

Difficulties Encountered by Vocational Training Students in Distance Learning

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Abstract: *The paper mainly consisted of studying the difficulties of the distance learning applied by Moroccan Vocational Training Department. An online questionnaire was completed by 286 trainees studying in the Moroccan Specialized Institutes of Applied Technology. A Multiple Correspondence Analysis (MCA), using SPSS Statistics, was conducted to analyze the pattern of relationships of model's variables. Also, the Chi-Square test of independence was used to determine if there is a significant relationship between the nominal variables.*

The findings revealed that many institutes' students find serious difficulties in following and understanding their professional training from homes. They do not attend their virtual classrooms in some distance learning's platforms such as Microsoft Teams, which need a high cost of internet connection's fees and a previous training and support program.

Keywords: Distance learning, Vocational training, Students' enrolment, Digital platforms

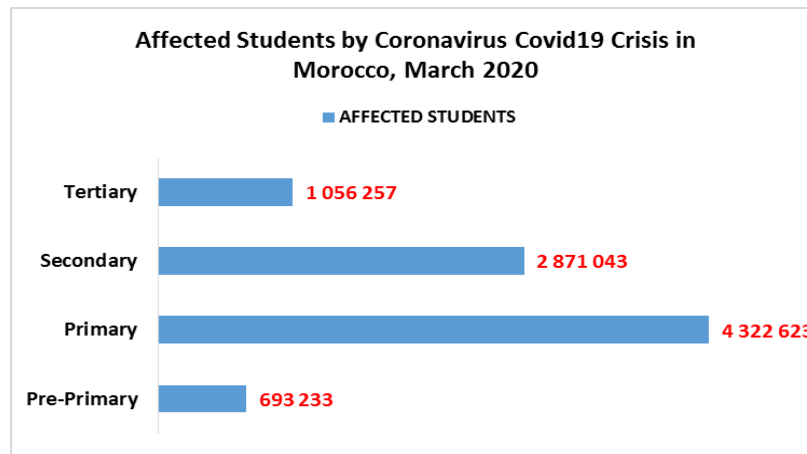
INTRODUCTION

The pandemic caused by Covid-19, led teachers and students to have to adapt to a reality that, although it already existed, was not at all visible. From one moment to the next, we had to learn new methods of teaching and interaction never experienced before, in a state of social isolation that transformed the family space into a public and private space (Alves & Guerreiro, 2021) presenting new challenges, sometimes disruptive, where teachers and students are exposed to new methodologies of teaching and learning never experienced before. This new reality has led to students being forced to work from home, where the company of colleagues, the school environment and signs of reality have been replaced by a coldness personified by small black squares where dialogues turn into short solitary monologues (Azevedo, 2020).

The Moroccan vocational educational has integrated the distance learning in the national education strategy to enhance the quality of learning and make the pedagogical approaches more adequately with sociocultural development and labor's markets (Author et al, 2022). Distance learning's framework was forced by Coronavirus COVID-19 confinement since March 2019. In the current circumstances of this study, Novel Coronavirus is shutting down schools and affects learning opportunities for over 1.5 billion children and youth around the globe. The international pandemic has stunned the education systems worldwide, and in Morocco 8 943 156 students are forced to stay at home (UNESCO Institute for Statistics data, 2020).

Figure 1

Number of confined students due to the Coronavirus pandemic (UNESCO, 2020)



In fact, learning vocational lessons at home using distance learning's platforms needs spending a substantial amount of time and resources trying to enhance the quality of the students' training. So, this research aims to study the difficulties of distance learning applied in Moroccan Vocational Department during the pandemic of Covid-19 confinement.

So, we analyze these difficulties by answering the following main research questions:

What are the major difficulties encountered by Moroccan Vocational Training Department's students? What are their attitudes toward distance learning during COVID-19 crisis? Why they prefer distance learning's platform rather than another?

DISTANCE LEARNING STRATEGY OF MOROCCAN VOCATIONAL TRAINING

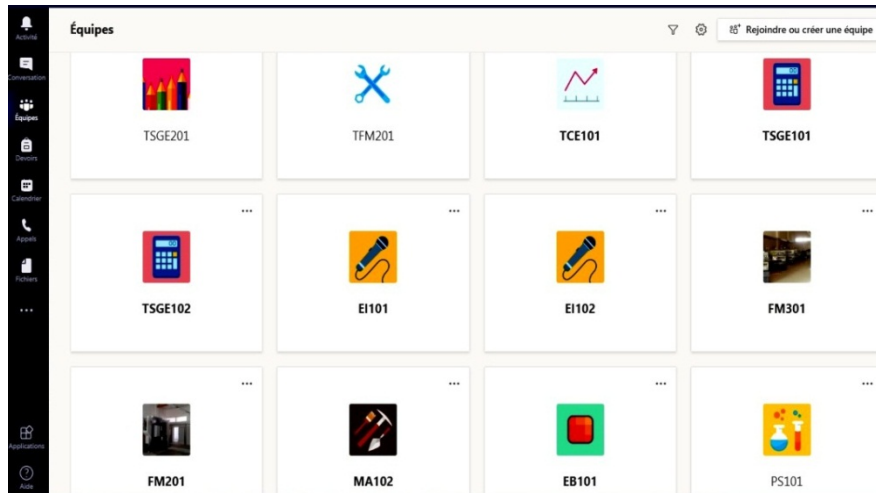
Specialized Institutes of Applied Technologies of Moroccan Vocational Training Department provide four main levels, professional bachelor in partnership with the university (three years of studying), specialized technicians (two years of studying after baccalaureate), and technicians (two years of studying), qualification (two years of studying), and specialization (one year of studying). Access to training for all levels is by competitive examination.

Focusing on face-to-face learning pedagogy, over the past long years, the institutes have been ones of the most important actors of vocational education in Morocco. Students have to attend all their programs and the rules applied to control their absence are very strict.

Since the Coronavirus outbreak in Morocco and the launch of distance training, the Specialized Institutes of Applied Technologies have designed its urgent strategy to keep their

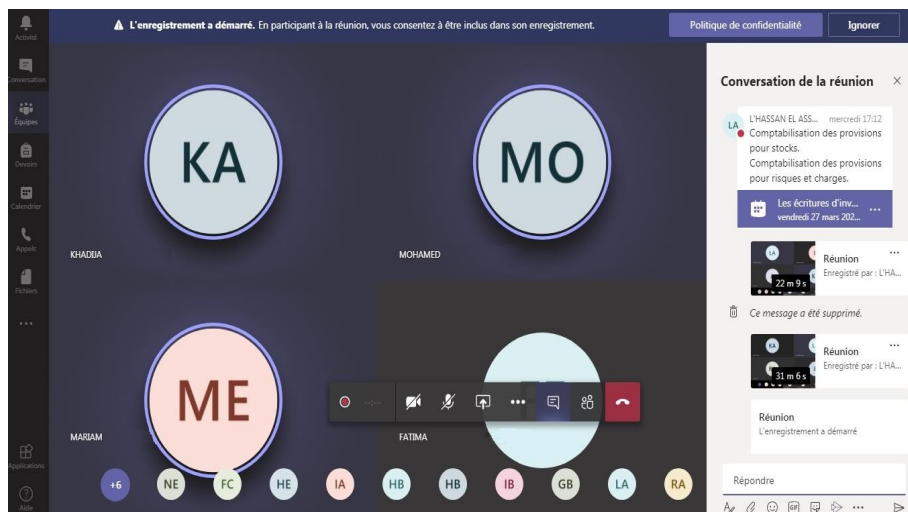
students' training (Figure 2). They have proceeded to create groups in Microsoft Teams platform (Office for Vocational Training and Work Promotion, 2020).

Figure 2
Trainings' teams in Microsoft Teams platform



Virtual timetables are created for each group of trainees; and sessions of courses are planned respecting the same timetables of face-to-face training used before Covid-19 crisis. After raising awareness and mobilizing the training body and trainees of the need to use the platform, the institutes' trainers start giving distance courses in videoconference virtual classrooms.

Figure 3
A videoconference virtual classroom used in the vocational institutes



Assuming a distance course, which teaches electrical engineering, accounting or mechanical manufacturing, is not an easy operation. For example, getting an oscilloscope or a

milling machine is not affordable for students. Moreover, it would be impossible for them to carry something home, which weight is high (Clemens, 2007).

To use distance learning for these matters and during an international pandemic is more difficult. Many students do not have experience in such methods and some of them live in no internet-covered areas. Moreover, Trainees in Specialized Institutes of Applied Technology learn by doing inside their workshops because it is a better way to improve their theoretical acquisition performance.

LITERATURE REVIEW

Given the specificities of today's learners, the creation of a new type of school, new types of teachers for new types of learners belonging to the "P" generation - participatory - becomes necessary (Kalantzis & Cope, 2010). Distance learning refers to a learning model in which the teacher and the learner are not face-to-face. It is a pedagogical device added in pedagogical approaches in the recent years. It is offered when special requirements preclude any face-to-face teaching. For instance, when most of learners are living far from their schools. Alternatively, if an area population density is low and the travel distances between schools and students are very great. In addition, in cases where the places in schools are restricted and insufficient to meet too much demands (Littlejohn & Pegler, 2007). This new teaching/learning paradigm has led teachers and students to develop new skills based on dynamic processes of distance interaction through a new contextual learning model based mainly on creative and participatory practice between teacher and student.

In fact, students in the 21st century are no longer limited to what they learn in the classroom, as the tools provided by new information and communication technologies allow them to continue to acquire knowledge outside the school context. This change in learning model requires new teachers to acquire new pedagogical skills and to guide students in their discovery of knowledge beyond the classroom. A new generation of teachers, more collaborative, sharing knowledge with peers, developing a professional culture of mutual support and sharing (Kalantzis & Cope, 2010), promoting involvement without spatial or geographical boundaries, positioning the student not only as a recipient of knowledge, but also as an agent in the process of creating that same knowledge. In fact, distance education has revolutionized the educational system, making it more independent, flexible and autonomous.

The use of new tools such as the Zoom platform, Teams or Google Classroom has represented a new challenge for teachers who, from one moment to the next, have had to adapt their old teaching models to new forms of virtual teaching and learning. Looks, smiles, affections, were replaced by new digital signs in which the digital "I" is transformed into a new way of being and leading the teacher to no longer be considered the holder of knowledge and to become a guide, an advisor in this brand new teaching and learning process (Alves & Guerreiro, 2021). Distance learning is not a new method, it was appearing in mid-18th century and since that time it has been filling the gaps of traditional education, at first, from correspondence courses and tapes to the integration of computers and computers' applications (Marcia, Kenneth, & Barbara, 1999). In the last years, innovations in smartphones' applications and social software using Web 4.0 technologies (cloud computing) or social networking sites (such as Facebook and MySpace) have made distance learning more dynamic and pervasive and promise more potential. Thus, distance learning is developed to the Mobile learning, which refers to the use of mobile or wireless devices (e.g., smartphones, palmtops, and handheld computers; tablet PCs, laptops) for learning while on

the move (Yeonjeong, 2020). As smartphones become an integral part of our daily life, and their applications are ubiquitous, from home, students are learning directly courses recorded by their teachers at schools and universities using new tools and techniques such as MS Teams, Facebook, Zoom, WhatsApp, Google Classrooms... Due to this technology, learners could receive resources of texts, figures, audio and video, and interpersonal interaction through hyperlinks and online inquiries. Students not only could attend an online and live course, but they are able to see it many times. Then, many teachers are playing an important role in distance education and increasing the satisfaction level of students.

The 20th century teaching model is slowly being replaced by a new model of knowledge construction based on the promotion of new techniques of self-learning, individual or in groups, where students are the main mentors of this self-discovery. It is important to note that this is not a linear and continuous process because, although the new generation of students is considered experts in technology, it is often extremely difficult to find relevant information that serves as the basis for the construction of this knowledge. According to Castells (2014), what 21st century students lack is not information, because it exists in abundance; what they lack are the criteria and tools that help them find the right information so that it can be applied and combined with their intellectual projects (Jesus Alves & Caetano de Faria, 2020).

As can be read in the paper of Manijeh (2019), the performance of students in distance course was similar to the performance of students in the traditional course. They analyzed the performance of two class sections in an introductory graduate-level accounting course; one section was a traditional campus-based class and the other section was distance education class. For the student, distance education provides increased access to courses with flexible scheduling and less travel. In its study on Latvia Education, Organization for Economic Co-operation and Development (OCED) requires to “ensure equal learning opportunities for disadvantaged students throughout the education lifecycle, including by providing more generous grants for low-income students attending vocational schools and expanding grants for disadvantaged students in tertiary education.” The organization said that education’s financial expenses of adults are considered a big obstacle for the families’ budgets and therefore outrageous for some families (OCED, 2017). Therefore, distance learning is one of the most affordable models of education. According to this study results, 53,3% of students refer to the high cost of education as a constraint. For the student, distance education provides increased access to courses with flexible scheduling and less travel (Gagne & Shepherd, 2001). However, the same authors point out that the distance education has also increased costs.

In his paper “Adults Students’ Problems in the Distance Learning”, Pozdnyakova (2016) points out that a significant amount of knowledge can be obtained at lower cost in the process of distant learning. However, it can have some problems such as the lack of the technical and technological support of online learning and skills of students. In addition, the problem related to the organizational support of the educational process that depends on the efficiency of the school administrative system and teachers. Another problem caused by the lack of direct contact between students and lecturers which create difficulties for the students to focus on their courses and don’t feel helpless and lonely, and the lecturers who cannot estimate their students’ acquisition as possible as if they are met face to face.

Distance learning can be a stressful experience for postgraduate students who are at the stage of writing their dissertation or thesis (Fortunate & Michael, 2016). The authors have conducted a mixed method study of 748 distance learning postgraduate students in a South African university. The research indicated that students had difficulties within distance learning and

suggested some solutions such as, that universities with distance learning should help their students by offering training or counseling services and improving how supervisors assist distance learning postgraduate students. One of the major obstacles for students in high education e-learning process is the lack of skills and experience in using technology. In this process, students should work independently without any interaction with their instructors and some students find it difficult to participate and understand their courses, because of the lack of face-to-face contact with them (Abou El-Seoud and al., 2014). Consequently, some students need the necessary hardware and specific skills. In his study of a website used for distance learning for students' benefit in Burgundy University, Dambreville states that the multiplication of distance learning platforms used within the university system and the complexity of some of them raise problems such as, the stabilization of writing practices of digital documents and the evaluation of these devices (Dambreville, 2008).

In fact, distance education is strongly dependent on technology that is why many researches were conducted to investigate the relationship between technology and education. The work by Meyer & Gordon (2014) presents an effective and overall discussion of the concept of using technology to help learning. Her work notes, "Many reports present strong assertions that technology can catalyze various other changes in the content, methods, and overall quality of the teaching and learning process". As read in Thomas & Reinders (2010) paper, technology is vital in modern society to develop students learning, both inside and outside the classroom. Distance learning depends also to the learner's motivation. In his research, Selim (2007) concluded that student's motivation has a critical part to play in the adoption of online learning environments (OLE). Some studies established a significance correlation between learner success and online learning environments. This environment depends on tools used in distance learning, trainings' level and software (Coldwell, J. Craig, A. Paterson, T. and Mustard, J., 2008). In their research on vocational education institution Open Polytechnic of New Zealand, Yates, Brindley-Richards and Thistoll (2014) stated the importance of building relationships with students to encourage engagement and connection with the institution. They cited the lack of face-to-face contact as a particular barrier to establishing these relationships with distance education students. The results of their paper show that the institution's staff believes are key enablers and barriers to student engagement and course completion. Radovan (2011) stated in his empirical study, which consisted of 319 students: 83 males and 236 females, the importance of motivational factors, such as intrinsic goal orientation, task value, self-efficacy and effort regulation strategies. Rockwell (1999) examined in his study the incentives that encourage faculty to develop students' higher education opportunities via distance learning and obstacles that discourage them from doing so. The major perceived obstacles related to time requirements, developing effective technology skills, and assistance and support needs. In his investigation in whether the use of a virtual learning environment increases students' motivation to acquire knowledge, Barker & Gossman (2013), found that the use of Moodle produces improvement in learning and motivation. In their research, Corcuera & Alvarez (2021) have concluded that the deficiency of appropriate training and experiences of teachers in distance education constitutes an obstacle to education in the context of COVID-19 emergency distance education. According to the authors, the sudden shift from face-to-face teaching and learning to remote learning challenges not only the students but also the teachers who are serving as educational front liners at the time of the pandemic crisis. According to the study of Bhaumik and Priyadarshini (2021), there is a positive response to the use of online synchronous tools for counseling with most of the participants desirous of continuation of such interventions even after the pandemic. The authors concluded from the analysis of collecting

responses of a sample of 57 participants that the majority of participants reported non-interruption in their distance learning studies and felt confident of completing the program owing to the flexibility of the system. Galy and Coulibaly (2021), analyze in their article the conditions of organizing lessons through social networks WhatsApp and Telegram as an alternative of face-to-face education in Niger in the era of the COVID pandemic. This analysis reveals the urgent need to promote the pedagogical integration of ICT.

RESEARCH METHODOLOGY

The current paper aims to assess the difficulties of distance learning applied in the Specialized Institutes of Applied Technology during the Coronavirus Covid-19 crisis to maintain students' training. The study measures and analyzes the factors affecting students' enrollment in distance learning's platforms and problems encountered, particularly in a period of health confinement.

To investigate the relationship between the variables concerning the main difficulties of distance learning, students' characteristics and the distance learning tools' usage, we use a quantitative method. This method is adopted because it enables us to process the collected data before its analysis. Its use allows us to transform the nominal variables into numbers, then we analyze the data using at first the descriptive analysis after that we use the correlational statistics to answer our research questions.

Participants

A survey was conducted and the sample of 286 students came from two vocational institutes. The sample's size was determined carefully because it has great importance on the precision of the estimates made on the characteristics of the population. Therefore, the study involved questioning both male and female students of the first and second years, aged from 15 to 32 years and the students of professional bachelor (third year). The target population is all students who studied in the Specialized Institutes of Applied Technology of Moroccan Vocational Training Department in 2020. The total number of students is 1100 and we have selected 286 students.

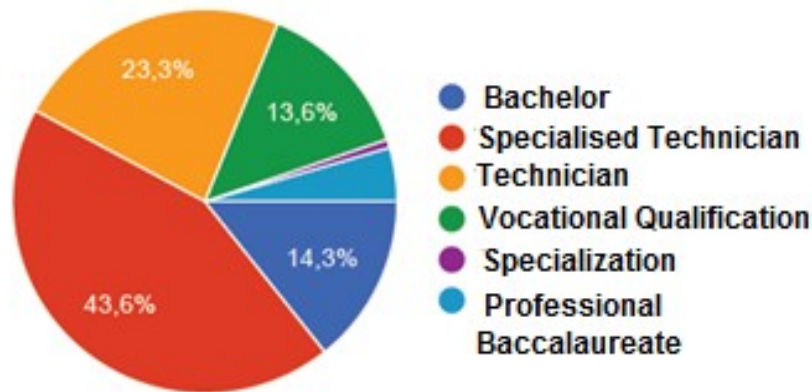
The sample design is a simple aleatory sampling. The reason for choosing this type of sampling is that each element of the population should have the same probability of belonging to this sample to have strong representability. The sample size of students was defined using the formula: $n = t^2 N / (t^2 + (2e)^2 (N-1))$ (a).

With n is the sample size, s : confidence threshold, which we hope to guarantee in our measure (100%- e). t is the margin coefficient which could be deduced from confidence threshold « s ». e is the margin error and N is the whole population.

Using the formula (a), we have selected 286 persons, whose components by speciality are illustrated in Figure 5.

Most of the respondents (52,7% are in the first year of the vocational training in the institutes. 34,2% of them are studying in the second year and 13,2% are enrolled in the third year (professional bachelor).

Figure 5
Participants by specialty



DATA COLLECTION AND ANALYSIS

To conduct the survey, an online questionnaire was developed by the author and was used as a technique of data collection. The questionnaire is subdivided into three sections, one for sociodemographic data collection, the second for distance learning devices, and the last section is for difficulties of respondents in using technology in distance education in the context of the pandemic remote education. The questionnaire was piloted on a group of five students to test its clarity and to see if it would produce the required responses. In addition, a screening question “Are you enrolled in the institute’s distance learning?” was asked before the self-administered survey was given out.

At first, the data is displayed in a contingency table where each row represents a category for one variable and each column represents a category for the other variable. Then, the collected data was analyzed using the Multiple Correspondence Analysis and SPSS Statistics Software. This method allows us to examine the relationship between many nominal variables. The Multiple Correspondence Analysis “MCA” were used because the data collected are nominal, and it allows us to find structures and patterns of correlations between variables. To describe jointly all variables considered for study, this method is useful. Results for these analyses are shown in Table 1. According to Cronbach’s alpha, this assesses the reliability or internal consistency of the questionnaire items. For our study, the reliability coefficient is 0.892, which is acceptable. The reliability coefficient above 0.7 is considered satisfactory (Nunnally, 1978).

Table 1
Summary of Model

Represented Variance				
Dimension	Cronbach's Alpha	Total (Eigen value)	Inertia	variance %
1	,998	3,979	,995	99,474
2	,689	2,068	,517	51,693
Total		6,047	1,512	
Average	,892 ^a	3,023	,756	75,584

a. Alpha de Cronbach's Average according to Eigen value average.

DISCUSSION

Once the data have been collected and organized, its analysis was preceded in two stages. In the first step, we proceed to the descriptive analysis. In the second stage, we apply the Multiple Correspondence analysis (MCA) to measure the interrelationships between the variables.

DESCRIPTIVE ANALYSIS

In the second part of the questionnaire, the respondents were asked to answer a question on whether they have a smartphone and computer to attend their online courses. 96,1 % of them have a smartphone and 55,4 % do not have a computer. Answering such a question is of great importance to know about the distance learning obstacles and the respect of education's equal chances. To rely on these responses with the attendance rate, they were asked some other questions to elicit information regarding their attendance in online courses during the confinement caused by the health crisis of Coronavirus COVID-19. The result shows that 92% of students attend the online courses of their teachers' lectures. Those who are not enrolled do not have distance learning's hardware or internet.

After that, we investigated the students' attitudes to explain the financial, pedagogical and social reasons. This item shows that students have a positive attitude toward WhatsApp. 67,8% of respondents use WhatsApp in distance learning. 30,4% of them use Microsoft Teams. This result is explained firstly by the respondents' preference of WhatsApp (57%) and secondly by the financial cost of Microsoft Teams for a large number of them who does not have the means to pay internet fees.

Figure 8 shows that 67,5% of the respondents confirm that MS Teams is expensive even if it is free in downloading and installing the software but, its use need internet fees. This result is in contrast to the findings of Pozdnyakova (2016), which noted in his study that distance learning is one of the most financially affordable forms of education and can be obtained at lower cost. 39,6% of students could not understand well their courses because of the low grade of the videoconferences (video and voice).

Figure 6

Distance learning applications used by students

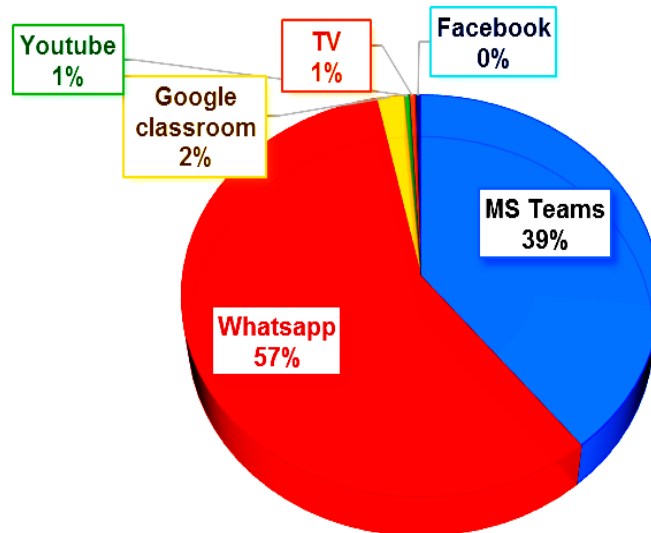
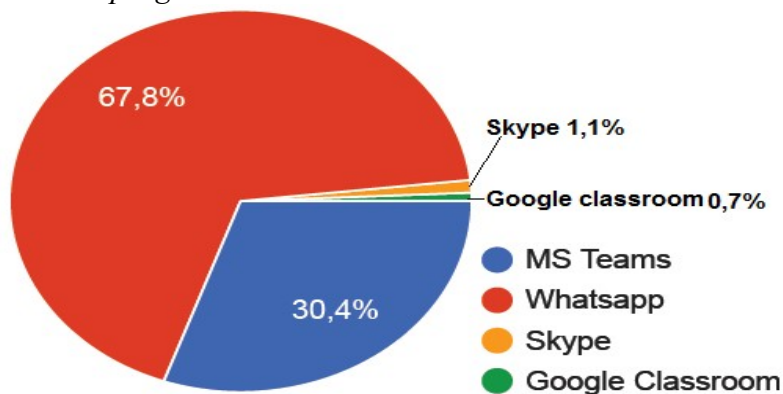


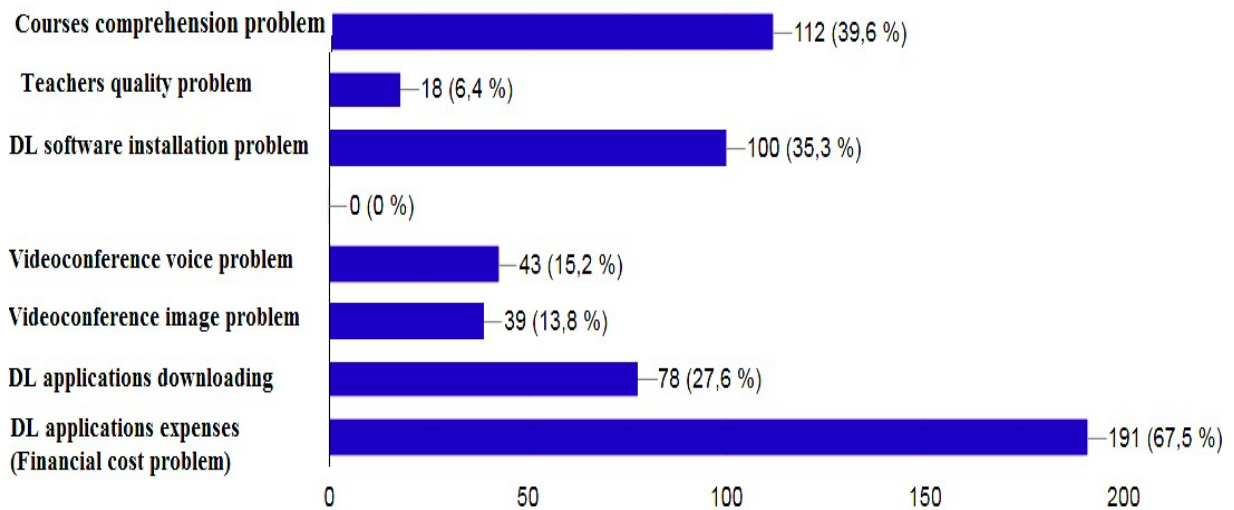
Figure 7

Students' attitudes toward programs



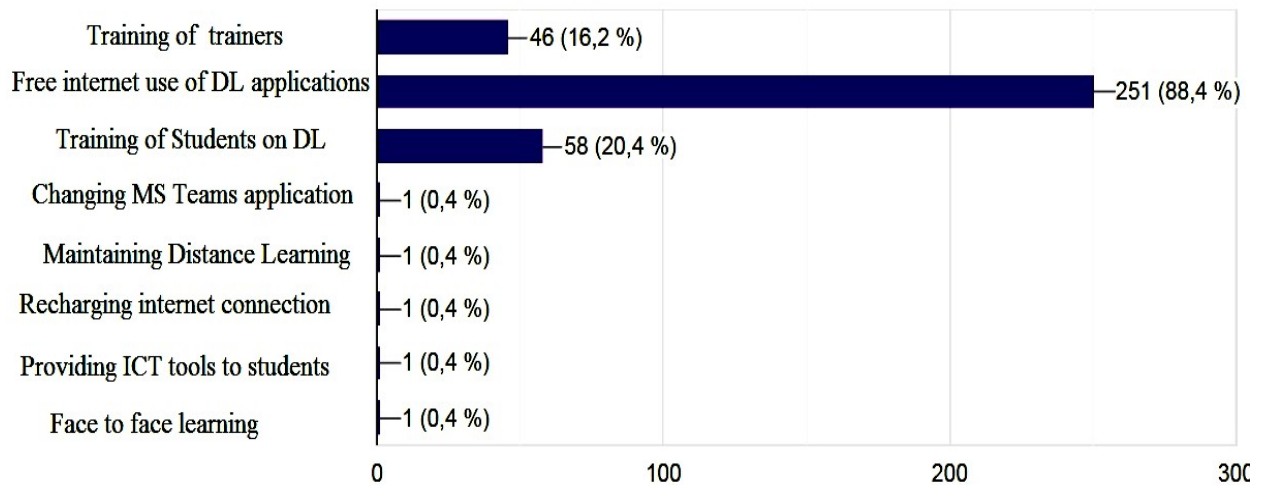
In addition, they face difficulties in the software installation and technical problems (Rockwell, Schauer, Fritz, & Marx, 1999). Pozdnyakova (2016) could be seen to support this result as he argued the effect of the lack of the technical and technological support of online learning and skills of students. This result can be explained by the lack of students' training (Abou El-Seoud and al., 2014). The institute has never formed their trainees about distance learning, which has suddenly replaced face-to-face learning because of an act of God and no due a planned strategy. Also, 39,6% of students encounter problems of courses' comprehension.

Figure 8
Difficulties encountered in using Distance Learning



In connection to the previous items, it is found that students have positive attitudes toward using distance learning process to participate in their teachers' on-line lectures, achieve their training program, and pass the next final exams. Moreover, they request free internet connection for using the distance learning applications especially Microsoft Teams.

Figure 9
Students' suggestions to improve the distance learning



Regarding figure 9, 88,4% of the respondents request free internet connection. The majority of them appreciate the distance learning system whether the institutes take care of their Internet connection expenses. They think that it will give them a permanent access to the institutes' pedagogical programs.

MULTIPLE CORRESPONDENCE ANALYSIS (MCA)

Based on the correlation matrix of the Multiple Correspondence analysis (table 2), we demonstrate that the correlation between “Difficulties encountered by trainees in Distance learning” and the other variables are high. All the correlations’ coefficients indicate significant positive relationships between the variables.

Table 2

Correlations’ Matrix “Difficulties Encountered in Distance Learning and the other variables”

	Training Levels	Pedagogical DL Tools	Difficulties Encountered in MS Teams	Training Year
Training Levels	1,000	,995	1,000	,991
Pedagogical Tools	,995	1,000	,995	,986
Difficulties Encountered in MS Teams	1,000	,995	1,000	,991
Training Year	,991	,986	,991	1,000
Dimension	1	2	3	4
Eigen value	3,979	,015	,006	,000

In accordance with the descriptive analysis’s results, the correlation matrix between the variables demonstrates a significant positive correlation between the Microsoft Teams platform difficulties and the attitudes of the students. This result can be explained by the high cost of Internet connection, which makes the use of distance learning’s platform expensive and some students cannot support it (Rockwell, Schauer, Fritz, & Marx, 1999). In addition, the table shows a positive significant correlation between difficulties in distance learning, training level and training’s year. The trainees of Specialization and Vocational Qualification’s level have more difficulties than Specialized Technicians, Technicians and bachelors’ level. This finding can be explained by the fact that most of these trainees come from precarious families with very low incomes. In addition, their areas of residence are not covered by the Internet connection. These results are found by a number of studies, which have suggested that distance education environment depends on tools used in distance learning, trainings’ level and software (Coldwell and all, 2008).

Table 3 and 4 show the significant positive correlation between difficulties encountered by students in using Microsoft Teams in distance learning and their attitudes toward the other educations’ tools available during Coronavirus Covid-19 crisis.

As shown in this table; 67,3% of students who have problems of MS Teams internet expenses proclaim a positive attitude toward using WhatsApp as an alternative to enroll in their distance courses. This result can be explained by the fact that the top management of Moroccan Vocational Training Department obligates Specialized Institutes of Technology to use online videoconferences to provide courses in MS Teams platform, which quickly and massively consumes students' Internet recharge.

However, when using WhatsApp, teachers have more freedom to diversify teaching methods between sending scanned lessons, Word files, PowerPoint files with sound and the use of chat and audio messages, which don’t consume Internet as much as MST videoconferences.

Table 3

*Cross table: Attitudes toward DL Tools * Difficulties Encountered in MST*

			Difficulties Encountered within MST							Total
			CCP	IntSpeed	MSTE	SoftIns	TCQ	Video C		
Attitudes Towards Distance Learning Tools		Frequency	1048226	0	0	3	0	0	0	1048229
		% in Difficulties Encountered in MST	100,0%	0,0%	0,0%	2,0%	0,0%	0,0%	0,0%	100,0%
	GC	Frequency	0	1	0	0	0	1	0	2
		% in Difficulties Encountered in MST	0,0%	1,4%	0,0%	0,0%	0,0%	20,0%	0,0%	0,0%
	MST	Frequency	0	18	8	43	12	0	6	87
		% in Difficulties Encountered in MST	0,0%	24,7%	53,3%	29,3%	32,4%	0,0%	66,7%	0,0%
	SK	Frequency	0	1	0	2	0	0	0	3
		% in Difficulties Encountered in MST	0,0%	1,4%	0,0%	1,4%	0,0%	0,0%	0,0%	0,0%
	WA	Frequency	0	53	7	99	25	4	3	191
		% in Difficulties Encountered in MST	0,0%	72,6%	46,7%	67,3%	67,6%	80,0%	33,3%	0,0%
	Total	Frequency	1048226	73	15	147	37	5	9	1048512
		% in Difficulties Encountered in MST	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%	100,0%

With GC: Google Classroom; MST: Microsoft Teams; SK: Skype; WA: WhatsApp; CCP: Courses comprehensive problem; MSTE: MS teams Expenses; SoftIns: DL software installation problem; TCQ: Teachers' courses Quality and VideoC: Videoconference problem.

Table 4

Chi-square test

	Value	df	Asymp.Sig. (2sided)
Pearson Chi-Square	1188907,860	24	,000
Likelihood Ratio	5209,670	24	,000
N of valid cases	1048512		

The dependence relationship cross table and chi-square test (table 5 and 6) show a significant positive correlation between training's level and difficulties encountered by students in distance learning. Similar results have been previously found by Fortunate & Michael (2016) ; Coldwell, Craig, Paterson and Mustard (2008).

Table 5

*Cross table: Training Level * Difficulties Encountered in using Microsoft Teams*

		Difficulties Encountered in in using Microsoft Teams						Total	
			CCP	IntSpeed	MSTE	SoftIns	TCQ	VideoC	
Training Levels		1048226	0	0	0	0	0	0	1048226
	BACH	0	18	0	14	3	3	3	41
	PBAC	0	4	1	7	0	0	1	13
	S	0	0	0	1	1	0	0	2
	ST	0	31	8	62	21	0	2	124
	T	0	15	4	37	10	0	1	67
	VQ	0	5	2	26	2	2	2	39
Total		1048226	73	15	147	37	5	9	1048512

With BACH: Bachelor; PBAC: Professional Baccaulaureate; S: Specialization; ST: Specialized Technician; T: Technician; VQ: Vocational Qualification.

Table 6

Chi-square test

	Value	df	Asymp.Sig. (2sided)
Pearson Chi-Square	1206191,449	36	,000
Likelihood Ratio	5312,050	36	,000
N of valid cases	1048512		

CONCLUSIONS AND RECOMMENDATIONS

This paper research investigates the difficulties encountered by students and their attitudes toward the distance learning required by Moroccan Vocational Department when the Coronavirus COVID-19 was killing a large number of people in the country and in the World in 2020. We demonstrated that a wide range of students has a positive attitude toward enrolling in distance learning. They are keen to use this pedagogical form of learning to facilitate their understanding and being able to pass their final exams.

However, they encounter many difficulties in attending their videoconferences virtual classrooms in Microsoft Teams because of the high cost of Internet connection, its very low speed, lack of internet coverage in some areas and low grade of the videoconferences (video and voice). Trainees have difficulties, also, in the software installation, the lack of framing courses to enhance their skills in using distance learning’s software and the lack of devices (e.g.: smartphones and computers).

The findings from this study reveal that exploring the distance learning in a pedagogical program suddenly without teachers and students training is not an easy operation, as it is a model

that needs technological tools, internet applications, financial expenses and participants' training. These results are confirmed in the research study of Rockwell, Schauer, Fritz, & Marx (1999), who confirmed that the major obstacles of distance learning are related to developing effective technology skills and assistance and support needs.

In accordance with Selim (2007) research's results, which stated that learner motivation has a critical part to play in the adoption of online learning environments among students, and the study of Fortunate & Michael (2016) who indicated that students have difficulties within distance learning, we conclude that distance learning requires pedagogical contents, trainers' training, technological tools and free internet applications to motivate students and help them to participate in their on-line lectures. Its adoption needs change piloting of the institutions' structure and procedures.

Coronavirus Covid-19's confinement was a positive experience, which has forced the use of distance learning without a previous change management. Even if the period was very difficult and the use of Microsoft Teams was more difficult, a large number of trainees were able to keep on their training, and teachers could in a short time and without deep training adopt this new pedagogical approach.

Although the outcome of this study concerns emergency remote teaching and learning in the period of COVID-19 confinement of 2020, this paper may have many contributions such as, the findings may be used as basis for Vocational Training Department to take necessary actions to improve the delivery of distance education and to make decisions of the scenarios of an emergency remote teaching and learning. Also, the results can be used to overcome the difficulties and improve distance learning (for example: providing free distance learning platforms and students advisors who provide technical help to teachers and assist students with pre- and post-enrolment processes, assisting students by offering them training and counseling services in distance learning and, providing Internet mobile phones cards to students to encourage them to enroll and maintain their distance courses). Another contribution is that the study conclusions can be used by Moroccan private companies since they participate in the vocational training's strategy design to meet the qualification and requirements of the labor market. Finally, the data could be useful for authorities who are looking for the consecration and institutionalization of distance training as a vector for digital inclusion and as a model that can further open the vocational training system to the populations of areas without training infrastructures in the appropriate sectors.

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