

## Distance Education and Moroccan Universities: A Content Analysis of Students' Attitudes towards Operability, Practicality, Familiarity, and Gratification



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**Abstract:** This paper attempts to study the perceptions and attitudes of Moroccan university students' towards the operability, practicality, familiarity, and gratification of distance education in maintaining, reinforcing, and developing their educational level. A sample of 250 university students is targeted through an online field survey to empirically measure their e-teaching/learning achievability. The indelible truth of the shortage of the necessary ICT equipment's - both as insufficiently ICTized teaching/learning platforms in the university and as a PC/Wi-Fi paucity among poor students-sticks out here as a major bipolar complex variable that is useful enough in the formulation of the central hypothesis and research question of this paper. This latter hypothesizes that in view of that shortage, professional online education (e.g. MOOCs) may not lead to attain the sought academic achievability. Results obtained have confirmed this hypothesis, i.e. Moroccan universities, especially public ones, must invest more, especially in equipment's and training, so that their distance education strategies and plans can practically be meaningful and productive on a professionally international level.

**Keywords:** Distance, Education, Moroccan, Attitudes, Operability, Practicality.

التعليم عن بعد والجامعات المغربية: تحليل محتوى لمواقف الطلاب تجاه قابلية التشغيل، التطبيق العملي، والالفة والارباح

ملخص الدراسة: تحاول هذه الورقة دراسة مواقف وتصورات طلاب الجامعات المغربية حول مدى جهوزية وقابلية التطبيق العملي للتعليم عن بعد وقدرته على تنفيذ البرامج التعليمية بكل متطلباتها للحفاظ على مستواهم التعليمي وتعزيزه وتطويره. لأجل هذا تم استجواب ٢٥٠ طالبًا جامعيًا من خلال مسح ميداني عبر الإنترنت لقياس حجم التحصيل الأكاديمي لديهم بواسطة التعليم الإلكتروني. الحقيقة التي لا يمكن تناسيها هنا هو النقص الحاصل في معدات تكنولوجيا المعلومات والاتصالات الضرورية - في كل ما يخص منصات التدريس/التعلم المحوسب في الجامعة وقلّة الحواسيب الشخصية والارتباط الشبكي (Wi-Fi) بين الطلاب الفقراء - والذي يمكن اتخاذه هنا كمتغير رئيسي ثنائي القطب صالح في صياغة الفرضية المركزية والمبحث الأساسي لهذه الورقة. تفترض هذه الأخيرة أنه في ضوء هذا النقص قد لا يؤدي التعليم المهني عبر الإنترنت مثل (MOOCs) إلى تحقيق الإنجاز العلمي الأكاديمي المطلوب. أكدت النتائج التي تم الحصول عليها صحة هذه الفرضية، أي أن الجامعات المغربية، وخاصة الجامعات العامة، يجب أن تستثمر أكثر و لا سيما في المعدات والتدريب مما سيتمكن استراتيجياتها وخططها للتعليم عن بعد أن تصبح عمليا مجدية ومنتجة على المستوى الدولي المهن.

الكلمات المفتاحية: المسافة، التعليم، المغربي، المواقف، قابلية التشغيل، التطبيق العملي.

## ● INTRODUCTION

Over two decades have elapsed after the first studies had been carried out in hope of defining, conceptualizing, theorizing, operationalizing, analyzing, mapping, investigating, assessing, and subsequently contributing to the development of the ICTized teaching/learning processual concomitancy both as F2F and what this paper calls F2S ("face-to-screen," in reference to TV and computer screens). Scores of definitions, models, theories, and modes of operation –few major

ones of which are advanced hereinafter- have been conceptualized and tested to render the complex functionality, usability, and operability of ICT/Web-based distance learning with all efforts out to keep abreast of the unstoppable technological evolution of hardware and software armories, wired and wireless. Within and without this continuously ICTizing F2F/F2S interoperability, developing yet under-industrialized and under-digitalized countries like Morocco find themselves somewhat coerced into adopting and adapting to the premises of the global e-learning determinism in hope of alleviating the short-term and long-term obstructive effects of the ever-widening digital gap between information rich and information poor states. Being conscious of this gap and consequently adamant to account for it so much that vital sectors like higher education, both as teaching and research, can continue to thrive both nationally and internationally and contribute to Morocco's national development initiatives, all Moroccan public universities, especially high ranking ones, are trying to turn themselves into online campuses or "e-universities" to the best of their capacities. To see to what extent this "e-ness" has progressed in Moroccan higher education, this study attempts to survey, measure, and analyze the students' perceptions and attitudes towards the distance education reality in Moroccan universities as closely based on their own practices of e-learning.

#### ● LITERARY REVIEW

Here few major definitional and focal points are raised mainly with a view to backgrounding as well foregrounding the research topic and research questions this study has set out to investigate. It is not

intended here to delve the deepest possible in the terminological complexities existing in the foregoing literature on distance education since this depth spills over the paper's foci. Historically speaking, distance education might be dated back to the 1840s in England where the British phonographer, Sir Isaac Pitman, had been claimed to have been the first to have mailed his lectures on his phonetics-based system of shorthand to his students who would send their assignments back to him (Pitman, 1902; Baker, 1908; New World Encyclopedia; Florida National university, 2020). Besides, he University of London is claimed to be the first university to have offered distance education degrees after it had established its so-called External Program in 1858. In 1892, the first president of the University of Chicago, William Rainey Harper, had developed the concept of "extended education" whereby new colleges, established and located far from the central campus, had been annexed to constitute a nucleus multi-campus university complex (Clark, 1906; Pittman in Moore, et al, 2003).

Since then, "Correspondence Education" or "Distance Education" has continued to develop through the twentieth century via radio, television, and eventually via internet in many universities in USA, Australia, Canada, and England. The Open University experience with televised education programs broadcasted by BBC (British Broadcasting Corporation) and the Phoenix University internet-based distance education experience remain pioneering and exemplary in this regard (Giddens, 2009, p. 875). Despite the invitingness of the intellectual worth of this historic(al) development, one can summarily state that distance education has since its late nineteenth century

burgeoning beginnings to date has evolutionarily shifted from the delivery of educational contents by postal correspondence to synchronous and asynchronous dispatching of syllabi and curricula via internet and satellite linkup-based electronic communication systems and technologies.

As these networked and networking systems have extended over time globally, Morocco has felt it self-incumbent to subscribe itself in/to an e-Morocco Project in a racing hope for a digital nationwide all-field “self-reencoding”. Ennam (2017) synoptically highlights that

In 2009, Morocco launched the “Maroc Numérique 2013” (Digital Morocco 2013) Strategy to generalize the ICT usage all over the country, increase the national digital capacity, and realize the digital switchover (Zaid & Ibahrime, 2011). Amid this nationwide digitalization process, which is not yet completed especially in rural areas for several reasons, an ICT sphere seems to be taking some shape all in the academic, professional and daily life spaces. In academia, the abbreviation ICT buzzes everywhere to sneak itself into syllabi, conferences, workshops, seminars, and research projects with and without enough mastery of digital literacies. (p. 20)

In the pursuit of this mastery, which is volitionally attainable, this paper deems it contextually relevant to reiterate with little criticality some of the definitional, conceptual, and operational compositionality of the distance education whole enterprise. First, it should be made clear that this paper uses and distance education and distance

learning quite interchangeably in spite of its consciousness of the debatable differences existing between the two, both as dictionary meanings and field practices. This semantic and operational interchangeability remains quite questionable for certain researchers, for example (King, et al., 2001), who tried to specify the meanings of the terms of learning and education, but their acknowledgeable efforts have not produced a fully-fleshed field-specific, generalizable, theoretically and analytically applicable definition that does render the complex totality of the behavioral, cognitive, psychological, social, cultural, and environmental elements manifest in the process of education and/or learning, let alone the technical and technological, especially the ever-changing nature and performance of the ICT constituency. Learning cannot be limited to brief explanations of few categories - instruction, exploration, and serendipity- without any solid foundational conceptual and philosophical exegesis symbiotically blended with content analysis of validly and reliably representative data collection processes elicited from well sampled populations of practitioners and professionals, especially students and professors. As such, the author will not dwell longer on this definitional matter but hopes to take it up in future research.

Based on the scores of readings made, training sessions attended, scores of courses taken and taught, many conference presentations and national and international publications made about ICTs and social media and their roles in twenty-first century higher education, the author has found that a comprehensive non-specific working definition of distance education focuses attention on the transmission

(transfer and dissemination) of educational contents described in the different modules of a given degree program offered by a given university by a professor, a teaching team, or a whole department to a large or small number of students away from campus at their homes, workplaces, or travel locations; on earth, while traveling by air, or by sea via different digital and/or telecommunicational channels or mediums either synchronously (real time) or asynchronously (recorded and transmitted). Quite similar to this, Buselic (2012) wrote that distance education or

Distance learning can be summarized as teaching and learning involving the implementation of various technological applications. This term also reflects both the fact that all or most of the teaching is conducted by someone removed in time and space from the learner. As a force of contributing to social and economic development distance learning is today one of the most rapidly growing fields of education and training". (p. 24)

This is the type of general definitions of distance education most frequently read in the existing literature published in the last twenty years. Most often, if not always, as Honey man and Miller (1993) states, distance education is usually said to focus on teaching students "who are not physically present in a traditional educational setting such as a classroom," a "process to create and provide access to learning when the source of information and the learners are separated by time and distance, or both". (p. 68) (in Buselic, 2012, p. 24).

As for more detailed, more specified and more elaborate definitions, Moore and Anderson (2003) talked about the technical and operational features and criteria characterizing distance education and asserted that Keegan (1990) had foreseeably provided “the most lucid and detailed description of the characteristics of distance education” and phrased them as follows:

- The quasi-permanent separation of teacher and learner throughout the length of the learning process (this distinguishes it from conventional face-to-face education).
- The influence of an educational organization both in the planning and preparation of learning materials and in the provision of student-support services (this distinguishes it from private study and teach-yourself programs).
- The use of technical media, print, audio, video, or computer, to unite teacher and learner and carry the content of the course
- The provision of two-way communication so that the student may benefit from or even initiate dialogue (this distinguishes it from other uses of technology in education). (p.80)

Moore and Anderson (2003) updated these four criteria and added that “groups of learners can cooperate although being geographically separated” by means of audio-video teleconferencing for example “even if not very practical in many cases, as it requires students to keep to a timetable that cannot possibly suit all students” many of whom may have occupational, familial, or inevitable social



commitments, which usually prevent them taking part in F2F or F2S classes. They consequently added that computer conferencing “offers a practical solution, a sit can be arranged asynchronously and be adapted to self-paced study,” so that students can take part in courses “whenever it suits them”. (p. 80)

As educational technologies have continued to develop to the very moment of writing this paper and will continue to do so all the more and all the faster in the years and decades to come, the definitions of distance education have continued to evolve to cover new features, means, and dynamics. For instance, Kaplan and Haenlein (2016) have categorized today’s distance education into four types ordered along two impactful variables: time of learning and the number of learners. These four taxonomies are rephrased as follows.

- **MOOCs** in reference to Massive Open Online Courses which function according to an online open access teaching system allowing for unlimited participation of students.
- **SPOCs** in reference to Small Private Online Courses which offer a limited number of seats decided by a formal enrollment system.
- **SMOCs** in reference to Synchronous Massive Online Courses which function along an open access system that can enroll an unlimited number of students but requires their online attendance synchronously, i.e. at the same time.
- **SSOCs** in reference to Synchronous Small Online Courses which allows for a limited number of seats and requires their online synchronous attendance.

In the light of this taxonomically definitional, conceptual, and operational approach to distance education as critically and analytically developed elsewhere, for example Ennam (2011, 2017, 2019, 2020), the paper closes the literary review section at this point to move to the methodological and analytical sections.

#### ● RESEARCH METHODOLOGY

This study research design is basically twofold. On one hand, it is definitional and conceptual as it is established on much of the theoretical and analytical literature about e-learning or web-mediated education. It is a further development of several previous studies carried out by the researcher. On the other hand, this paper is empirical and analytical in most part of it; it is based on field observation and action research throughout ten years of university teaching experience. A field survey was designed, carried out online via Facebook, and covered 250 students from Ibn Tofail University, Kenitra city, Morocco. This target population was randomly sampled to cover undergraduates, graduates, and postgraduates without working on this level difference as a determining variable since these entire levels share more or less the same degree of familiarity with distance education. This latter's experience in Moroccan universities is still in its burgeoning stage but somewhat making progress steadily. The survey was conceptualized and patterned along the research questions listed below and run through Google Forms platform which allows for loading large numbers various types of questions.

The questionnaire continued to be filled in online for 24 hours and reach 250 respondents. The collected data was imported, screened, categorized, labeled, tabled, commented and analyzed on the basis of a combination of positivist, interpretivist, and constructionist approaches, as demonstrated in the Findings Section below. The adoption of these approaches in the description and analysis of data because Positivism helps subject human society to measuring laws, determine behavior and holds that “knowledge and truth exist insofar as they can be proved” (Wisker, 2008). Adopting a positivist approach asks/allows for testing hypotheses, responding to research questions, using large sample (250), eliciting highly specific and precise data, ensuring high reliability and validity, generalizing from random sample to large population (Wisker, 2008). Constructivism, on the other hand, helps construct knowledge and meaning from experience and relationships between things, people, events, while Interpretivism helps to interpret experience, phenomena and events out there in the social world, and construct meanings thereof (Wisker, 2008).

In this methodological framework, the research objectives motivating this paper and the research questions patterning it are going to be as follows.

- **Research Objectives**

As objectives, this paper aims to:

- Measure and analyze the functionality and usability of distance education in Moroccan higher education.

- Determine the extent of distance education logistical and technical readiness and/or preparedness in Moroccan universities.
- Measure and analyze the degree of familiarity of university students with e-learning tools and their subsequent need for online skills reinforcement.
- Measure and analyze the degree of the gratification the students' distance education needs.

In firm operationalization of the research methodology outlines above and in the light of these four objectives, this paper attempts to study and answer three main research questions.

- **Research Questions**

So, the research problems that this paper attempts to raise and study can be phrased as follows:

- How much functional, usable, and logistically/technically ready is the distance education enterprise in Moroccan higher education from the perspective of students?
- To what extent are Moroccan university students familiar with and skilled in using distance education tools in their day-to-day study programs?
- How much need-gratifying is the distance education system in Moroccan universities?

In response to these research questions, the results elicited from the field survey carried out for the purpose of this study are organized, charted, and analyzed in the next section.

● **FINDINGS AND DISCUSSION**

▪ **Necessity and Usability of Distance Education**

Under this heading, the respondents were given space to voice their opinion as to how necessary and usable to pursue their study programs online whilst the logistical and technological means are not sufficiently in place. Their responses came proportioned as charted in table 1.

Necessity & Usability of Distance Education (DE, henceforth)				
Dis/Agreement	Strongly Agree	Agree	Disagree	Strongly Disagree
Rates	32.6%	46%	16.4%	5%
Subtotal	78.6%		21.4	
Total	100%			

**Table 1 Proportioning the Dis/Agreement on DE Necessity & Usability**

Although the disagreement category was fixed in 21.4%, this percentage no matter how low or insignificant it may look translates the presence and resistance of an undeniable segment of students who seem to disfavor the distance education alternative probably owing to supremacy of physicality and/or “**face-to-faceness**” of the

teaching/learning process. This stance will find further support in the next findings.

- **Determining the Degree of Technical and Logistically professional Distance Education Readiness in Moroccan Public Universities**

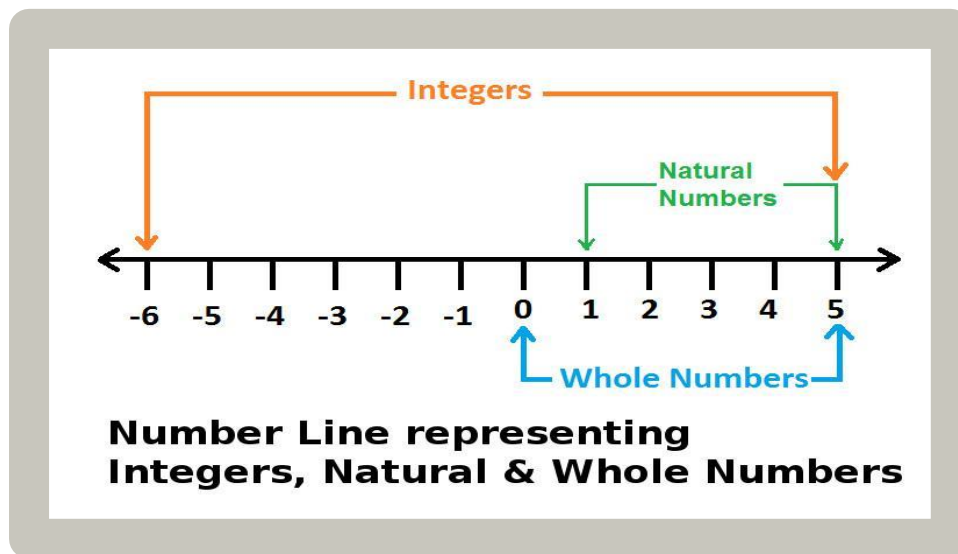
Since the majority of the surveyed students, 78.6%, demonstrated in table 1, confirmed the usability of continuing their study programs distanced from campus in compliance with the online academic learning regulations, as it was expected before carrying out the survey, the informants were asked to rate the degree distance education readiness in Moroccan public universities on a 1 to 5 measuring scale. The ratings are figured in table 2 as follows.

Rating DE Readiness					
Ratings	1	2	3	4	5
	15.2%	20%	44.3%	14.5%	6%
Subtotal	35.2%		44.3%	20.5%	
Total	100%				

**Table2 Proportioning DE Readiness in Moroccan Universities**

Before commenting and analyzing further the ratings in table 2, as a functional reminder, the 1-5 scale used in measuring the respondents' numerical attitude towards the readiness for distance education in Moroccan public universities stems from the mathematical definition and usage of natural numbers which are positive integers (i.e. whole non-negative numbers) as they occur in nature are defined in either of two nodes:  $\mathbf{N} = \{0, 1, 2, 3, \dots\}$   $\mathbf{N} = (1, 2, 3, 4, \dots)$ . Figure 1 retrieved

from the Algebra Den website (algebraden.com) clearly schematizes it out.



want to express Figure1 Defining Natural Numbers Used in Scaling/Rating Responses

Thus, adopting a rating scale based on the use of natural numbers was meant to enable informants to numerically assess distance education readiness according to the natural value of each of these numbers, from smallest to biggest. This means that if an informant, for example, opts for the number 1 as a rating, they simply that Moroccan public universities are very low on distance education readiness, and very much the opposite if they choose the number 5 to highlight a state of maximal preparedness. In this mathematical light, table 2 clearly highlights that a majority of the informants, 44.3%, rated the distance education ICT status-quo in Moroccan universities as of a medium level reflected in their choice of the positive integer 3. On the other hand, statistics revealed that 35.2% of the surveyed population saw that the technical and logistical readiness of Moroccan public universities for professional distanced learning is below average, since

they opted for 1 and 2 as representative numerical values. Yet, 20.5% of the questionnaire respondents saw these universities as well equipped and abled in terms of online education technologies and logistics since they chose 4 and 5 out of 5 (4/5 to 5/5 to rate distance education readiness. The differences manifest among students in their understanding and experience of the ways and means of distance education might be a sound reason behind the proportional disparities existing between these three percentages. Table 3 below clarifies further these differences and disparities.

▪ **Measuring Familiarity with Distance Education in Moroccan Public Universities**

Out of the 250 surveyed respondents about 41% of them rated their familiarity with online educational technologies such as webcasting, videoconferencing, educational television, live streaming, radio streaming, web-based VoIP, inter alia, as cherishing a 4 to 5 out of 5 (4/5 to 5/5) degree of proficiency in distance education. On the other hand, about 29% of the informants candidly admitted their low mastery of these educational online ICTs, positioning themselves in the 1/5 to 2/5 rates, as detailed in table 3. The remaining 30.5% of the surveyed sample assessed their familiarity with distance education as of a fairly average degree, 3/5. The differences between these three segments with their three different proportions can be referred to the socio-economic disparities setting apart the Moroccan university students so many of who cannot afford the ICTs they need for their study. This variable of class and wealth is a real and realistic force



hampering the progress of higher education in Morocco, online or offline.

Rating DE Familiarity					
Ratings	1	2	3	4	5
	12.8%	16%	30.5%	24%	16.7
Subtotal	28.8%		30.5%	40.7%	
Total	100%				

**Table 3 Proportioning DE Familiarity among Moroccan university students**

For instance, in their response to how often they have been using the e-learning/teaching tools mentioned in the previous paragraph, 66% of the sampled and surveyed population stated, as showcased in table 4, they only sometimes deployed these tools in their study programs. This limited usage needs to be calculated further to determine the exact frequency of use the adverb of time sometimes indicates in this context. But, based on what Moroccans do really mean by “sometimes,” it can be guesstimated that distance education as an alternative to traditional education is still not being widely used. This is a reality lived and observed on a daily basis.

Frequency of DE Tools Usage			
Measuring Usage Frequency	Always	Sometimes	Never
	18.4%	66%	15.6%
Total	100%		

**Table 4 Measuring the Frequency of DE Usage among Moroccan University Students**

That paucity finds support in the fact that only about 19% of the informants who affirmed that they always use educational e-tools; about 16% confessed they never use them. As such, it can be argued that familiarity distance education tools among Moroccan university students needs more strategic reinforcement through regular purposed usage in order to increase their educational achievability. Said differently, the presence and usage of distance education ICTs cannot be nullified but it remains in dire need for further institutionalized professional implementation as sustainably as the increasing number of students requires.

As shown in table 5 below, about 53% of the inquired students stated that they make use of tools like webcasting, videoconferencing, educational television, live streaming, among others, on a seriously regular basis to accomplish their study program, while 47% of the same population does not. Numerically speaking at least, it can be said that about half of Moroccan university students depend largely on the traditional non-digitalized methods of learning owing again to the scarcity of financial means reserved for education. Here attention should be drawn to the study budget management by students many of whom, and this time based on field observation and frequent interaction, have other spending priorities than study.

There are students who spend money on clothing, daily look, entertainment, and social life at large more than they do on learning. Some spend money on unnecessary things like smoking, make-up, haircuts, and socializing, inter alia, and abstain from buying books or

necessary affordable digital education tools. Some students do just the opposite; they stint themselves out of many life expenditures to spend enough on their education as much as their meager budgets warrant. This latter case remains limited to highly serious, committed, book-wormish, and study-devout university enrollees. These remarks are purely based on daily fieldwork observation operated by the author and confirmed by his work colleagues, which therefore call for systematic scientific research to generate reliable, valid, and generalizable results.

Regularity of DE Usage in Study Accomplishment		
Measuring Regularity	Yes	NO
	52.7%	47.3%
Total	100%	

**Table 5 Proportioning the Regularity of DE Usage in Study**

### **ACCOMPLISHMENT**

In other words, the frequency and intensity of how regular the students benefit from distance education available to them need further research-based statistical specification since it remains unspecified how much real time they exactly spend on academic learning online. In an attempt to approximately measure this time, the students were asked how much on a 0-5 scale had they recently been reinforcing their usage of the distance education means available to them. Their responses are charted in table 6 as follow.

DE Tools Usage Reinforcement						
Rating	0	1	2	3	4	5
Reinforcement Intensity	11.5%	15%	25.2%	27.7%	13.6%	7%

Subtotal	51.7%	27.7%	20.6%
Total	100%		

**Table 6 Rating the Intensity of the Students’ Reinforcement of DE Tools Usage**

As it is clearly demonstrated in table 6, over 50% of the students covered by the survey admitted their failure or quasi-failure to reinforce their familiarity with distance education tools. And while only 20.6% asserted to have made enough efforts to boost their distance education skills, 27.7% rated their efforts in this regard as of a 3/5 level. In a symbiotic synergy with the interpretivist analysis of table 5 statistics, table 6 perpetuates the largely undeniable low attention or unimportance manifest in the students’ behavior towards distance education.

Even after the digital switchover declared in Morocco in 2013, the percentage of the students who have tried to increase their use and familiarity with computer skills did not reach 50%, as demonstrated in table 7.

Upgrading Computer & Web Skills						
Rating Degree	Upgrading	Very much	Much	Somewhat	At All	Never Cared
		21.4%	27.6%	36.2%	10.8%	4%
Subtotal		49%		36.2%	14.8%	
Total		100%				

**Table 7 Measuring the Students’ Amelioration of Computer & Web Skills**

So, while almost half of the sampled target population, 49%, increased their focus on developing their online learning abilities, 51% of them made almost no effort to upgrade their computer and web skills since over 36% somewhat tried to do so and about 15% did not bother at all. Again it should be made clear here that when the average Moroccan student defines the frequency or the recurrence of an activity they do or are supposed to do with “somewhat,” this latter can be taken to signify “hardly ever if ever,” as specified above. Not meant here are the serious students who always work in compliance with clear, realistic, believable, desirable, measurable, and achievable study plans which they usually frame from within well thought-out time management guidelines.

Either way the surveyed students were asked to express the degree of their satisfaction with Morocco’s efforts to implement an efficient distance education system and subsequently measure the outputs that have been reaped thereof. Tables 8 and 9 demonstrate herein below the respondents’ stance towards the two interoperable variables of satisfaction and output whose interplay once well balanced out increases the possibilities of gratifying the actual teaching/learning needs of a given distance education system.

- **Measuring and Investigating the Gratification of Students’ Distance Education Needs**

So, as showcased in table 8, only 34.1% of the survey informants expressed their satisfaction with the Moroccan distance education

initiative most probably out of a surface-structure approach rather than out of a solid practical knowledge and experience of the whole process of e-teaching/learning. As it will be furthered below, most if not all Moroccan public university students have never studied full programs/semesters online. They have not had such an experience so that they can give a professional evaluation of the distance education initiative, especially as the Moroccan minister of higher education officially declared on Moroccan state-owned mainstream media after one month of online and televised courses during the inadvertent Corona pandemic, which imposed pursuing Spring Semester Program online, that only about 26 % of the whole student population in Morocco, counting up 9 million enrollee all levels combined, could have received/followed their e-classes (TVM & 2M Channels, April, 2020). About 74% did not. Here one can all arguably question the functionality and usability of the Moroccan distance education enterprise, both as a gratification and an output. As said above, Morocco must indeed invest so much more in all senses that this alarming 74% and 26% exchange positions, i.e. up to 80%, and why not more, of the whole student population in Moroccan can pursue their degree programs online/off-campus and achieve satisfactory academic results. This is in the future and it is not impossible especially when Morocco is clear and unwaveringly decided to both of the F2F and F2S systems so effectively and efficiently functioning the Kingdom's universities can switch from one to another or operate them both according to need.

However, for the time being, the proportion 34.1% in table 8 can be seen an endorsement of the minister-declared percentage, 26%, representing the totality of university students who, most probably being ICT-equipped and PC/Wi-Fi-wired enough, indeed received/followed their programmed class contents. In all cases, any of these two percentages cannot be taken to claim a nationwide generalizable distance education experience.

DE Needs Gratification					
Gratification Degree	Very much	Much	Somewhat	At All	Never Cared
	13.6%	20.5%	44.6%	16.9%	5.4%
Subtotal	34.1%		44.6%	22.3%	
Total	100%				

**Table 8 Proportioning the Gratification of Students' DE Needs**

Functional generalizability of the distance education enterprise therefore remains about 45% in the **somewhatness zone** which was expounded above as closer in meaning to seldom-ness than to a higher frequency because of the time orientation taxonomy the average ordinary Moroccan usually adheres to while expressing/dealing with time. Besides, over 22% of the surveyed population zeroed and/or jettisoned any sense of distance education gratification. This outright nullification should not be taken as unquestionably true notwithstanding. There remains some tenability in the ministerial 26% elucidated in the two previous paragraphs. Not need-gratifying but it can be a good start upon which steadier leaps

may be jumpable. In other words, Morocco, as government and people, as public and private sectors, as professors and students, as offline and online education experiences, as tradition and modernity, as body and soul, as present and future, as self-(re)leading and self-(re)creating, and as self-modeling and self-empowering, can develop that self-achieved 26% into higher and more redeeming real need-gratification rates.

Accordingly, table 9 represents the surveyed voices' low rating of the output success of the distance education initiative, since about 48% of the survey informants quantified the outcome at -3/5 (minus 3 out of 5). Only 33.2% of the respondents rated at 3/5, plainly the average; while 19% of the sampled students thought of the distance education initiative output as good enough, rating it at 4 to 5 out 5 (4-5/5).

Worthwhile noticing here is the data consistency as the survey and its analysis moves from one question to another, as clearly demonstrated in the statistics charted in the tables worked out thus far. The survey respondents can be said to have been rigorously sincere in filling in the questionnaire and therefore have clearly provided valid and reliable data. For instance, tables 8 and 9 display fairly enough statistical harmony between the undeniably insufficient rates of gratification and output of the distance education experience among the survey informants, at least in the sense of average and below average rates, i.e. the aforementioned somewhat ness/averageness.

DE Output Success						
Rating DE Success	0	1	2	3	4	5



	7.1%	14.1 %	26.6%	33.2%	13%	6%
Subtotal	47.8%			33.2%	19%	
Total	100%					

**Table 9 Proportioning the Output Success of the Moroccan DE Experience**

The notion of data consistency as stemming out of the honest responses of the survey informants has helped to ensure the validity, reliability and tenable significance of the findings all at the major analytical stations of this fundamental section of Findings and Discussion. The statistics have thus far consistently and fairly sufficiently demonstrated the reality of distance education in Moroccan universities all in terms of necessity and/or usability (sub-section 5.1), logistical and technical readiness/preparedness (sub-section 5.2), familiarity, regularity, reinforcement, and up-skilling (sub-section 5.3), and needs gratification and outcome success (5.4), as showcased in tables 1 through 9.

What consolidates further the concomitant statistical and analytical consistencies characterizing this study is the responsive integrity of the surveyed population in choosing again to position themselves in the somewhatness zone when they were asked their opinion about the degree of their commitment to online classes on a regular basis. Table 10 clears it up as follows.

Commitment to DE Alternative				
Rating seriousn	Very much	Much	Somewhat	At All

ess	7%	17%	65%	11%
Subtotal	24%		65%	11%
Total	100%			

**Table 10 Measuring serious commitment to DE classes among students**

Less than the third of the respondents, 24%, expressed high sense of serious commitment to online learning. On the other hand, a big majority, 65%, selected the somewhat option, reminding us of the contextual implicates of this frequency quantifier previously elucidated. Besides, 11% of the target population admitted their complete lack of commitment to learning online. It can therefore be safely argued that the variable of commitment can be considered as one of the major causes behind the low distance education achievability in Moroccan public universities which count sixteen in number as compared to six private ones. Consequentially, even if the e-learning equipment may be available and/or affordable and broadband connection is in place, the whole e-learning enterprise may not succeed if the students fail to do their part.

## **CONCLUSION**

This paper has set out to answer three research questions regarding the state of art of the distance education initiative in Moroccan public universities. In response to the first question, which focused on how much necessary, usable, functional, and logistically/technically ready Moroccan universities are for distance education, data presented in tables 1 and 2, respectively, reflected the students' large belief in the necessity and usability of distance education, (78.6%), and their awareness of their universities' low readiness to teach whole degree

programs online ( $75.5\% \leq 3/5$ ). In other words, while the students emphasized the need for the establishment of a practically functional distance education system in Moroccan universities, they expressed their consciousness of the current unpreparedness to launch and carry out full e-study programs.

Insofar as the second research question is concerned, it focused on the degrees of familiarity with, stiltedness in, and frequency of distance education usage with a view to measuring the operability and practicality of teaching/learning online in Moroccan public universities. The survey statistics revealed that the majority of the respondents ( $c.60\% \leq 3/5$ , table 3) are not enough familiar with e-learning ICTs. Besides, results indicated that while only 18.4% always use these e-learning tools, 66% sometimes make recourse to them, and more that 15% never do so, which demonstrates a low degree of frequency, as showcased in table 4. In short, the students covered by the questionnaire were honest enough to admit their extensive unfamiliarity with and low frequency of distance education usage in their day-to-day study programs. Still, in terms of regularity, reinforcement, and upgrading of distance education skills, from 50 to 60% of the students affirmed they are making more efforts for a strong initiation into the e-learning enterprise although they suffer low web-accessibility and low hardware affordability, as demonstrated in tables 5, 6, and 7 respectively.

As for the third research question, it aimed to measure the degree of the gratification of learning needs, the output achieved, and the commitment of students to features and guidelines of the distance

education alternative. Results charted in tables 8 and 9 showed that only 34.1% think their learning needs are gratified by means of online education, while 81% rated the e-learning output as  $\leq 3/5$ . With regard to the influential variable of students' commitment, 65% of the respondents positioned themselves in the somewhatness zone, explained and commented in the findings section.

In the light of these conclusions, all of which are drawn out of a positivist designing and an interpretivist/constructivist analysis of the survey-elicited data presented in tables 1 through 10, as defined in the methodology section, the paper findings have proved valid and reliable enough to support the hypothesis that the distance education initiative being tried in Moroccan public universities is in considerable need for sufficient practitioner familiarity, plan-based usage regularity, higher use frequency, and a continuous e-learning skills upgrading in order to improve nationwide generalizable operability, practicality, and achievability. In other words, distance education or distance e-learning, as others prefer to call it, is in its burgeoning stage in Moroccan public universities and therefore still needs more sustainable strategic investment to ensure sufficient degrees of gratification and output achievability, as quantitatively translated by the data tabled above. Morocco has not got where other overseas developed distance education experiences have yet, but a fairly promising start can be said to have been initiated.

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