

*The impact of the use of modern communication technology on the
educational performance of secondary education teachers*

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Abstract:

Our study aimed to show the means of modern communication technology used in the institution and to know the impact of its use in the educational process to improve the educational performance of the professor as well as to find the difficulties in applying modern communication technology. We relied on the descriptive method by employing data collection tools, which was represented in the observation and questionnaire. We selected a sample of 40 items chosen intentionally, where we reached a set of results, the most important of which are:

- Weak and insufficient modern means of communication in the institution.
- weak training of the professor in the field of modern technology.
- - Lack of clarity of educational goals related to modern communication technology.

key words

Educational performance, Modern communication technology, The use, Teaching performance.

ملخص الدراسة

هدفت دراستنا إلى الكشف عن وسائل التكنولوجيا الاتصال الحديثة المستخدمة في المؤسسة ومعرفة تأثير استخدامها في العملية التعليمية لتحسين الأداء التعليمي للأستاذ وكذلك التعرف على صعوبات تطبيق تكنولوجيا الاتصال الحديثة والحلول المقترحة لممارسة الأساتذة العملية التعليمية بشكل أحسن، وقد اعتمدنا على المنهج الوصفي بتوظيف أدوات جمع البيانات والتي تمثلت في الملاحظة والاستبيان، وقد اخترنا عينة مكونة من 40 مفردة اختيرت بطريقة قصدية حيث توصلنا إلى جملة من النتائج أهمها:

- ضعف وسائل التكنولوجيا الاتصال الحديثة بالمؤسسة وعدم كفايتها.
- ضعف تكوين الأستاذ في مجال التكنولوجيا الحديثة.
- عدم وضوح الأهداف التربوية الخاصة بتكنولوجيا الاتصال الحديثة.

الكلمات المفتاحية

تكنولوجيا الاتصال الحديثة- الأداء التعليمي- الاستخدام، الأداء التدريسي.

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I. INTRODUCTION

The impact of the use of modern communication technology did not stop at the institution's communication only, but went beyond that to the creation of a new method of modern management that differs from the previous method. In fact, modern communication technology has contributed to changing the contents of the traditional management functions in the organization from planning, organizing, controlling, coordinating, and making decisions. The impact of modern communication technology is not limited to this only, but also contributed to raising the level of performance productivity and reducing costs. Algerian institutions are not far from this development, as if we look at them, we will see the clear impact of the network economy by moving from a period in which it relied on classical methods, to a modern stage based on modern traffic based on the system of information networks, the Internet and the Extranet, especially after the efforts of the Algerian state through The strategy of spreading computers, research and development in the field of modern communication technology, which is reflected in the various activities of public institutions, and has an impact on the employee's performance in them, increasing his efficiency and improving his performance. Bir Mokadam / Tebessa, which uses modern communication technology in its various applied classes to raise and improve the performance of the teacher and help him convey the information to the minds of the students in a way of presenting, talking and an applied and visual explanation, but the process of the teacher's use of modern communication technology does not necessarily reflect its impact On their performance, this is what made us pose the following problem:

What is the effect of using modern communication technology on the educational performance of the teachers at Mubaraka Bouregaa High School in Bir Mokadam/Tebessa?

Subquestions:

- 1- What are the means of modern communication technology used in the institution?
- 2- What is the impact of using modern communication technology on the educational process?
- 3- What is the role of modern communication technology in raising academic achievement?
- 4- What are the areas of the professor's use of modern communication technology?
- 5- What are the difficulties of applying modern communication technology and the proposed solutions for the practice of teachers to perform education better?

1. The importance of the study:

The importance of this study stems from the importance of the topic it discusses, which deals with modern communication technology and its impact on improving the educational performance of secondary education teachers at at Mubaraka Bouregaa High School in Bir Mokadam/Tebessa?in Bir Mokadem. This importance is demonstrated by the following:

- Enriching information and increasing knowledge on this topic, which is one of the important topics in our time. The study tackled the topic of modern communication technology as a focus for developing the educational process in conditions of changing educational curricula and its important role in raising and improving the efficiency and performance of the educational teacher.
- Awareness of the educational staff at Mubaraka Bouregaa High School in Bir Mokadam/Tebessa?about the role that modern communication technology plays in improving educational performance.

Presenting a scientific view that may contribute to increasing the knowledge of officials and teachers in Mubaraka High School with a paper on modern communication technology and how to use it and take harsh advantage of it, which is positively reflected on the level of their educational performance, in addition to the fact that modern communication technology is one of the most important and most influential factors on the teachers' educational performance. In addition, modern communication technology is one of the most important and most influential factors on the educational performance of teachers.

2. Objectives of the study:

Disclosure of the means of modern communication technology used in the institution.

Knowing the impact of using modern communication technology in the educational process.

- Demonstrating the role of modern communication technology in raising academic achievement.

Determining the areas of the professor's use of modern communication technology.

- Identifying the difficulties of applying modern communication technology and the proposed solutions for teachers to practice their teaching performance in a better way.

3. Reasons for choosing the topic:

Our choice to study modern communication technology and its impact on the educational performance of secondary school teachers was the result of a group of subjective and objective reasons and motives, and they can be summarized in the following:

3.1. subjective reasons:

- The importance of the topic, especially with the developments witnessed by modern communication technology, and the teachers' reliance on it to provide lessons.

- The tendency to research the field of modern communication technology and the factors it contains.

- Enriching the university library with a topic that deals with the field study of an educational institution.

- Completion of the memorandum to obtain a master's degree.

- The ability of the subject to be completed and studied.

3.2. Objective reasons:

Recognizing the role that modern communication technology plays in improving the performance of secondary school teachers.

2- The subject's ability to be studied and researched, both cognitively and methodologically.

3- The subject is one of the requirements of this age because of the role of technology in educational institutions and its impact on the educational performance of teachers during the delivery of lessons, in addition to that it is a wide and new field of research.

4- Awareness of the importance of the existence of modern communication technology in every educational institution.

5- Knowing the role played by modern communication technology when used in raising the student's achievement and the teacher's performance.

6- Knowing the extent to which modern communication technology keeps pace with the development of educational programs.

4. Previous Studies:

Modern communication technology has received great attention from researchers and thinkers through books and some articles, as it has been linked to several different variables. A solid ground in establishing the research being prepared, in order to benefit from it and to go to other aspects that previous studies have not been exposed to and with the aim of increasing the balance of scientific knowledge.

In the following, we will review a number of previous studies that we benefited from and that dealt with the topic of modern communication technology and educational performance, as follows:

The first study: a thesis prepared by Abdul Rahman Al-Qari (2007) to obtain a master's degree under the title Information Technology and its Impact on Human Resources Management, Mohamed Boudiaf University of M'sila, Department of Commercial Sciences.

The study was based on a pivotal idea in the effects of communication technology on human resource management as the most important jobs in the contemporary institution, which considers human resources the pillar and first advantage of excellence by asking the following question: What is the impact of communication technology on human resource management?

Where the study aimed to identify the manifestations of the new revolution of communication technology on the function of human resources management and to try to reveal the nature of the relationship that binds them, and the study aimed at "study hypotheses"

The workforce is characterized in light of the new developments with a higher composition than in the past periods.

- Communication technology helps to activate the functions of human resources management in terms of cost, speed, flexibility, in addition to it improving the career paths of employees according to their training in this field.

- The institution under study constantly adjusts its needs according to modern technological developments.

Through this study, the researcher concluded that communication technology comes with facilities that serve the human resource and that the level of communication technology at Mohamed Boudiaf University is acceptable, but the use of it did not rise to the required level. The competitiveness of the university, as most of the results emphasized the need to activate two important aspects: the need to pay attention to the human resource in the institution and activate the role of the human resource management function by introducing modern technology.

This study agrees with the current study in that:

- Both are looking at the field of communication technology. By reviewing the results of this study, we can benefit from them in terms of the role played by communication technology.

- The difference lies in the fact that this study linked communication technology with human resources management, and the current study looks at the impact of the use of information technology on the educational performance of secondary teachers.

Data collection tools Interview, observation and questionnaire. **(2002: 2 Mikush & Philibi)**

The second study: entitled The role of modern communication technology in improving the professional performance of workers in public institutions, prepared by the student Sarah Qarfi,

a memorandum for obtaining a master's degree in media and communication sciences, specialization: Communication and Public Relations, College of Humanities and Social Sciences, Qutb Curfeh, academic year 2014-2015 University of Mohamed Khider Biskra.

The study was based on the topic of the role of modern communication technology in improving the professional performance of workers within the Scientific and Technical Research Center for Dry Areas "Omar Al-Barnawi".

The main question: What is the role of modern communication technology in improving the professional performance of workers in the Scientific and Technical Research Center for Dry Areas "Omar Al-Barnawi"?

Sub-questions:

- What are the most important means of modern communication technology used in the Scientific Research Center?
- What are the difficulties that workers face when using modern communication technology?
- - What is the effect of using modern communication technology on the performance of employees inside the scientific research center?

Reasons for choosing the topic

- The fact that this topic is one of the requirements of this era because of the role of modern communication technology in the development of institutions and improvement of performance, in addition to that it is a new broad field of research.

Awareness of the importance of the existence of modern communication technology in every institution and thus increasing interest in it by making use of it to raise the level of professional performance.

- Objectives of the study

- Shedding light on the role of modern communication technology in improving the level of professional performance of employees and revealing the difficulties they face, and identifying the impact of using modern communication technology.

- the importance of studying

It appears in the importance of the topic covered by the study, which deals with modern communication technology and its role in improving the professional performance of workers to develop the administrative process in light of openness and globalization.

- Results

The Internet occupies the first place, then application software, after intranet, and finally fax, and the use of these technologies varies from one method to another according to their arrangement.

- The employees of the center did not benefit from the training courses guaranteed by the center.

Lack of application software.

- Modern communication technology in general has led to improving the performance of the center's employees by improving the methods of communication, both internal and external.

Data collection tools: interview, observation and questionnaire.

Method: The descriptive approach and the adoption of the sample survey method. (2008: 14
Thomas G.Cummings)

The third study: a research entitled Obstacles to the use of educational technology in the secondary education stage, a field study at the level of the teachers of the municipality of Tolga - Biskra - a memorandum submitted to obtain the requirements of the LMD Social Certificate - Education specialization prepared by the student Nouredine Saadi, the 2014-2015 academic year

The study aimed to: Identify the severity of the obstacles, both teachers, students, administration and infrastructure, which prevent the teacher from using educational technology in the secondary stage.

The importance of the study: the growing interest in achieving quality and excellence in the teaching and learning processes, and the use of educational technology and the professor's mastery of quality and distinction skills are part of the development and production of educational technologies and the development of the teacher's performance and skills

Reasons for choosing the study:

Clarify the ambiguity in the concept of educational technology

Clarify the effective role of educational technology uses in educational institutions

The main problem:

- What are the obstacles to using educational technology in secondary education in the municipality of Tolga, Biskra?

Sub-questions:

What are the obstacles that prevent the teacher from using educational technology in secondary education?

What are the personal obstacles related to the professor that prevent him from using educational technology in the secondary stage?

What are the administration's obstacles that prevent the teacher from using educational technology at the secondary level?

Data collection tools: interview, observation, questionnaire

Method: Descriptive method: sample survey method

Results

- Educational technology is not related to educational means only, but is related to human touches that create real conditions that face various obstacles.

The necessity of keeping pace with technological developments that accompany educational patterns, and this is by providing various material and human conditions

The necessity of paying attention to the training aspect of teachers and addressing their various concerns

The necessity of communication between the various elements of the educational process. (1956: Jeffrey, Richard C, 23(3): 237-246)

Areas of benefit from previous studies:

- Previous studies dealt with the subject of the research using technology to improve the professional performance of employees.
- Previous studies are consistent in objectives with the subject of the research, which is to reveal the impact of the use of information technology on the performance of employees.
- Previous studies used the sampling survey method and the descriptive approach, so it was identical to the study method.
- Previous studies used data collection tools, an interview, a note, and a form, and our study aims to be similar to the tools of the planned study.

areas of deficiency

- Previous studies were the field of study of economic institutions, based on the creativity of our study in the service institution.
- Previous studies did not clearly address the educational performance of secondary education teachers and the impact of information technology on it, as stated in our study.

5. Define Concepts:

5.1. Modern communication technology:

The media lexicon defines it as the totality of the accumulated and available knowledge and experience, and the material, administrative and organizational tools and means used in collecting, processing, producing, storing, retrieving, publishing and exchanging information, that is, communicating it to individuals and societies.

Nabil Ali believes that communication technology is a tributary to information technology on the basis that the raw material for information technology is data, information, knowledge and its undisputed basic tools, namely the computer and its software, which consumes its computational energy in converting this raw material into information goods and services. As for distribution, it is through Immediate interaction between man and machine, or through direct and indirect broadcasting methods, as is the case in the media, or through data networks that link one computer to another or between it and its peripheral units.

The word "modern" that is added to communication technology is relative, because it depends on the extent of the development of society and the time period, so what is modern at a particular time is old at another time.

5.2. Definition of use:

A social activity that turns into a normal activity in society thanks to repetition and antiquity, then the use becomes frequent and merges with the practices and habits of the individual, then we can talk about use, and therefore the use of technology is the source of the necessity of use, because the purpose is behind the use. (Bird, Alexander 2010: 24: 23–56.)

6. Study method and tools:

6.1. Method:

Our study falls within the study of the descriptive approach, which is defined as a study of phenomena in terms of their characteristics, forms, relationships and factors affecting that, and this means that the descriptive approach is concerned with studying the present phenomena and events, noting that the descriptive approach often includes predictions for the future of phenomena and events that it studies.

Our reliance on the descriptive approach in our study does not mean that we are satisfied with describing the obtained data only, but rather we go beyond that to an objective analysis of these data in order to reach the objectives of the study.

We relied on the survey method because it includes all the data and variables for a large number of individuals. This method is applied in many studies in order to describe the upcoming situation of the phenomenon in a detailed and accurate manner, and to compare the phenomenon under study with levels and criteria that are thoroughly tested on the studied phenomenon. The survey is the study that analyzes, interprets and presents the reality of a phenomenon, or attempts to analyze the content of documents to reach conclusions and generalizations related to reality, or to describe the tasks and responsibilities associated with a job or job. (1983: 2 Collins, Harry, pp. 115–140)

6.2. Data collection tools:

6.2.1. The Observation:

Observation is defined as the process of observing or observing the behavior of phenomena, problems, events, their physical components and the environment, and following up on their progress and following them through an organized, planned and purposeful scientific method with the intention of explaining and determining the relationship between variables and predicting the behavior of the phenomenon and directing it to serve human purposes and meet his needs. (1987: Goldman, Alvin, 73(1): 109–144)

6.2.2. Questionnaire:

It is a set of indicators through which the dimensions of the subject of the study can be discovered through experimental investigation, that is, conducting field research on a specific group of people.

The form included 05 axes, namely:

- Sociodemographic data from question 01 to question 05.
- The first axis: the means of modern communication technology used in the institution from question 06 to question 09.
- The second axis: areas of the professor's use of modern communication technology in the section from question 10 to question 14.

The third axis: the impact of the use of modern communication technology in the educational process from question 15 to question 25.

The fourth axis: the role of modern communication technology in raising academic achievement from question 26 to question 32.

- The fifth axis: the difficulties of applying modern communication technology in teachers' practice of teaching, from question 33 to question 39.

6.2.3. the interview:

It is a directed conversation between the researcher and a person or other people, and the interview is included in the data collection tools in order to achieve the objectives of the study in order to reach a fact, or a specific situation, in order to search in depth for more knowledge, in order to reach more and more accurate information directly, and the interview is characterized as it collects Between the researcher and the respondent in a confrontational situation, this is one of the methods of data collection.

7. Research community and sample:

There is no doubt that every scientific research has a community around which the study revolves. The research community in the language of the humanities and social sciences is a systematic or non-methodological group of pre-determined elements that are based mainly on observations, as well as a group of elements that have one or several common characteristics that distinguish them from other elements. Others that are being researched and investigated.

The study community, upon which the scientific research will be based, is represented by the secondary education teachers of Mubaraka Bouregaa High School for scientific and literary subjects.

We have relied on the intentional sample in our study by choosing professors of literary and scientific subjects for Mubaraka Bouregaa High School, and this sample was chosen as it is used for modern communication technology in its educational performance and hence easy access to the respondents, and we have chosen forty (40) professors.

The intentional sample is the sample whose units are selected according to the researcher's point of view because he believes that it gives satisfactory results.

8. Results:

The first axis: the means of modern communication technology used in the institution

- Professors use modern technological means in the institution, the most important of which is the data display with 62.5%, and the computer and the Internet with 06.6%
- Teachers at Mubaraka Bouregaa High School need modern means of communication technology by 50% due to the nature of the prescribed programs, and the rest of the teachers do not need them because their subjects are literary at a rate of 37.5%.
- 60% of high school teachers, Mubaraka Bouregaa, did not receive training in the field of modern communication technology, because their academic path did not allow them to receive a special education in communication technology.
- The majority of high school teachers, Mubaraka Bouregaa, do not have any kind of certificate or training in the field of modern technology, at a rate of 60%, and a small group had obtained certificates after graduating from university.

The second axis: the professor's use of modern communication technology

- The professor at Mubarka Bouregaa High School always uses modern communication technology within the department because most of the people are scientific by 55%.
- The teacher uses modern communication technology in the educational field by 62.5% to explain and present lessons to improve his performance.
- Teachers at Mubaraka Bouregaa High School in Bir Mokadam/Tebessa believe that the application of the use of communication technology is an absolute necessity by 75% to face the development taking place in the educational field and to shorten time and effort.
- Teachers at Mubaraka Bouregaa High School in Bir Mokadam/Tebessa assert that the improvement of their performance depends primarily on the application of the use of modern communication technology by 70%, because the good performance of the teacher is linked to the degree of control and the optimal application of technology.
- Teachers at Mubarka Bouregaa High School prefer e-learning by 65.5% because it suits the development of programs and the generations of books.
- The modern means of communication technology always meet the functional needs of the professor by 65%, through the image viewer and the computerized media device only.

The third axis is the impact of the use of modern communication technology in the educational process

- The teacher at Mubarka Bouregaa High School deals with students who use modern communication technology when preparing for the lesson with 85% encouragement, which makes the student's performance improve within the department and this raises the teacher's performance.
- Teachers at Mubarka Bouregaa High School use electronic media in presenting the lesson by 62.5%, using a computer and image viewer.
- Teachers at Mubarka Bouregaa High School are interested in presenting the lesson through the use of modern technological means, and they see it as having an important role in the learner's understanding of the lesson with a rate of 67.5%, attracting the learner's attention and forcing him to focus and understand.
- Teachers at Mubarka Bouregaa High School in Bir Mokadam/Tebessa confirm that they benefit from the student's skills in using the computer to develop his competence in analysis by 65%, by using his skills to provide examples for explanation, understanding and clarification.
- Teachers at Mubarka Bouregaa High School in Bir Mokadam/Tebessa confirm that documentary videos increase the student's ability to understand and correspond to the activities of the lessons presented by 57.5%, because this method embodies the scientific material.
- Teachers at Barqa High School confirm that the use of modern technological means of communication allows for an increase in the learner's participation within the department by 67.5% because it receives a great response from the learner.
- The nature of the materials that require the use of modern communication technology are scientific materials by 72.5% because they have experimental concepts.
- Teachers encourage students to use modern communication technology at a rate of 77.5% to complete research because the Internet is a virtual world rich in abundant information and meets all its cognitive needs.
- Students' use of the Internet in completing projects will gain them research skills, according to the opinion of Mubarka Bouregaa High School in Bir Mokadam/Tebessa teachers, by 75%.
- Teachers at Mubarka Bouregaa High School use modern communication technology to prepare lessons and write notes by 85%, and this is due to the renewed programs every year.

The fourth axis: the role of modern communication technology in raising the academic level

- The teacher at Mubarka Bouregaa High School uses modern communication technology in the department by dividing the students into small groups for group work at a rate of 82.5%, because the study programs urge the teacher to assign the student to participate in projects in groups.
- Teachers at Mubarka Bouregaa High School in Bir Mokadam/Tebessa follow the method of evaluating students by means of modern communication technology, at a rate of 72.5%, because it encourages teamwork.
- Teachers in Mubarka Bouregaa High School do not employ modern communication technology as a means of competition among students by 70% due to the weakness of teachers in this field and the lack of technological capabilities of the institution.
- Teachers at Mubarka Bouregaa High School develop cooperation between students through the use of modern communication technology for 45% through research from the Internet and ready-made programs within the department.
- Teachers do not use modern communication technology in the continuous evaluation of the grades awarded to students by 77.5%. This is due to the existence of varying individual differences between students.
- Teachers at Mubarka Bouregaa High School do not use social networking sites as a means to develop the educational aspects of the learner by 100% because social communication affects academic achievement.

- Teachers at Mubarka Bouregaa High School do not use the method of integrating the electronic games program into the evaluation methods by 90%, and this is due to the difficulty of designing electronic games in the evaluation methods.

The fifth axis: the difficulties of applying modern communication technology in the practice of teachers for teaching with the proposed solutions for better performance

- Teachers at Mobarka Bouregaa High School face 80% of the difficulties in using modern communication technology, and this is due to the lack of availability of modern communication technology halls and the poor level of teacher training in the field of technology.
- The lack of coverage of modern communication technology at Mubarka Bourqaa High School for the information needs of teachers when using communication technology by 92.5%, due to its insufficiency in the institution.
- The focus of problems related to scientific theft when requesting research via the Internet
- Professors believe that the excessive reliance on modern communication technology affects the intellectual and cognitive abilities of the student by 57.5% because it affects the student with intellectual paralysis and weakness in solving problems quickly.
- Teachers at Mobarka Bouregaa High School face obstacles that prevent the use of modern communication technology by 40% due to the lack of capabilities of the institution.
- Teachers at Mobarka Bouregaa High School in Bir Moghadam suggest solutions they see fit to use modern communication technology on a large scale to improve the teacher's performance.

9. Conclusion:

We conclude through this study that modern communication technology has an active role in the teaching and learning process, because it is considered an effective means in developing and facilitating the learner's understanding and access to knowledge and information, and this is proven by learning theories and research related to educational technology, and this type of technology is not fully applied in our current schools. Compared with foreign schools, many researchers attribute this to the weakness in the level of training and training of teachers, and the weak technological culture. But there are attempts and efforts to integrate technology into teaching, even in a small way, and this is what we noticed in our study. That is, there are some members of the studied sample who have a tendency to employ modern communication technology with a simple concept in the teaching process, trying to raise and improve its performance despite the difficulties and obstacles that exist in the local environment. This appears through the use of technological media in teaching methods that encourage learners to access the world of modern communication technology and use educational technological means. There is awareness among professors of the importance of modern communication technology and its use in education on the one hand and the difficulty of providing it on the other hand and integrating it into teaching in the manner required to raise the level of education. Professor performance and improvement.

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