The Acceptance of E-learning as a Tool for Teaching Entrepreneurship During the COVID-19 Pandemic:
The Case of HITS of Sidi Bouzid and Ksar Hellal -Tunisia

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Abstract

A relentless mutation characterized universities around the world by the advent of the infamous virus that gave rise to the pandemic called COVID-19. This study aims at exploring e-learning readiness and its acceptance as a tool for teaching entrepreneurship in two higher institutes of technological studies in Tunisia, and it has become imminent to resort to e-learning. The desired results are more far-sighted in these new special circumstances, which have made this mode of learning the gateway to the entire educational system be called into question. The question is: How did students perceive this new mode of distance education? An online questionnaire was distributed to extrapolate a descriptive analysis. We have explored certain facets in both institutes that highlight many disadvantages between both students and areas: mastery of technology, poor internet connectivity, technological accessibility, and unkind study environments. Besides this, research highlights the role of new approaches to distance learning in entrepreneurship. It will end with the proposal of recommendations that are relevant for different stakeholders in the phenomenon of distance education in general and the entrepreneurial discipline in particular.

Introduction

In industrialized countries, distance education has long been seen as alternative education for low-income people who have not received an adequate education but need a specific qualification to fit in the labor market. However, although there have been particularly important developments over the past 20 years, no one can deny that in many so-called southern countries, including Tunisia, higher education is facing enormous difficulties, as well as the establishment of distance learning projects.

Since its existence, the whole world has not experienced a historically specific health situation like that of the global Coronavirus pandemic or called Covid-19. A microscopic and barely visible virus that has disrupted all human activities, and no sector has escaped it.

Educational and university establishments in both the private and public sectors in Tunisia were closed on March 15, 2020. As well as, all educational, scientific, or administrative activities were suspended. As a result, classes, lessons, and assessments for the 2nd semester of 2020 have been unexpectedly suspended.

It is important to stress that distance education has existed in Tunisia since 1983. The origin of this experience was to compensate for the lack of qualified teachers, in particular by introducing accelerated training procedures for those working in educational establishments far from the capital. This is why the Higher Institute for Continuing Education and Training (ISEFC) was founded. In addition, the Virtual University of Tunisia (VUT) is responsible for making the transition to distance education for students, with training based on the necessary mastery of information and technology technologies. Communication. Due to the institutional will, this new body was instituted by decree n ° 112-02 of January 28, 2002, within the framework of the policy of modernization of the Tunisian higher education sector, which uses modern technologies and communication as working and research tools. It has indeed been shown that distance training does not in any way constrain the proper functioning it to lead to good entrepreneurs (Fernandez et al., 2018), a lot of effort remains to be made to succeed in building high-quality practices in this direction. Indeed, unfailingly, distance training for entrepreneurship raises three principal challenges: 1) the acceptance by learners of the integration of ICT in the learning of entrepreneurship; 2) the procedures were taken by the two higher institutes of technological studies of Sidi Bouzid and Ksar Hellal to maintain courses and distance training and activities in entrepreneurship?; 3) a particular pedagogy allowing absolutely to satisfy which at its base must be engaged an appropriate posture of teachers.

To provide some answers to the problem posed in this research, it would be appealing to conduct an analytical study of the measures and procedures taken to increase the acceptance of distance learning as an entrepreneurial learning tool despite the closure of universities. In addition, our attention will initially be focused on the description of the various approaches used by the administrative staff and the teaching team to achieve this objective. Then, it will be a question of surveying students who follow their courses at a distance in the two institutes of higher education.

Since 2003, the Virtual University of Tunisia launched its first program in the Higher Institutes of Technological Studies (ISET). It consists of providing students with distance learning resources according to their fields and levels of study. The creation of this university body (ISET) dates back to 1995. These are scientific and technical institutes responsible for the training of senior technicians. The emergence of new demands and needs in all commercial sectors in general and in the secondary and tertiary sectors, in particular, prompted the Tunisian State to create this new higher education institution to meet the needs of the national and international economy, based on the qualification of the human resources of Tunisian companies.

The pedagogical challenges of distance education for entrepreneurship
Distance education is one of the areas that is growing at a very rapid pace. Since the beginning of the 20th century, it has gradually become an important part of academic institutions and has played an imperative role in the development of university teaching practices. In the Tunisian context, it has become trivial than other modes of learning with students of higher education are necessary besides that of the face-to-face mode. This social demand has not stopped increasing for two decades, and the challenge has become critical with the dawn of the COVID 19 pandemic.

The university precinct can strengthen its role through sophisticated approaches inculcated effective and well-integrated training and apprenticeship systems. The ultimate objective is to succeed in promoting, creating, and strengthening a whole culture founding an entrepreneurial society. In doing so, the role is played by stars represented by new educational missions. As a corollary, the common thread is embodied by the objectives of the distance education project, which must meet the challenge and align with the nature of the institutional requirements. In particular, the intended meaning places first and foremost the intrinsic nature of infrastructure and educational equipment. The challenge is further anchored by the global invasion of the COVID-19 pandemic, which has inflicted periods of general containment never seen before in all aspects. The fact is there, and the new context has prevailed by tirelessly touching all the universities which have become vulnerable to attack if they do not succeed in the transition to the new mode of distance learning.

Throughout history, the impact of technology on education and training has played a crucial role. Printing, writing, audiovisual, and microcomputing have profoundly changed traditional methods of education and training. Investigation and in-depth exploration of the consequences of the acceptance of distance education have become two major axes on the table of a good number of researchers. Indeed, a part of these researchers created a bridge via related disciplines intending to successfully study the basket of factors determining the upward adjustment of distance education outcomes (Piccoli et al., 2001; Alavi & Leidner, 2001). More precisely, the transition to the new mode of distance learning of entrepreneurship largely opens the doors to great horizons. Scientific facts respond effectively through inquiries embodying an exploration of so many critical facets to be investigated. Entrepreneurship is ever-evolving research obedience. More than a few currents have developed over time. The question of the acceptance

and effectiveness of new ways of learning is at the heart of the debates surrounding distance learning today. According to Pourcelot et Zarrouk (2015), individual effectiveness is correlated with student satisfaction with distance apprenticeship practices. While institutional effectiveness is linked to success rates or knowledge tests.

The entrepreneur-business opportunities-creativity triad is approved as more relevant and plausible compared to that, evoking the analysis of the nature of the traits common to entrepreneurs to explain and understand the entrepreneurial act, which has only been partially proven true. The convergence of most research in entrepreneurship towards the first paradigm evoked as the entrepreneur-business opportunities-creativity triad. That said, despite such a convergence, researchers are not unanimous on each of the helices of the triad. Indeed, the very nature of the opportunity calls into question because it pre-exists the entrepreneur (Kirzner, 1997), recognized by the entrepreneur (Filion & Lima, 2011; Popadiuk & Choo, 2006; Mintzberg & Westley, 2001) or folded by him (Filion & Lima, 2011). The dark side of the coin also seems to concern the transforming process of an idea into a big business opportunity by challenging such thinking.

Starting from the conceptual evidence that entrepreneurship is defined with great unanimity as being a discipline of studying the three helices process of entrepreneurs: identification, exploration, and exploitation (Surlemont, 2007, p. 2). The issue of the capacity of the teacher is essential to assert the dimensions mentioned in this conceptual dimension. As a corollary, like all other disciplines, entrepreneurship can be instituted teachable. The questions that arise are: what do we teach in the entrepreneurial discipline? How do you teach it effectively? How to achieve learner satisfaction? What impact and what dimensions of the evaluation of this teaching?

Evaluation of the acceptance of distance learning for entrepreneurship
The importance of studying the effectiveness of distance learning in the era of education digitalization is highlighted by many researchers, like Bates (2018) who considers the Internet as the main means of transmitting educational material. The author states that 25% of academic institutions use technologies that promote synchronous communication. Likewise, for 25% of universities, the educational support will be transmitted electronically. As for less expensive technologies, such as social networks and mobile devices, they are still underused. Recently there has been controversy on the topic of the impact of technological advances on the effectiveness of distance learning (Zancaro, 2017; Fendler, 2018). Some researchers report their positive contribution (Lee, 2017), while others highlight disappointments with the latest technologies (Johnson, 2014, Merrill, 2014). The question of the effectiveness of new ways of learning is at the heart of the debates surrounding distance learning today. According to (Pourcelo, 2015), individual effectiveness is correlated with student satisfaction with distance learning practices. While institutional effectiveness is linked to success rates or knowledge tests (Abid-Zarrouk, 2013). In searching the literature on the effectiveness of distance learning, three main theories are considered to be the most credible, namely: the transactional distance theory of Moore (2013), the theory of Anderson (2013), and that of Garrison (2013).

Moore (2013) specifies in his theory of transactional distance that the transaction is the result of the interaction between teachers and learners and it occurs in spatially separate places. The distance of the transaction arises from the changing combinations of the degree of structure, dialogue, and autonomy of the learner. This distance is very important when the course has a high structure and involves little conversation. However, it is less important when there is intense conversation and a flexible structure.

According to (Moore, 2013), it is an instructional design that determines the effectiveness of distance learning, not technological advances. Thus, accessibility to new technologies offers course designers the possibility of choosing between different types of pedagogy.

For his part, (Anderson, 2013) focused his theory on the concept of self-direction to assess the effectiveness of EAD. According to him, this concept encompasses two facets, namely independent learning and collaborative learning. Self-direction shows how students themselves build their own independent or collaborative learning environment. Students then control their learning style in a more or less sustained transaction involving their teachers and colleagues. Distance learning thus offers many opportunities for interaction with stakeholders and course content, thanks to the latest technological advances (Anderson, 2013). According to this author, the effectiveness of distance learning would increase with technological progress. By referring to the theory of the efficiency of distance learning (Garrison, 2013), we might think that the position of these theorists is ambiguous. According to them, the effectiveness of distance learning would differ according to technological advancements. However, the effectiveness of virtual learning is not necessarily higher when the use of newer technologies becomes unavoidable. For these researchers, the online educational environment facilitates the creation of a learning community. Nonetheless, organizing education in a virtual setting requires the integration of technology into pedagogy, as well as the obligation to rethink educational strategies to maximize the potential of the media. Overall, these conceptual positions from major distance learning theories agree on the importance of teacher-learner interaction. This relationship is at the heart of the success of virtual education.

The preponderance of these studies shows that the period of confinement is followed by large and noteworthy learning degradation. These post-COVID losses are generally more related to quantitative subjects and seem to be notable for pupils and students of disadvantaged economies since they have unequal access to the Internet, computers, and other digital tools (Atteberry, 2020; Carralho, 2020).

Likewise, recent studies about acceptance of distance learning reveal that distance education can only partially replace classroom teaching and induces a drastic drop in intellectual levels among learners [Burgess, 2020; Haeck, 2020; Kuhfeld, 2020; Psacharopoulos, 2020). In addition, access to the technology and computer equipment necessary to ensure the efficient continuity of learning during the universities and schools closure is not at all the same for all learners, and with more consequences. Sustainable, distance education can exacerbate existing inequalities in education. Inequalities in access to distance education amid the Coronavirus crisis, therefore, risk worsening the crisis of learning inequality.

Methodology

The exploratory nature of this research implies the adoption of a qualitative research protocol based on semi-structured one-to-one interviews of just about 30 minutes each. An individual interview is a privileged tool in management sciences because it makes it possible to explore the personal experiences and the attitudes of the person towards the phenomenon studied (Gavard-Perret, 2008). Our qualitative study was carried out in April 2020 by addressing students from the two higher institutions of Sidi Bouzid and Ksar Hellal involved in entrepreneurship distance learning. Prepared for their intentions, our interview guide includes a series of open-ended questions as well as closed-ended single-choice questions to identify the interviewee's profile. Subsequently, we offer a range of different dimensions. As far as the learner is concerned, it is a question of studying: autonomy, motivation, anxiety regarding the computer handling, personal competence towards the computer, and new learning mode. In the second part, the aim is to study the dimensions relating to the teacher to explore his feedback and the styles of education adopted. The other part concerns the dimensions relating to complexity and bandwidth, the use of the website, technology: the quality of Internet connection. The last part studied concerns the dimensions concerning the satisfaction perceived by the learner.

Results

After recording and fully transcribing the interviews conducted within 24 hours of the conversation with the interviewees, we performed a qualitative data analysis using the thematic content analysis method, which allows us to break down the information raw by predefined themes while considering the possibility of new themes appearing. The QSR NVIVO qualitative analysis software in version 7 was used as a tool for storing the data, coding it, and grouping it into relevant themes and sub-themes. The output of our data analysis is four themes, and twenty-four sub-themes appear at the verbatim level.

Experience with distance learning in entrepreneurship

When referring to the work of (Rogers, 2003), it is important to consider the reasons for adopting an innovation within a community, whether it is an individual, collective, or imposed decision. Innovations whose adoption is imposed are probably the fastest to spread, as long as the obligation to adopt the innovation is respected by the adopters concerned. This is the case of the decision on educational innovation (through distance learning of entrepreneurship), which was imposed by the Ministry of Higher Education and Scientific Research in Tunisia during the pandemic of COVID-19 to ensure course continuity.

Regarding the questions "Did you benefit from a training period before benefiting from distance learning in entrepreneurship? Do you think that students should be given a period of training before teaching you remotely? ". We found that most universities did distance education for their students but the student participation rate was very low. Only 15% of students attended these pieces of training. Here are two verbatim in this sense:

   "... *Since this is a brutal transition, our rectorate has organized distance learning courses through webinars for the majority of students. Likewise, the virtual university has created virtual*

course spaces on its platforms so that students can benefit from distance education and it has also given access to free services by all telephone operators in Tunisia ".

   "*... Many of my colleagues did not attend these training because they believe that it forces them to take distance learning courses and at the beginning, we were all resistant to change ... Personally I hesitated* ".

   To the questions "What types of virtual course materials do you receive during distance learning in entrepreneurship?" Most of the students interviewed replied that they systematically received static digital documents. Indeed, 85% of students interviewed claim that the supports received from their entrepreneurship teaching are static supports (PDF, WORD, PowerPoint presentations, etc.) whereas it is only a minority that gives access to multimedia courses (hypertext, audio, video…). This choice of static supports can be explained by the ease of use of this type of support. For others, preparing multimedia materials can be overwhelming for their teachers and requires prior training. This highlights the lack of digital skills of some teachers.

   According to (Lewis, 1993), synchronous platforms offer the possibility of exchanging images of the interlocutor and sharing the tasks that he is performing. This type of platform thus contributes to enriching communication by reintroducing non-verbal aspects into the conversation. But despite the many advantages of synchronous exchanges, 70% of the students questioned prefer to benefit from asynchronous communication. For them, the use of asynchronous platforms such as sending e-mails as well as submitting and uploading documents to Google Classroom is easy to use, allows them time for reflection, and promotes their autonomy.

   On the other hand, 95% of the students questioned think that the use of synchronous communication concerning Teams, Zoom, Google Meet, is essential especially for the case of the entrepreneurship course. The rest say that the ideal approach is to combine the use of both synchronous and asynchronous platforms.

   Regarding the question "How do you rate your distance learning entrepreneurial experience?" 83.33% of respondents believe that distance learning is a stressful, unpleasant, and painful experience that disrupts the old ways of learning and passion for this subject. Indeed, many students are faced with a difficult educational situation, totally new and differentiated. These students felt the need to be more suitable for this new educational tool. On another shutter, 14.23% of those interviewed appreciate the experience of virtual education and believe that it is indeed an advantageous and professionally rewarding experience.

Difficulties in accepting distance learning entrepreneurship during confinement

Our verbatim shows that the resistance to changes and the reluctance that some students might experience when faced with the use of new educational media for learning entrepreneurship (86.66%) is the main brake linked to the acceptance of teaching. at a distance from this discipline. We join here the results of (Caneva, 2019) which find that technological innovations can provoke resistance to change. The results of the study of learner satisfaction unswervingly put the problem of Internet connection into play. Indeed, on the place of residence of the students, the problem arises for the majority of them. As a corollary, it is only a situation

inhibiting learning and the adequacy of its rhythm. This reveals, indeed, that the technology in Tunisia is not available to all learners - for lack of means or the presence of operators on the sites of residences, particularly in rural areas - and remains relatively expensive. At the same time, although the Tunisian Ministry of Higher Education intervened in collaboration with operators established in Tunisia (Tunisie Telecom, Ooredoo, and Orange) to promote free access for all students, the problem of the availability of Internet connection remains a problem. Obstacle without solution, especially during periods of general confinement. However, this does not prevent an obvious observation that motivation during entrepreneurship has shown its support by detecting the fact that students attached to the future entrepreneurial profession campaign by all mean not to miss the synchronization during the course. Entrepreneurship. This is despite the effort and the real constraints imposed by this new method of learning. The constraints that exist have not made the students express their satisfaction from the point of view, strengthening their creative capacity and imagination. However, the level of anxiety towards the settings necessary to disembark in distancing mode remains high, although the autonomy of the students is generally accepted. This result can only be explained by the lack of mastery of the concept of remote platforms and the cogs that exist at the base of good sequential learning. The obvious interpretive reading is only the fact of corroborating the vulnerability of the education system in Tunisia, which has not been able to promote the efficiency of students' cars and their autonomy. Thus, although the posture of the practitioner-researcher is authentic and has been able to provide the halfway point for anchoring and thriving distance training for entrepreneurship, the constraints are almost existing everywhere in connection with most of the dimensions set at the table for exploration. This leads us to plausibly accept that the factors for integrating ICTs still have a major impact on the efficiency and learning quality in the entrepreneurship field. The obvious conclusion is that this is a dependency bias on a tutor who renders his performance in a factual physical space. This reveals that his learning program in the primary, secondary, and even higher phases has prevented the learner from effectively self-mobilizing independently of tutoring. Morality is obvious to value and it will be of primacy for the two higher education institutes of Sidi Bouzid and Ksar Hellal to support and a tax strategy that can intrinsically adopt the compulsory transition to new learning styles of learners throughout. Throughout their educational course. In this sense, nothing is more relevant than keeping the spearhead in parallel with a new posture of the practitioner-researcher. Consequently, based on these observations, we will be rational in affirming that our studied population manifests a certain nostalgia that errs the expectations and the expected results of the traditional way of learning the discipline of entrepreneurship. The most recent research review on the subject reveals that among the results of learning is the satisfaction perceived by the learner. Its conceptual delineation considers it to be the attitude of learners to courses (extent of digital streaming coverage, organization, clarity, teaching methods, teachers, and e-learning technology) (Moreno et al., 2019). Three other fundamental dimensions are added to this conceptual delimitation: the contents themselves intrinsically, the permanent control of the learner, the value received from learning (Chiu et al., 2015), and without necessarily missing the relative dimension. interaction, (Piccoli et al., 2001).

Along with the dimension previously announced, other developments have been mentioned by Jacob (2005) who formulates that the study of the satisfaction perceived by the learner relentlessly involves determining the distinction between the satisfaction of the learner as a that such and the possible ambiguity that can result from the literature of marketing. Indeed, as unanimously recognized for the latter that the received consumer satisfaction is rather assessed based on a stance that is retained after an experience and long trial.

The teaching of entrepreneurship is assimilated to a session of social practical work. Nowadays electronic systems give birth to onboard technologies facilitating access to controllable, pilotable, and remotely manipulated machines. A large number of teachers then take advantage of these technological advances to create experimental virtual laboratories to carry out practical work at a distance [Claesson, 2012; Crabeel, 2012). However, in a developing country like Tunisia, it is complex to" provide practical work using these electronic systems. The review of the satisfaction dimension reveals that the explanation of the act of distance learning involves the study of learner satisfaction in as much as a dependent variable (Alavi et al., 1995). It is in the same direction that the research of Rae (2000) is aligned, who corroborates that the evaluation of learners and their attitudes are the path to the explanation of the phenomenon studied.

About teachers, the dissatisfaction of the students has revealed the concept by announcing that they feel a lack of flexibility and in connection with the relevance and the speed of response. Indeed, the transition to this new mode of learning did not promote the satisfaction expected and received as such. The interpretation of these results is rooted in the fact that entrepreneurship teachers in particular (given the specificity of the discipline) did not lead the transition to the new style of education successfully and that the traditional style is still authentic. This leads to say that entrepreneurship teachers are not yet capable of succeeding and adapting effectively to the emerging rules of transition and the adoption of a more effective posture in the act of teaching. In doing so, the recommendations can in no way be beside the most appropriate preparation of teachers. This is achieved in particular through targeted and à la carte training, in proportion to the shortcomings observed after evaluation and through the appropriation of the pedagogy of entrepreneurship based on the dissemination of knowledge and online learning.

Another pair of sleeves is spread out concerning the main factors articulating the effectiveness and the success of the content of distance training in the field of entrepreneurship. Indeed, based on the results noted, it is unswervingly assured that the performance of most of them is called into question about all the convergent results. In this sense, four dimensions are highlighted, namely: the website use, the bandwidth, the complexity of use, and the Internet connection quality. Altogether, these four components have negatively impacted the results of entrepreneurship distance education. A conclusive interpretation in this direction brings out the certainty that the authenticity of the manipulations and the quality of the technology are by no means yet capable of disseminating entrepreneurial knowledge online in tune with the highly expected results. The certainty of this failure is still without question when it is a question of a synchronic mode of interaction, inevitably suitable for entrepreneurship learning. Thus, it is

purely obvious that to ensure a healthy and highly satisfying transition for learners in a distanced mode, it is necessary to play well all that is related to technology and its multiple facets.

Discussion

In the era of the COVID-19 pandemic, distance education measures risk compromising the right to education of students from low-income families. Indeed, our study shows that more than half of the students interviewed affirm that the new mode of learning worsens social inequalities between students, especially those who are disadvantaged and living in rural areas. These inequalities are not only unjust and unacceptable to the majority of students, but they undoubtedly represent an obstacle to the migration to a new type of education and the democratization of an equitable entrepreneurial university. We are based on the proposal of Pelletier and Huot (2017) to show that the teacher who is anxious with the learning of his students is deliberately solicited to increase and to develop his educational expertise teaching of entrepreneurship. Such an adaptation, which is natural in and of itself, is the only gateway that allows the distance study programs development of entrepreneurship to be supported. In doing so, he is called for a continual practitioner-researcher posture to know-how. Thus, the main objective is to accurately detect the issues and sources of recovery in the event of the inadequacy of certain facets of the distance mode. The prospects for distance education for entrepreneurship appear to be called into question. Indeed, 73.33% of respondents consider that the traditional teaching of entrepreneurship in the classroom is irreplaceable, while a minority of the students interviewed consider that online teaching is a new educational paradigm that should be generalized in the classroom future of a purely entrepreneurial university.

Without the teacher's awareness of the entrepreneurial discipline, nothing can succeed in understanding the various determinants supporting this new mode of teaching success. We rely on the contribution of Bédard (2017) who tried to identify and define the different identity postures. The stake was crucial and the ultimate goal is to arrive at apprehending the construction phenomenon of the pedagogical proficiency for it the university professor must adapt to succeed in his transition to the distance mode. It turned out that belonging to a social group and the stakes in this membership are at the base of the appropriation of the new rules of success in his profession of a trainer. This membership is likely to favor the mutation towards new habits at the base of the evolution of its pedagogical expertise. The practitioner of entrepreneurship apprenticeship programs' tutor's profession must make sure that he meets the study program requirements in which he is exercising by synchronizing with the social group with which he practices. The satisfaction of the learner in this new mode of learning will be an unwavering result despite the shortcomings that can alter the learning system as such. In this sense, the ultimate objective of the upgrades must target the enrichment of its scientific or professional expertise. The only path that will approve the success of his transition is the appropriation of a state of mind of a reflective practitioner who must be endowed with a perpetual logic of questioning in connection with his teaching practice in a new environment of electronic learning. In doing so, its course or its study program must align with the new educational reality. The

transition to such a new practitioner-researcher profile requires new rules to be adopted, otherwise, the deviation from the targeted objectives will be certain. This new profile of practitioner-researcher implies more reflexivity and more questions which must situate the new mode of teaching about the new requirements of success. In doing so, the owner of this new practitioner-researcher status is asked to compare and document his new training and coaching practices appropriately. It is also required to collaborate positively in research actions by targeting the production of results recognized by the committees involved. It will be undoubtedly retained that the accumulation of highly qualified experts and which adjusts with the achievements of the new mode of learning is not therefore an individual act. According to Pelletier & Huot (2017), it is a collective, collaborative and public act.

The occurrence of the COVID-19 pandemic has imposed new learning rules and the offer of entrepreneurship courses and programs like other university courses are only done remotely. A new era is inaugurated and new obligations are imposed on both parties: tutor and learner. It remains however that the nature of the offer at a perpetual function to improve henceforth because most of the learning components are poorly accomplished. Judgments are made given the basket of dimensions for evaluating learner satisfaction. In particular, concerning all that is the variables linked to the technology which centrally articulate the stake of the efficacy transition to the distance mode.

Our results then join those of (Perret-Clermont, 1991) and (Resnick, 1991) who consider learning as a social process in which interactions with others play a crucial role. In this sense, a framework that would constrain interactions with the other and which would deprive non-verbal aspects (looks, gestures, etc.), as is the case with certain forms of distance learning for entrepreneurship, would have little chance of leading to effective learning. Indeed, distance learning, even when it conveys the image, leads to poor exchange methods compared to face-to-face teaching.

The stakes appear to be more within reach when entrepreneurship teachers comprehensively understand the requirements of the new mode of distance learning. It is in this sense that they must experience a work of improvement based on the added value brought by the apprehension of the satisfaction of the learners. The bridge is made by experimenting with a small cohort of learning bringing together the contribution of two parties involved in the distance learning process. It is a question of providing learning by both a mentor (coach) and a teacher. The result is unwavering in maximizing the collective learning that is generated between the students. However, the risk exists and this experience must remain under the watchful eye of careful observation here at its start. However, the gains are obvious following the experimentation phase and other areas of learning could benefit from this experimentation. In this new mode and via this cohort, the students will be called upon to be engaged in the production of a personal project crowning the objective of the termination of a collective project. The reasoning is structured around the fact of advancing the collective project through all the individual projects. The path of gain is also relevant in the sense of the collective project in favor of personal projects. However, a second risk arises about the grading system which must adjust to the nature of this new type of

learning. This approach is such an obvious inspiration for learning circles (Juvonen & Ovaska, 2012). That said, the inspiration also concerned entrepreneurship support professionals. Their research work and their works primarily target good integration into entrepreneurship programs. At the same time, the spearhead also concerns the entrepreneurship teachers of the two studied higher institutes who have developed a specific course in consultation with a detailed interactive study. In this mode of transition, the student is entrusted with a mission that he must complete.

Morality asserts itself clairvoyant in corroborating that it is critical to growing exponentially the cogs of this transition without return. In doing so, authentic learning is inextricably linked to the constant and collaborative development of online tools. By focusing on the learning circles example and the notions of "teampreneur", a transition would be tested of the new form of collective learning. In this context, the prescriptions described by Juvonen & Ovaska (2012) are effectively suitable. However, it is not without obvious relevance that the collaborative work tools will have to be developed and questioned for continuous improvement on the platform of the two typical Tunisian higher education institutes.

Conclusion

The coronavirus health crisis has shocked education systems unprecedented in the history of education, disrupting educational life on all continents of the world. The closure of face-to-face learning venues and the rapid unprepared transition to virtual learning greatly disrupted students and teachers. Many students and teachers face constraints they have never experienced before. Even though students are born with digital tools in their hands, and some teachers are trained to use online platforms, the distance learning experience certainly poses several challenges for both students and teachers. In this article, we tried to explore the experience of online entrepreneurship education in two higher education institutes in Tunisia during the Covid-19 pandemic, to understand the brakes that hinder students during distance learning and shed light on the effect of the latter on their acceptance of new learning outcomes, on the learning process and social inequality. To do this, we carried out an exploratory qualitative study via conducting semi-structured individual interviews using an interview guide with thirty students equally in the two higher education institutes. It is certainly obvious that the two higher institutes entrepreneurship teachers are well aware of the issues concerning an effective and efficient transition to the distance training mode of future student entrepreneurs of the two institutes. The limits of such a transition also characterize the state of mind of the teachers involved in teaching but also the production of summary teaching sheets. The central element that constrains this transition, besides those related to technology, is that for many courses and programs the transition is almost tolerated without significant limitations. However, when it comes to entrepreneurial discipline, it is more critical to get the cogs of the healthy and efficient transition right. Indeed, about entrepreneurship, the foundation of learning and teaching is anchored around purely authentic experiences. Thereby, in face-to-face mode, role-playing games, creative workshops, and realistic scenarios allow the majority of students, especially enthusiasts, to live an authentic experience and to carry out both an individually and collectively effective process.

In this sense, it is obvious that learning to be an entrepreneur with theoretical notions remains largely insufficient, which is not the case when it comes to training future entrepreneurs via a successful approach that transforms the learner to "be an entrepreneur" during his learning phase. However, with distance learning, a second constraint is urgently needed. Indeed, the collective component is difficult to find, and more extra labor must be made to switch the tools personally used (inspired workshops, scenarios, role plays, etc.).

The satisfaction of Tunisian learners following the transition to distance learning remains conditioned by technical and financial constraints. However, it is more sustainable than the program's effectiveness in the new educational environment has indeed benefited from the contribution of a body of focused research targeting the development of appropriate tools capable of generating a touching satisfaction. the achievement of the objectives assigned to this particular discipline of entrepreneurship. In this sense, it remains very relevant to have a conclusive bridge through the new posture of practitioner-researcher which seems to be the most promising for teachers wishing a surely effective and efficient transition to the distance mode of teaching entrepreneurship. The articulation is based on a reflective approach making it possible to question the own teaching methods and group consultation around new tools and new approaches and pedagogies under uncontrollable constraints.

While universities are forced more than ever, in the time of Covid-19, to adapt their courses very quickly to keep them at a distance, it seems that social equality and the equity of learning opportunities are seriously compromised. Indeed, our qualitative study shows that the use of distance education risks amplifying social inequalities and equal opportunities for students, territorial inequalities in access to technologies in low-income families. These inequalities are unacceptable to most students and they are undeniably an obstacle to supporting an equitable Tunisian entrepreneurial university.

However, it should be noted that any extrapolation with an objective of generalization must be seen with aversion. Indeed, the results of this research remain purely relevant for a particular context that characterizes the higher institutes of technological studies compared to other Tunisian university institutions. This limit of extrapolation of the results also remains relevant for the Tunisian context compared to other national contexts and during a particular period.

These results can certainly be improved if we had involved entrepreneurial teachers in our scoping study. In addition, the results of this research cannot be the object of an absolute generalization. To overcome this limitation, quantitative research should consider, in future lines of research, a national survey on the acceptance of both students and teachers in distance education of entrepreneurship. Furthermore, we could consolidate the cross-checking of the obtained results by adopting a triangulation of both quantitative and qualitative data. The implications based on the results of this study are also relevant for policymakers about higher education and lifelong learning. Indeed, it is recommended that the ministry of higher education and scientific research, thanks to the support of the ministry of telecommunications, invest in the distance entrepreneurial university paradigm by improving infrastructure, especially by the intensification and generalization of digital equipment in universities throughout Tunisia.

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Conflict of Interests

No, there are no conflicting interests.