Assessment of distance learning in Moroccan Higher Education

**A systematic review of evidence**

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**ABSTRACT**

The abrupt transition from the traditional model of medical education to online learning caused by the COVID-19 pandemic led to unprecedented changes in the students’ education in Moroccan universities. This study aimed to evaluate the opinions. Its purpose is to evaluate experiences in distance education in Moroccan Universities at the time of the Covid-19. In order to assess the distance learning in Moroccan Higher Education we have searched for students’ opinions regarding the continuity of education in this period of confinement, we mobilized a systematic review of evidence as a measurement tool from different regions. The purpose was to seek evaluation of distance learning in specialized journals, electronic databases, websites of several organizations and a repertory of published studies. The satisfaction of students was mitigated which led to questioning the systems put in place by the educational authorities. The fragility of administrative and technical support for universities; were also among our principal results. Pedagogy, innovation and creativity were among the claims that students emphasised for a more accurate distance learning platform. Finally, we have made some recommendations and proposals based on global best practices regarding distance education

**Keywords:** Distance learning, innovation, satisfaction, Moroccan universities, Covid-19.

# Introduction

The Moroccan higher education system has undergone a profound change with the development of teaching-learning practices and distance learning reflecting the commitment of universities and establishments to serve students and guarantee educational continuity. It is about redefining the roles of actors of the virtual pedagogical situation of online education and the diversification learning tools. This clearly legitimizes the questioning of the experiences developed in this area by examining the level of student satisfaction with the implanted device, the difficulties encountered in drawing lessons serving as a basis for prospects for improving future strategies of distance education, mode to integrate as an accompanying element of face-to-face teaching for the post-Covid period.

Faced with the Covid-19 pandemic and following the restrictive measures imposed by governments to limit its spread, everyone's daily life has been disrupted, the economy disrupted and aspects of societal organization radically changed. Education, in turn, has also experienced disruption. The results of this evaluation highlight the lived experience of teachers and students, of an education delivered in the form of distance learning. These results offer an observation on "education in the time of Covid", but also on the future prospects of distance education in Morocco as well as the requirements of the post-pandemic recovery to succeed not only in the digital transition but essentially education reform.

One of the methods used to evaluate the effectiveness of this learning method consists in evaluating the satisfaction of students (Avery et al., 2008; Burns, 2013). Indeed, the evaluation of teaching by students is a process of collecting information to students "about the teaching or learning process they have been beneficiaries during one or more courses given” (Detroz, 2014). It's a form assessment system that has been developed with a view to improving teaching from a formative assessment.

Our problem is part of a strategy to improve the quality of education at distance in Moroccan Universities. (Sahin and Shelley, 2008) argue that it is important to explore the relationship between job satisfaction students and distance education. With this in mind, the technology acceptance model (technology acceptance model) provides an important theoretical framework for understanding the use of new technologies and the underlying attitudes. The Technology Acceptance Model analyses this acceptance based on two factors: perceived usefulness and perceived ease use of Information and communication technologies (Kissani, N. S. 2020).

All of these previous elements give the current meaning to the problem of distance education insofar as faced with this situation which invites us, to see forces us to become capable of "living with uncertainty" (Morin, 2020) as the thinker of complexity Edgar Morin said, the higher education sector is becoming fertile for the essential transition from face-to-face to distance learning. For this, it is extremely useful to proceed with the evaluation of the current system of distance education in the light of the measurement of the satisfaction of the students who are considered as the first concerned and central link of the reflection and the educational act. The practices developed by the professors and the device implemented have the ultimate goal of improving the quality of higher education and are therefore particularly intended to help all students develop their achievements, learning and skills. If not, what happens if these practices and this device are not carried out well? Evaluation, the basis of regulation, thus makes it possible to judge quality and to verify to what extent the distance education system and cyber-training practices play their roles. Therefore, finding elements of answers to these questions helps the much needed improvement of the digital educational offer in terms of online planning, management and evaluation, and essentially leads to proposing a possible basis for visions and strategies. digital future of distance education.

In order to collect and appreciate the satisfaction of students and lectures’ opinions on teaching remotely and educational continuity in this period of confinement, we mobilized a systematic review of evidence as a measurement tool from different regions. We have systematically sought evaluations of distance learning in several sources and the results highlighted later in the paper have allowed us to come out with lessons needed to likely improve the state of distance education in Morocco.

# Place of digital learning in Moroccan Higher Education

The place given to digital technology in Moroccan higher education is characterized by a glaring discrepancy between theory and reality in such a way as to give food for thought on the need to rationalization of the passage from the desirable to the actually achievable.

On the theoretical and discourse level, the national education and training charter stipulates that NTIC must be invested as ways of the future and at the very least, be put to use immediately to rely on distance education and move towards equality chances of access to resources (COSEF, 1999). However, due to non-compliance rigorous transparency, lack of will and real participation, the applicability even of this charter, whatever its relevance, is seriously handicapped.

The Ministry of Higher Education has, for some years, introduced the teaching information and communication technologies (ICT) for the benefit of students (ICT modules), with the aim of contributing to improving the quality of teaching and learning. In this sense, Morocco has carried out many initiatives aimed at setting up a program for the generalization and integration of ICTs in higher education such as the development of projects related to Numéric Morocco 2013 and Maroc Numéric 2020, the E-Sup program (2006), the Moroccan Virtual Campus project (MVC), the MARWAN network, the APOGEE project, the INJAZ programs, and more recently LAWHATI (Mohammed Mastafi, 2019).

In harmony with royal orientations, government measures, the Ministry of national education, vocational training, higher education and scientific research gave instructions for the activation of distance education in higher education. Indeed, each Moroccan university has mobilized to make a success of this new experience based on accessible technological means and its own platform it has. It is obvious that students today are relatively initiated to this kind of teaching-learning resources and have their account institutional that allows them to access these platforms, crossroads exchange of information and sharing of documents.

It also turns out that some higher education teachers have their spaces in this type of platforms and upload their online courses there. This experience allowed "the forced transition to distance education in an emergency situation and its generalization also imposed good to all students as well as to all teachers” (Kissani, 2020).

But, it is also essential to underline that there are still efforts to be made in this direction, because the higher education community including professors are not yet all involved in this new way of teaching. In reality, the education system in general and that of higher education in particular, displays a digital divide characterized by extremely flagrant delays in the integration of distance education and training systems. In this sense, the latest report on the reform of Moroccan higher education concludes with the finding of “Absence of a structuring digital plan for higher education” (CSEFRS, 2019). Consequently, the current digital situation is moving towards “the threat of the digital divide” (INESEFRS, 2014) and stands out in some measures by the disparate nature of existing projects and experiments at the level of universities, which must do more to develop quality platforms and go beyond the timid practices of distance education.

# Materials and methods

A systematic review is a collection, critical evaluation and synthesis of existing knowledge on a given issue. This well-defined question comes from the study of a problem raised by a sponsor, a manager, a practitioner, a researcher, the latter is our case.

It is a question, contrary to simple reviews of literature, of minimizing the biases that can be inherent either to the raw material (data, knowledge) or to the conduct of the review itself, in order to reach as much objectivity as possible. The biases cannot be reduced to zero, so it is a matter of highlighting them and taking them into account in the synthesis work so that any reader of the results and conclusions of the review can appropriate them in full knowledge of cause, understanding the limits and the level of confidence regarding the results.

In accordance with the methodology of the systematic review, we have developed a protocol that allowed us to identify all relevant literature; we have systematically sought evaluations distance education in Moroccan Universities in specialized journals, electronic databases, websites of several organizations and a repertory of online books. In doing so, the ultimate goal is to increase the sensitivity of our research and to avoid ignoring any relevant research on the targeted subject.

Our search results were then examined for their relevance, which systematically implied the application of pre-specified integration criteria:

* The paper had to assess the distance learning and distance education in Moroccan Universities;
* The studies had to be involving evaluation of distance learning by students in Moroccan Higher Education;
* The research had to be conducted after Covid-19 advent, academic journals published few articles on the subject during the explosion of the pandemic but the publication of articles peer reviewed on the subject has since increased post Covid-19.

Initially, we were too inclusive, and then we focused on the relevance of papers in terms of studying the evaluation of distance learning in Moroccan higher education. Then, articles that met our inclusion criteria were coded to avoid biases and have more visibility. Our coding included classification studies of the type of distance learning assessment, target populations, evaluation models and the considered outcomes.

The results framework was developed by the authors and has been modified after consultation with Moroccan lecturers and systematic review methodologists. All relevant studies were evaluated using pre-determined quality criteria and the conclusions of these studies considered appropriate for our problematic were extracted. When evaluating the quality of the studies to be included in this review, we examined the relevance of the hypothesis formulated, the study design used and the conclusions drawn.

We examined the methods of analysis and their relevance to the questions in the study and thought about the completeness of results (see Stewart, van Rooyen, Dickson, Majoro, and Wet, 2010 for the specific criteria we have used). Each study was judged on each criterion to allow us to identify and exclude those most likely to bias. Studies judged to be at high risk of bias or lacking enough details to be carefully evaluated were excluded from the review. At the end of the introspection, only 6 studies were found to be adequate to meet our inclusion criteria in the rigor of the methodology.

# Findings and Discussion

The debate around improving the quality of higher education in general and that of the distance education systems put in place by Moroccan universities in an exceptional period of confinement remains lively, and remains of strategic importance. politically, educationally, socially and economically. Higher education is also a generator of development and its digitization is a major project to be discovered in order to do qualitative and quantitative good in supporting educational policies through reengineering and a clear vision of the integration of information and communication devices and technologies in higher education

Going through the finding of our 6 studies accepted, meeting our inclusion criteria, we have gathered some lessons, recommendations and propositions made by students for students. In that sens our accepted studies were unanimous to say that a questioning of our practices of all the actors of higher education is necessary, even essential to act differently and guarantee high quality. “higher education decision-makers, must surely reorganize priorities by giving digital education the place it deserves in its educational policy”, says a university student.

Some students share an idea that there is “a need to develop a real, well-planned distance learning system in the university. It is even very difficult to qualify this method of ensuring the continuity of teaching as a device in the proper sense of the term". In this sense, it is urgent to proceed with the development of a digital plan allowing to put an end to the fracture technology in a logic of successful transition to digital from "collective involvement" which reflects the conviction that the distance education system is a question of effective belief in a collective project of good quality digital education.

For other students, the proposals made for improvement concern "the need to develop the promotion of a culture of use of information and communication technologies" in higher education and "the evolution of mentalities towards a paradigm shift with a pedagogical engineering of the higher education system”. This culture, which is today an essential basis for national and international influence, does not go without emphasizing the crucial aspect of "the initial and continuing training of teachers and students on the platforms and the proper use for the effective integration of ICT into pedagogical practice in teaching and learning". These platforms must keep track and we must institutionalize a policy that engages everything". challenges related to the establishment of e-learning and digital resource centers.

The creation of virtual universities and flipped classrooms that work for the continuous improvement of the distance education system is not an easy thing. It requires a series of measures widely proposed and shared by several student participants in the study, namely essentially:

- “Rethink the university to set up a complete system of distance education in terms of planning, management and evaluation for all cycles of higher education”;

- “Equipment and installation of IT infrastructure in each university establishment and provide it with a recording studio without forgetting the serious collaboration with specialists in the field”;

- “Administrative and technical support for the proper functioning of this method of teaching”;

- “Need to develop a new teaching-learning model based on an innovative, intelligent and motivating digital pedagogy”;

- “Partnership with international platforms and cooperation with the media sector to improve educational scripting”;

- “Technological means available to the service of the student linked to the distribution of equipment (laptop) and to the free internet connection of good speed for equal access to distance education”;

- “Adopt a hybrid approach adapted to the context through the exploitation of good practices and the inspiration of internationally recognized models in the field. “

The results of the studies included in our systematic literature review on the evaluation of distance learning experiences by students in Moroccan universities in the time of Covid-19 show that weaknesses and dysfunctions characterize the regulations and the remote teaching system. Hence the need to carry out a profound reform of the distance education system, intended to create, within the framework of prospects, a dynamic for improving its quality.

At the end of the previous elements, we then propose a series of recommendations for improving the quality of the said system, which constitutes an essential lever for change and the success of the reform of Moroccan higher education:

- Define a framework and criteria in terms of quality assurance in distance education. This involves developing standards and quality manuals for all aspects of distance education that are in harmony with international standards.

-Reaffirm the place and role of digital technology and distance education in the reform of the higher education system. The aim is to place digital technology at the center of teaching-learning, training and scientific research activities.

- Set up a quality, well-prepared, well-thought-out distance learning system. The current system demonstrates remote teaching improvised in an emergency.

- Inform and raise awareness of the educational community, higher education stakeholders and the public on the important contributions of distance education through the press, e-conferences, circulars, etc. Their active participation and sincere involvement in this collective project can be a source of guarantee of success and improvement of distance learning systems.

-Train local and national experts on the engineering of distance learning systems.

-Establish a digital culture, change the educational paradigm and mentalities. It is to move on to the digitization of higher education by accepting that it does not only mean an integration of new technology but essentially a question of creating educational programs and complete engineering that skillfully respond to the digital revolution.

- In terms of technicality and administration, train in digital education and pedagogical scripting by supporting teachers and students on the optimal use of technology in distance teaching-learning because giving face-to-face lessons differs widely distance courses.

In this Covid-19 health crisis, as in the evolving life of higher education systems, there are always lessons to be learned. In Morocco, as everywhere in the world, there are several types of teachers: the innovative, the beginners, the reluctant and the recalcitrant. Experience shows that distance learning in the higher education sector struggles to replace face-to-face training. Another highlight is that students are not satisfied with this distance learning experience imposed and required as an obligation to adapt to the unexpected and ensure pedagogical continuity. This pandemic has been a real opportunity for everyone, including those who do not believe in digital technology, to make good use of technology in university education. (Mohammed Mastafi, H. B. 2019).

The use of ICT as a pedagogical tool in the act of teaching and learning is still very limited. Distance education in Morocco is a matter of the future to become a reality by combining face-to-face and virtual courses because the emergence of this scourge does not go without inviting decision-makers and actors to rethink the university pedagogy of teaching and learning. framing and reflection on the possibility of creating virtual universities and classrooms. It is a unifying opportunity to capitalize on what has been learned, exploit the efforts made and the quantity of courses in different disciplines recorded for various cycles of higher education on digital platforms, with a view to giving birth to digital schools with their own teaching skills and technical and administrative staff.

# Conclusions

The results of this research demonstrate that despite the importance of the efforts made by the faculty and the motivation for distance education in the future, students share common opinions regarding the overall dissatisfaction with this teaching experience. distance reinforced by several difficulties and constraints encountered related to the mediocrity of the connection to the Internet than to the cost. The answer to the questions of this essay on distance education in a particular national and global period, has made it possible to draw several lessons on the way in which Moroccan universities through their institutions and personal and administrative bodies have managed the improbable situation, students' experiences and level of satisfaction with the distance learning system.

It is now clearer that distance education is one of the efficient solutions to meet the needs of students while accepting digitalization while keeping humanization in order not to fall into the disaffection of knowledge. It goes without saying that e-learning would never replace the teacher, which is why this new mode of teaching should be considered as an addition, an added value that would enrich face-to-face teaching. The prospective vision to be developed is a type of multimodal training that harmonizes an alternation and a combination of face-to-face with digital in higher education. The distance education process can therefore be identified through a context that is not limited to an enriched face-to-face modality (face-to-face in the classroom with the integration of technological tools), or to an online modality. which mainly offers remote activities, but to promote the hybrid modality which offers face-to-face and remote activities.

Indeed, the challenge is to question whether the university community is ready today to take up the challenges and above all demonstrate a commitment to meet the challenges? And what means of prevention to recommend in distance education, becoming aware of the danger of ICT on the personality and the transition from largely auditory learning to learning by visual memorization. In the end, a set of measures in the form of recommendations to be taken by universities and establishments in the future to establish quality distance education were proposed, with a focus on the development of a framework and references in terms of quality assurance of distance education in Moroccan universities and institutions.

**Research Contribution:** In line with the results of the study we have exhorted some recommendations, notably to develop an ICT skills repository and a digital ethics charter. It is a question of establishing legal texts framing distance education practices and guaranteeing institutionalization and standardization while leaving room for maneuver to govern the specificities of higher education establishments. It is almost vital to provide all university establishments with the necessary digital means, e-learning centers, recording studios and collaborate with specialists in the field (radio, television and press) since dissemination and communication do not directly fall within the competences of the University.

**References**

1. Benkaraache, T., Benabdelouahed R., Belafhaili M., Dafir A., Nefzaoui A., EL Marhoum A. (2020) "Continuité pédagogique et enseignement à distance en période de confinement : Perception et satisfaction des acteurs", Enquête nationale auprès des étudiants et des enseignants, L’économiste n° 5770 du jeudi 20 mai 2020
2. Bétrancourt, M. (2008). L’ergonomie des TICE : quelles recherches pour quels usages sur le terrain? Dans B. Charlier et D. Peraya (dir.), Regards croisés sur la recherche en technologie de l’éducation (p. 77-89). De Boeck.
3. Chaney, J. D., Chaney, E. H. et Eddy, J. M. (2010). The context of distance learning programs in higher education: Five enabling assumptions. Online Journal of Distance Learning Administration, 13(4).
4. CSEFRS. (2019). Loi cadre 51-17 relative au système de l'éducation, de la formation et de la recherche scientifique. Maroc: Bulletin officiel.
5. CSEFRS. (2019). Réforme de l'enseignement supérieur: perspectives stratégiques. Maroc: Publication du conseil supérieur de l'éducation, de la formation et de la recherche scientifique.
6. Detroz, P. (2008). L’évaluation des enseignements par les étudiants : état de la recherche et perspectives. Revue française de pédagogie, 165, 117-135.
7. INESEFRS. (2014). La mise en oeuvre de la charte nationale d'éducation et de formation 2000-2013 Acquis, déficits et défis. Maroc: Conseil Supérieur de l'Education, de la Formation et de la Recherche Scientifique.
8. Kissani, N. S. (2020). L'enseignement à distance au département de langue et de littérature françaises: Le clavardage, un outil d'apprentissage synchroe médiatisé et multidimentionnel. In J. A. Ferhane, La vie.... à l'ère du Coronavirus "COVID-19"? (pp. 172-188).
9. Lameul, G. (2008). Les effets de l'usage des technologies d'information et de communication en formation d'enseignants, sur la construction des postures professionnelles. Savoirs , 71- 94.
10. Mohammed Mastafi, H. B. (2019). Intégration des TIC dans l’enseignement supérieur marocain réflexions et perspectives. Hal archives-ouvertes , 1-2.
11. Morin, E. (2020, Avril). Edgar Morin:"Nous devons vivre avec l'incertitude". (F. Lecompte, Interviewer).
12. Université Mohammed V, (2020), l'Évaluation du dispositif d'enseignement à distance mis en place depuis l’arrêt des cours en présentiel, www.um5.ac.ma