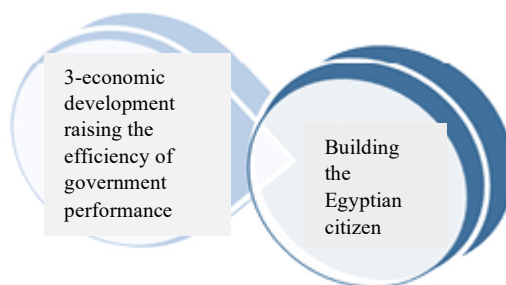


The sixth goal:

Governance and partnerships



Direct links to the strategic objectives of the government's work program (Misr Tantalek).



Strategic objective: for the state plan for Sustainable Development: Egypt Vision 2030 AD (updated):

General objective: (1) to improve the quality of life of the Egyptian citizen and improve his standard of living.

(3) Upgrading the education system.

The strategic objective of the government's program: Building the Egyptian citizen.

The main programs of the government's work program: Confirmation of Scientific identity.

Sub-programs of the government program, the head of the ministry:

1. Development of the pre-university education system.
2. Development of technical education.
3. Competitive education systems and outputs.
4. Improving the quality of the research and technological system.
5. Promotion the part of scientific research in improving the business environment.

Priority: C Learning and teaching quality

| Sub-Programs of the Government Program, Main for the Ministry | Ministry's Sub-programs | Projects/Activities |
|---|---|---|
| 12) Development of Pre-University Education System | Curriculum development and updating - review of existing curricula. | <ul style="list-style-type: none"> - Curriculum development in response to 21st century skills, including skills in new curricula and ensuring play-based learning, inclusive education, gender-responsive teaching methods, climate change, positive discipline and climate change, science, technology, engineering, mathematics and digital literacy in line with school curricula - Make curricula, learning, and teaching materials available on educational platforms. - Adapting curricula for students with hearing and visual disabilities in non-inclusive schools according to the disability curriculum framework. -Development of curriculum framework for students with intellectual disabilities |
| | Raising awareness of the importance of education | <ul style="list-style-type: none"> -Develop programs to raise families' awareness of the importance of education, and launch outreach/awareness/advocacy campaigns on the benefits of education in the early childhood phase - Identify the reasons for children dropping out of school or lack of regular attendance and improve the attendance rate. |
| 13) Enhancing the role of scientific research in improving the business environment | Strengthening dual education and training schools | Increase the number of dual education and training schools/Increase the transition units for the work market with technical education schools |

| Sub-Programs of the Government Program, Main for the Ministry | Ministry's Sub-programs | Projects/Activities |
|---|--|---|
| 13) Competitive education systems and outputs. | <ul style="list-style-type: none"> - Development of calendar and exam systems - Evaluating schools - Making question banks available at all levels - Promotion of international competitions | <ul style="list-style-type: none"> - Developing, conducting and applying synthesis and formative evaluation tools; To discourage rote learning and private tutoring. - Assessment of reading in the first grades (EGRA) and evaluation of mathematics in the first grades (EGMA) for students in the fourth grade of primary education - Participation in international research studies, including " The Study of Mathematics and Science at the International Level" (TIMSS) and "International Study to Measure the progress of reading in the world "(PIRLS); To assess the effectiveness of national education proficiency compared to other countries - Improve formative evaluation practices as part of the learning process, and complete them through High-quality standardized educational assessment of system performance. - Develop and create online platforms: to facilitate the introduction of ninth grade examinations of preparatory education. - Preparation and updating of an electronic platform to announce exam seat numbers and exam results for students in grades 10-12 of general secondary education. - Development of question banks for secondary education in cooperation with the private sector and international organizations - Assess the quality of online exams for secondary education. - Reform of the general secondary examination according to the priorities of the education reform project. - Continue to participate in international learning assessments. |

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| <p>14) Improve the quality of the research and technology system</p> | <p>- Ensure that policy development and evidence-based decision-making are facilitated through an integrated education and targeted research management information system. (National Research Centre)</p> | <p>-Conducting national research studies: such as the assessment of reading in the first grades (EGRA) and the evaluation of mathematics in the first grades (EGMA) for students in the fourth grade of primary education.</p> <p>- Conducting research, analysis and evaluation of education sector performance and subsectors to guide education policy and practices.</p> <p>- - Strengthening cooperation with academic and research institutions with the necessary capacities to support capacity development in the development, management, monitoring and evaluation of education policy.</p> |
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Second theme - Quality and Excellence in Education According to Global competitiveness standards.

D- Strengthening governance and administration.

Strategic Objectives: Of the State Plan for Sustainable Development: Egypt's Updated Vision 2030.

- Strategic Objective: Of the State Plan for Sustainable Development: Egypt's Updated Vision 2030.

The first strategic objective: Improve the quality of life of the Egyptian citizen and improve his standard of living.

Overall objective: Improve the education system.

- Strategic Objective: Of the State Plan for Sustainable Development: Egypt's Vision 2030.

Strategic Objective VI: Governance and partnerships.

Overall objective:

A. Enhanced accountability

B. Empowering Local Administration

Strategic objectives of the Government's program.

- Strategic objectives of the Government's program.

Strategic Objective 3: Economic Development and Raising Efficiency of Government Performance.

Main programs of the Government's program of work:

Develop governmental and institutional performance and confront corruption.

Sub-Programs of the Government Program, Main for the Ministry:

A. Institutional

Development

Program.

B. Building and developing the capabilities of employees in the state's administrative apparatus.

| Sub-Programs of the Government Program, Main for the Ministry | Ministry's Sub-programs | Projects/Activities |
|---|--|--|
| 16) Institutional Development Program | Strengthening information system of the education management and school management and harmonizing it with other similar systems | <p>-Strengthening the evaluation based on the quality system / expanding the number of schools that obtain accreditation and quality</p> <p>- Strengthening the education management information system to provide further support to integrate teaching and learning processes</p> <p>- Development of electronic platforms for application in order to facilitate enrolment.</p> <p>- Harnessing technology to improve the management and accountability of education and to support the cost-effectiveness to provide hybrid education and learning.</p> <p>- Strengthening schools' governance, administration and leadership.</p> <p>- Develop a plan to introduce and implement automatic upgrading.</p> <p>- Develop strategies to drastically reduce tutoring, improve regular attendance of educators and increase teaching hours in line with international standards.</p> |
| | Capacity development at all levels of education administration to support systemic reforms | <p>- Establishing quality assurance mechanisms and processes to monitor the performance of teachers, students and schools.</p> <p>Versus standards.</p> <p>- Development of sector and subsector planning capacities, including crisis risk management framework and effective coordination between all</p> <p>Subsectors</p> <p>- Develop appropriate mechanisms and processes to guide and support the implementation of education policies and plans.</p> <p>-Strengthen coordination and cooperation within and among education management bodies.</p> <p>Strengthening gender responsiveness in the education sector by supporting women's leadership role</p> <p>- Digitization and automation of administrative procedures to develop flexibility, transparency and efficiency of management of the sector</p> <p>- Strengthening the sector's management, oversight, organization and evaluation capacities.</p> |

| The main government sub-programs of the Ministry | Sub-programs of the Ministry | Projects/Activities |
|--|--|---|
| | | <ul style="list-style-type: none"> - Supporting personnel management and establishing performance standards and their implementation. - Establishing/enhancing mechanisms for cooperation, coordination, and convergence between ministries. - Strengthening the organizational framework to support comprehensive education at all school levels and organizing the roles and responsibilities of non-governmental stakeholders in education. |
| | <ul style="list-style-type: none"> - Enhancing partnerships with the private sector, civil society organizations, and communities to improve access to quality education. | <ul style="list-style-type: none"> - Providing support for capacity development for education officials and school management regarding partnership and collaboration with non-governmental stakeholders, organizations, and international entities. - Developing and implementing a governance model that supports strong partnerships between the public and private sectors to ensure the provision of education in a quality and equity manner. - Ensuring the existence of a strong network with civil society organizations, relevant ministries, and government institutions in accordance with Law No. 8 of 1991. - Expanding the partnership model between the public and private sectors to include an additional number of schools. - Establish Machine and incentives to increase the participation of non-governmental partners, civil society organizations, and communities in providing quality education. |
| | <ul style="list-style-type: none"> - Ensuring a participatory approach in education management. | <ul style="list-style-type: none"> - Ensuring gradual decentralization and delegation of planning, management, and financial authorities while enhancing institutional capacities at all levels, including piloting appropriate models for decentralized planning, crisis risk management for decentralized authorities, and micro-planning. - Monitoring the functions and tasks of decentralization and tracking financial allocations for daily maintenance and school operations. - Ensure and promote the effective participation of communities, parents and NGOs with relevant capacities and voices represented in policy deliberations. |

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| 16) Institutional development program | <p>-Ensuring additional financing and resource mobilization; To achieve learning objectives.</p> | <p>Increasing budget allocations to the education sector, in addition to increasing efficiency and effectiveness in using the budget and ensuring the financial sustainability of sector management.</p> <p>-Establishing efficient, fair and transparent standards for budget allocations and results-based financial management.</p> <p>-Addressing the negative impact of debt services on financing education.</p> |
| | <p>-Improve the management of the teacher workforce, while strengthening the status of the profession.</p> | <p>-Strengthening capacities, technical skills and leadership skills in the administrative structure and among staff at all levels: to collect/compile information on teacher management and accountability indicators.</p> <p>-Develop applications to automate teacher recruitment and career advancement.</p> <p>-Issuing a teacher eligibility certificate; For promotion and career advancement.</p> <p>-Establishing an incentive system and aligning teachers' salaries with international practices, for example, 1.5 as a multiplier of the per capita GDP.</p> <p>-Improving the status of the teacher by establishing rules and regulations for evaluation and promotion.</p> <p>-Create a database of teachers with specializations and develop an effective and fair system for deploying teachers at all levels.</p> <p>-Establish a supportive supervision mechanism and support for teachers at all levels.</p> <p>-Monitoring and evaluating the professional capabilities of new and existing teachers.</p> <p>-Integrating positive discipline into in-service teacher training.</p> <p>-Improving the instructional leadership of beginning teachers, curriculum administrators, superintendents, and district administrators; To support teachers' sensitive practices.</p> <p>-Support teachers to effectively improve classroom</p> |

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| | | teaching time and learning activities. |
| | <ul style="list-style-type: none"> -Raising the level of teachers' competencies and skills -Raising the level of competencies of educational leaders | <ul style="list-style-type: none"> -Designing in-service training to increase teachers' ability to teach, learn, and train them according to the new curriculum. -Preparing a teacher's guide for information and communications technology. -Preparing teacher guides for physical and health education. -Train teachers to include lessons/activities related to prevention and protection from violence and abuse, based on safe school protocols and the Teacher Code of Conduct. -Providing teachers with ICT training opportunities and skills development training related to the blended learning method. -Professional development for mentors. -Professional development for educational leaders. |

The third axis - sustainability and lifelong learning.

Priority: 5 - Digital transformation and innovation / green education

Direct links with the goals of the updated 2030 UN Plan, the updated National Agenda for Sustainable Development, Egypt's Vision (2030), and the government's work program (Misr Tantalek).

Direct links with the UN goals of 2030







Direct links to the Africa Agenda: 2063:

- (1) A prosperous Africa based on comprehensive growth and sustainable development.
- (2) An integrated continent that is politically united and based on the ideals of African unity and the vision of the African Renaissance.
- (3) Africa is safe and secure.



Direct links to the updated National Agenda, Egypt's Vision 2030.

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| The first goal: improving the quality of life of the Egyptian citizen and improving his standard of living | Third goal: an integrated and sustainable ecosystem | Fourth goal: a diversified, competitive knowledge economy | Fifth goal: advanced infrastructure |
|  <p>The quality of life and standard of living</p> |  <p>Integrated and sustainable ecosystem</p> |  <p>A diversified, competitive knowledge</p> |  <p>Advanced infrastructure</p> |

Direct links to the strategic objectives of the government's work program (Misr Tantalek)



Strategic objectives of the state plan for sustainable development: Egypt Vision 2030

➤ Strategic goal: The state plan for sustainable development, Egypt Vision 2030

The first strategic goal: improving the quality of life of the Egyptian citizen and improving his standard of living.

- General goal: improving the education system.

➤ Strategic goal: The state plan for sustainable development, Egypt Vision 2030

Fourth strategic goal: a diversified, competitive, knowledge-based economy.

General goals:

a- Supporting medium projects.

b- Increasing decent job opportunities.

➤ Strategic goal: The state plan for sustainable development, Egypt Vision 2030

➤ Fifth strategic goal: A complete and sustainable ecosystem.

General goal: 1- Confronting the challenges of climate change

➤ Strategic objective: for the state plan for Sustainable Development: Egypt Vision 2030 AD:

The sixth strategic goal: a developed infrastructure.

General objectives:

- a. Enhancing sustainable energy resources and systems.
- b. Developing communication systems and information.

Strategic objectives of the government's work program

The second strategic objective of the government program: 2) Building the Egyptian citizen.

-The main programs of the government's work program, the head of the ministry: b. Entrenchment of cultural identity.

- Sub-programs of the government program, the head of the ministry:

1) Spread the culture of science and innovation.

2) Addiction treatment and abuse.

The fourth strategic objective of the government program:

4) Improve operating levels.

-The main programs of the government's work program:

a- Development of human skills.

-The main programs of the government's work program, the head of the ministry:

- a) Encouraging a culture of self-employment and entrepreneurship.
- b) Industrial Training.

- The first strategic goal of the governmental program:
 - 1) Maintaining national security and Egypt's foreign policy.
- The primary programs of the governmental program: a- national security
- The subsidiary programs of the governmental program of the ministry:
 - 1) Enhancing the citizenship and responsibility values and raising political awareness for youth and rising generation
- The primary programs of the governmental program: b- water security
- The subsidiary programs of the governmental program of the ministry:
 - 1) Emergency plan for water rationing.
 - 2) Raising awareness of water importance.

The priority: 5- the digitalization and innovation/green education.

| The Ministry's main subsidiary programs | The subsidiary programs of the ministry | Projects/activities |
|---|---|---|
| 18) spreading the culture of science and innovation | <ul style="list-style-type: none"> - developing the technological infrastructure | <ul style="list-style-type: none"> - Preparing schools with communication and information technology amenities ,expanding the communication and information technology infrastructure, and providing access to it. Linking all classrooms, teachers and students with internet and digital resources. |
| | <ul style="list-style-type: none"> - Improving the digital architecture and providing learners and teachers with the necessary learning materials. | <ul style="list-style-type: none"> - Providing schools with high-speed internet and deploying it to the classrooms through WI-FI. - Providing schools with necessary equipment to operate its network: the server, air conditioning, UPS units and network devices. - Providing classrooms with interactive displays to connect with the resources through internet, storing digital materials and broadcasting live teaching - Providing teachers with necessary resources to organize teaching and classroom administrative tools. - Providing students with digital materials for studying and exams. - Providing students with digital communication tools and internet access outside the classroom. - Providing continuous technical support to maintain the system. - Hiring information technology specialists in each school. - Making comprehensive assessment for the infrastructure initiatives. - Building technical skills developing centers and providing access to it. |
| | <ul style="list-style-type: none"> - Building a digital educational system with full integrated digital components. | <ul style="list-style-type: none"> - Preparing schoolbook and interactive educational subjects. - Providing “Hisas Misr” platform and making educational materials for the |

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| | | <p>platform.</p> <ul style="list-style-type: none"> - Providing digital exams for the grades 10-12 and making digital assessment question bank. - Providing lessons, revisions and exam preparation instructions via television. - Raising public awareness about digital resources, communication and information technology in education. - Editing and revising the digital educational system continuously. |
| 18) spreading the culture of science and innovation | <ul style="list-style-type: none"> - Making training and digital professional development programs for teacher's in-service. | <ul style="list-style-type: none"> - Providing coordinated lessons from Egyptian teachers or other educational materials. - Providing online training on the new educational system for teachers. - Providing digital training in-service on the professional development materials based on the new teacher standards. - Providing a professional development services management system that is offered by education management system. - Providing planning and organizing system to support the new methodology goals in classroom subjects and teaching activities. - Setting training programs about the effective usage and merging technology in education in addition to training the teaching staff |
| | <ul style="list-style-type: none"> - Dissemination, institutionalization, storage and evaluation of data | <ul style="list-style-type: none"> - Making a digital profile for each student and teacher. - Making database. - Preparing digital information panels for students, teachers and schools to inform students and parents. - Building infrastructure for the internal network. - Following and storing data about teacher practice and class participation. - Developing and updating all electronic applications for management works on database on the central level of the |

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| | | <p>ministry of education and technical education, school information units, statistical units at the subnational education directorate level and local education departments.</p> <ul style="list-style-type: none"> - Developing and improving tools and instructions of collecting the data of education management information system. - Building employees skills on different levels to collect and gather information about different indicators, analyzing and doing reports about the statistics of education management information system. - Coordinating with the systems of education management information system for other subsidiary sectors. - Enhancing making assessment systems to follow the performance of students and school regularly. |
| 18) spreading the culture of science and innovation | <ul style="list-style-type: none"> - Spreading the culture of creativity and innovation in the institutional work environment. | <ul style="list-style-type: none"> - Expansion of exploratory centers. - Centers for talented students. - Expansion of schools for outstanding students in science, mathematics, and technology. - Preparing training programs in quality, excellence and innovation in education for education workers. - Promoting creativity and innovation in schools. |
| | <ul style="list-style-type: none"> - Green learning | <ul style="list-style-type: none"> - Integrate climate education into education curricula. - Integrating climate change mitigation and adaptation strategies into teacher professional development training and training school leaders and teachers on how to integrate climate literacy into teaching and learning throughout the school. - Preparing/approving the green school accreditation plan. |
| 19) Combating and treating addiction, abuse and renunciation of violence. | <ul style="list-style-type: none"> - Providing safe, inclusive, effective and violence-free learning environments for all - raising awareness to combat and treat addiction and abuse. | <ul style="list-style-type: none"> - Creating a safe and healthy school climate free from social and psychological violence: Such as verbal abuse, harassment, social exclusion. - Preparing awareness programs to combat addiction and abuse in cooperation with the relevant authorities. |

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| 21) Industrial training | <ul style="list-style-type: none"> - Industrial training for teachers and students. | <ul style="list-style-type: none"> - Increasing the number of newly established professions through dual education and training aims to meet the evolving demands of the job market. - Training technical education students on solar panel installation. - Training technicians for maintaining solar power stations for government ministry buildings. - Training technicians for maintaining solar power stations for directorate buildings and schools. - Training of Trainers (TOT) for disseminating a culture of electricity consumption efficiency. <ul style="list-style-type: none"> - Developing, implementing, and monitoring protocols and a code of conduct for teachers on how to interact with students to ensure that schools are safe learning environments. |
| 20) Encouraging a culture of freelancing and entrepreneurship | <ul style="list-style-type: none"> - Encouraging a culture of freelancing and entrepreneurship | <ul style="list-style-type: none"> - Implementing the capital project in schools. - Increasing sales outlets in technical education schools - Providing transition units to the labor market in schools. - Applying the study of entrepreneurship to technical education schools. - -Preparing competitions and implemented activities; To contribute to improving the mental image of technical education. |
| 22) Enhancing the values of citizenship and responsibility and developing the political awareness of youth and young people. | <ul style="list-style-type: none"> - Developing the spirit of loyalty and belonging for youth and young people. | <ul style="list-style-type: none"> - - Preparing awareness seminars, to develop the values of citizenship and responsibility, and developing political awareness. |
| 24) Awareness of water security issues. | <ul style="list-style-type: none"> - Awareness of water security issues | <ul style="list-style-type: none"> - - preparing awareness programs to preserve water and rationalize its use |
| 23) The urgent plan for rationalizing and managing water needs | <ul style="list-style-type: none"> - The urgent plan for rationalizing and managing water needs | <ul style="list-style-type: none"> - Incorporating awareness of water conservation into curricula. - - Prepare a plan for managing water needs. |

General summary

The Technical Education and Education Plan provided a set of legitimate policies and strategies. Egypt's education reform over the coming years to 2030, based on past achievements and drawing lessons from recent years' experience responding to dynamically changing economic, social and environmental contexts at the global and national levels, particularly during the disruption of education caused by the COVID-19 pandemic; The plan also seeks to develop a long-term vision for the Egyptian education reform project with the vision of the State 2030, and to identify strategic priorities for education and technical education as all and various subdivisions of secondary and main education that fall within the competence of the Ministry of Education and Technical Education. The guidelines for the evaluation of the Global Partnership for Education's Education and Technical Education Plan and the UNESCO International Institute for Educational Planning have also been used as a reference for the preparation of the education plan and have provided a number of programs that must be designed and disseminated to implement political orientations. The Ministry of Education and Technical Education has adopted a plan with lofty goals in the light of its belief that the challenges faced are enormous, particularly because of the multiple contextual crises and because we are strongly supported. Our convictions; we have maintained our firm faith in our reform agenda and in the ambition and vital importance of the educational investments set out in this plan if we are to realize our national potential. Our aspirations for a better future for all Egyptian youth. To address these challenges, the Strategic Plan for Education and Technical Education proposed key performance indicators that translate the five areas of political importance into the operationalization of strategic programs across seven components of the education system: (1) pre-primary education. And (2) basic education. (3) General secondary education. In addition (4) technical secondary education. (5) Special education. Moreover (6) community education. (7) Adult literacy programs.

In pre-primary education, the plan's results will expand kindergarten provision and increase. Availability of appropriate classroom facilities and improvement of physical equipment for kindergarten halls

Current education.

In basic education, the plan aims to improve basic education for all, equitable access to and successful completion of universal primary and preparatory education, and to address the causes of dropout, with special attention to excluded and marginalized groups; In order to reduce gender and disability disparities and geographical location.

In secondary education, the objectives are to expand equitable access to and participation in public and artistic education, provide relevant competency-based curricula and ensure adequate availability of schools.

In addition, classrooms and teachers to accommodate qualified graduates from basic education.

In special education schools (a) with special needs: the plan's results will improve the quality of education in existing schools for persons with different disabilities and provide an inclusive environment supportive of the process of integrating persons with minor disabilities into pre-university schools. Developing the integration system manually for persons with minor disabilities in the light of supporting experiences, and adapting the use of advanced technologies to serve the educational process provided appropriate to different disabilities. (b)

Super and talented The plan will work in the field of educational superiors: there are currently 19 schools for mathematics and science superiors known as STEM, which are intended to build a school in each governorate by the end of 2030, and to ensure that applicants' The development of their talents and abilities leads to their good investment for the benefit of the individual and the community all over it, and a number of (50) gifted centers are available at the level of the Republic.

In community education, the Ministry of Education and Technical Education's plan aims to reduce early school leaving. By identifying and addressing causes and guiding dropouts to appropriate learning paths, providing flexible learning opportunities.

In literacy and adult education programs, the objectives include increasing government funding, supporting development partners for adult education, non-formal education and expanding access to and quality of centers and facilities, in particular literacy programs. In the area of governance and governance at the level of education and technical education, the strategic plan will establish an effective system of management and administration, including accountability, good governance, transparency, effective management and sustainable and equitable means of financing; Enhancing the system and mobility through flexible partnerships and multiple pathways within and between each component.

In the area of governance and governance at the level of education and technical education, the strategic plan will establish an effective system of management and administration, including accountability, good governance, transparency, effective management and sustainable and equitable means of financing; Enhancing the system and mobility through flexible partnerships and multiple pathways within and between each component. Finally, in the field of digital transformation and innovation, the plan seeks to transform the educational ecosystem into fully integrated digital components that support flexible management of the system and hybrid learning, and provide schools with high-speed Internet. And digital content and IT specialists.

Training, educational and administrative resources.

The Ministry of Education and Technical Education is committed to achieving these ambitious goals through strong coordination and collaboration in designing, implementing, monitoring, and evaluating proposed key performance indicators. The ministry will strive to increase its resources to fulfill the objectives and outcomes of this plan, either by advocating for raising governmental and additional functional budgets for education to 2.9% of the gross domestic product, or by mobilizing development partners to contribute to the development of quality education, or a combination of both options. Additionally, joining the global partnership for education will enhance the ministry's opportunities to achieve its targets from the plan, and the ministry will review the implementation costs of the Education and Technical Education Plan 2024-2029 through its executive plan, taking into account various external criteria that support educational development, such as population growth, economic projections, and governmental priorities for national development.

Finally, success will require the concerted efforts of all units of the Ministry of Education and Technical Education at both the central and decentralized levels to implement and monitor the plan in order to achieve its goals. Additionally, the goals of this plan cannot be achieved by the efforts of the Ministry of Education and Technical Education alone, but under the leadership of the Ministry and through close coordination and collaboration with relevant ministries and other related entities, support from all stakeholders including local communities, development partners, the private sector, civil society organizations, school leaders, teachers, parents, and students will be essential pillars for achieving success.