THE HIGHER EDUCATION SITUATION IN THE LIGHT OF ICTs AND E-LEARNING REQUIREMENTS
A brief comparative study between Venezuela and Algeria

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Résumé:
Malgré la prise de conscience croissante de la nécessité d'améliorer les résultats de l'enseignement supérieur à travers l'emploi des nouvelles technologies de l'information et de la communication dans le processus d'apprentissage et d'enseignement, et le recours à l'apprentissage en ligne et à distance, y compris l'évaluation en ligne, pour faire face aux défis actuels imposés notamment par la capacité limitée d'accueil de milliers voire de millions d'étudiants et l'épidémie de pandémie, un écart énorme existe toujours entre ce qui est dit en théorie et ce qui est fait en pratique. Cette étude vise à jeter la lumière sur la situation actuelle du processus d'apprentissage-enseignement en établissant une comparaison entre trois universités différentes dans deux pays différents. Pour ce faire, nous adoptons la méthode descriptive qui nous permet d'analyser différentes données recueillies au cours de ces dernières années par l'observation et en interrogeant 30 étudiants et professeurs de l'Université Centrale du Venezuela et de l'Université de Margarita (Venezuela) et de l'Université de Constantine2 (Algérie).

Abstract:
Despite the increasing awareness of the necessity of enhancing the higher education outcomes throughout the employment of the new technologies of information and communication in the learning-teaching process, and the recourse to the e-learning and distant learning including online evaluation in order to face the current challenges imposed especially by the limited capacity of receiving thousands if not millions of students and the pandemic outbreak, a huge gap still exists between what it is said in theory and what is done in practice.
This study aims at throwing the light on the current situation of learning-teaching process by drawing a comparison between three different universities in two different countries. In order to do so, we adopt the descriptive method which allows us to analyze different data collected during these recent years by observation and by interviewing 30 students and lecturers from the Central University of Venezuela and University of Margarita (Venezuela) and the University of Constantine2 (Algeria).

Resumen:
A pesar de la creciente concientización de la necesidad de mejorar los resultados de la educación superior mediante el empleo de las nuevas tecnologías de la información y la comunicación (TICs) en el proceso de enseñanza-aprendizaje, y el recurso del *e-learning*, incluyendo la evaluación en línea para hacer frente a los desafíos actuales impuestos especialmente por la capacidad limitada de recibir a miles, si no millones, de estudiantes y el brote de la pandemia, todavía existe una brecha enorme entre lo que se dice en teoría y lo que se hace en la práctica.
Este estudio tiene como objetivo arrojar luz sobre la situación actual del proceso de enseñanza-aprendizaje mediante la comparación entre tres universidades presentes en dos países diferentes. Para ello, adoptamos el método descriptivo que nos permite analizar diferentes datos recopilados durante estos últimos años mediante la observación y entrevistas a 30 estudiantes y docentes de la Universidad Central de Venezuela y la Universidad de Margarita (Venezuela) y la Universidad de Constantine2 (Argelia).

Introduction:

There is no doubt that there exists a worldwide consensus on the necessity of integrating the new technologies of information and communication in education in general and in higher education in particular. Several meetings / debates of raising awareness of countries and political leaders have been taking place since the end of 20th century. And the result was that instructions and guidance were given by the rulers of countries to begin with the implementation of such tools for the sake of resuming the education activities.

Venezuela and Algeria are among those countries who are trying to get benefit from improving the quality of the higher education through the use of ICTs and e-learning. In this paper we are going to cast light on the current situation of tertiary education in both countries in the light of ICTs and e-learning requirements. It aims to briefly expose the current situation of higher education, as a comparative diagnosis, in order to know the various challenges that they will have to face in order to include ICTs in learning and evaluation systems, didactic management in the educational methodology component, development of online resources and hybrid teaching and learning, and personal/social development, inclusion and accessibility in the governance of universities, as the main points to be discussed.

Additionally, it seeks to maintain the interest of the scientific and academic community on all the benefits and potentialities offered by the use of communication technology in higher education, pathways to an education of the future, despite the various shortcomings that today are present in both countries, as a means to improve or maximize other variables such as teacher training based on competencies, scientific research, formulation, evaluation and administration of projects, planning and curriculum design based on competencies, learning evaluation, and academic tutoring, through future research.

1. CURRENT VISION OF HIGHER EDUCATION IN VENEZUELA AND ALGERIA

1.1. Venezuela

1.1.1. *Background: teacher and student desertion in Venezuelan higher education*

The Coronavirus has changed the way of seeing the current world, since all sectors of life have been affected due to the pandemic, one of them being education, which had to migrate, at all levels, to virtual or distance learning, even when this lack of preparation would become an unexpected situation for the teaching staff of public and private universities in Venezuela, as well as for its student population. Indeed, it seems logical to think that the pandemic, a product of COVID-19, is one of the factors causing the problems presented by higher education in Venezuela; however, various challenges and difficulties from previous years have been the authors of one of the largest population movements in history in many years: the Venezuelan diaspora, and with it, a massive and expected teacher and student desertion.[1]

The health emergency immediately exposed all the deficiencies that were being addressed at this academic level, since teacher and student turnover has made this educational sector an unstable structure in the eyes of any entity or institution. However, in the months prior to the pandemic, and despite such population movement, public and private universities, thanks to their respective teaching unions and corresponding student representatives, had begun an exchange of proposals to resolve most of these problems; Thanks to this, many teachers advanced in the design and application of information and communication technologies (ICTs) in postgraduate and diploma courses and extension courses, many of them carried out entirely at a distance since then.[2]

[1] ZAPATA. M. (2017). EDUCACIÓN A DISTANCIA. ALTERNATIVA PARA ESTUDIOS UNIVERSITARIOS EN LA VENEZUELA DE HOY. REVISTA SCIENTIFIC. HTTP://WWW.INDTECA.COM/OJS/INDEX.PHP/REVISTA_SCIENTIFIC/ARTICLE/VIEW/131

[2] UNESCO. HTTP://APRENDEENLINEA.UDEA.EDU.CO/LMS/INVESTIGACION/PLUGINFILE.PHP/52/MOD_FOLDER/CONTENT/0/EDUCVIRTUAL_20ALC.PDF?FORCEDOWNLOAD=1

The teachers consulted, from the Central University of Venezuela, already noted the need to include some technological strategy that would complement or help the learning process, and to capture more attention from the students, due to the fact that a percentage of this population, mostly young, has the use of smart phones and platforms or social networks that could have great potential in areas of education. For this reason, work was being done in order to include ICTs in undergraduate careers, as has been done in postgraduate levels, through the UCV Virtual Classroom platform. However, with the arrival of COVID-19, this methodological design was stopped and, seeing that this paralysis was extended, a teacher-student phenomenon began to emerge spontaneously.

Quite the opposite occurred in some private universities, as was the case of the University of Margarita, whose authorities gathered their teachers, suggesting that they had the freedom to teach the contents of the subjects with the technological tools available. The students of this university, many of them living in various countries around the world, got an opportunity to continue their university studies, these modalities started to become an advantage due to the academic limitations in the countries where they reside.[3]

1.1.2. Current situation: How is e-learning done in Venezuela nowadays?

During the pandemic, the operational part of public universities, which handle large volumes of students, suffered too much, as administrative activities had to stop until further notice. However, some undergraduate teachers were asked about how they coped with this situation and several of them stated that they autonomously continued to teach their classes, initially through their emails, and once they contacted their students, they established new ways to maintain communication, either through applications such as WhatsApp and Telegram, and in a virtual way they tried to recreate what they taught in person, giving their classes and putting them on YouTube, so that students could "attend" asynchronously and finish their semester[4]. Yet, despite the fact that some teachers looked for more accessible alternatives to bring the content to their students, this did not happen in a formal or general way. Nevertheless, other professors consulted, who teach postgraduate classes, diploma courses and extension courses, did manage to remain active, thanks to the online modality of their curricular programs.

Some of the teachers consulted from the University of Margarita mentioned that they obtained, during the pandemic, a brief training on the most practical use of the Moodle platforms, Google Classroom, and how to teach classes by videoconference with applications such as Google Meet and Zoom. Additionally, the university institution with its technology team supported the faculty in recording the classes of those teachers who did not have the required equipment; thus, students could view these recordings on platforms such as YouTube. It is worth saying that many of the students incorporated into this diagnosis, who currently reside in other countries, such as the United States, Argentina, Chile, Peru, Colombia, and Europe, have been able to continue their studies from afar at this university, thanks to this modality, even when the curricular programs are not fully adapted to a virtual promotion.

After the pandemic, with this tough experience, full of obstacles and challenges, the horizon in Venezuelan higher education was broadened. Theoretically, these teachers and students from both institutions, who reside in the country, have gradually returned to the classroom, combining face-to-face learning with the use of ICTs; this new way in which the learner acquires and interacts with the teacher during their learning process would be promising: a hybrid education system could be the next step in Venezuela.

It is interesting how many of the Venezuelan students who live abroad prefer the education that is taught in their country of origin, and they welcomed this reality despite the pandemic situation; because in the countries where they reside there are few who have had opportunities to study, due to the high costs of tuition at the universities of these other nations.

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[3] Ramírez, T., Salcedo, A., & Faúndez, F. (2021). Cuando la pandemia no es suficiente para explicar el abandono estudiantil a nivel universitario. El caso de Venezuela. Congresos CLABES. Recuperado a partir de https://revistas.utp.ac.pa/index.php/clabes/article/view/3360

[4] Tejedor, S., Cervi, L., Tusa, F., & Parola, A. (2020). Educación en tiempos de pandemia: reflexiones de alumnos y profesores sobre la enseñanza virtual universitaria en España, Italia y Ecuador. Revista Latina De Comunicación Social, (78), 19-40. https://doi.org/10.4185/RLCS-2020-1466

1.1.3. *Asymmetries of the technological gap in Venezuelan higher education*

The challenges and obstacles presented by the teachers consulted were:
- Not everyone handles various technological tools.
- Not all of them have the technological equipment for virtual teaching.
- No use of technological tools is achieved due to connection and electricity failures in the country.
- Difficulties in evaluating and measuring student knowledge.
- In certain places in Venezuela there is no Internet connection or little access to this service.[5]

As for the students consulted, many of them stated the following:
- Those who study at private universities, although almost all of them have technological equipment, cannot take full advantage of these resources either, if they are located in areas of the country with little Internet access.[6]
- Those students residing abroad have expressed that they have not presented any problems and, although they always comment that the connection in Venezuela is not the most suitable and is very unstable, they affirm that teachers always do their best to facilitate communication in the teaching-learning process.
- Now, several of the students consulted who belong to public universities, stated that they have many inconveniences for not having technological equipment or Internet access, to be included in this distance or virtual learning modality.

1.2. Algeria :

1.2.1. The reality of higher education

The reality of higher education in Algeria can be illustrated through a living experience which begun in October 2016 and carries on up today (March, 2022).

Thus, this exposition includes examples and facts about the Algerian Tertiary Education during normal circumstances as well as in exceptional circumstances. The latter consists in *elhirak* movement occurred in Algeria in few years ago and in the pandemic of Covid-19 which affected mostly all countries and sectors.

In the context of general policies and measures adopted by Algeria for the generalization of numeracy, electronic administration, and ICTs over the Tertiary Education sector, it is became a compulsory for all new recruited lecturers to attend a training session during their first year of teaching.

A big part of this operation was dedicated to training those instructors to be familiar with ICTs.

A training course is called Teaching Technology and it covers the following:

- Electronic teaching contents' design;
- Online teaching contents' management;
- Presentation of electronic pedagogical productions.

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[5] ÁLVAREZ MARINELLI, H., ARIAS ORTIZ, E., BERGAMASCHI, A., X LÓPEZ SÁNCHEZ, A. NOLI, A., ORTIZ GUERRERO, M., PÉREZ ALFARO, M., RIEBLE AUBOURG, S., CAMILA RIVERA, M., SCANNONE, R., VÁSQUEZ M. Y VITERI, A. (2020). LA EDUCACIÓN EN TIEMPOS DEL CORONAVIRUS: LOS SISTEMAS EDUCATIVOS DE AMÉRICA LATINA Y EL CARIBE ANTE COVID19. BID. HTTPS://PUBLICATIONS.IADB.ORG/ES/LAEDUCACIONENTIEMPOSDELCORONAVIRUSLOSSISTEMASEDUCATIVOSDEAMERICALATINAYELCARIBEANTECOVID19

[6] BELISARIO-SANTOYO, L. (2021). DISEÑO TECNOPEDAGÓGICO CON EL USO DE WHATSAPP PARA ESTUDIANTES UNIVERSITARIOS EN TIEMPOS DE PANDEMIA. OBSERVADOR DEL CONOCIMIENTO, 6(2), 108-136. RECUPERADO A PARTIR DE HTTP://WWW.ONCTI.GOB.VE/OJS/INDEX.PHP/REV_ODC/ARTICLE/VIEW/284

The benefits of globalisation accrue to the countries with highly skilled human capital and it is a curse for the developing countries such as Algeria whit no specialized human capital. [7].

Just recently, the Algerian minister of higher education and scientific research, in his inaugural speech of the national meeting on "The Higher Education in Algeria after 60 years" held by CRASC on the 19th of March 2022, declared that the project of creating an Algerian Open University, dedicated for developing the distance education and the introduction of ICTs in the training operations, constitutes one of the main future challenges of the tertiary sector.[8]

In March 2020, a couple of days before the announcement of the outbreak due to Covid-19, as a member of the administration staff, we received an instruction telling us to use all available means in order to contact the faculty members and to let them know about their accounts of e-learning platform, so that they can use them as soon as possible in order to publish a minimum of 4 classes on the university e-learning site.

At the moment very few of the lecturers knew how to deal with it.

According to (Bensalem:2020), the fact that the higher Algerian Education is funded by 98% the government is a big challenge in itself and that the government needs to seek for non-government sources.

In Algeria, funding is always a renewed issue, despite the remarkable quantitative development (…) and the vast reforms it entailed, it suffers from multiple imbalances.[9]

The study of (Hanifi:2019) on the potential and challenges of e-evaluation, showed that faculty members have a positive regard about the importance of implementing different types and systems of online evaluation such as electronic course evaluation and course work assignment electronic submission.

This study has investigated the perspectives of only 16 lecturers across the country which is far a way from giving us a clear view about what is going on with the electronic evaluation on a national level. And despite its confirmation that online supervision of students of Master's and doctorate's degree is a matter of fact, we observe that this still an issue for several lecturers and students of Master which are often asked by the administration to do face to face meeting. This is the case of sociology department of the University of Constantine2. Most of the graduate Master's students have presented their dissertations in classroom in front of a jury of 3 members. And just at the beginning of the current university year the head of the same department has insisted that supervision should be done at university face to face despite the pandemic situation.

As part from the e-learning, electronic evaluation system is not yet adopted for the lack of sophisticated software technology.[10]

The poor software infrastructure system which lacks effective electronic evaluation tools, poor skilled supervision staff in monitoring such electronic evaluation tools and lack of training are all factors that delayed the implementation of an electronic development model in the Algerian major universities.[11]

In Algeria unlike in many other countries, faculty members were not and still not asked to do more than just making courses available and accessible online through the e-learning official platform of their own university establishment and to prepare the exams of some exploratory and optional modules and to submit them on a document and / or PDF format to the faculty / department staff.

Thus, we can talk of the transfer of educational content to the digital world rather than online teaching and delivery methods.[12]

[7] الحاج بوروينة، الحاج . (2020) ما هي التوقعات التي تسعى الجامعة الجزائرية إلى تحقيقها تحت تأثير العولمة؟، مجلة جسور المعرفة، المجلد06، العدد02، ص2

[8] https://www.mesrs.dz.

[9] Bensalem, F., & Gaidi, K.,(2020,December02).Financing higher education in Algeria-reality and challenges, Journal of innovation and industrial development, volume 03, special issue., p2.

[10] Hanifi, A. (2019,December12). Electronic evaluation: potential and challenges, *Djoussour El-maaréfa*, volume 05, Issue 04., p4.

[11] Idem, p4.

What can be said about lecturers using other e-learning features such as chat rooms, group discussion , videos, audios, face to face interaction through software applications such as Zoom, telegram, Facebook, Whatsapp, Viber, Google Meet, Google Classroom… still more individual initiatives than a compulsory or a standard.

1.2. 2. **A missed opportunity of moving towards e-learning**

Algeria had a great opportunity, in the beginning of 2019, to introduce e-learning and other technologies of information and communication into its tertiary education. Several Algerian universities were left empty for a couple of months due to the boycott of study related to *el hirak* movement which took place on the 22nd of February 2019.

It seems that the idea of adopting the e-learning system and generalizing the utilization of ICTs in order to deal with the situation was totally absent or at least put aside.

Although a cell of e-learning was installed in most of higher education institutions and online courses of languages, computer science, and methodology… were delivered for the bachelor's first year students, we had to wait until the spread of the pandemic Covid-19 to make a big step towards the e-learning regardless if we met with the e-learning and TIC requirements or not.

Some may argue that the reason behind this delay might be the overall political situation within the country. However it is completely obvious that we were not fully ready for this major shift in the way of teaching and learning, or we might lack the will to take such brave decision. Because educational institutions across the globe were asked to use already available technical resources to create online learning material for students of all academic fields.[13]

CONCLUSION :

Higher education institutions in both countries have gone through similar social movements prior to the pandemic ; Venezuelan diaspora movement and elhirak movement which caused the suspension of conventional higher education activities in some universities.

While some venezuelan universities have opted for the application of ICTs and e-learning as an alternative in order to overcome the challenges they were facing before the pandemic outbreak, those Algerian universities, which were in the same situtions, have not adopted such solutions untill March 2020.

During the pandemic both countries have applied the asynchronous type of ICTs and e-learning due to the unexpected situation and the lack of experiences among teachers, learners and administration staff as well.

In both countries, adopting more interactive tools such as videoconferencing, audioconferencing through institutions e-learning platforms as well as Zoom, Google Class, Whatsapp… were left only to individual intiatives.

Finally the study recommends that tertiary education policies need to provide institutions with the minimum acceptable infrastructure for ICT, including stable and affordable internet connectivity, that Successful implementation of ICT requires integration of ICT in the curriculum, to do their best for overcoming the following shortcomins:

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[12] Muhammad, A., & Kainat A., (2020).Online learning amid the COVID-19 pandemic: Students' perspectives, Journal of Pedagogical Sociology and Psychology, Volume 2, Issue 1, p2.

[13] Muhammad, A., & Kainat A., (2020).Online learning amid the COVID-19 pandemic: Students' perspectives, Journal of Pedagogical Sociology and Psychology, Volume 2, Issue 1, opcit p1.

➢ The lack of training among lecturers and students regarding the use of the internet in general and the new technologies of information and communication in particular (Google classroom, Google meet, Youtube, Zoom, Telegram, Moodle,....) for learning-teaching purposes ;

➢ The limited bandwidth of the e-learning dedicated websites and platforms;

➢ The issuee of internet and lack of equiped spaces with the neceessary means such internet, computers, data show and audiovisual materials ;

➢ The diffficulties of online-evaluation.

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