Education In Egypt: Life Skills and Future Labor Market Needs for the Post-Corona Phase

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Abstract

Education is one of the most important issues that enjoys national consensus on its role and the need to develop it Education is responsible for building an Egyptian human being capable of dealing with today's data. And today's rapid changes and developments at the national and global levels in addition to the coronavirus and then the micron variant that is still sweeping the world, The study aims to identify the priorities for the development of Egypt's post-coronavirus education sector research, the researcher used the analytical descriptive approach based on the study of reality, One of the most important results is that the success of our use of digital technology tools in education at the time of the coronavirus crisis is measured by the success of the use of digital technology at the time of crisis and may be determined by many important factors that vary from region to region. in order to determine the actual applicability of digital learning tools in time of crisis, Researchers on curriculum and policies recommend a comprehensive assessment and review of the use of digital technology tools during the crisis and activate the role of educational institutions by holding workshops and training courses (Online) for students, parents and members of the community to develop awareness of the positive practices needed to cope with the coronavirus pandemic, the attention of schools and universities Developing the life skills needed for the labour market in the face of the coronavirus crisis.

Keywords: *Life Skills, Crisis, Pandemic, The Coronavirus Pandemic, Coronavirus***.**

Presentation of the problem and its importance

Education is one of the most important issues that enjoys national consensus on its role and the need to develop it Education is responsible for building an Egyptian human being capable of dealing with today's data. And today's rapid changes and developments at the national and global levels in addition to the coronavirus and then the micron variant that is still sweeping the world, today we have no choice but to build the human being as the means and purpose of development.

It is therefore imperative that the world know what the coronavirus pandemic will leave on human history and determine how long the pandemic has been able to stop the economic and global wheel and the interruption of the educational process.

In this spirit, the importance and necessity of making a qualitative shift in our Egyptian education, by going beyond traditional educational concepts and practices, and starting to new heights, comes with modern concepts that now impose themselves on societies and the developed world works through them. The concept of "post-coronavirus education" must therefore be a priority among these concepts. (1:1)

Egypt's political leadership has paid attention to the issue of the development of quality education and the extent of the needs of the labour market for certain types of education, enabling the graduate to keep pace with rapid developments in society, especially in the light of the COVID-19 pandemic, which has made the problem more difficult. Education in Egypt ", because the issue of education in Egypt is an important priority for building Egyptian society, Because education, with its research and development, has become the main and only challenge for bridging the scientific and information divide between the third world and developed countries (13).

In the opinion of the researcher, achieving a distinct level of university or pre-university education meets the needs of the labour market in the light of these challenges. This will be achieved only through the concerted efforts of all workers in educational institutions and their effective participation in parallel with students, graduates, the labour market and society itself in order to achieve quality education and reach accreditation and thus meet the needs of the labour market.

Egypt's education sector is currently witnessing unprecedented turnout and significant diversification in its fields, as well as growing awareness of its vital importance for social, cultural and

economic development to build a future that sees many challenges centred on how to pursue accelerated developments locally, regionally and internationally. and perhaps one of the most important of these variables is what has happened at the global level is the growing role of knowledge as the source of States' real power.

The world is currently witnessing an event that has plagued education with a crisis that may have been the most dangerous of our contemporary times. According to reports and follow-up sites in this regard and until the end of March 2020, we see the coronavirus pandemic (COVID-19) has caused more than 1.6 billion children and young people to drop out of education in 161 countries Education ", or approximately 80% of students enrolled in school globally, This came at a time when we were already experiencing a global education crisis. Hence the importance of the study and its need as a self-imposed problem for all countries of the world, particularly Egypt, There are many students in schools, but they don't receive the basic skills they need in working life. Hence the need to learn life skills through education, as demonstrated by the World Bank's indicator on "Learning poverty", or the proportion of students unable to read or understand at the age of 10, has reached the proportion of these children in low- and middle-income countries prior to the 53% HIV outbreak. So we have to move quickly to find scientific solutions before this pandemic increases the proportion that makes it more complicated. (15)

The coronavirus pandemic has had a negative impact on all sectors of the country, including the education sector, which is one of the most affected by the coronavirus pandemic, as the progress of the educational process has been affected around the world, according to a UNESCO report. (20) 195 State has suffered a total or partial closure of schools and universities. Nearly one and a half billion students have dropped out of school at different levels of education. Of them, about 26 million students in Egypt, despite this severe influence The crisis has opened up new prospects for education around the world, It has accelerated the transition to digital education, the use of distance learning and the use of modern techniques in education by all, Distance education became the lifeboat of the educational process during the crisis The current crisis has also presented an opportunity to rethink the structure of the education sector and plan for post-coronavirus education. It is therefore imperative that we examine the current situation of education in Egypt, the future needs of the labour market, the lessons learned from the pandemic and the post-pandemic equipment and priorities by linking learning outcomes to the life skills needed for the labour market and taking advantage of modern technologies that have imposed themselves since the onset of this dangerous pandemic.

Education status (pre-university) in Egypt

- In view of the situation of pre-university education in Egypt, the latest statistical report issued by the Ministry of Technical Education for the academic year 2019/2020 indicates several figures that reveal the current situation of the pre-university education system in Egypt. According to the report, the number of school students at all levels is about 23,567,060 in 509,471 classrooms and this is a serious indicator of the average class density of 43 students per semester, In some governorates such as Giza, the average class density exceeds 62 students within government schools And given the density of students in most countries of the world, the average is between 18 and 23 students per class, according to OECD statistics. (OECD) (22). This means that the density of students in Egyptian classrooms is twice that of most countries in the world and in some high-density governorates is three times that of the world. This means that Egypt needs to double the

number of classrooms at least in order to approach class density from accepted global ratios.

- With regard to university education, the latest statistical statement issued by the Central Agency for Public Mobilization and Statistics indicated an increase in the number of enrolments in higher education in the university year. (2019/2020) 4% of the previous year, bringing the number of students enrolled in higher education to about 3 million, 100 and 4,000 72.9% in public universities; The number of public and Azhar universities has reached 28 with 513 colleges, including 279 theoretical colleges attended by 77.6% of the total number of students in public universities, and 235 practical faculties attended by 22.4% of the total students in these universities, while the number of faculty members and their associates in public and Azhar universities has reached 101 thousand faculty members and associates In addition, the number of students from private universities is 195 thousand, representing 6.3% of the total number of students in higher education in the 25 of a private university. Private universities contain 153 colleges, of which 54 are theoretical colleges attended by 25.6% of the total students of these universities. 99 practical colleges attended by 74% of students of these universities. The private universities have 10,700 faculty members and associates. The number of students enrolled in higher institutes is 14.1% of the total students in higher education and the number of students enrolled in academies is 101% of the total students in higher education, while the number of students in higher technical institutes is 4.8% of the total students in higher education.

It is clear from the foregoing that higher education as the sole person responsible for building a human being is the means for the real development of societies. It is imperative that we seek scientific solutions to the crisis in which the coronavirus pandemic has put the country in a stalemate. The pandemic has highlighted the importance of using modern technologies in education in addition to the life skills required by the future labour market in the light of the ongoing and accelerated developments we are experiencing.

According to the researcher, this pandemic has had direct negative effects on the education sector, including losses that have occurred and will cause a future, including future learning losses, increased dropout rates and, most importantly, inequality in the educational systems, which most countries suffer, and these negative effects will undoubtedly affect poor children the most. (15) hence the need for this study.

If we want to come out of this crisis with the lowest toll (the coronavirus crisis), and the resulting total and partial closure of our educational institutions, the researcher considers:

- The use of digital technology tools and their potential is to focus on the use of technology-based education strategies, digital information sources, social media applications: such as Facebook, Twitter and others, communication applications: such as Messenger, WhatsApp and others, such as virtual and enhanced learning environments, activation of virtual classroom education, attention to services provided via TV.

- The need to link the life skills needed for the labour market with education programmes, whether university or pre-university in Egypt;

Tweeting Imran and Others (2001) emphasizes that life skills have become an imperative for all individuals in any society. They are a prerequisite for the individual to comply with and coexist with himself and the society in which he or she lives, as they help to cope with everyday problems and interact with life's attitudes. (Amran et al., 2001) (4).

As crises come in different forms and sizes, each crisis needs a special response, including the coronavirus crisis. (Covid-19), where its nature differs from that of other crises before it and from various types of crises, whether they are financial crises or natural crises such as earthquakes, hurricanes, floods, or even terrorist attacks, so we have to deal with them in a manner appropriate to the unprecedented spread and evolution of this global pandemic, and hence the problem of study and the need for it. (National Democratic Institute, 2020) (8)

Not to detect a vaccine to prevent the coronavirus (COVID-19), we must follow general advice and guidelines to reduce the transmission of hostility, and to follow precautionary and preventive measures through cultural programmes and awareness-raising to inform society of the seriousness of the pandemic. Abd al-Sameya, 2020, highlights the role of education at its different stages in using and maximizing the role of technology in dealing with this crisis, which is just as important as the role of life skills that all members of society need to overcome successive crises in society.

The outbreak of the coronavirus in Egypt, and the increase in the number of infected people according to the Egyptian Ministry of Health's daily reports, sounds the alarm and warns of the lack of awareness and skills needed to confront this pandemic among many individuals, foreshadowing significant negative repercussions on all aspects of health, economic, political and social life. (Naha Saad et al. 2020) (10). This is underscored by this study's lack of awareness of the skills needed to cope with this pandemic, whether technological or life.

According to the researcher, the total and partial closure of schools and universities at all levels of the coronavirus pandemic and the economic stagnation caused by the pandemic's anti-pandemic measures require considerable study and efforts to cope with these effects. As the researcher emphasizes, the closure of schools and universities will cause losses in learning. Increased dropout rates, increased inequality and economic shock will exacerbate damage by reducing both supply and demand in education, the researcher stresses that countries still have the opportunity to rebuild better by exploiting modern technological strategies and means while linking educational curricula to life skills if they are to recover from the crisis with long-term improvements in evaluation areas. education, technology, finance, parents' participation as well as data science that has become able to do a lot of efforts to fight the coronavirus such as the creation of interactive information boards, epidemiological model analyses and the proposal of the best compounds to help access treatments for this virus, all of which prompted the researcher to conduct this study entitled "Education in Egypt, life skills and future post-corona labour market needs"

Objective of the study

The study aims to identify priorities for the development of Egypt's post-coronavirus education sector.

Study Questions

(1) What is the role of modern technologies, digitization and the coronavirus crisis?
(2) What is the role of information and cyberspace?
(3) What is the role of life skills and the labour market?
(4) What are the priorities and preparations for the post-coronavirus phase?

Research Method

First: Research curriculum: *The researcher used the analytical descriptive curriculum that relies on the study of reality or phenomenon as it actually exists and cares as an accurate description and is expressed quantitatively and quantitatively in order to arrive at scientific findings that are interpreted objectively in line with the actual data of the phenomenon. (Tastes of slaves and others, 2007) .6*

Second: Scientific terms and procedural concepts

Life skills: The World Health Organization (WHO) has defined life skills as the capabilities needed for an individual to act in a positive and compatible manner, enabling them to deal efficiently with the requirements of daily life. (Ahmed al-Rabani, 2011) .2

- Hind Mohammed Ibrahim al-Mazloum (2021) defines it as: Knowledge, information, skills and capabilities needed to respond positively to epidemiological crises and enable them to interact with and live with the events and requirements of daily life in the event of the COVID-19 crisis. (Aggrieved India, 2021, p. 57) (12)

- The crisis is defined by India (2021) as a period of the country's exposure to events, risks and threats in building and stabilizing society as a result of the emergence and spread of the novel coronavirus (covid-19). (Aggrieved India, 2021, p. 58) (12)

- Pandemic: It is a large-scale epidemic that exceeds the threshold, affecting a large number of individuals, and these pandemics may have an impact on the environment, agricultural organisms of livestock, agricultural crops, fish, trees, etc. (Miqual S Porta, 2008) (16).

- Coronavirus pandemic: COVID-19 is a contagious disease caused by the latest virus detected from the coronavirus strain. There was no knowledge of the presence of the new virus and its disease before its outbreak in the Chinese city of Wuhan in December 2019. COVID-19 has now become a pandemic affecting many of the world's countries. (World Health Ministry, 2020) .17

Coronavirus: *Coronaviruses are a broad strain of viruses that cause disease to animals and humans, and the recently discovered coronavirus causes COVID-19. (World Health Ministry, 2020) .17*

Some studies associated with:

(1) Hind Mohammed Ibrahim Al-Mazloum (2021) (12) study entitled "Effectiveness of an e-mentoring programme to give children some life skills to cope with the coronavirus pandemic crisis". The researcher used the prescriptive curriculum and pilot curriculum on a sample of (285) children in primary grades (4th - 5th - 6th) who were enrolled in government and private schools. There are statistically significant differences at 0.01 between the averages of experimental sample scores in the acquisition of children's life skills to cope with the coronavirus pandemic before and after the application of the e-mentoring program and for the benefit of dimensional measurement.

(2) Ashraf Mohamed Abdul Hamid Kashk (2020) (3), entitled "The activities of the Centre for Studies on the coronavirus crisis", recommends several important recommendations, including: Need for television outreach programmes on the negative effects of e-games and blacklisting of unethical games and appealing to telecommunications companies not to upload them, Design of an interactive online platform for useful games under the supervision of the Ministry of Education and the establishment of an interactive training club to discover and develop professional and technical skills and abilities, Preparation of an educational programme from the Ministry of Health on the relationship between playing e-games and obesity problems and sleep disorders, and an awareness campaign involving the preparation of publications in glasses shops s Health ", illustrates the relationship between low levels of perception and electronic devices, as well as the development of publications in hospitals, centres and clinics showing the damage caused by electronic gaming.

(3) The study of Salameh Abdeladim Hussein (2020) (7), with the aim of identifying "online education in the time of the coronavirus", was one of

the most important results: online education is the way to develop students' abilities for independent learning or self-reliant learning.

(4) The study of Mansour Latif (2020) (9), with the aim of identifying the "service of higher education and the challenges of coronavirus". The most important results were the development of some of the recommendations that work to improve the educational process, including the reliance on virtual education that represents the future of higher education in the Arab world, in the light of the challenges imposed by coronavirus, which we still have to live with educationally.

(5) Hudi Al-Maimouni (2020) (11), with the aim of identifying "a new vision of children's education with the coronavirus crisis", the most important results were: The coronavirus crisis has shown the importance of the need for distance education in light of the world's trend towards living with the crisis, and the recognition that information technology is the best way to reduce the risks of the spread of the epidemic in light of the creation of a functioning telecommuting environment based mainly on the safe exchange of information.

(6) Yusuf Farid (2020) (14), entitled "The balance between education and safety under the coronavirus pandemic", was one of the most important and recommended in the study: the need for parents to communicate with their children's teachers to follow their children, to learn about the efficiency of precautionary measures at school, and to inform teachers of the psychological difficulties that the child may face such as anxiety and fear.

Presentation and discussion of results

Discussion of the first question, which includes the role of modern technologies, digitization and the coronavirus crisis (26)

Since the start of the coronavirus pandemic in December 2019, we have seen much delay in the application and use of modern technologies and digitization in education. The coronavirus pandemic has demonstrated the vital and important role of modern and digital education techniques during this crisis, which has no known or specific end. (5: p. 6)

In the researcher's view, what has happened and the disturbances that will occur in educational institutions around the world oblige us to use the technological tools available to create a content for distance education for students at all levels of education.

This has led teachers in different countries of the world to choose new ways to do their part differently. and, more flexibly than before, these new ways of teaching have never been significantly exploited in the past despite their existence, Societies and some States' perception of the certificates awarded through distance or e-education was skeptical, causing students and families to harass these programmes. (5: p. 6)

In the opinion of the researcher, the talk is at a time of crisis (especially the coronavirus crisis) Different from normal times, because the crisis forces decision makers to take difficult steps at a specific time, and under complicated circumstances, don't give us more time, we don't live far away. We live at the heart of the crisis, and our educational institutions have been closed for periods. and educators have sought solutions that enable us to emerge from this crisis with minimal losses, or at least avoid the worst.

Therefore, the researcher stresses that the interruption of educational life in our scientific institutions at all stages, it is imperative that we go directly towards digital technology to overcome and overcome this crisis. The researchers are likely to offer digital technology tools such features as: The ability to use its tools easily and in different places, the variety of applications it offers, its support for different types of digital content, its high ability to communicate and communicate, its ability to simulate the work of educational environments by: Building virtual learning environments that are very similar to those within regular classrooms, providing them with computing and cloud storage services, and

integrating their applications and compatibility during this crisis, we need to go directly to these technologies because they are the only way to get through this crisis.

Discussion of the second question, which includes information and cyberspace.

With all the information available during cyberspace, the concept of a teacher as a knowledge holder who wise his pupils is no longer suitable for education during the 21st century, The researcher is therefore of the view that the role of the teacher must be redefined to help develop students' personality so that they can teach and learn continuously to keep pace with rapid technological development if we want them to be active members of society. (5: p. 6)

Data science is capable of making a lot of efforts to fight coronavirus, such as creating interactive dashboards, analyses of epidemiological models, and suggesting the best compounds to help access virus treatments.

Data Science combines three main packages of science, skills and knowledge, starting with statistics and mathematics, then programming skills, especially artificial intelligence and Machine Learning, and then knowledge associated with the nature of the field in which data are monitored and analyzed.

Since the field of data science is one of the most in demand in the world's labour market over the past five years according to the Glassdoor report, which emphasizes that it is the most sought-after job in 2018 in the U.S. market, as also confirmed by the 2017 LinkedIn Annual Report, hence the need to make good use of available information in the cyberspace.

According to the researcher, what was launched by the White House Office of Science and Technology Policy (OSTP) mid-March 2020, to build a huge open source data center CORD19, Government institutions, academics and technology companies, such as NIH's National Institutes of Health Library, participate Allen Institute of Artificial Intelligence, Cold Spring Laboratory, Georgetown University in addition to Google, Microsoft Research Center, Chan Zuckerberg Initiative, Dozens of other institutions (18) show the vital role and outstanding efforts to employ data science in the face of the coronavirus.

Discussion of the third question, which includes the role of life skills and the labour market.

Citizens must be mindful of the importance of the idea of the world's interdependence, because now we do not live in isolated worlds, and let us know that what happens somewhere can have an enormous impact elsewhere far from it, where successful people in the coming decades need to be able to understand this interdependence and move across borders to take advantage of their differences and work collaboratively. (5: p. 6-7)

The researcher stresses the need to focus on teaching life skills needed for the future that are now inevitable. in the presence of this ever-changing global environment. This makes young people need resilience and resilience. These skills have proven essential to the ability to respond effectively to condoms during this pandemic. Looking ahead, some of the most important skills employers will seek will be creativity, networking and collaboration, along with empathy and social intelligence, and the ability to work across demographic lines to harness the group's strength through effective collective action. (5: p. 7)

The researcher stresses that through what has happened and what has happened throughout the coronavirus crisis, we must be aware that our children are in dire need of learning many life skills, especially technological ones, which help them to use digital-based learning tools, including: (Basic skills for using digital devices, search skills via digital information networks (Internet), subjective skills that make students

able to learn alone in interrupted educational conditions, and problem-solving skills that help students deal with unusual situations (developed) that confront them, work to implement strategies to solve those problems, and cope with crisis skills that enable students to be able to act at critical times, be able to continue their learning during interruptions, and rely on themselves in emergency situations such as this crisis.

Discussion of the fourth question, which includes the priorities and preparations for the post-coronavirus phase.

This question is based on the lessons learned from the COVID-19 crisis, the outlook for the future, international and international reports, the change in the mechanisms of the prospective labour market and future jobs. A rapid plan for the development of Egypt's university and pre-university education sectors is required, according to the Ministry of Education and Technical Education. and the Ministry of Higher Education and Scientific Research and the Academy of Scientific Research and Technology in June 2020 (5: p. 7-9) The following priorities are proposed between now and 2030. According to the report:

Investing in the field of education technologies (education industry) and working towards regional leadership and leadership in this sector, through a national alliance of education and creative education technologies with the participation of the Ministries of Education and Higher Education. Investing in this area will help to provide the latest technologies in education locally and make them available to the education and higher education sectors.

Expanding medical education to cover the needs of the state, as Egypt suffers from a severe shortage of doctors, which was evident during the crisis. The percentage of doctors in Egypt is 0.5 per 1,000 citizens, while the global ratio is 105 per 1,000 citizens, the proportion in high-income countries increases to 3 per 1,000 citizens according to World Bank statistics. (27)

Increasing enrolment in higher education in the engineering sector with the importance of developing engineering disciplines in order to serve Egypt's Vision 2030, which requires the presence of large numbers of qualified and able to develop modern techniques in order to serve the knowledge-based economy.

Interest in the development of technology science, engineering and mathematics (STEM) education at all levels of education. Most international reports indicate the pivotal role that STEM education plays in the development of States' economies and that it is the only and optimal way to achieve a knowledge economy (28) (29).

Catching up on subsequent technological revolutions and keeping up with future jobs requires us to reach more than 50% students in higher education in practical and technological colleges by 2030 and 75% by 2050. The current situation shows that about 77.6% in theoretical colleges, and in some African countries such as Ethiopia the number of students in technological education currently 75% and the number of students in social and human sciences 25%.

Upgrading students graduating from social and human sciences and investing well in theoretical colleges. Graduates of these colleges are future leaders and pioneers of thought, enlightenment, economics, social and cultural security, identity and human construction.

Establishing flexible educational systems capable of coping with any emergency conditions to mitigate risks and be able to manage them easily and easily in the future.

Invest in the development of the technological infrastructure necessary for the transition to electronic learning (Blended Learning) and distance learning.

Revision of laws and legislation and enactment of new flexible legislation supporting e-learning and emerging future teaching methods, annex (1) with a table of basic requirements for the transition towards integrated or digital learning. (5: p. 10-17)

Enrolment of foreign students in integrated education programmes and accreditation agreements with the States concerned.

Open community dialogues and ongoing awareness-raising programmes with the participation of local and international education experts, acceptable youth leaders and managers of major economic institutions around the world to promote the new educational system and counter the academic reputation of any educational system other than traditional ones inherited.

Develop curricula at different educational levels to develop personal skills.

Reformulation of a teacher's and university professor's functions from a teleprompter and a single knowledge owner to a mentor, wave and supervisor (Mentor). Coach and Supervisor).

The management of available funding has been improved and further investments have been made in accordance with the Constitution, encouraging community participation and charitable endowment in favour of a chair in higher education or a class or school in pre-university education.

In Egypt, education is explicitly and clearly free. It is costly for the State. It is not free and burdensome for parents. They pay twice as much as the actual cost of educational service in private classes in pre-university education for the post-graduate labour market.

The development of secure and intelligent interactive e-learning platforms that strictly enforce the system during lectures, measure students' performance, explore areas of excellence and have the ability to document the electronic lectures, attendance, discussions and performance appraisal to ensure the quality of education.

Teaching practitioners are urged to excel in performance as a result of broader electronic publishing with training programmes to enhance teaching staff's abilities and develop their skills in the use of modern teaching techniques, and it is suggested that the faculty development programme be replaced with a diploma accredited by well-established global universities in integrated education.

Redirect savings in transport, university city construction expenses and operating expenses to sports and cultural activities.

Give attention to training medical students in dealing with epidemiological diseases and health conditions during crises and disasters and introduce it as an essential part of their curricula.

The most important findings and recommendations of the researcher.

* Top results:

It is clear from the foregoing that universities, especially public universities, bear the brunt of Egypt's higher education. The density of theoretical colleges with which approximately 75% of Egyptian university students study increases the number of Egyptian university students in the four 2030 is expected to exceed 1 million, this requires that 1 million seats be added to Egyptian universities within 10 years. With an increase of 25%, increasing the number of students in theoretical colleges, representing 75% of university students, is a major challenge to work on. If Egypt's Vision 2030 calls for a knowledge-based economy, this requires the preparation of two graduates with scientific, practical and technical capabilities that qualify them to participate in the

achievement of the national vision and capable of creating productive and technological jobs. And what makes the challenges of the national education system even more difficult is the coincidence of the coronavirus crisis with a terrible digital transformation in the world that requires education other than what we have used for decades. An education capable of producing a creative skilled graduate capable of competing in the international labour market and qualified for future jobs, in addition to all these challenges we find that Egyptian society (with or without intent) stubbornly rejects the recognition of global reality, new learning systems and the inevitability of change.

If we review some of the previous reports on this crisis related to education, such as:

- Report "Dell Technologies" (23), which indicated that 85% of the businesses that will be employed by those currently in the education stages of Generation Alpha and Generation Z are not yet invented.

- The report of the World Economic Forum (24), which indicated that currently 65% primary school students will be employed in types of jobs that have not yet existed. The same report also referred to the role of mechanization and economics in changing how business is performed, and therefore the imperative of changing the methods of education to match the change in how business is performed. The report also noted the importance of interdisciplinary education and education being personal Personalized Education is based on the development of different human skills rather than indoctrination and static templates The report noted that besides digital murals and how to deal with modern technologies, Which will become essential in the labour market, attention must be paid to the development of other skills commensurate with the labour market of this era, Like developing creativity, how to communicate, think critically, how to deal with problems and other human skills as these skills will become essential in the labour market, While mechanization can be replaced by many technical skills, while these human skills remain irreplaceable and will be the basis for trade-offs in the labour market, the relationship between humans and women will become a partnership (Human Machine Partnership), this report also noted an increased need for the labour market to recruit higher qualifications rather than those with middle and above-average education.

The report also highlighted the importance of personal education, which depends on the learner receiving information and guidance based on what a person already knows. It is presented in a way that allows a person to learn better (25). It is necessary to link these reports with the lessons learned from the COVID- 19 crisis when conceptualizing the future of Egypt's education sector and considering the mechanisms for its development.

The researchers emphasize that what the coronavirus pandemic has caused our students to acquire many skills, both life skills and the ability to use digital learning tools correctly, including: (Basic skills for using digital devices, search skills via digital information networks (Internet), self-learning skills that make students able to learn alone in interrupted education, as well as problem solving skills that are one of the most important skills that helps students cope with unusual situations (developed) that confront them, work to implement strategies to solve those problems, and finally cope with crisis skills that enable students to absorb situations that occur emergently, take them seriously rather than disregard, and be able to act at critical times, and be able to continue their learning during interruptions, and rely on themselves.

The research also suggests that the coronavirus disease (COVID-19) has highlighted the need for rapid access to information where the digital divide and social and population inequality create an information gap and therefore unhealthy practices in dealing with

COVID-19. the role of information and cyberspace and the easy use of any data collection anytime and anywhere, The importance of linking learning outcomes to life skills, especially technological and digital skills, that combat the spread of the epidemic by reducing people's distancing is also demonstrated here.

The research emphasizes that the success of our use of digital technology tools in education at the time of the coronavirus crisis is measured by the success of the use of digital technology at the time of crisis and may be determined by many important factors that vary from region to region. In order to identify the actual application of digital learning tools in time of crisis, decision makers must answer the following key questions:

• Does the curriculum and its objectives, content, activities and "learning sources" support the use of digital tools?

• Have teachers received adequate training in the use of the necessary applications and techniques, especially when the crisis occurs?

• Have students been pre-groomed and taught how to use the right apps?

• Are all educational participants available: supervisors - teachers - students with appropriate tools and techniques?

• Is there a greeting structure for using digital technology tools: Electricity - Networks - Internet?

To the extent that the answer is positive, we can say that the use of digital tools is effective and feasible, and those digital tools can give us the desired results, so that we can overcome our current crisis. (19)

* Researcher's recommendations: In the light of the questions of the study and the presentation of its results, the researcher recommends:

(1) Curriculum and policy holders must assess and review comprehensively the use of digital technology tools during the crisis to identify weaknesses, correct errors and enhance positives from the current experience, In addition to building general, comprehensive and appropriate strategies for each school phase. so that work is shared, and that every educational institution is not unique in its own initiative s development ", which may weaken the desired results from the use of digital learning tools at the time of our current crisis.

(2) Activate the role of educational institutions by holding workshops and training courses (Online) for students, parents and members of the community to develop awareness of the positive practices needed to confront the coronavirus crisis.

(3) Intensify the role of the Ministries of Education and Technical Education and the Ministry of Higher Education and Scientific Research by sensitizing students on life skills and their importance to confront the coronavirus pandemic and by incorporating the guidelines of precautionary measures necessary to confront that crisis as an indicative supplement in textbooks, electronic educational platforms and satellite educational channels.

(4) The interest of schools and universities (government-private) in developing the necessary life skills for the labour market in the face of the coronavirus crisis.

(5) The preparation of television programmes to raise awareness using modern technologies, digitization and the coronavirus crisis, how to exploit all information available through cyberspace, the importance of learning life skills that work to graduate a competitive product in the labour market and the need of society for this type of graduation and then lessons learned from the coronavirus crisis by preparing for the post-coronavirus phase.

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Annex (1)

Table of basic requirements to shift towards integrated or digital learning.

Urgent prerequisites for transformation of integrated or digital education from the perspective of the Ministries of Education and Technical Education and the Ministry of Higher Education and Scientific Research:

1) *A strong infrastructure of high-speed Internet or local networks with coverage at the provincial or state levels in anticipation of contingencies to provide minimum digital education and content delivery.*

2) *Bridging the digital divide between rural and urban in pursuit of the principle of equality through the Internet of each home at a standard level and high quality in terms of Internet access and providing computers or tablets to every learner at a reasonable price taking into account accelerated technological development.*

3) *Developing digital education platforms to be smart education platforms that focus on tracking and analyzing student's educational activities in the digital field using AI algorithms and instruct him to correct the course as he diagnoses the learning process according to the learner's preferences, which calls for the need to integrate a model of educational analysis (Learning Analytics) such as Tin Kan and other learning analysis tools with digital learning platform to improve the quality of education and evaluation (360 Degrees Assessment), electronic courses and the role of the teacher. AI will contribute to learning at the highest level where the learner continuously guides and studies his behaviour from all sides in the midst of the digital environment in which he dives and assesses his performance thoroughly first with any formative assessment that shapes the learner's conscience.*

4) *Provide initiatives by banks and companies to provide children, pupils and students most in need with devices and means of communication or grant them long-term and interest-free loans.*

5) *Verify the security of learning networks to avoid any acts of hacking or forgery by developing content management systems and learning on the blockchain.*

6) *Build a central online accessible laboratory to practice real experiences remotely (Remote Real-time lab access) and we need to rethink and re-engineer higher education in light of the myriad potential available through the IOT Internet of Things.*

7) *All measures must be taken expeditiously to ensure fair access to children, especially in remote areas, to ensure equal access to education for all without discrimination.*

8) *Building an Egyptian conference video system that ensures complete autonomy, security and integrity of information circulating online.*

9) *Supporting technologies that have a positive impact on the learning process such as mixed reality, data science and artificial intelligence to better deliver education needs and address potential imbalances.*

10) *Improve radio connectivity for schools that need it most.*

11) *Improve the funding of digital curricula and materials (digital libraries, lessons, teaching materials, etc.).*

12) *Continuous and cumulative evaluation of the learning process and interaction to avoid lax learning ensuring commitment especially in early learning stages.*

13) *Invest in personalized learning and learning through play, augmented reality and mixed reality techniques and interact with remote labs in real time.*

14) *Teachers must upload duties and working papers for students to complete and upload on the online learning system and fully integrate them into interactive learning.*

15) *Focus on the need for face-to-face encounters as isolated experiences, distance learning away from their peers, teachers, classrooms and cautious focus on the importance of human need for*

social interaction so as not to fall prey to psychiatric diseases. Acquire digital etiquette and include digital citizenship online cooperation activities.

16) *Learning design that does not require much support from parents who may already be overstretched.*

17) *Develop an online learning manual, which stresses that online learning should not be an absolute excuse for neglecting duties, but rather for dealing with clear attractive learning goals.*

18) *Provide guidance to parents on how to support their children in the online learning model. Not all parents were able to cope easily, especially with young children who could not work from home.*

19) *Sustainable technological development of human resources in educational institutions.*

20) *Conduct courses to develop faculty capacity online and support students decentralized.*

21) *Communication between officials, employees, parents and students.*

22) *Provide technical support to families as their role in following up their children in early education increases.*

23) *Family responsibility in pursuing the obligation to learn remotely, especially for schoolchildren and nursery children.*

24) *Change how online education is planned, managed and funded after the pandemic and must be state-level management and institutional planning.*

25) *Recessions usually mean high secondary school enrolment rates. Universities have to prepare for a larger surge than those coming to university education in four years' time.*

26) *Integrate online learning management into existing academic leadership structures and processes.*

27) *To accelerate the opening of the Egyptian University - BEU Blockchain in anticipation of the most dangerous of the coronavirus pandemic: the monopoly of education and its globalization.*

28) *Expand online learning programs to attract incoming students.*

29) *Prepare for the expected increase in the turnout for higher education more than the previous covid to get a job in the light of the great economic depression created by the coronavirus pandemic.*

30) *Expand the scope of work in a team to include cooperation between States, ministries, educational institutions, families and learners.*

31) *Transforming universities into 5G universities that volunteer AI, IoT and blockchain technologies in the development of education, community service and scientific research emphasizes the role and well-being of man and society.*

32) *Introduction of new study programs in IoT and chains.........*

33) *Raising awareness among students of higher education institutions in Egypt of the importance of the Internet of Things in Egypt's development.*

34) *Encourage and support scientific research in the field of IoT.*

35) *Enlargement of student countries where International Institute of Education research was demonstrated (56) (13) That students from a single country should not be heavily relied upon, which poses a significant risk to the economics of education when that country is exposed to any emergency that prevents its students from flowing, as when the United States of America and Australia relied on China as the primary source of expatriate students According to the Institute of Higher Education, three quarters of American colleges and universities have reported the negative impact of COVID-19 on employment this year. Sources must be diversified to attract students to Egyptian universities and exploit the technological experiences gained during the pandemic for distance education for periods that reduce expatriate students from China, Malaysia, Australia, Canada and Singapore for these reasons so that they do not lose their expatriate students and can attract larger numbers so that education economies.*

(5: p. 10-17)