

# Distance Learning for CRMEFs What Technical-Pedagogical Adaptations for the Development of Socio-Professional Skills?

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## ABSTRACT

To ensure the continuity of training activity in the context of the Covid 19 health crisis, CRMEFs such as universities and schools have radically reversed their training strategy, from face-to-face to remote " online " where training is provided remotely with several means " digital platforms, social networks, videoconferencing software ". Based on the results of several research studies that have shown that an online learning strategy increases information retention and takes less time in its implementation process.

In this regard, our central question is the following: What adaptations for the development of socio-professional skills? What educational paradigm will make it possible to achieve the objectives set out in the distance training systems?

The objective of this article is to verify the contribution of FAD within the CRMEF of Taza on training practices on the one hand and on the apprenticeships of trainees on the other hand, in order to trace a reverse training methodology aimed at to guarantee maximum socio- professional performance.

**KEYWORDS:** *Distance learning, socio-professional skills, technical-pedagogical adaptations*

## INTRODUCTION

The COVID-19 pandemic as it is known by everyone. It has led to the breakdown of fundamental and professional training in Morocco, whether in schools, universities or also professional training centers, in the hope that advice from public health officials on social distancing is helping to flatten the infection curve and reduce the overall number of deaths from the disease.

Consequently, to ensure the continuity of the training activity in the context of the health crisis, the CRMEFs have radically reversed their training strategies, from face-to-face to distance " online " where training is provided at distance with several means "digital platforms, social networks, videoconferencing software". By drawing on the results of several studies which have shown that an online learning strategy increases information retention and takes less time in its implementation process.

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In this regard, several questions emerge from this new situation, namely: Did distance training meet the real needs of trainees? Can we judge that we have developed in distance of skills socio-professional upwind of trainees? and To what extent have the chosen methodology and logistics respected the principles of andragogical training ? and what are the different technical-pedagogical adaptations to suggest to optimize the quality of training in a distance mode ?

To answer our question we have begun an inquiry from of our sample of 151 trainees and 42 trainers CRMEF of Taza, in order to demonstrate the contribution positive of the ADF in the professional training, not to mention all the nuances that disrupted the skills development process.

## THEORETICAL FRAME

The question of distance learning has been debated since 1850, when the first correspondence course

in France was created by Emile Pigier. By Jean-Pierre Lehnisch, doctor of law, graduate in letters, founding director of the CNFDI (National private distance training center). [1]

This FAD has experienced a dilemma between two totally contradictory trends, some of which defend the idea that distance education is ideal in times of crisis in order to readjust the labor market between job offers and demands. Others maintain the conviction that this type of training is especially necessary in times of economic euphoria, of full employment in order to meet the multiple demands of the job market.

In the professional sector, distance training is a training system that allows training without going to the training place and without the physical presence of a trainer. In other words The transmission of knowledge and the learning activities take place outside the direct face-to-face relationship, known as "face-to-face" between the trainer and the trainee (trainees).

Several definitions have identified this new training paradigm among which we can distinguish:

Distance education (FAD) is the set of devices and organizational models that aim to provide education or learning to individuals who are distant from the service provider organization. This mode of training requires special training technologies, course design, and means of communication based on electronic or other technology.

The FAD has developed a model of knowledge transmission built on the edition and distribution of printed documents, then on mass media technologies with television, radio and telephone and finally, with IT, it has moved from processing analogue of information to the creation of interactive digital services on and off line allowing the individualization of content. "In this context, promoting new training methods that give space to the learner, to his responsibility and to his initiative, appears to be an essential issue for open training and new training technologies." [2]

### 1. Types of distance education

According to several researchers have distinguished between four types of FAD namely:

- Improved face-to-face: A hybrid form between face-to-face and online, also called work-study training.
- The enriched face-to-face training: The face-to-face training time here concentrates the heart of learning, and therefore remains online teaching practices

- The reduced face-to-face: a very open form of open online distance learning
- The non-existent face-to-face: distance learning par excellence [4]

### 2. Features of distance education

Distance training is a training system that allows training without going to the training place and without the physical presence of a trainer. The transmission of knowledge and the learning activities take place outside the direct face-to-face relationship, known as "face-to-face" between the teacher and the learner. [5]

The FAD is then an organized, finalized training device, recognized as such by the actors, which takes into account the uniqueness of people in their individual and collective dimensions.

The learners in this training mode are then called upon to perform the tasks that were recorded at home and hand them over electronically or hand to hand to their training organization.

Open distance learning has rapidly developed in terms of its forms, techniques, strategies, resources and new professions... A.-J. Deschênes [6], Bruno Devauchelle [7] and Serge Agostinelli [8] have addressed in their articles several characteristics of distance training. We can summarize them as follows:

- Accessibility. With distance training, the problem of difficult access to the public is solved by offering teaching-learning situations that take into account the individual constraints of each learner (spatial, temporal, technological, psychosocial and socioeconomic constraints) which block access to know. (Jaquinot, 1993)
- Contextualization. FAD enables the individual to learn in their immediate context. It thus maintains direct, immediate and permanent contact with the various components of the environment, facilitating the integration of scientific knowledge into practical knowledge (Pepins, 1994) and the transfer of knowledge.
- Flexibility. FAD offers an opportunity to make training and education organizations more flexible by using approaches that allow the learner to plan in time and space his study activities and pace of learning. In addition, it can design activities offering the learner choices in content, methods and interactions and thus take into account the individual characteristics of each [9] (Deschênes 1991, Moore, 1977). Monique Commandré [10] uses the notion of flexibility to designate flexibility

in association with flexibility in the mode of pedagogical organization. This flexibility, says the author, can manifest itself in different ways in:

- The location of the educational sequences,
  - The link between training time, working time and leisure time,
  - The pace of progression and acquisition of skills,
  - The ability offered to everyone to have control over their own training course.
- The diversification of interactions (notion of group). By bringing knowledge closer to learners, FAD recognizes that learning does not result primarily from the interaction between the teacher and the learner or between the latter and other learners but also between the learner and all individuals who surround him (family, community, work...) (Wagner and McCombs, 1995)
- The disaffection of knowledge. In any teaching process the contents are formalized so as to transmit knowledge, cognitions and affective knowledge which seems to be interwoven in the situation itself. But the distance does not allow the teacher to adapt to the representations, the thought and the approaches of the learner, we thus speak of disaffection of knowledge, several researchers have realized this problem and offer hybrid training which combine presence and distance. "Distance learning institutions have gradually introduced forms of presence such as group sessions and peer work in order to bring the learner out of his socio-cognitive and socio-emotional isolation, often considered to be the main cause of discouragement and consequently abandonment." [11]

### 3. Distance training and collaborative learning

Today, learning theories focus on two dimensions: active participation in motivating projects and collaborative work. These constitute the two most important elements of constructivism: a psychological foundation based on the writings of Jean Piaget and a psychosocial dimension based on those of Lev S. Vygotsky. Distance training devices meet the expectations of new learning theories emphasizing cognitivism, constructivism and socio-constructivism.

Take for example Vygotsky (1896-1934), theorist of group learning, who formulated this famous theory: cognitions emerge in and through social interaction. For him:

- The cognitive development of individuals is

strongly linked (correlated) to social interactions (inheritance and appropriation) [12].

- Language plays an important role in learning. For him, the interiorization of practical activities into more complex mental activities is ensured by words, especially written (associated or dissociated), the origin of the formation of concepts. Language is the mediator par excellence of the passage from interiorization to exteriorization. He considers that the instruments of psychological development such as words, research theories, mnemonic processes, etc., are only accessible to the learner within the framework of communication with adults and collaboration with others [13]. Externalization makes it possible to make a cognitive activity explicit, public, negotiable and "united". It saves cognitive activity from the implicit. Internalization process: "what the child can do today with others, he can do tomorrow alone"

Collectively, a learner shares his proximal development zone with the current development zone of the other. The proximal development zone represents what the learner is only able to do when guided by a more competent person while having the knowledge on which he must rely.

This way of conceiving learning assumes that it is preferable to encourage teamwork in a cooperative manner. Hence the interest in organizing collective learning environments.

This allows the learner to adjust his conceptions and structure new knowledge. It is through social interaction, a place conducive to restructuring intellectual functioning, that the learner can build new cognitive tools (socio-construction of knowledge). Vygotsky thus goes beyond Piaget's theory of knowledge construction by speaking of assisted self-structuring. It supports the theory of development in the proximity zone by associating it with the notion of scaffolding (scaffolding). This conception refers to technical strategies and procedures used by the person who constructs a learning for a learner or a group of learners. Scaffolding is more than a succession of stages leading to a knowledge or a skill to be acquired.

### 4. The advantages of distance learning

Among the advantages demonstrated by the authors of this training model we cite:

- The learner works individually in permanent contact with the trainer (s)
- Organize training around groups of learners:

- group videoconferencing for example
- Learners are a self-aware group: It is effective to build a cohesive team.
- Generating its own codes: The team must invent and build its methods of collaboration
- promoting mutual aid networks: including and perhaps even above all outside the tools made available by the trainer. (learning in pairs, by mediation, etc.)

### METHODOLOGY

The methodology recommended for the job leading the investigation based hypotheses to sit a particular reasoning and our experiment will aim to verify the impact of the use of distance education in our sample of 151 trainees representation different cycles ( 101 teachers and 50 educational administrators).

After having undergone a completely online training "the nonexistent face-to-face" of three

### RESULTS

We collected feedback from our questionnaire automatically and periodically after each week of "remote training, the following section summarizes all of the results of our research.

#### 1. In relation to the nature of the courses

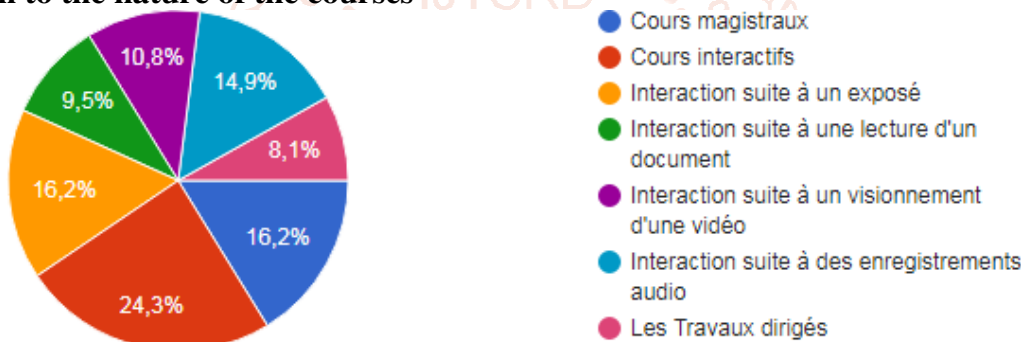


Diagram 1 represents the trainees' preferences in terms of distance learning courses

Diagram 1: Nature of the courses preferred by the trainees

From the results shown in the diagram above, we found that 25% of trainees prefer interactive lessons with the teacher as well as 31% consider collaborative online interaction as the best way to learn, finally 26% preferred recordings for later use.

#### 2. In relation to the schedules of the sessions

The availability and the temporal organization of the course are the most relevant characteristics of an online training. The following diagram represents the preferences of our trainees in relation to the programming of the course

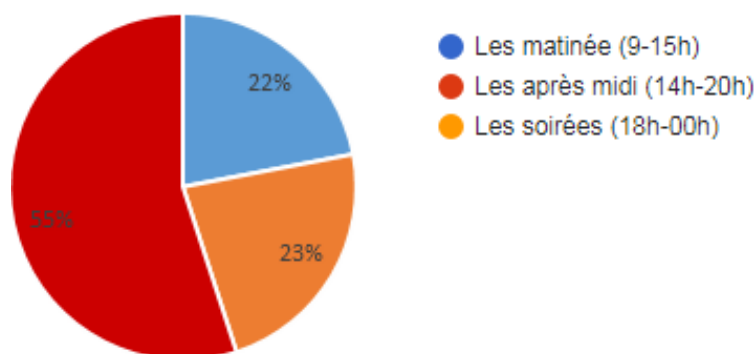


Diagram 2: Course schedules preferred by trainees

months from March 16, 2002 to June 26, 20202 ; trainees are required to complete a questionnaire designed on the basis of "Google forms" and which contains 12 questions relating to 4 components, namely:

- Needs and motivations
- Preferences in terms of course material
- Schedules and programming
- Learning barriers

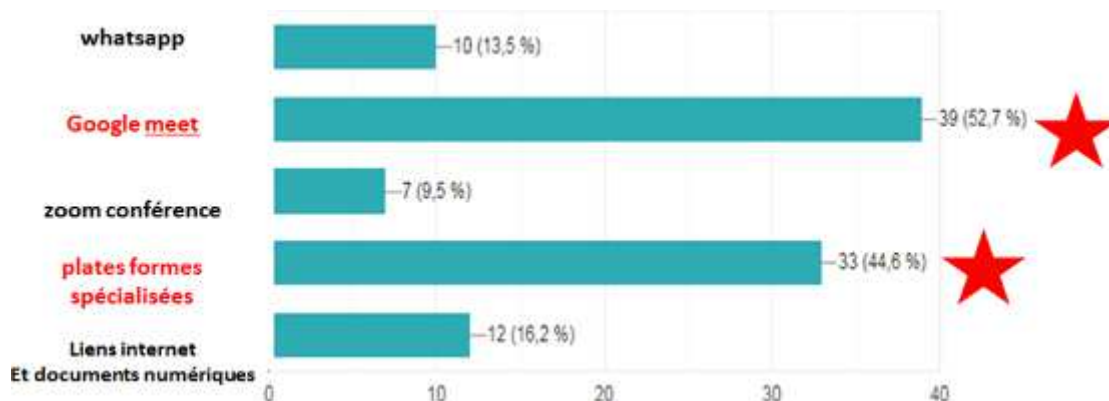
Each section of the four is represented by 2 to 3 multiple choice questions (see appendix). We were thus able to recover 100% of the responses from the trainees.

Finally, we point out that the trainees had a strict course schedule in terms of course or content but they have the possibility of negotiating the schedules of the sessions with the trainers; similarly, the latter have the possibility of choosing between several online training materials.

Analysis of the results of diagram 2 shows that 55% of our population prefers to train in the afternoon (between 2 p.m. and 8 p.m.) against 22% and 23% who like to train simultaneously in the mornings or evenings.

### 3. Compared to course material

In distance learning, several technological tools and techniques are put in place to disseminate or redistribute training content. In our survey we questioned the trainees about their preferences in terms of technological tools, the responses are organized in the following diagram:



**Diagram 3: Digital tools of the courses preferred by the trainees**

From diagram 3, we dispute that trainees value more videoconferencing sessions with a percentage that exceeds 52% and secondly estimate specialized platforms, while only 10% prefer training via social networks.

### 4. In relation to motivation

The motivation of our trainees in relation to the modes and the training courses is represented on a weekly basis in diagram 4

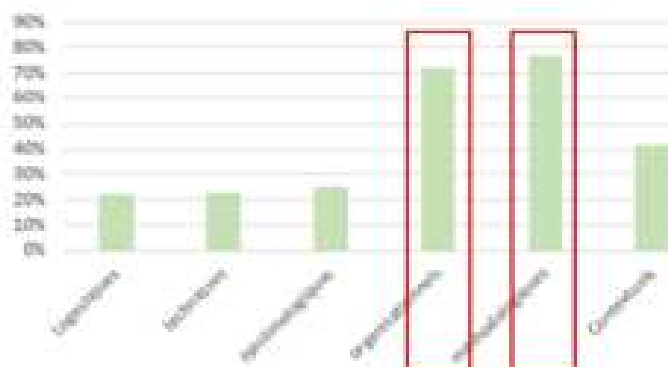


**Diagram 4: Weekly evolution of intern motivation**

Our diagram 4 reflects the decreasing motivation curve from the first week to the fifth this is explained by the monotony and the stable nature of the types of the pedagogical interventions, also noting us a slight increase in the motivation following an introduction of the quizzes and the quizzes. assessment topics towards the end of the training modules.

Beginning of the course until the end and this is explained by the monotony of the courses programmed by our trainer

### 5. Limits and obstacles of distance education



**Diagram 5: Limits and obstacles of distance education**

It appears that the majority of the trainees suffered from organizational problems or from the scheduling of the sessions explained in general by the course load, similarly the methodological obstacles are declared by 76% of the population which clearly shows that the key to the success of such a mode of training at CRMEF is good planning. In another stolen other technical and conceptual obstacles are declared emanating from a mixture of knowledge, to the approaches employed by the trainers and to the unstable and monotonous nature of the cc learning situations which increases the gap between the objectives of the training, training and the technico-cognitive strategies of the trainees.

## DISCUSSION

The concluded results of our research have focused on several challenges of the course planning methodology and the management of online content within our CRMEF, these nuances are presented in relation to two axes: the educational axis or strictly speaking andragogic which defines the nature of the interactions and the learning strategies mobilized or also the organizational and methodological axis which is summed up in the choice of supports and technical tools and the programming philosophy of training actions.

In this perspective, we confirm that respect for the trainees' needs, their motivations and their strategies, is decisive in achieving the final objective of the training which is the development of socio-professional skills, in this perspective a success of distance training at the CRMEF is achievable by implementing a strategy based on several didactico-andragogical adaptations, namely:

- Methodological adaptation 1: in relation to the didactic component:
  - Plan interactive lessons rich in social interaction situations
  - Set up a digital bank of training situations.
- Methodological adaptation 2: in relation to the design / planning
  - Streamline training programs
  - Our observation confirms that the visual style is dominant among trainees of this generation, which encourages us to mobilize it more in digital resources
- Methodological adaptation 3: in relation to the interaction
  - Open debates around the course modalities
  - Enhances retro-learning following traceability ensured by modern supports

- Methodological adaptation 4: in relation to innovation

The results of figure 4 invite us as an actor in this process of varied the types of courses and to appeal to the novelty in us act of formation.

- Methodological adaptation 5: in relation to andragogical approaches

From this perspective in FAD, it is above all necessary to think about organizing the courses in form and substance according to an efficient andragogical approach.

As this mode of training requires technical-pedagogical adaptations, distance training has also proven its contribution, both pedagogically and organizationally.

En regard to the educational component:

The contribution of distance training was marked on:

- Diversification:
  - The diversification of learning methods and strategies, in order to adapt to the variety of learners' cognitive styles ;
  - Diversification of assessment methods and introduction of the formative approach
  - Diversification of skills at develop and introduction of complex skills;

Innovation

Introduction of innovative learning methods and strategies mobilizing metacognition in the training process.

- Enrichment of digital content.
- Interaction
  - Exploitation and development of quality interactions
  - Create moments of sociocognitive conflicts
- Self-monitoring and self-management
  - Regulation and upgrading manage autonomously
  - Adopt a knowledge management strategy.
- Availability and motivation
  - Learn freely in time and space;
  - Improvement of accessibility to content;
  - Possibility to make Choice of type of exercise, of task according to individual needs
- Flexibility
  - Adaptation of knowledge according to the pace of learning
  - Learn at your own pace
  - Improved economic efficiency.

## CONCLUSION

In conclusion, distance education within the CRMEF must imperatively be part of the curriculum, either in a time of crisis or not. This will require a new educational and didactic approach and adequate training on the one hand, and on the other hand, it will be necessary to review our training systems and our systems of evaluation and grading of final exams, quality to the detriment of quantity, for more returns, through skills-based approaches and inverted classes.

With this in mind, before setting up the process of setting up distance training and the technical-pedagogical engineering of the supports, it is above all necessary to think about organizing the courses in form and background according to an andragogical approach. efficient based on the following five points:

Firstly, the time and planning factors are essential for a successful FAD action, which prompted us to negotiate these two elements with our trainees.

Second, in relation to the principle-experiences, it is essential to think about mobilizing the trainee in the course around known concepts or objects of research started before.

Thirdly, in order to promote continuous motivation, we must on the one hand think about varied and innovative ideas, and on the other hand encourage the use of new online training supports.

Fourth, having the course at the end of the training is always desirable but if the trainees giving the opportunity to discuss and share benefits their points of view will be much better.

Finally, setting up a training evaluation system is essential to improve the quality of the educational intervention.

To conclude, we would like to remind you that it is essential in the engineering of our distance learning courses to go through 5 stages, namely: the diagnosis of needs, the Benchmark or the comparative study of digital tools, the planning of courses and sequences, the andragogical approach to be followed and the evaluation, each step has its essential place in this training process and such a success of online courses is only possible through a well- founded design and monitoring strategy.

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