

**Hybrid Education Application During the COVID-19
Pandemic: A Descriptive Study of Algerian and
Egyptian Universities**

تطبيق نظم التعليم الهجين أثناء جائحة كورونا دراسة وصفية للجامعتين الجزائرية والمصرية

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Abstract : This research aims to stand on the actual procedures that were implemented in the algerian university and the egyptian university , through the legal regulations on the one hand , and through the human and material reality devoted to the application of the hybrid system, with an analysis of the opinions of the elite in the two countries and their evaluation of this systm, with a realistic assessment of the success of this system, and the possibility of applying in the future, or amending it, or compensating for the shortcomings that accompanied the application of this system in light of the corona pandemic.

Keywords:

Algerian university- Application- COVID-19 - egyptian university- hybrid education – Pandemic

Introduction:

The trend towards hybrid education was primarily aimed at providing the foundations and necessary elements for its realization in reality. Most countries seek to implement and develop it, especially after the circumstances the world witnessed following the outbreak of the coronavirus pandemic in early 2020. Universities worked to adapt to the pandemic situation, initiating preparations by incorporating programs to enhance educational services and improve their quality. They also adopted various advanced technological systems of all kinds while providing the material,

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human, and technical requirements to achieve high-quality education.

It became the duty of both teachers and students to rely on various mechanisms that use technological media simultaneously with traditional educational methods. By proposing and implementing new non-traditional patterns, they contribute to overcoming the pandemic with minimal damage. These measures included most Arab universities affected by this pandemic, with Algerian and Egyptian universities being part of the event through their implementation of hybrid education. This was done through a set of measures taken to implement this pattern. Based on this, how can this new pattern be understood through these experiences? What are the mechanisms adopted in its application, as well as the expected outcomes in Algerian and Egyptian universities? How practical is its application, by identifying the gaps and loopholes that have appeared here and there?

1/ Hybrid Education Concept:

In Arabic, the word "hybrid" refers to what results from the mating of two types, strains, categories, or systems of one gender. Generally, it refers to an educational model that combines on-campus teaching with online learning, utilizing modern communication mechanisms such as computers, networks, and the internet to deliver information to learners quickly and cost-effectively, with the possibility of managing, adjusting, measuring, and evaluating learners' performance⁽¹⁾. It's an integrative solution that combines cooperative learning methods, web-based courses, face-to-face classrooms, and live online education⁽²⁾..

(1) Ahmed Helmi Abu Al-Majd, **Hybrid Education: Procedures and Mechanisms for Implementation and Technological Innovations at South Valley University**, South Valley University Electronic Center, <http://www.svu.edu.eg/>.

(2)-Abdullah Al-Faqi, **Integrated Learning: Instructional Design - Multimedia**, Dar Al-Thaqafa for Publishing and Distribution, Oman, 2011.p36.

Hybrid education terminology has become widely used since the spread of the coronavirus in various academic research, but there is no consensus on its meaning as definitions have varied according to specialized researchers. According to Mc Farlin (2008), hybrid education is "a course that combines face-to-face teaching in classrooms and educational technologies often using internet-based devices, with a significant amount of learning occurring in an online hybrid course."⁽³⁾

Requirements of Hybrid Education:

To implement this new approach, several structures, tools, systems, software, platforms, and human resources are necessary. These requirements can be divided into two main types:

1. Technical Requirements: Hybrid education requires a technological infrastructure, including an electronic linking network connecting the university to the e-learning subject and the structure upon which the network is based. This includes determining electronic linking devices, computers used for communication, and software facilitating educational content management.
2. Organizational Requirements: These involve the university institution appointing individuals responsible for managing digital platforms, putting them into service, and regularly maintaining them against possible malfunctions. Additionally, opening electronic accounts for teachers and students to access these digital platforms is necessary.
3. Human Requirements: Training teachers and students on optimal use of electronic devices and internet technologies, along with coaching students on personal skills, dialogue techniques, and expressing opinions with others, are essential.

Universities in Algeria and Egypt Embrace Hybrid Systems:

1/In Algeria:

The asynchronous application of both face-to-face and distance education is very common today in higher education

)3(Lamport, M. A., & Hill, R. J, **Impact of Hybrid Instruction on Student Achievement in Post-Secondary Institutions: A Synthetic Review of the Literature**. Journal of Instructional Research, 1,2012,pp49-58.

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institutions. Universities now have virtual environments complementing in-person education, with platforms like Blackboard, Edmodo, and Moodle being commonly adopted learning management systems. These platforms facilitate collaboration among teachers, students, and even learners themselves. Additionally, single-purpose tools like Google Docs facilitate online learning in the asynchronous context. It's important to note that hybrid learning is the synchronous application of face-to-face and distance education for student learning. Therefore, the asynchronous integration of in-person and distance learning practiced by many institutions doesn't necessarily mean hybrid learning. Achieving this goal requires simultaneous implementation of in-person and distance education⁴, with Moodle being the most widely used platform for e-learning in Algerian universities.

Moodle Platform:

Moodle, an open-source e-learning platform, provides an integrated educational environment, including tools for course creation, student tracking and guidance, adding learning resources to web pages, multimedia files, online testing and grading, and result announcement. It facilitates communication and interaction between teachers and students to achieve educational goals efficiently and effectively⁵.

Activation of e-learning system in Algerian universities:

During the academic years 2019/2020 and 2020/2021, there were periods of remote and hybrid learning due to the prevailing epidemiological situation in the country. Following the spread of the COVID-19 pandemic and the Algerian government's implementation of preventive measures to limit its spread, the Ministry of Higher Education and Scientific Research issued a memorandum to the regional university conference presidents and university institution directors. This memorandum included

4 - Alokluk, J.A., **The Effectiveness of Blackboard System, Uses, and Limitations in Information Management**. Intelligent Information Management, 10, 2018, 133-149.

5- Shibani Mukhtaria, **The Future of Algerian Universities in Transition to E-Learning - Reality and Prospects**, Kunooz Al-Hikmah for Publishing and Distribution, Algeria, p.178.

pedagogical initiatives to combat the spread of the virus and ensure the continuity of education through remote learning.

The Ministry also adjusted the academic regulations, assessment, and transition procedures for the academic year 2019/2020 due to COVID-19, emphasizing remote teaching as a recognized pedagogical method within students' higher education pathways. Additionally, it highlighted the importance of using various distance teaching methods, including remote visual communication, supported by explanatory videos and other resources, instead of merely providing lectures in PDF format.

In the academic year 2020/2021, the Ministry closely monitored the epidemiological situation and implemented health protocols established by the Ministry of Health and Population. Digital platforms were developed across universities, with their coverage expanding from 10% to 90%. Despite the benefits of remote teaching, reports revealed a lack of interaction between professors and students, prompting efforts to address this issue through faculty training and internet infrastructure development.

For the academic year 2021/2022, the Ministry instructed higher education institutions to adjust their schedules to resume remaining activities and complete the academic year. This included remedial exams, orientation committee meetings for joint core disciplines, and certificate issuance for graduating students. Furthermore, the Ministry empowered university directors to assess the situation at the university level, involving institutional bodies in organizing educational activities and ensuring coordination between remote and in-person teaching.

In the academic year 2022/2023, the Ministry initiated field implementation of remote learning in higher education institutions, focusing on horizontal units exclusively through distance education starting from the second semester. It instructed institutions without Moodle platforms to adopt them and provided training for professors on platform usage and assessment methods. Additionally, it emphasized the importance of preparing students by

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creating institutional email addresses and designing digital platforms for easy access.

The Ministry established a sectoral committee to oversee and evaluate the implementation of remote learning in higher education institutions, focusing on technological equipment, digital platforms, human resources, and organizational measures. This committee also proposed training plans for teachers and technicians in distance education technologies and monitored the production of necessary digital pedagogical content. Finally, it monitored international experiences in remote education to adapt the national higher education system accordingly.

Algerian Elite's Views on the Hybrid System:

- Abd Al-Baqi Ben Ziane (Minister of Higher Education and Scientific Research): Minister Ziane stated that the hybrid model adopted by Algerian universities is considered a pioneering experience, from which the university has greatly benefited. Due to its success in several universities, it has been decided to adopt both in-person and remote learning even after the final elimination of the pandemic. He clarified that "the experience of hybrid teaching and learning, which includes both in-person and remote learning, adopted by universities for the first time during the 2020-2021 academic year due to the exceptional health conditions resulting from the spread of the coronavirus, is an opportunity to permanently adopt this educational model within the Algerian higher education system."

- Fateh Serbili, President of the Free Algerian Student Organization: He sees the shortcomings of hybrid education as poor pedagogical achievement, as well as the cramming of lessons through remote teaching methods, the inability to comprehend, and evidence of this, according to him, is the percentage of student failures (according to the exceptional decision of the Ministry of Higher Education that determines transfer mechanisms). He pointed out that there is a somewhat significant rate of student failure, not to mention the internship, which is considered a major obstacle for students previously, let alone now in these exceptional circumstances. In

addition, practical sessions are almost nonexistent in some universities, not to mention directed work sessions, which are very important in the LMD system. As for the issue of staggered or batched teaching aimed at achieving physical distancing to prevent COVID-19, the representative of the Free Student Organization explained, saying: "We are completely against it if applied in the next academic season because in reality, most universities do not respect or apply the health protocol of distancing in teaching and impose masks that they cannot even provide to their workers."

2/ In Egypt:

The Egyptian government first resorted to precautionary measures starting from March 14, 2020, when the Egyptian Prime Minister Mustafa Madbouly issued a decision to suspend classes for two weeks in all schools, institutes, and universities, followed by successive extension decisions. University professors and students endured the hardship of these measures, which were initially mandatory with no alternatives or assistance means.

After the situation worsened due to the serious and striking spread of the pandemic in Egypt and other countries, and with limited resources to combat the disease, it became necessary to switch to hybrid education as a more suitable solution for the situation that the higher education sector in Egypt is experiencing. "After the Egyptian state found itself facing one of three scenarios for education in the next academic year (2020-2021), which are: education inside educational institutions face-to-face, or distance learning, or hybrid education that combines both types, it is clear that the closest of these scenarios to implementation so far, to keep up with progress, development, artificial intelligence, and to maintain what has been achieved remotely, and its impact on preparing a professional generation capable of acquiring knowledge in all circumstances, while protecting students from COVID-19 infection."

The decision to approve this model came on July 21, 2020, to be effectively implemented in the first semester of the academic year 2021/2022.

*** Actual implementation measures:**

- Formation of responsible committees to follow up, support, and implement this system, which are three main committees:

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* Committee for Monitoring Humanities and Social Sciences: Its field includes law, commerce, literature, media...

* Committee for Monitoring the Medical Sector: Its field includes medicine, dentistry, pharmacy, veterinary medicine...

* Committee for Monitoring Basic and Engineering Sciences Colleges: Agriculture, sciences, engineering, computer science.

"The responsibilities of these committees include communicating with colleges, monitoring the preparation of schedules, uploading courses and lectures to the college platform, and preparing a weekly report presented to the university administration" through the university's educational platform Smart CU, which includes a set of integrated global systems such as Blackboard, Assessment Gourmet for exams, an integrated system for scientific references and educational materials, a system for meetings and conferences Collaborate, in addition to other multiple educational tools according to the president of Cairo University.

- Preparation of a training plan to introduce the hybrid system and its implementation procedures and technological innovations for it.

- Determination of mechanisms and procedures for implementing hybrid education.

Hybrid learning challenges at Egyptian universities:

Despite the aforementioned measures, there are numerous administrative, organizational, human, and academic obstacles hindering the achievement of desired results. These include a lack of modern technology utilization, with most universities relying on traditional lecture hall equipment, ignoring the demands of the digital age. Additionally, faculty members' lack of readiness for training on information technologies, scarce employment of modern teaching techniques, high costs of computer equipment and software, and deficiencies in remote communication and slow response to internet issues contribute to the shortcomings. Moreover, there's a lack of incentives for faculty members, weak coordination and planning among higher education leaders in Egypt.

*** Elite Egyptian opinions on the hybrid system:**

- Dr. Mohamed Kamal (Professor at Kafr El-Sheikh University) commended the Ministry of Higher Education's steps in expanding the digital "distance learning" system in universities. He emphasized its role in allowing students to access various curricula

and scientific materials, thus contributing to the graduation of distinguished professionals aligned with the requirements of the job market, especially those based on artificial intelligence technology.

- Dr. Magda Nasr (Member of Parliament's Education Committee) considered hybrid learning as the future of education development, highlighting the need for infrastructure development to accommodate remote learning technologies. She stressed that students have the capability for remote learning and utilizing modern technological tools.

- Dr. Abdelbaset Sadek (Professor at Alexandria University) views hybrid learning as a blend of face-to-face and remote learning systems, emphasizing the importance of clear planning to provide students with knowledge and skills. He advocates for infrastructure provision, faculty training, and educational content enhancement.

- Dr. Mohamed Saraya (Professor of Business Administration at Misr University for Science and Technology) suggests focusing on developing infrastructure for laboratories, servers, internet sites, and educational platforms. He also proposes providing unlimited internet service for students and faculty members, addressing the shortcomings revealed during the suspension of studies.

Evaluation of the Egyptian Experiment with Hybrid Education:

In light of colleges' plans to utilize hybrid education, most faculty members were trained by the University's e-Learning Center on using proposed educational platforms and uploading course content. Students were also trained to access the platform using their academic email before and during the semester. Hybrid education in Egypt has yielded several benefits, including facilitating social distancing to some extent, easing students' ability to choose suitable study times, fostering self-learning skills, and addressing classroom and computer shortages within universities, which many Egyptian institutions face. Additionally, it has alleviated financial burdens on families related to education expenses (public or private transportation, purchasing supplies, etc.).

However, there are several accompanying flaws to this system's implementation, such as the lack of support from the Ministry of Communication, despite initial efforts. It would have been preferable to utilize the experience of radio and television broadcasting, known as blended learning. Coordination with the

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National Telecommunications Regulatory Authority could ensure discounted packages for students and collaboration with donors and businesses to provide computers on installment plans. The implementation of the hybrid system also posed difficulties in assessment and examinations, with many universities canceling final exams. There was a trend toward using research projects as a means of assessment due to the inability to conduct traditional exams due to pandemic conditions. If remote learning is different from traditional learning, then the assessment and examination process should also differ, with strict guidelines to ensure its proper conduct and prevent cheating or plagiarism.

In conclusion,

the Algerian and Egyptian experiences, like other experiences in Arab countries, have their strengths and weaknesses, requiring rectification and improvement. Perhaps future benefits can be derived from implementing this system as a future system, as Algerian sector officials intend, by providing logistical and human resources for its optimal implementation.

- Provide the logistical and human resources for an optimal application of this unique system.
- - A concrete study of the educational requirements required by the application of distance learning for the different training offers in their different specializations.
- - Train teaching staff to apply this model by adopting well-studied and advanced electronic programs.
- - Develop foreign language teaching programs, especially English, to keep pace with global developments.
- - Accustom students to coexist with this system through progressive programming of the hybrid mode.
- - Work to correct the shortcomings continuously through work teams whose job is to identify all the positive and negative points and propose solutions to all possible problems.

The attachments:

Table 01: Image number 1: Front view of the digital platform model "University of Bouira"2019"

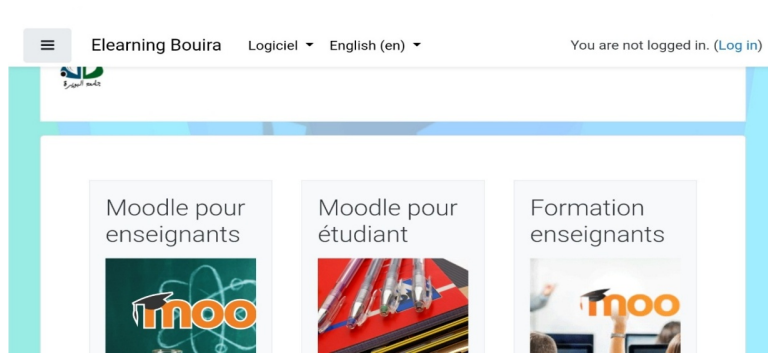
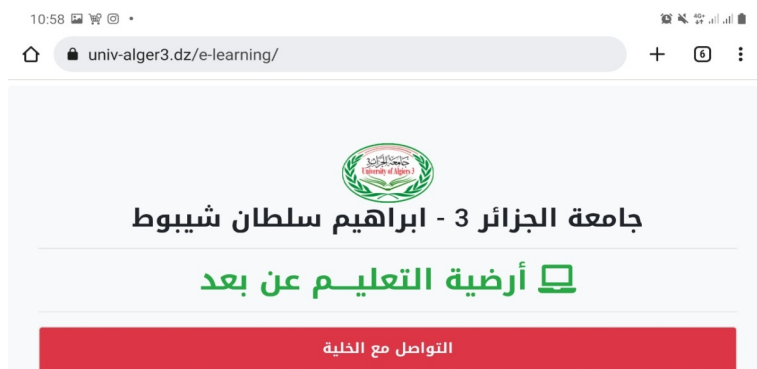


Table 02: Front view of the digital platform model "University of alger3



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