



ESJ Social Sciences

## Teachers' Perception of the Moroccan ICT Portal of the Ministry of Education

*Youssra El Janous, PhD student*

Interdisciplinary Laboratory of Research in Pedagogical Engineering (LIRIP), Abdelmalek Essaadi University, Tetouan - Morocco

*Mohamed Laafou*

Professor, Interdisciplinary Laboratory of Research in Pedagogical Engineering, Abdelmalek Essaadi University, Tetouan - Morocco

*El Hassan El-Hassouny*

Professor, Higher Institute of Nursing Professions and Health Technique Tetouan - Morocco

*Mourad Madrane*

Professor, Interdisciplinary Laboratory of Research in Pedagogical Engineering, Abdelmalek Essaadi University, Tetouan – Morocco

[Doi:10.19044/esj.2022.v18n12p155](https://doi.org/10.19044/esj.2022.v18n12p155)

Submitted: 02 March 2022

Accepted: 12 April 2022

Published: 30 April 2022

Copyright 2022 Author(s)

Under Creative Commons BY-NC-ND

4.0 OPEN ACCESS

*Cite As:*

El Janous Y., Laafou M., El-Hassouny E.H. & Madrane M. (2022). *Teachers' Perception of the Moroccan ICT Portal of the Ministry of Education*. European Scientific Journal, ESJ, 18 (12), 155. <https://doi.org/10.19044/esj.2022.v18n12p155>

### Abstract

School failure is a difficult experience for students and their families. The identified causes of such failures however vary. While some are related to the educational system, others are extrinsic and related to the family or society. This paper focuses on promoting the notion of equity in education since there is a close relationship between equality of opportunity and the reduction of school failure and drop-out. Oftentimes, students from disadvantaged social backgrounds have less access to teaching aids, which results to the highest rate of school failure. The results interpret two things: the impact of the integration of the ICT in education through the Ministry of National Education and Vocational Training and the use of teaching aids in the performance of students. Through the responses of students and teachers to the questionnaire, two main factors of school failure were distinguished. The first factor is specific to the school such as teaching and evaluation

methods, the school climate, the content of the curricula taught, and the difficult relationship between teacher and student, while the second factor is identified outside the school such as the students' standard of living or the lack of support at home.

---

**Keywords:** School failure, education system, ICT, educational means, digital resources

## I. Introduction

The term “school failure” is a recent notion. In France, in the middle of the twentieth century, few students reached a longer and more advanced level of study, while a larger number of students went to school only to acquire basic knowledge like reading, writing, and counting (Chauveau & Rogavas-Chauveau, 1995).

However, the galloping socio-economic change and the unbridled urbanization, as well as the appearance of more technical jobs, made schooling compulsory for the majority of the population from 1959 onwards, especially since the discourse of the public authorities focused more and more on the role of the school in correlation with economic development.

As a result, a growing number of students found themselves on the school benches, thereby revealing school failure. According to Philippe Perrenoud, a good number of them found themselves "gathered and compared in view of a selection at the entrance to secondary school" (Perrenoud, 1995), to the pedagogy at the school of differences, and most of them did not succeed in the passage from primary to secondary school.

Although it seemed normal that there were intelligent students who succeeded in their studies and other unintelligent ones who failed, some humanists and pedagogues like Louis Legrand looked into the heterogeneity of the school environment and tried to elaborate on new pedagogical methods to offer all students the same chances to succeed at school (Legrand, 1994). However, a significant quote from Jean-Jacques Ayme work titled “Laïcité - École laïque” was affirmed by Pierre Bourdieu in 1966: "For the most favored to be favored and the most disadvantaged to be disadvantaged, it is necessary and sufficient for the school to ignore, in the content of the teaching transmitted, in the methods and techniques of transmission and in the criteria of judgment, the cultural inequalities between the children of the different social classes" (Ayme, 2015).

According to him, it is the disregard of differences between individuals that creates the differences as a final result.

In the same context, a study was carried out by Alette Fuxet under the title "school failure and differentiated pedagogy"(Fuxet, 2004).

In 1975, the establishment of a single college was accompanied by the advent of differentiated pedagogy based on the work of Louis Legrand (Legrand, 1994) in junior school. It was mainly a question of making the transition from mass teaching to democratization and individualization of teaching on a case-by-case basis, which led to the establishment of level groups.

Thus, in 1989, the foundation of equal opportunities in the education system was officially promulgated through the Orientation Law in France. According to this law, teachers are required to take into consideration the learning pace of each student in their practice in order to bring 80% of students to the level of the baccalaureate.

In the middle of the 90s, France recorded very high unemployment rates. According to Gérard Chauveau, the notion of school failure affects the educational system in its entirety, which no longer ensures one hundred percent integration into the world of work. He opined that the more the requirements of the educational system increase, the more the school failure is placed on a higher level (Chauveau, 1996).

### **Context/Issue**

In Morocco, the issue of school failure has recently reached a worrying level. The latest reforms of the education system have enabled the students to pass their school year regardless of the knowledge and skills they have acquired. Certainly, important progress has been made in reducing the rate of academic failure in Moroccan schools. However, there are many disillusion, especially in the way teachers and students perceive this problem.

### **General Objective**

The objective of this study aims to explore the perception of teachers and students so as to identify the causes of school failure. The province of Ouazzane is used as a case study.

### **1. Materials and methods**

In this paper, the validity of the hypotheses will be examined based on an in-depth analysis of the questionnaire aimed at exploring the causes of school failure.

### **Research Methodology**

#### **Choice of Tools**

One of the steps in any research process is questioning. For this reason, a questionnaire was administered in order to verify the validity of the hypotheses that were extracted from the analysis of the databases studied. The

choice of using a questionnaire as a methodological tool for the research was intended to:

- Provide qualitative responses.
- Facilitate access to information.
- Have a large number of people in a relatively short period of time.
- To be completed anonymously and at the person's own pace without feeling any external pressure or interference from the interviewer.

### **Target Audience**

The questionnaires were administered to 1000 teachers of secondary college and qualifying education who all belong to the Provincial Directorate of Ouazzane, while 100 college students belong to the different colleges of the province.

### **The Questions in the Questionnaire**

This questionnaire is composed of the following 6 questions:

- Does the use of teaching aids (video projector, computer, interactive board, etc.) improve the student's level of learning?
- Do you use the portal of the Ministry of Education for the integration of ICT in education?
- Do you integrate ICT into your teaching process?
- Do you know the digital resources that are provided by the Ministry of Education?
- Have you attended any training courses organized by the Ministry?
- What type of training do you prefer?

### **Data Processing**

The questionnaires were analyzed anonymously. All the information collected was copied onto a computer format in order to process and analyze it with Excel software. Using this software, the results of the questions were translated as follows:

- Yes / No: in the form of a pie chart.
- Closed with multiple choices: in the form of a histogram graph.

## **II. Results and Discussion**

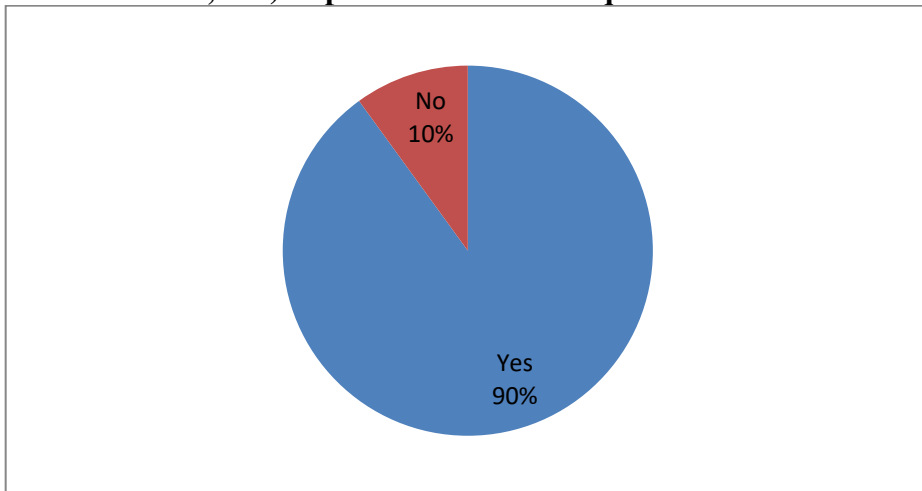
### **Presentation and Analysis of Results**

#### **Information and Communication Technologies for Education (ICT in education)**

The questions in this axis validate or invalidate the hypotheses that determine the role of information and communication technology in education for academic success. This axis consists of 6 questions:

1. Does the use of teaching aids improve the student's level of acquisition?
2. Do you use the portal of the Ministry of National Education ([www.taalimtice.ma](http://www.taalimtice.ma)) for the integration of ICT in education?
3. Do you integrate ICT into the teaching process?
4. Do you know the digital resources provided by the Ministry of National Education and Vocational Training?
5. Do you Follow-up training courses organized by the Ministry?
6. What type of training is preferred by teachers?

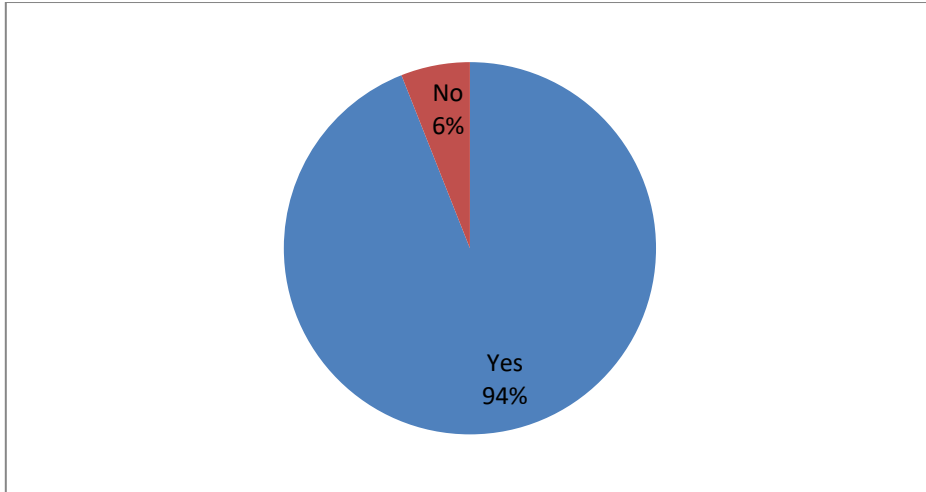
**Question 1: Does the use of teaching aids (video projector, computer, interactive board, etc.) improve the level of acquisition of the student?**



**Figure 1.** Teaching aids (Video projector, Computer, Interactive board, etc.) and the level of acquisition of the student (Teacher's point of view)

The graph presents the teachers' answers concerning the use of pedagogical means such as video projectors, computers, interactive boards, etc., to improve the level of acquisition of the students. 90% of the teachers affirm that the use of these tools improves the level of acquisition, while 10% of the teachers do not see a relation between the two.

The same question was asked to the students, and the graph below shows the answers received:

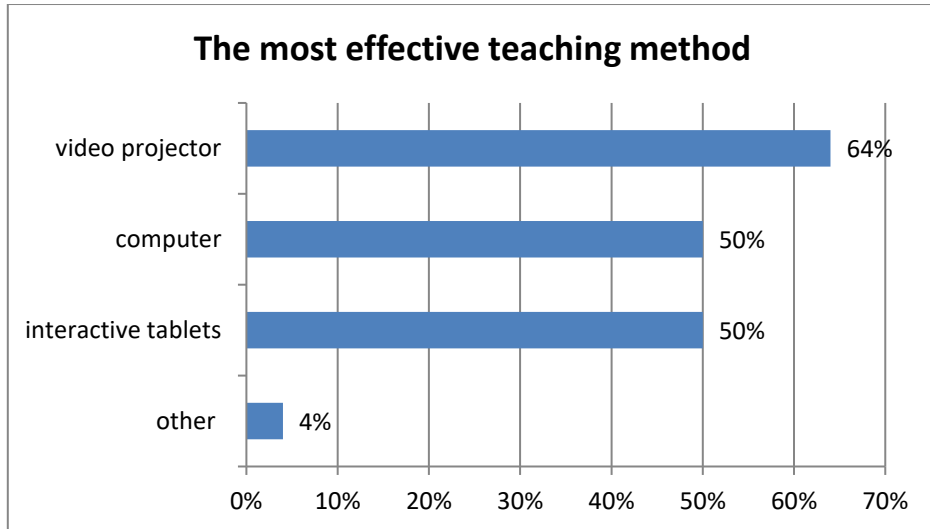


**Figure 2.** Teaching aids (Video projector, Computer, Interactive board, etc.) and the level of acquisition of the student (Student's point of view)

Figure 2 indicates that 94% of the students are of the opinion that the use of a video projector, computer, or interactive whiteboard improves their acquisition, while 6% of the students assert that the level of knowledge acquisition is not related to the use of these means. Thus, students and teachers are generally in favor of the use of digital technology.

In the same view as the responses of teachers and students, the documentary review "TACT production" states that "Technologies (video projector, computer, interactive board, etc.) can contribute in several ways to advance the assimilation of knowledge in the various educational subjects as well as the improvement of skills and behaviors that are attached to this knowledge. The nature and development of this learning remain linked to the students' prerequisites and the activities they carry out with these techniques" (Bracewell & Laferrière, 1996).

In addition, teachers were asked to identify the most effective tool among these different tools and to mention any other tools. The graph below shows the teachers' answers to this question.



**Figure 3.** The most effective teaching method

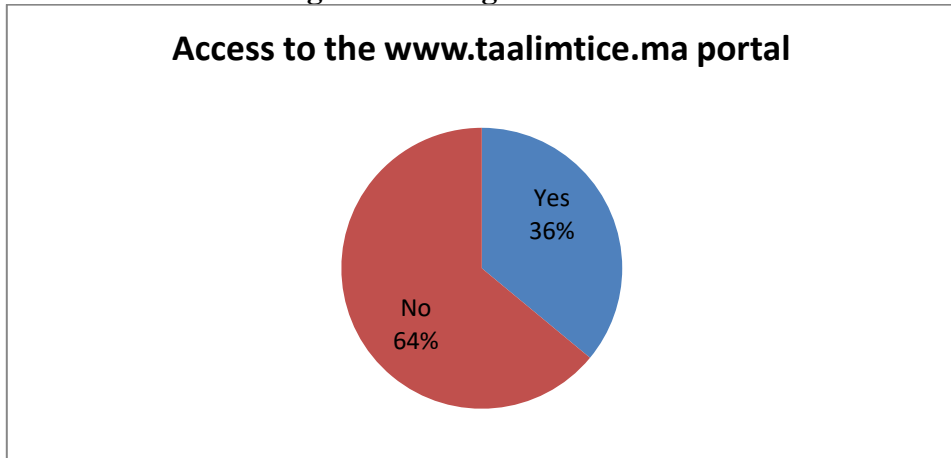
According to the teachers' answers, 50% state that the use of a computer with a video projector is the most effective method. On the other hand, 50% of the teachers opine that the use of an interactive board with a video projector is the most active means, while 4% of the teachers suggest that there are other more effective tools such as the Smartphone, the digital binder (interactive tablets), and the social networks.

In the same context, a study conducted by Laval University and McGill University on the contribution of NICTs to the learning of primary and secondary school students announces that "The use of computers seems to be well used, along with other pedagogical innovations (video projector, courseware, etc.), to improve the acquisition of students in various subjects such as English, mathematics, and science" (Bracewell & Laferrière, 1996).

Concerning the interest in using an interactive whiteboard, Louise Sarrasin announces in her article, TBI/TNI and the 3-O strategy in MST, that "The 3-O approach (TablO-BurO-CervO) integrates three known areas of the classroom, i.e., the blackboard (or the front of the class), the desk (the student's working environment) and the brain (where learning takes place), which is taken advantage of by teachers. As the teacher works with TBIs, the students should thus be allowed to learn in these three spaces (TablO-BurO-CervO). Also, the teacher is definitely required to modify the learning situations (Sarrasin, 2012).

Based on the responses of teachers, students, and the research conducted in this area, it is deduced that the use of teaching aids such as video projectors, computers, TBI, and others remains one of the most important tools for academic success.

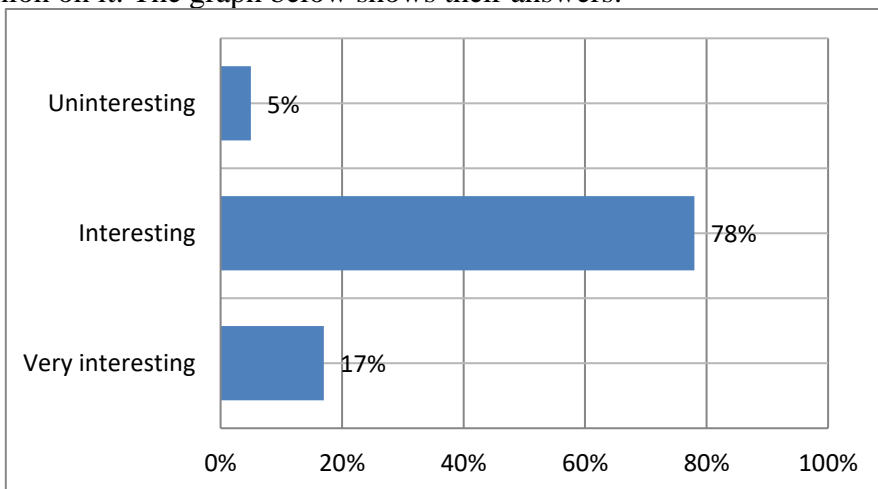
**Question 2: Do you use the portal of the Ministry of National Education and Vocational Training for the integration of ICT in education?**



**Figure 4.** Percentage of access to the www.taalimtice.ma portal (Teacher's point of view)

The graph in Figure 4 shows the percentage of access by teachers to the Ministry of Education portal (www.taalimtice.ma) for the integration of ICT in education. Nearly 64% of teachers do not use this portal, and only 36% access it.

Thereafter, the teachers who use this portal were asked to give their opinion on it. The graph below shows their answers.



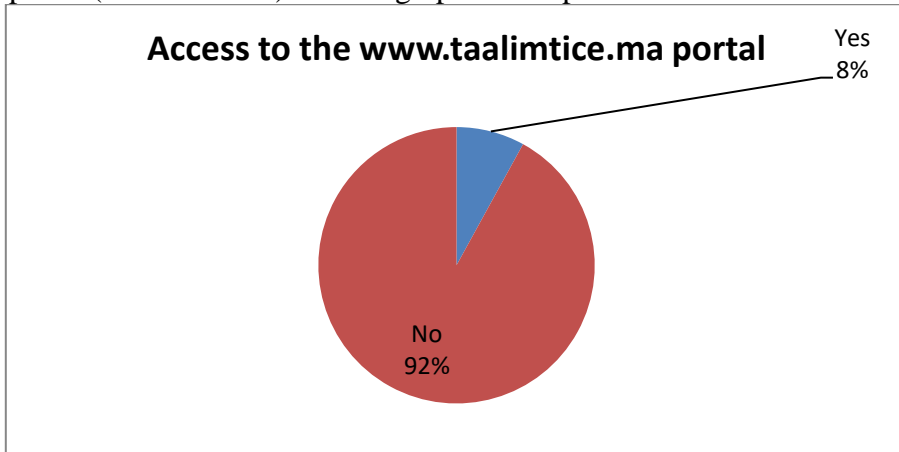
**Figure 5.** Teacher ratings on the www.taalimtice.ma portal

From Figure 5, it can be seen that 78% of the teachers who use this portal find the content of the site interesting. Subsequently, 17% of the teachers find the content of the portal very interesting, while 5% find the



content of this portal uninteresting. Using these percentages, it suffices to say that the site is interesting, but most teachers are not aware of it.

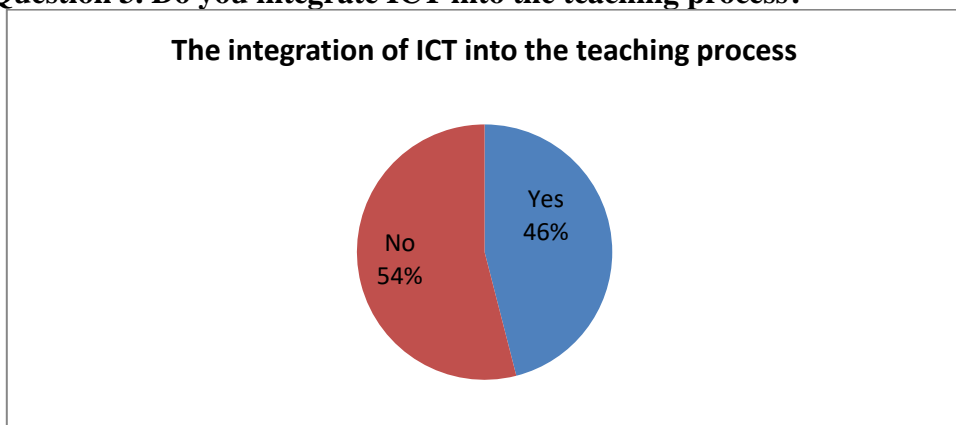
The same question was asked to the students concerning the access to the portal (taalimtice.ma) and the graph below presents their answers.



**Figure 6.** Percentage of access to the www.taalimtice.ma portal (Student's perspective)

Figure 6 shows that 92% of students did not access this portal, and only 8% consulted it. The portal (taalimtice.ma) was created by the Ministry of National Education to facilitate access to digital resources for different subjects, from the first year of primary school to the second year of the baccalaureate, in order to integrate ICT into the teaching process. The portal contains a large number of applications and a lot of videos to facilitate the explanation of different phenomena. Therefore, it is necessary to sensitize teachers through meetings, notes from the ministry, or announcements to access this portal and also to sensitize students on the importance of using this portal.

**Question 3. Do you integrate ICT into the teaching process?**



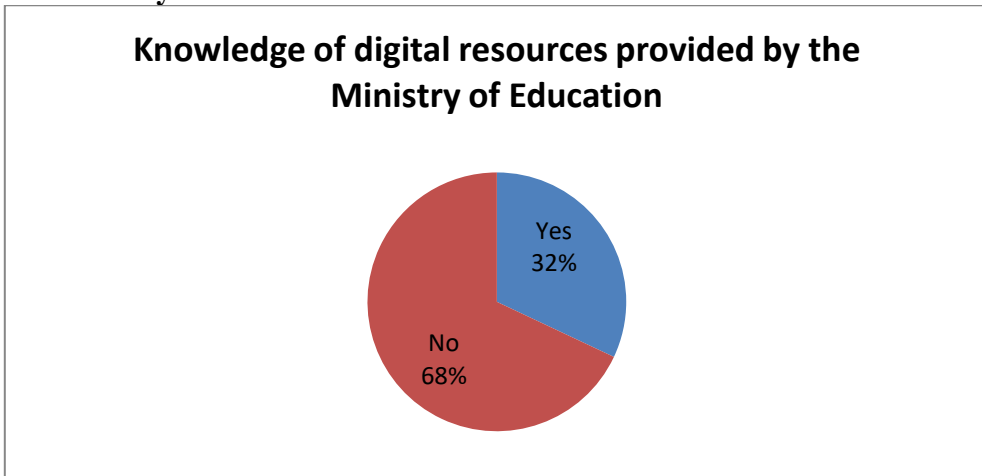
**Figure 7.** The integration of ICT into the teaching process

The graph shows the percentage of teachers who integrate ICT in the teaching process. Figure 7 shows that 54% of teachers do not integrate ICT in the teaching process, while 46% of teachers integrate ICT in the teaching process. According to Nicole Perreault in her research entitled "Rôle et impact des TIC sur l'enseignement et l'apprentissage au collégial", she states that "ICT improves the adoption of a pedagogical method that places the student in the middle of the learning process. Certainly, ICT provides new means, not only for the dissemination of knowledge but also for the deepening of learning that promotes the construction of competencies" (Perreault, 2003).

In the same vein, Catherine Bizot stated in an interview on "Numerical schooling" that "The ICT in education provides an opportunity to improve and vary teaching practices which are becoming more and more interactive and better adjusted to the wishes of each student. It also allows the adaptation of teaching according to the profile of each student, as well as group work in project logics where they can carry out an activity together. More so, it offers the way to the development of the courses through the provision of several educational resources. Furthermore, it offers the possibility for all students to access information and develop the link between the school and the environment, especially with families" (Bizot, 2013).

Based on these statistics and the benefits of ICT integration, the ministry should put more effort to encourage teachers to integrate ICT into their teaching process.

**Question 4: Are you aware of the digital resources that are provided by the Ministry of Education?**



**Figure 8.** Knowledge of digital resources provided by the Ministry of Education

Every year, the Ministry of National Education, more precisely the Engineering Directorate, offers CDs containing digital educational resources for students of all levels and for all subjects (mathematics, life science, and

earth, Arabic language, etc.) to each provincial directorate of the Ministry. Figure 8 shows the statistics of teachers who are aware of these digital resources. While 32% of teachers are aware of these resources, 68% of teachers are unaware. It is also noted that more than two-thirds of teachers do not know that these resources actually exist. Thus, despite the efforts of the Ministry to create these digital resources, this digital content is hardly being used by teachers.

The graph below shows that among the teachers who know about these digital resources, 62.5% use them in their learning process while 37.5% of the teachers do not use them.

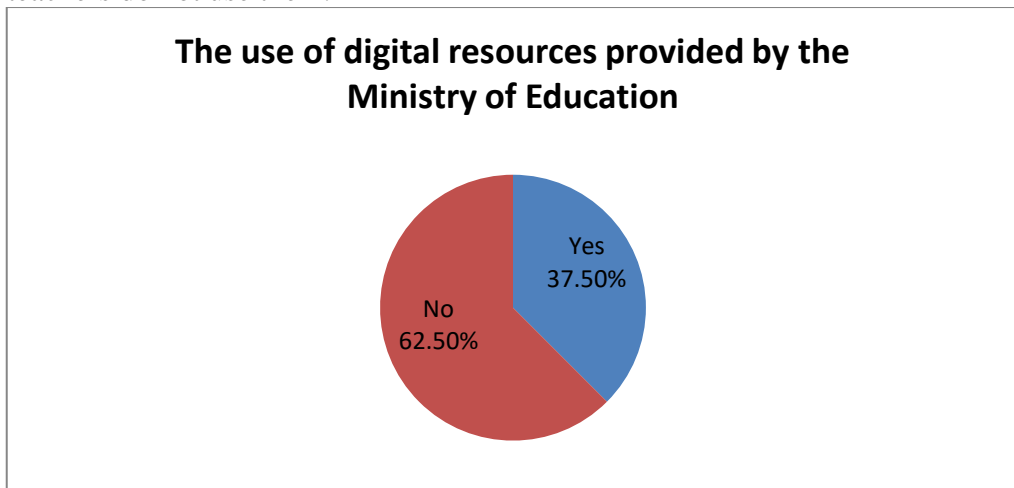


Figure 9. The use of digital resources provided by the Ministry of Education

The teachers who use these resources were asked to give their opinion on the use of these resources, and their responses are presented in the graph below.

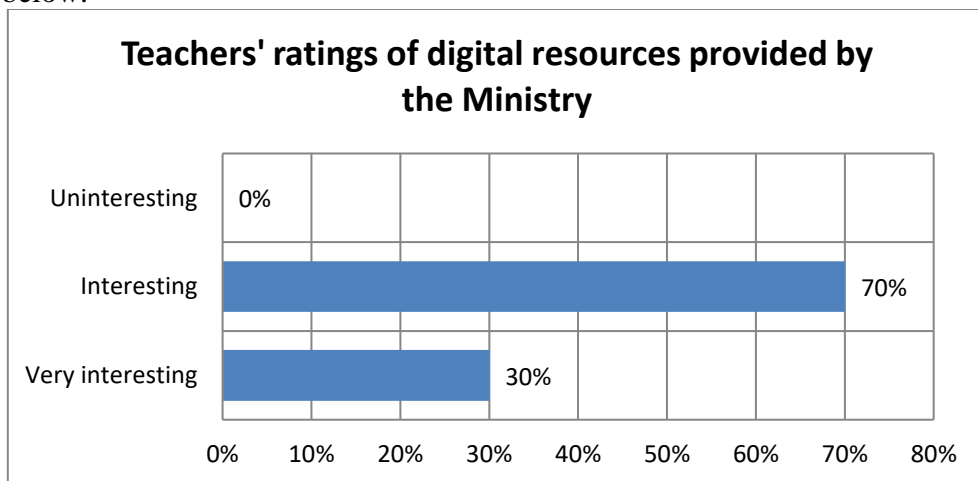
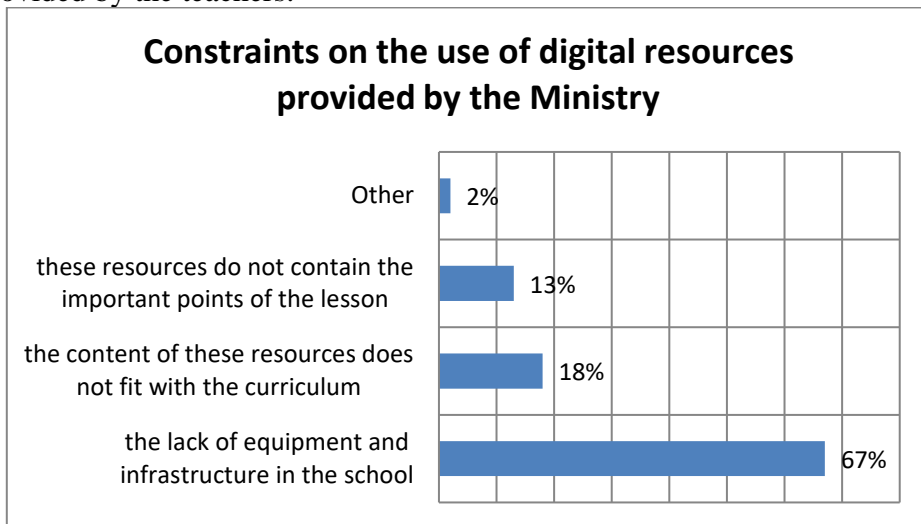


Figure 10. Teachers' ratings of digital resources provided by the Ministry

According to Figure 10, 70% of teachers find these resources interesting while 30% of teachers state that these resources are very interesting.

Digital learning resources offer a very important capacity for pedagogical renovation, which allows the advancement of the performance and equity of the educational system. The digital educational resources provided by the Ministry are very effective and important in the learning process. Also, they allow teachers to integrate ICT in teaching in an easy and quick way (without any effort of research or creation by the teacher).

Conversely, the same question was asked to the teachers who know about these resources and do not use them in order to justify why they never integrate them into the learning process. The graph below shows the answers provided by the teachers.



**Figure 11.** Constraints on the use of digital resources provided by the Ministry

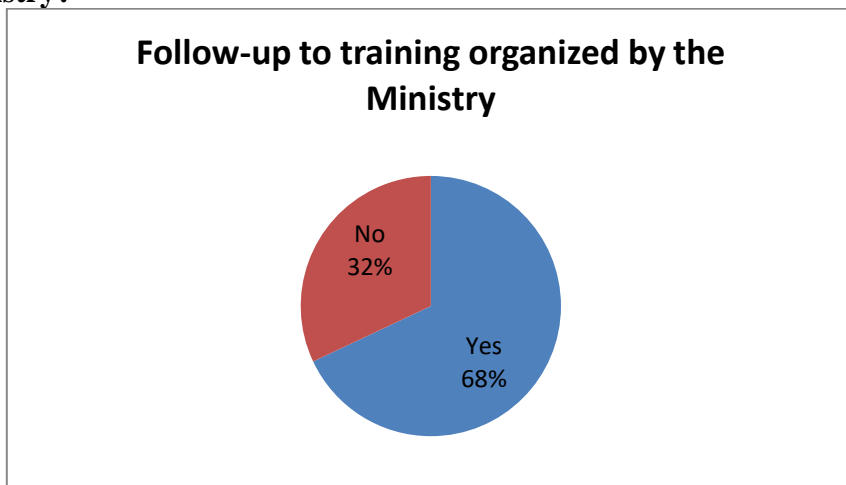
According to Figure 11, 67% of the teachers do not use these resources because of the lack of equipment and infrastructure in the school. Also, 18% of the teachers are of the opinion that the content of these resources does not fit with the curriculum. Furthermore, 13% of the teachers stated that these resources do not contain the important points of the lesson, while 2% of the teachers assert that there are other constraints such as incompetence in using computer tools.

Despite the efforts of the Ministry of National Education, in the field of integration of ICT, to aid the learning process through the creation of the portal and the distribution of digital resources, teachers are still unaware of the availability and ready usage of these resources (i.e., the portal and digital resources). Therefore, the Ministry should create methods of publication and

announcements to inform and sensitize teachers on the importance of these resources.

Subsequently, it is necessary to create an infrastructure that will facilitate and encourage teachers to use these technologies. For example, it is necessary to equip all rooms with at least one computer, a video projector, and a modem to access the Internet and also change the blackboards to interactive whiteboards (TBI). However, it is important to check these resources to avoid differences between them and the curriculum of the subject taught. The teachers also require training so as to comprehend the methods of integration of ICT in the learning process.

**Question 5: Have you attended any training courses organized by the Ministry?**



**Figure 12.** Follow-up to training organized by the Ministry

Figure 12 shows that 68% of the teachers state that they have already taken a training course set up by the Ministry, while 32% of the teachers assert the opposite. The 68% of the teachers have taken one of the following trainings:

- Microsoft Office Specialist training,
- Training in integration pedagogy,
- Engineering training.

Concerning the importance of teacher training, Michael Barber and Mona Mourshed, in their study titled "Keys to the success of the best performing school systems", stated that "The best-performing systems are proof that, in the end, it is the level of teacher competence that makes a school system good" (Barber & Mourshed, 2007).

It should be noted that the percentage of beneficiaries is a little high. Therefore, it is necessary to reach 100% of the beneficiaries. This is because

all the teachers must follow at least compulsory training during one school year so that they remain up to date with the innovations in teaching and new learning technologies.

To this end, the Ministry has created the MOOC (Massive Open Online Course) ICT in education engineering platform (Information and Communication Technologies in Education) for the training of teachers in the field of computer science to improve their performance. This, in turn, will increase the success rate of students.

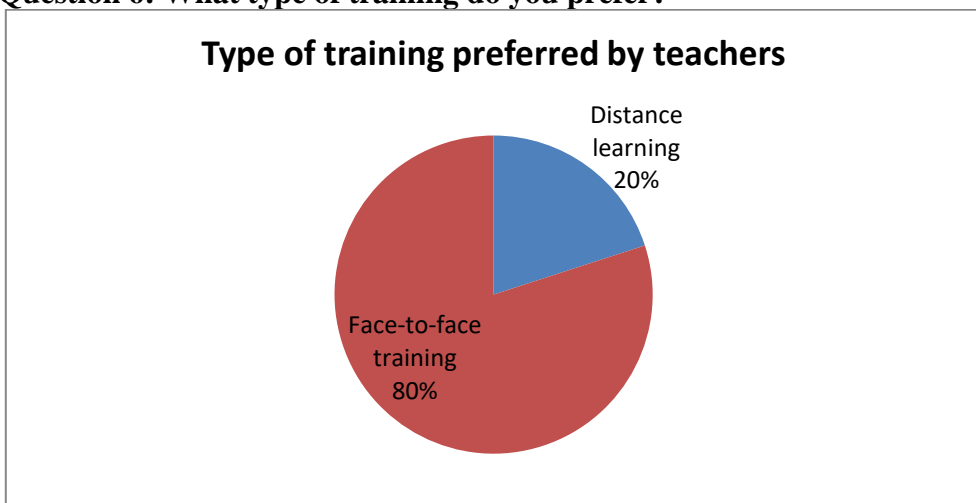
The training within the ICT in education engineering MOOC is divided into sections and each section represents an AREF (Regional Academy of Education and Training). By simple method of organization, the teacher could follow the training only in his section. In addition, the content of the training remains the same at the national level.

The ICT in education engineering online platform is a learning and professional development space, which is dedicated specifically to education professionals who wish to improve their skills and knowledge in the use and integration of ICTs. The platform makes available online courses and resources for the purpose of following up before, during, and after the training courses.

Participants have a choice of access to resources and courses according to their wishes and pace. These courses are integrated into the platform in such a way that participants can access them even before attending the face-to-face training.

In this survey, none of the teachers interviewed are registered on this platform. For this purpose, teachers were asked to identify the type of training they prefer.

**Question 6: What type of training do you prefer?**



**Figure 13.** Type of training preferred by teachers

It is observed from Figure 13 that 80% of the teachers prefer face-to-face training, while only 20% of the teachers favor distance learning. This result reflects the absence of MOOC registration by teachers. The main constraint of distance learning is that the learner (teacher) is alone in front of the class session. There is no instructor who can give a written or oral explanation or demonstration, and there are no fellow students who can motivate each other. For this reason, most teachers opt for face-to-face training.

Teachers were also asked to identify the types of motivations that might encourage them to take training. From the teachers' responses, the graph below

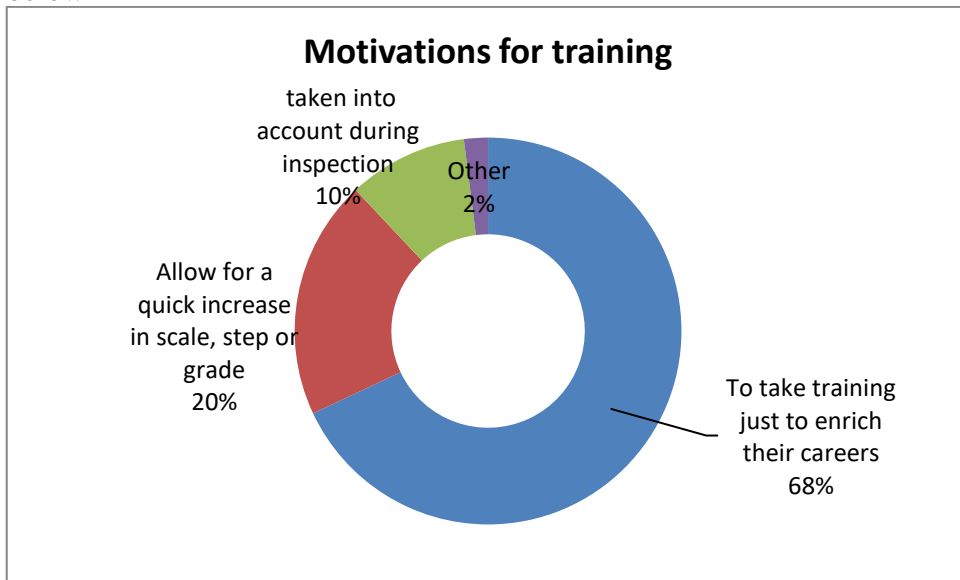


Figure 14. Motivations for training

According to this graph, 68% of teachers state that they want to take training just to enrich their careers, while 20% indicate that training should allow for a quick increase in scale, step or grade. On the other hand, 10% of teachers consider that training should be taken into account during the inspection.

Research shows that the most important factor in teacher improvement is the development and improvement of skills, as well as updating and increasing knowledge.

### Conclusion

Affirmatively, the result of the analysis carried out through the questionnaire reveal that there is no single cause of school failure, but several

overlapping causes. Therefore, the main causes of school failure are summarized in this research as follows:

- Pedagogical learning methods used by teachers,
- Techniques of animation and motivation of the student,
- Lack of integration of ICT into the learning process and lack of use of the department's digital resources,
- The lack of in-service training for teachers,
- The lack of good infrastructure, poor school climate, and unfavorable working conditions,
- And the different levels of difficulty of the students.

From this empirical study, it is observed that the ministry provides enough efforts to develop the level and performance of the teachers, especially in the field of integration of ICT (MOOC, ICT in education platform). Nonetheless, the majority of teachers are unaware of this, despite their interest in this field of integration of ICT in the learning process. Concerning the students, there is a digital space dedicated to them that meets their multiple needs.

### References:

1. Ayme, J.J. (2015). Laïcité - École laïque "Collection cours d'Histoire". FINLANDE : Éditions Atramenta.
2. Barber, M. & Mourshed M. (2007). Les clés du succès des systèmes scolaires les plus performants. Chicago USA : Éditions McKinsey & Company.
3. Bizot, C. (2013). Numérique scolaire - Interview. Published at [www.20minute.fr](http://www.20minute.fr) available at <http://www.20minutes.fr/magazine/numerique-alecole/interview/le-numerique-augmente-la-motivation-et-le-plaisir-dapprendre-5016/> [Accessed April 28, 2021].
4. Bracewell, R. & Laferrière, T. (1996). L'apport des nouvelles technologies de l'information et de la communication (NTIC) à l'apprentissage des élèves du primaire et du secondaire. Canada : Éditions L'UNIVERSITÉ LAVAL et de L'UNIVERSITÉ MCGILL.
5. Chauveau, G. (1996). L'échec scolaire existe - t - il ?, in *Échec et réussite scolaires* (n°104). Paris : Revue Migrants - formation.
6. Chauveau, G. & Rogovas-Chauveau, E. (1995). *À l'école des banlieues*. France: Éditions Esf Editeur.
7. Fuxet, A. (2004). *Échec scolaire et pédagogie différenciée*. Marseille : Éditions de l'institut universitaire de formation des maîtres de l'académie d'aix-marseille
8. Legrand, L. (1994). *Encyclopedic dictionary of education and training*. Paris: Éditions Nathan.



9. Perreault, N. (2003). Rôle et impact des TIC sur l'enseignement et l'apprentissage au collégial. Canada: Éditions Collège Édouard-Montpetit.
10. Perrenoud, P. (1995). La pédagogie à l'école des différences (2nd ed). Paris : Éditions ESF.
11. Sarrasin, L. (2012). TBI/TNI et la stratégie des 3-O en MST. Available on the link: <http://recit.qc.ca/article/tbitni-et-la-strat%C3%A9gie-des-3-o-en-mst> [Accessed May 26, 2021].