The Influence of the COVID-19 Epidemic on Teaching Methods in Higher Education Institutions in Israel

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Abstract: This paper aims to review the transition to online teaching (that took place on 12th March 2020) carried out by the top 10 academic higher education institutions in Israel as a response to the COVID-19 crisis in Israel, and to present details on several aspects, such as: how did each university make the transition, what were the learning and teaching channels that were adopted, how did they organize to support students and academic staff, what was the official policy of the institution, etc. The paper shows the sharp systemic changes that took place at the universities in order to continue the learning process that began before the epidemic broke out. In addition, we present trends that, although initially considered as potential future processes, expected to take place in the next 10-20 years, become at once the immediate reality, and ushered the Israeli education system towards the next step in the evolution of future teaching methods in general, and transition to distance learning in particular.

Keywords: COVID-19 epidemic, Distance learning, Digital learning, Online teaching, Synchronous teaching, Asynchronous teaching, Higher education .

https://doi.org/10.24193/JRHE.2020.1.4

Introduction

Framework: This review was conducted at the beginning of April 2020, approximately 20 days after the announcement of the new guideline by the Israeli Ministry of Health to close all academic institutions and subsequently to transition to distance learning.

The information available was gathered in the period of closure and of "social distancing" restrictions, while access to information sources was limited and thus is based on data published on the official website of the universities.

Discussions regarding the ways to promote digital learning as a tool to improve teaching, learning experience and pedagogical skills of teaching staff has taken the forefront place in recent years at various academic institutions around the world. Many articles, projects, courses and programs have been developed, aimed to upgrade existing teaching methods and combining them with innovative learning skills that are a prerequisite for the learner during the process of acquiring the skills and abilities required for integration in the 21st century.

During the last decade, there has been a rapid worldwide growth of new initiatives in creating massive online courses (MOOCs) across the academy: many large-scale entrepreneurship courses have been set up, offering mass, high-quality education at a low price that does not demand any special pre-requisites, and for a moment it seemed that an innovative revolution would soon take place amongst higher education institutions - a revolution that would change the way people study around the world. However, in spite of the great expectation and many efforts on the subject, the revolution did not occur: many teaching failures due to learners' abilities, high dropout rates and lack of pedagogical supervision (in other countries) led to the conclusion that online teaching is not adequate to the higher education system in Israel, and moreover, it also claimed that it will bring damage and negative influence to the whole learning process (Kirsch, 2015).

Subsequently, in Israel, this conclusion led to the formulation of a national digital program under government's decision, which started its implementing steps during 2015, under the responsibility of the Ministry of Social Equality. The aim of this program was to develop

innovation in education and improve the professional training system to the level of developed countries (Israeli Ministry of Social Equality, 2017). Hecht (2018) published data indicated that despite the program and efforts invested, no significant change had yet occurred. He noted that there was some very slight and slow progress in the administrative infrastructure but no practical change in the nature of learning and teaching methods (Hecht, 2018).

11th March 2020 was a turning point for the Israeli academic institutions – in which "civil emergency situation" was declared by the Israeli authorities, due to the COVID-19 epidemic. The entire education system including higher education transformed immediately to distance learning procedure. Ten days later, all higher education institutions in Israel replaced their traditional teaching methods, implementing distance learning using various tools, i.e. programs and processes that were designed for the next decades (2020-2030) became at once a contemporary reality (Shahar, 2020).

Given the context above, in this article we address the following questions:

- How did higher education institutions implement the rapid transition from traditional to online learning during the COVID-19 epidemic?
- How will transition to online educational activities affect higher education institutions in Israel?

First, we will describe the components of the programme that was built prior the epidemic outbreak, as well as the drastic changes that have been taken by the higher education institutions (HEIs) as response to the epidemic restrictions. Then, we will review the advantages and disadvantages of this process, and conclude that these changes are an essential opportunity to progress towards adjustment of future academy to the 21st century requirements.

Overview of Digital Learning in Israel's Higher Education System

"Digital learning is one of the updated 21st century pedagogical means, which incorporates learning-teaching methods with information

technology and communication in an online learning environment, and the implementation of appropriate behaviours in the online educational space. This learning type is based on accessibility and use of digital teaching-learning materials, alongside online information sources" (Rotem, 2013).

The major themes connected to digital learning incorporating personalization and flexibility to learners, teaching management led by teachers, combine receiving meaningful personal educational support, collaborative and socialization founded on a common educational vision, digital materials driven by updated information which is aligned with learners' needs and transparency related to cross-disciplinary learning topics (Rotem, 2013). The focus on digital learning in the last two decades has become a key component due to the accelerated advancement of technology. The analysis of contemporary research literature shows that despite the great potential inherent in this system, there is internal resistance to such organizational and pedagogical change. The Knesset[1] Research and Information Centre (Goldschmidt, 2013) examined in 2013 the issue of online learning at the academic level. As part of this discussion, various challenges presented by MOOCs (Massive Open Online Course**)** were discussed, including:

1. The fear of reducing the "market value" of academic degrees, which are a means of differentiation - the online courses may bring the higher education system to an "inflationary" state of academic degrees due to an increase in supply of academic studies and a decline in the value of academic degrees.
2. The fear of deteriorating the quality of an online curriculum - a free model that stands alongside the development of a large supply of courses can lead to deterioration in the level of courses and the development of a "Wild West", where certificates are attained by not entirely clear origin and value.
3. The fear of reduction in personal dialogue between the student and the lecturer of the course, which may cause absence of a learning experience on the part of the learner and increase dropout.

[1]The Knesset is the unicameral national legislature of Israel. As the legislative branch of the Israeli government, the Knesset passes all laws, elects the President and Prime Minister, approves the cabinet, and supervises the work of the government

4. Limitations on the ability to assess students' achievements due to the inclusion of unreliable digital models used as an alternative to the accepted academic exams methods.
5. Damage to the population of lecturers and researchers due to academic market take-over by large companies.

These challenges reflected the lack of readiness of the higher education system in Israel for online learning, which subsequently became a major impediment to the implementation of digital learning.

A survey conducted by the Higher Education Council in 2018 (Arbiv 2019; HEC, 2018), examined the attitudes towards digital learning of approximately 2472 academic staff and lecturers and found that only 15% of respondents experienced teaching of a digital course. Only 37 made use of an existing digital course and 133 declared that they developed a digital course on their own through a university site; furthermore, 116 of the respondents reported that they did not use the services of a consulting company during the development and production process. Still, 90 reported being satisfied with the level of student participation in frontal courses, 92 claimed that they would recommend others to teach in this way, and 84 would like to teach more digital courses.

Despite the positive approach to digital teaching found by mos lecturers who were exposed to digital courses, about 78% of survey respondents reported that the university did not offer them to develop such a course.

The conclusion that emerges from the findings reflects the uncertainty of the higher education system in Israel regarding online learning and that this ambiguity is a major inhibiting factor in promoting digital learnin.

The Ministry of Social Equality claimed that while in many other OECD countries a follow-up plan was established for the Digital National Program, in Israel (2013), only the first national strategy was defined. On this program, a national policy, the use of information technologies regulations, communications and their applications were formulated. Development and promotion of higher education system relies on the argument that the skills will be acquired by academic qualifications of future employees, while they are still students, and this enlistment will serve them throughout all their future career and

improve their professional capabilities. Improving training system in the digital domain will ensure employment flexibility, a relative stability that will resist turbulences in the labour market and in the professional level of the Israeli labour force, which will be in line with other developed nations (Ministry of Social Equality, 2017).

In conclusion, although in the last decade we have witnessed a growing worldwide trend in the field of digital learning as well as expansion in online academic courses and digital learning in general, institutions of higher education in Israel (prior to the COVID-19 period) have underestimated the importance of developing an on-line curriculum and until the COVID-19 crisis, there was no significant change related to online learning methods in HEIs. In a review published by Jacob Hecht (2018), he notes that the education system preferred to invest in programs such as "meaningful learning" which were considered as an effective solution that would solve all learning problems (RAMA, March 2016).

Concerns about the "disruptive innovation" characteristics (Kirsch, 2015), the disappointment of integrating technology into higher education, partially due to experiences with MOOC platforms such as Coursera and edX that led to a high dropout rate with a particularly low graduation rate of 12.6% (McAvinia, 2017) and the shattering of the illusion that every learner can learn at their own pace without guidance and without peers (Ben David, 2019), have led the academic institutions in Israel to invest very low efforts in developing online learning materials and tools.

The Effect of the COVID-19 Epidemic on the Transition to Distance Learning in Israel

Global Context

The COVID-19 epidemic which broke into the world in November 2019 (Ma, 2020) in the city of Wuhan in China expanded at a staggering rate to 199 countries/territories (as of 7th April 2020), thus becoming the world's largest epidemic in the last century (since the Spanish influenza epidemic (Nature, 2005). The World Health Organization announced the outbreak as a global epidemic on March 11th, 2020 (WHO, 2020). In an attempt to overcome the rate of the epidemic, a

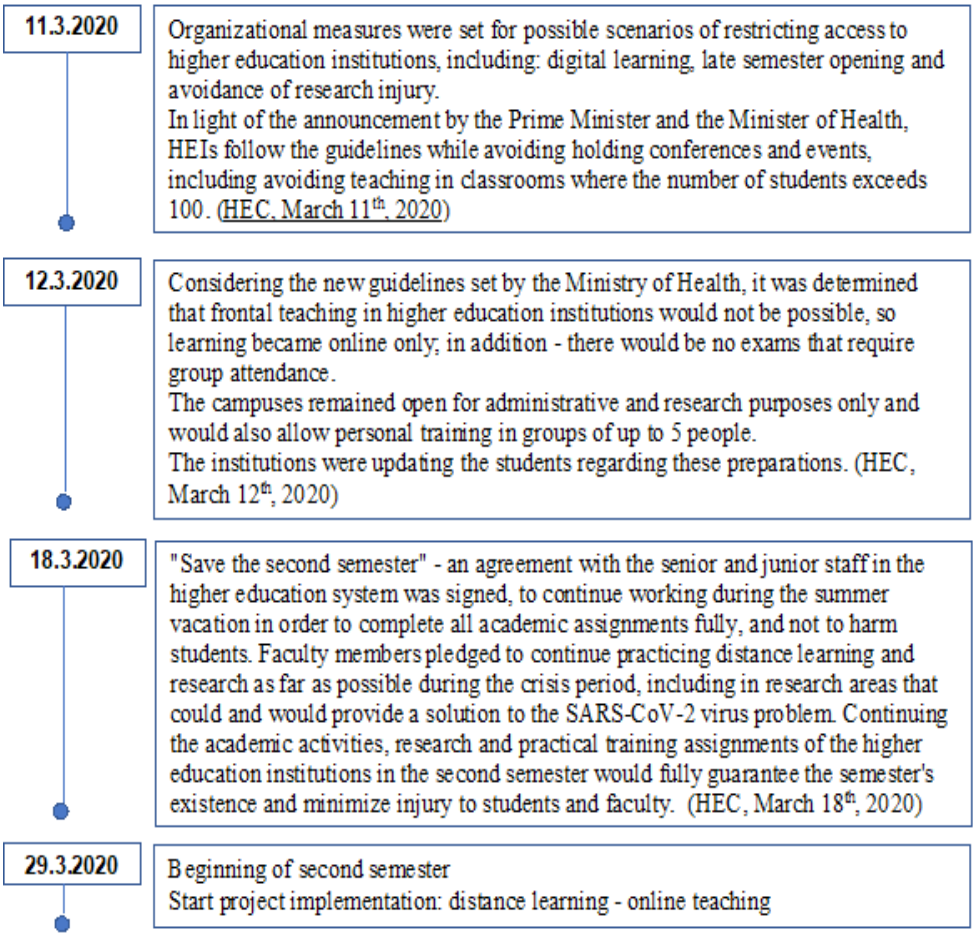
policy of isolating populations worldwide was adopted - from preventing foreign entry and closing borders, through isolating returning residents from countries exposed to the virus, to various levels of closure of areas and cities along with a ban on gatherings determined according to the rate of expansion. As a result, educational systems that include kindergartens, schools, universities and educational institutions were closed until the danger of infection would decline. (UNESCO, March 2020).

Local Context

The decisions of the Israeli Higher Education Council (HEC) following the spread of COVID-19 epidemic in Israel

In Israel, higher education institutions encountered the epidemic spread during the first semester vacation. Initially, guidelines were issued aligned with the instructions of the Ministry of Health regarding bans on gathering. Later, after the decision to ban traffic and crowds, a decision was made to continue teaching by using distance learning methods.

Chronology of preparations for distance learning during Coruna crisis – HEC Policies



The Transition to Online Learning of Israeli Academic Institutions

In this part of the paper, we aim to describe how 10 top academic institutions (out of a total of 62 in Israel) implemented the transition to distance learning. The selected institutions represent 50% of all students studying in the State of Israel - during the COVID-19 epidemic, approximately 306,000 students studied in Israeli higher education institutions (Online Report, 2019), including at seven state-funded public universities and 3 non-state-funded private colleges (see Table

1). It is important to note that the information was gathered at the beginning of April 2020, just two weeks after closure of the universities due to "social distancing", and thus most data was collected from the formal information published by the institutions on their websites.

Table 1: Number of students enrolled in the top 10 Israeli HEIs

Type	University	Bachelor's degree	Master's degree	Doctorate	Diploma	Total Students
State-funded university	Tel Aviv University	14,810	9,132	2,169	250	26,361
State-funded university	Hebrew University	11,278	6,085	2,312	162	19,837
State-funded university	Ben Gurion University	11,828	4,068	1,681	122	17,699
State-funded university	Haifa University	8,033	7,843	1,513	181	17,570
State-funded university	Bar Ilan University	8,352	6,450	2,192	237	17,231
State-funded university	Technion	9,365	3,082	1,155	9	13,611
State-funded university	Ariel University	10,610	1,056	-	75	11,741
Non-state-funded college	Uno Academic studies	9,055	3,596	-	-	12,651
Non-state-funded college	College of Management	6,238	1,383	-	-	7,621
Non-state-funded college	Interdisciplinary centre	6,066	1,366	-	-	7,432

Source: statistical data HEC - (HEC Report, 2019)

Data Analysis

Early Preparation to Distance Learning by the HEIs in I

Some institutions (Technion, UNO College, Interdisciplinary Center and Bar-Ilan University) were organized with recorded and filmed lectures, presentations and digital materials while other institutions bridged this gap during the COVID-19 epidemic. The University of Haifa,

for example, was previously prepared (at the beginning of the study year) for use of online courses and defined procedures for recording lessons and online exams. Bar Ilan University has been developing online teaching methods since 2000.

Of all institutions, the authors would like to note the Technion which produced 500 courses that incorporate innovative pedagogy even before the crisis and disseminated information to faculty staff and students regarding digital learning. In addition, the Technion has two advanced editing and filming studios, and was engaged in production of multi-participant online courses (MOOCs).

Academic Staff Preparation – Most universities recommended that lecturers provide live lessons or record lessons in advance (such as at Tel Aviv University and Ben Gurion University). In most institutions, the academic staff has been trained to use online systems (Bar Ilan University, Uno College and Interdisciplinary Center).

- *Online Courses* – In most universities, the stock of online courses before the COVID-19 epidemic was exceptionally low. During the crisis, there was a significant change while most institutions moved to an online format and managed to bridge the gap by developing hundreds of online courses in a short period. The University of Haifa for instance, made possible the distance learning for all its courses through a dedicated learning system (Moodle).
- *Student Support* – In addition to distance support and information on the institutions' websites, some universities have opened dedicated Facebook pages (such as the Open University and the Interdisciplinary Centre), or published useful recommendations on their sites (Hebrew University, Tel Aviv University, Ben Gurion University, University of Haifa).
- *Academic Staff Support* – Most universities provide academic staff training on how to use digital platforms through the institution's website or by direct instructions (Tel Aviv University). The Hebrew University has also established a dedicated website to support academic staff and encourages lecturers to experiment vast variety of online teaching methods.
- *Corporate Responsibility* – In most institutions, the responsibility for transitioning to digital learning was directly under the

faculties, or assigned to the digital unit or to online learning centres that existed prior to the COVID-19 crisis (Tel Aviv University, The Hebrew University, Bar Ilan and IDC).

- *Student Associations* – In most universities, Student Associations provided a host of tips and recommendations for learning from home through the universities' websites (Tel Aviv University, Interdisciplinary Centre, Tel Aviv University, University of Haifa). Ben Gurion University, for example, also provided information about free online courses in Hebrew and Arabic.

Of all the universities, it should be noted that the Interdisciplinary Centre, Tel Aviv University, the Hebrew University and the Technion implemented the transition to online teaching in a very short time (within only two weeks) and provided intensive support to students and staff while upgrading in real-time their teaching, learning and assessment systems.

The wide range of technologies and applications available for distance learning has enabled the institutions to adapt to synchronous and asynchronous learning.

Most institutions have established a virtual space for learning using live broadcasts, recorded lectures, past filmed courses, MOOCs, using a variety of existing platforms, direct YouTube lectures, publishing presentations, presenting lecture notes and reading materials on courses sites and more. Some have set up dedicated web and Facebook pages. Interpersonal communication between the student and the teacher was replaced by communication through Zoom, Skype, WhatsApp and more. All institutions had to adapt the new reality and provide remote technical support to both students and academic staff, to ensure that courses are optimally delivered.

At this stage the data analysis is not complete yet, since during the research it was found that further in-depth data collection was required in order to formulate conclusions.

It is also necessary to add information regarding the practical use of online teaching methods during the COVID-19 crisis.

Another issue that requires data collection relates to the transition process itself: if at the beginning of the crisis most institutions were not adequately prepared, then in recent months, most institutions have made a huge effort to bridge this gap. Institutions have developed, in a short time, tools, resources, educational materials and online courses -

which were not reflected in this study (since the study was conducted at the beginning of the crisis). It is possible that today, a few months after the outbreak of this epidemic, institutions are better prepared. We believe that it is necessary to collect and present this information in order to obtain a clearer and more comprehensive understanding regarding the experience of the academic institutions.

Further information will be gathered in the second stage of this research through personal interviews with academic staff, students and online study programs developers in order to achieve a better understanding of the transition to distance learning.

Conclusions - The COVID-19 Epidemic Accelerates Change Processes in HEIs in Israel

The COVID-19 epidemic presented educational and economic constraints, which served as a catalyst for implementing a change in teaching and learning methods.

The arguments against distance learning cited by institutions that prevented the development and implementation of distance learning technologies in the past (Goldschmidt, 2013) were dissolved at once, in light of the COVID-19 reality that dictated a new agenda.

Within a few weeks, the virus changed the way students learn throughout the world (Tam G. El-Azar, 2020). A UNESCO report shows that the percentage of learners affected by the COVID-19 epidemic currently stands at 91.3% of all learners in the world, (UNESCO, 2020) and according to the following details:

Table 2: The impact of COVID-19 on learners and educational systems

Date in the epidemic	Number of affected learners	Percentage of all registered learners	Countries that shut down education systems
16.2.2020	1,026,210	0.1%	1
3.4.2020	1,576,021,818	91.3%	188

Experts team report - COVID-19 Crisis and HEIs

A report related to the COVID-19 crisis and the higher education system was written on April 2020 by a team of experts headed by Prof. Yossi Dahan and Dr. Sarab Abu Rabia, together with 9 other researchers, aimed to provide an adequate explanation to the crisis in higher education during the COVID-19 period, and to offer solutions to this short and long-term crisis (Dahan et al., 2020). These experts reported that on April 12th, the Higher Education Council announced that studies on all institutions would continue to study using distance learning methods until the end of the second semester. This decision was made aggressively by the Treasury Department, without any consultation or reference from the academic staff. The Ministry of Finance, which does not have the authority or expertise to make such decisions, completely ignored the many difficulties encountered by the students and academic staff concerning the distance learning process, thus preventing proper and professional research management. Moreover, the team noted that online teaching was not a substitute for campus life and that there were serious implications on pedagogical and social processes, and thus distance learning enhances existing inequalities among students and academic staff (temporary and junior).

"Beyond the claim that online teaching can be used as a substitute to frontal teaching, it does not necessarily rely on researches done on the subject, it is important to note that this teaching method has negative consequences, mainly on disadvantaged students which may cause dropout of studies" (Dahan et al., 2020).

It appears that technology accessibility does not exist equally among students (not all students have a quiet working area, access to a private computer, Internet and availability to participate in online learning). Moreover, the gender gap has also intensified, because schools remain closed, parents have to fully bear the responsibility of their children and usually this responsibility rests on the shoulders of mothers and thus prevents them from having the free time and attention required by the distance learning process. In addition, most students from low socio-economic backgrounds need more assistance from faculty members, while independent learning reduces student-teacher interaction and puts these students on risk.

The team of experts in education published a number of recommendations aimed to reduce the digital gap between students, including:

- Providing additional personal computers, tablets and technological means to all students who do not have a personal computer, or at least providing the option to purchase devices through the university /college at a discounted price.
- During the quarantine (social distancing) - allowing universities to open computer rooms so that students can work while adhering to COVID-19 guidelines as defined by the Ministry of Health.
- Implementing mentoring programs for low socio-economic backgrounds students aimed to bridge the gap created by the crisis.
- Regarding prevention of gender gaps, the team recommended to extend the length of studies as well as scholarships with regard to students who are parents. (Dahan et al., 2020).

Every crisis also creates opportunities, and taking advantage of such opportunities might mean moving to a more successful future for most higher education institutions. In what follows, we are going to discuss the advantages that adopting distance and/or online education on a large scale might have for Israeli HEIs.

Advantages of Transitioning to Distance/Online Learning

The changes occurred during the process of adopting the distance learning methods enforced by the COVID-19 epidemic constrains in Israel present the following advantages:

- The immediate impetus for change created an opportunity for innovation
- Learning anywhere and anytime
- Learning at a personal and individual pace – 21st century skills
- Professionalization through the world's largest "distance learning" experiment
- New learning environments and distance learning technologies
- Using open learning materials
- Government policy supports digital learning

- Strengthening the value of distance learning
- Expanding new collaborations between institutions and the labor market

1. Innovation

The immediate impetus to change creates an opportunity for innovation. Academic institutions around the world characterized by complex mechanisms, slow change pace, centuries-old teaching traditions based on the rationale of frontal lectures (Tam and El-Azar, 2020), pushed necessity level through the new COVID-19 reality to create solutions for optimal application of e-learning technologies. This impetus evolves an opportunity for institutions to improve and develop means and methods for distance learning, as well as for a new organizational structure adapted to the new needs. The main objectives will be to train staff and students to use the existing platforms, to develop new procedures in terms of organizational and distance teaching pedagogical standardization. Another mission is to re-organize and enable a variety of digital courses and curricula of distance learning, develop teams that would engage in combining curriculum content with new professional multimedia departments, expand students and staff support departments, and develop new methods of assessment and accreditation.

These activities would establish distance learning even after the COVID-19 period and would provide an opportunity to expand the adoption of new teaching methods.

2. Learning anywhere and anytime

Using G5 technology learners and digital solutions providers can, more than ever, practice the concept of 'learning anywhere and anytime' through digital education. Traditional classroom learning will be accompanied by new learning tools - from live broadcasts, through 'educational influencers' to virtual reality experiences (Tam and El-Azar, 2020). Learning may become a habit that is integrated into daily routine and thus, may help to strengthen the trend of "Lifelong learning" (Holford, Griffin and Jarvis, 2020) designed to acquire skills that would enable the learner to be effectively integrated and to compete in the global economy and on the labour market.

In this context, the COVID-19 crisis creates an opportunity to change the way higher education institutions perceive the path to impart knowledge and life skills, and subsequently, address new avenues that establish abilities to acquire skills and knowledge from anywhere and at any time.

3. Individual learning – 21st century skills

Ran Amalia (2020) notes that learning in the online space helps develop skills such as: autonomy thinking, responsibility in learning process, enhancing intrinsic motivation, flexibility and involvement in the process. In addition, in terms of learners, digital learning is seen as personalized, effective and empowering.

The use of digital means and remote teaching methods effectively establishes the opportunity to acquire the 21st century skills required such as: autonomy and self-directive learning, problem solving, critical thinking and creativity (Fadel, 2008).

4. Professionalize through the world's largest "remote learning" experiment

The current crisis illustrated in practice how to utilize smart devices that are available to everyone for the sake of creating an open learning space online. The COVID-19 epidemic has actually created the world's largest distance learning experiment. An example of a process that is taking place all over the world today can be seen at Zhejiang University (ZJU) - a research university considered to be one of the oldest and most prestigious of China's higher education institutions, where they launched distance learning with more than 5,000 courses and developed a streaming App. in collaboration with Alibaba[2] Moreover, they bridged digital gaps through agreements with Internet service providers, established 200 smart classrooms with advanced technology, and even allowed graduates to defend their thesis in an online procedure.

The current experiment, even if accompanied with difficulties for both students and academic staff, will advance HEIs toward improving

[2]Alibaba - is a Chinese multinational technology company specializing in e-commerce, retail, Internet, and technology.

and streamlining distance learning processes and creating additional means and collaborations.

5. *New learning environments, a variety of technologies for distance education*

Learning in an open online space creates an opportunity to develop and create new learning environments, accompanied by the use of open learning materials and digital content. Already today, there is a growing use of cloud-based books and technology to teach sciences, filmed lectures, interactive practices and online texts.

The "Flipped classroom"[3] approach can deepen and expand. This hybrid learning approach combines distance learning and online meetings. The lecture is delivered via online videos (asynchronous teaching), but not at the same time, while exercises and problem-solving take place online, accompanied sometimes by the teacher in real time. The advantage is that the teacher's work focuses on working directly with students rather than lecturing them. Another benefit is the promotion of a research-based learning environment, student collaboration, critical thinking development and personalized learning. (Slant, 2020).

UNESCO has published dozens of online teaching tools that include platforms and educational resources that provide distance learning solutions in a wide range of fields: digital learning management systems, mobile phone-based learning systems, offline learning systems, MOOC platforms, self-learning systems, reading Apps, live-video communication platforms, teachers' tools for digital content creation and a variety of other distance learning solutions. (UNESCO, 2020).

The COVID-19 epidemic will serve as an engine that will motivate the development of e-learning tools while connecting knowledge to the technological means that already exist today, as well as new ones, that

[3]A "Flipped classroom" is a type of blended learning where students are introduced to content at home and practice working through it at school. This is the reverse of the more common practice of introducing new content at school, then assigning homework and projects to be completed by the students independently at home. In this blended learning approach, face-to-face interaction is mixed with independent study–usually via technology (Teach Thought, 2020).

are going be created in the near future, responding to the demands of the academic staff, students and the process of education.

6. Open study materials

UNESCO published "A Basic guide to open educational resources" (UNESCO, 2015) to describe the use of available information and technologies for non-commercial purposes, including studying and teaching. A good example of this is MIT University that was the first to grant a free license for the use of materials published in connection to the university courses without violating copyrights. In this context, teachers are seen as partners in the process of creating materials and knowledge while sharing and learning constantly (Ran, 2020).

The COVID-19 crisis has created an opportunity for academic institutions to develop practical programs to encourage teachers and lecturers to create, adopt, and produce new study materials, as well as to develop rewarding systems for lecturers and teachers by recognizing their development efforts as part of their role in the organization.

Moreover, the role of the traditional teacher will be reshaped after the COVID-19 crisis - the education system and teachers themselves will be required to redefine their role in the educational space.

7. Government policy supports digital learning

HEC, the Planning and Budgeting Committee, the headquarters of the National "Digital Israel" Project[4], and the Ministry of Social Equality work together to promote digital learning as a tool to improve the quality of teaching and learning, to broaden higher education for all sections of the population in Israel, and to strengthen the status of the Israeli academy in the world.

In 2018, HEC published definitions and regulations of digital learning (HEC Decision, 2018), to regulate the promotion and expansion of deploying digital academic courses through a series of declarations inviting higher education institutions to join the project (Digital Learning, HEC, 2020).

[4] Digital Israel" Project - promoting innovation in areas such as education, health, welfare and the Digital Economy and in a range of core issues. In addition, the headquarters is engaged in advancing technological and regulatory infrastructure and in developing human capital that will enable government work to adapt the challenges of the 21st century. (Digital Israel, 2018).

As part of this project, HEC offered financial support for the production and conversion of digital academic courses and presenting them in either two main platforms:

- The international platform "edX.org" - under the brand "IsraelX".
- The national open source platform "Campus" - (Based on edX technology).

In January 2017, HEC approved a plan to expand the range of online courses on the expense of frontal studies in academic institutions with investment of 26 million NIS (Kropsky, 2017). This investment is part of a digital learning program that began in 2016 and was expanded in 2017 when each academic institution was invited to submit courses.

The Digital Learning Project is part of the five-year program of HEC, approved in September 2016 with a total budget of approximately 7 billion NIS. Within this program, HEC (HEC, 2020) has called on all higher education institutions in Israel to submit online courses, until the last call which was distributed in January 2020 and invited them to join the international and national platforms.

In this context, regulators are expected to influence institutions of higher education in Israel, and be much determined, in order to implement distance learning methods as well as to set definite goals and timetable to ensure that the process is actually performed.

8. Strengthening the value of distance learning

Alongside the notable benefits of distance learning such as: increasing the accessibility of knowledge and learning; reducing costs of academic studies; strengthening competitiveness and developing academic teaching; improving measurement of learning processes and course management; strengthening the connection and alignment between academic studies and the labour market (Silver, 2020), academic institutions will need to formulate in the near future tools to address the concerns that accompany the process of distance learning, including the fear of reducing the "market value" of a college degree; the fear of deteriorating the quality of online studies; the absence of dialogue with lecturers; the nature of the "academic experience" and the student support system; the limits to assess the academic level of students; a relatively low percentage (approximately 12%) of on-line courses completion (Goldschmidt, 2013).

An example of reinforced "market value" can be achieved through defining higher requirements in distance learning courses. The online "quality of education" problem can be addressed through the development of a sophisticated measurement system that ranks the quality of study materials, the quality of knowledge transferred, the quality of the lecturer, the checklist of basic skills, the student assignments, etc.

The topic of "the absence of dialogue with the lecturer" can be addressed by encouraging a variety of virtual communication tools (accessible already today to every student in Israel), and by considering meetings in the virtual space as valid as meetings inside the classroom.

The problem of "academic experience" - required a reformulation to "learning spaces" and the recognition of the legitimacy of the "virtual learning spaces" far beyond learning in some geographical location dictated by the physical buildings of the university. The COVID-19 crisis is an opportunity to expand the "academic experience" into the digital space and to bring new meaning and content to the active "student experience" that is taking place in those spaces.

The Chairman of the Planning and Budgeting Committee of HEC suggested the "establishment of start-ups boosters" (Shacher, 2020) instead of the empty classrooms that would be available as a result of the transition to distance learning. She assumed that online learning would also open the door to collaboration between academic institutions and between institutions to private entrepreneurs and the labour market in the effort to create together the future of education.

During the COVID-19 crisis, we highlight the coming together of associations and diverse stakeholders, including: governments, publishers, educators, technology providers, and telecom operators – they all gather together to use digital platforms as a temporary solution to the crisis.

In China, for example, the Ministry of Education has assembled a group of institutions from different fields to develop a new online, cloud-based learning and broadcasting platform, as well as to upgrade the educational infrastructure (Tam and El-Azar, 2020).

Another example is readtogether.hk, a Hong Kong platform that is incorporating over 60 educational organizations, advertisers, media professionals and the entertainment industry. The platform provides

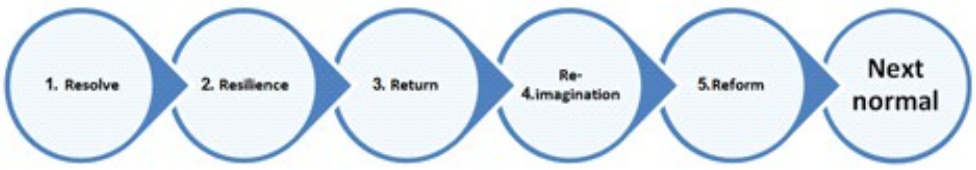
more than 900 educational assets, including videos, books, assessment tools, and free consulting services (Tam and El-Azar, 2020).

This trend of gathering associations and industry around a common educational goal will expand in the future and will provide innovative education solutions.

A Vision for the Future

The COVID-19 epidemic serves as a catalyst factor in the process of transition to distance learning and provides challenging opportunities for development and innovation in higher education.

In the journey of navigating towards the "Next Normal", we predict a dramatic reorganization of the economic and social order. Once the traditional order has turned out to be irrelevant to contemporary reality, higher education systems will move on to discussing what might be the "next normal."



An article published on McKinsey's website (Sneader & Singhal, 2020), presents a five stage model for coping with the "next normal" and includes the following steps which we translated here to the field of higher education;

(1) *Resolve* - This phase is characterized by the change that is currently being implemented in the transition to distance learning aimed mainly at continuing regular routine (as much as possible) and avoiding cessation in terms of studies and staff dismissal.

(2) *Resilience* - Assuming decline in economic activity expected worldwide, organizations will need to establish a competitive advantage and balance economic sustainability with social demands. The meaning is that institutions will have to adapt to the "next normal" stage by redefining their functioning and roles, changing organizational structure and traditional teaching methods. Thus, on the one hand, to

become economically viable, and on the other, to establish new relation with the labour market.

(3) *Return* - This is the stage at which institutions will resume activity at an effective rate (including considering that the next outbreak is likely to occur soon, if no vaccine is found).

(4) *Re-imagination* - The magnitude shock of the COVID-19 epidemic will change the expectations and preferences of citizens, employees and consumers. These changes will affect the way we live, work and use technologies. These changes will become apparent in the coming months. Institutions that reinvent themselves with an understanding of future reality will succeed. Thus, this crisis is not only revealing weaknesses, but also poses opportunities to improve performances that will contribute to better survival of educational institutions in the future.

(5) *Reform* – We will witness changes in economic policies regarding health systems but also global cooperation between states. Similarly, educational institutions will need to implement cutting-edge technologies, change policies, and collaborate with local and global partners. The vast social experiment in both distance learning and "working from home" will help to understand what innovations will be adopted and to what extent. In the midst of the restructuring of the global economic order, we are also facing a reorganization of higher education institutions that are currently transitioning towards the "next normal" future of major reforms in curriculum and redefinition of goals, objectives, vision and organizational structure that are aligned with the new reality and better adequate to future education.

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