The Impacts of Distance Communication Technology on the Educational Attainment of Information and Communication Sciences Students

Oudjedi Damerdji Wassila∗

University of Djilali Liabis, , (Algeria), odw1987@gmail.com

Abstract: This study sought to identifydistancecommunication technology and its impact on the educational attainment of students ofinformationin ,and communication sciences ,addition to identifying the most important difficulties that hinder the achievement process ,and this study belongs to descriptive studies ,based on the theory of uses and gratifications probability -e case study approach through the method of nonwhere it was relied on Th students of 200sampling by choosing the intentional sample represented by informationand communication sciences from thelicenceand the study concluded that ,and master stages or students' use ofthe main motive fdistancecommunication technology in educational continuous and accurate updating of ,achievement is due to the ease of rapid access ,information and ease of use In addition to being a practical alternative to physical education ,most notably the difficulty of accessing ,face many difficulties ,on the other hand ,sstudent as well as the failure of the content on the platform to satisfy the ,the digital ground respondents' desires.

∗ **Auteur correspondant.**

1. INTRODUCTION

Today, the gray matter is the main wealth of a country. It is also a major competitive advantage of a company. The training becomes a key issue but, every day, technologies are advancing, professions are evolving, the organization is changing. Needs increase for both initial and continuing training. But the available budgets and especially the time that can be devoted are not infinitely expandable. This is the reason why the tools built on the Internet, offer immense advantages. Moreover, the considerable saving in time and travel emerge at high speed in countries that have are in advance especially in North America. With the advent of ICT (Information and Communication Technologies), we must, from now «think fast and learn efficiently», with a minimum of organizational, and logistical problems and especially less waste of time. Online education is the solution. This is the name currently given to an important phase in the introduction of ICTs in training. This is a rapidly changing technology in learning, made possible by the global development of the Internet.

2. The problematic : Our study is an attempt to know the technology communication impacts on the distance educational attainment, and for this, the study of the problematic is represented in this following principal wondering:

- What is the impact of the use of distance technology communication on the educational attainment for the students of the information and communication sciences?

And our problematic branched out into sub-questions:

2.1 What are the kinds of uses of distance technology communication utilized by the students of information and communication sciences?

2.2 What are the achieved gratifications from the audience of the students in the department of information and communication sciences in using distance technology communication in educational attainment?

2.3 What are the difficulties that prevent from the good educational attainment of the students of information and communication sciences through distance technology communication?

3. Hypotheses of the study:

3.1. The first hypothesis: The challenges that distance technology communication brought, had changed the kinds of education from presence to hypothetical attendance, and then became a kind of tackling information and communication sciences students' to E-learning which represents to them a daily pillar.

3.2. The second hypothesis: The Information and communication sciences students' use of the distance technology communication is to satisfy cognitive and educational needs, to increase their competencies.

3.3. The third hypothesis: The information and communication sciences students face a lot of difficulties in using distance technology learning and its prominent difficulties to access the digital terrestrial.

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

4. The objective of the study:

This study aims to know the impact of the distance technology communication use in the educational attainment for the information and communication students, to identify the distance technology communication which can be used in educational attainment in addition to stopping at the most important difficulties which prevent information and communication students from educational attainment.

5. The importance of the study:

This subject covers up one importance from distance communication technology importance, so the use of the current communication in the educational attainment in this period is one of the important topics in the educational activity, and it is used in order to achieve the desired educational objective, because this tool helps in the educational attainment process, the research process, information exchange and achievement of knowing the results and all this in distance, and according to what it provides cause of the large electronic publication movement and appearance of numeric and electronic libraries and creates data bases and digital terrestrial to receive lectures at distance.

6. Theoretical approach:

The theory of uses and gratifications in the reform media is an example of difference between researchers, and briefly means; audience exposure to informative materials to satisfy their special internal desires as response to the individual motives of need.[1]

6.1. Hypotheses of the theory: «Elihukats» and his friends see that the theory of utilizations and gratifications is based on five assumptions which are (Hacen Imad Mekaoui, 2006, P98):

- The audience is an audience in the mass communication process and uses the means which achieves their needs.
- The use of the means exposure which the audience desires to achieve, and among the things which control that are: individual differences and social interaction.
- The public is one who chooses the means and the content which satisfy his needs.
- The audience can define its needs and motives, and then refers to the means and contents which satisfy his needs.
- It is possible to infer the prevailing cultural criteria in the society through public use of communication means and not through media means only (Mohamed Abdelhamid, 1998,P77).

The introduction to uses of gratifications is concerned with answering the basic question which is: Where do the individuals go in order to satisfy their needs?

Whereas the independence theory concentrates on answering the question: Why do individuals refer to a specific means to satisfy their needs?

And through this theory, we try to identify the habits of information and communication students' tackling the educational technology at distance, and also to identify the motives of

its use in addition to the achieved gratifications behind this utilization (Abderazek Edlimi, 2016,P246).

7. The previous studies:

7.1. The first study: (Abdelmoumin, 2017), the problematic study centered in; what is the impact of using educational technology in teaching the scientific matters (physics, nature and life sciences) to the third secondary year students, stream of nature and life sciences?

- Are there differences with statistic indicator in the third secondary year students' attainment in physics attributed to the teaching method through the educational technology?
- Are there differences with statistic indicator in the third secondary year students' attainment in physics in using educational technology attributed to the gender variable?
- Did the use of educational technology make a difference in the scientific matters with statistic indicator in the orientations of the third secondary year students towards it?

The hypotheses:

There is an impact of using educational technology in teaching the scientific matters to the experimental members of the group.

But the sub-hypotheses of the study are represented in:

- There are differences with statistic indicator in the third secondary year students' attainment in physics attributed to the teaching method through education technology in the benefit of the experimental group.
- There are no differences with statistic indicator in the third secondary year students' attainment in physics using educational technology attributed to gender variable.
- The use of educational technology in the scientific matters made differences with statistic indicator in the orientations of the third secondary year students' towards it.

The researcher, while dealing with experimental method, relied on the tools that he used in studying statistical processors as a test, arithmetic means and standard deviation using the statistic program SPSS version 22 then analyzing the results and explanation.

The result of the study:

Through this study, the researcher achieved a group of results from which:

- There are differences with statistic indicator in the third secondary year students' attainment in physics attributed to the teaching method using the educational technology in the benefit of the experimental group.
- There are no differences with statistic indicator in the third secondary year students' attainment in physics using educational technology attributed to gender variable.
- There are differences with statistic indicator in the third secondary year students' attainment in nature and life sciences attributed to the teaching method through educational technology in the benefit of the experiment group.

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

- There are no differences with statistic indicator in the third secondary year students' attainment in the subject of experimental sciences and life in using educational technology attributed to the gender variable.

7.2. The second study: (Mohamed Ahmed Mekdadi, 2020); the problematic of the study centered on:

How do the secondary students assess the use of distance education due to Corona crisis and its up-dating in Jordan?

Wonderings:

- Are there differences with statistic indicator at the level of the indicator (0.05) in the secondary students perceptions at Liwaa Kasba Arbid schools in Jordan attributed to gender variable?

Hypotheses:

The study hypothesis: There are no differences with statistic indicator at the level of the indicator (0.05) in the secondary phase students at Liwaa Kasba Arbid educational school in Jordan attributed to gender variable.

The researcher used the descriptive survey method for its suitability for study purposes and goals.

The results of the study:

The average calculations ranged between (4.78 – 3.60), so the paragraph (01) states that "the distance education tends to enrich the education for me" in the first rank, and with average calculations which reached (4.78) while paragraph (19) states with its text "it helped in the elimination of a lot of students "problems" with the last rank and with average calculation which reached (3.60).

The results of analyses concerning the first question showed that there is a positive impact in using the distance education during the current Corona crisis at Kasba Arbid educational schools, and with a very big degree, so the average calculation reached the sample number perceptions (4.30), and deviation of the standard (5.58) and with a very big degree for the field as whole. .

7.3. The third study: (Abderrezak Kassir, 2019), the problematic of the study is represented in: has the educational technology a role in ameliorating the average of the students' educational attainment in sciences and techniques in the physical and sports activities?

Wonderings:

- Has the educational technology a role in solving the students' problems in department of sciences and physical techniques and sports activities?

- Do the educational means have a role in improving the students' educational attainment in section of sciences and physical techniques and sports activities?

- Has the educational technology a role in raising the learning motivation for the students of sciences and physical techniques and sports activities and then in raising their academic achievement?

The hypotheses of the study:

The general hypothesis:

The educational technology has a role in improving the level of the academic achievement of the students in sciences and physical techniques and sports activities.

Partial hypotheses:

- The educational technology has a role in solving educational problems of students in department of sciences and physical techniques and sports activities.

- The educational means have an important role in improving the students' academic achievement level in department of sciences and physical techniques and sports activities.

- The educational technology has a role in raising the learning motivation of the students of sciences and physical techniques and sports activities and in raising their academic achievement as well.

Concerning the method, the researcher relied on the descriptive method as it is suitable to the nature of the study and the form tool.

The result of the study:

The researcher reached:

That educational technology solves the educational problems and the teaching and learning tools have an important role in improving the academic attainment level as they have a role in improving the learning motivation of the students in department of sciences and physical techniques and sports activities and therefore improving their academic attainment..

The Theoretical framework

1. What is teaching / distance learning?

1.1. Definition :

Distance learning is a training system that allows forming without moving at the point of formation and without the physical presence of former. 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, where the distance represents the geographical and temporal dispersion of the participants (Crozat, 2002,P25).

1.2. The characteristics of distance education :

Keegan (Keegan, 1994, P260) characterizes distance education by the following elements :

- The almost permanent separation between the trainer and the learner throughout the learning process (this differentiates distance training from face-to-face training).
- A direct influence of the educational institution on the planning and preparation of learning materials, as well as on the services provided to the student.
- The use of technical means in a process of media coverage of the content.
- An almost regular absence of a learning group, training being perceived more as an individual rather than a collective act.

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

1.3. The evolution of distance education (historical):

We can abstract the evolution of distance education :

1.3.1. Correspondence education:

Distance education is neither a new nor a local phenomenon. We can say that it was born at the same time as the postal services in the 19th century and that it was institutionalized in Berlin in 1856 with the institute Toussaint et langenescheidt specialized in language teaching, the only medium used was paper, with the appearance of other communication tools such as telephone, radio and television, it has borrowed these new technologies, courses are transmitted through radio and television, as well as new media such as: cassettes (radio, video) (Kaye, 1988, P45).

1.3.2. Computer learning:

1.3.2.1. Computer Assisted Instruction (CAI):

It was in the 1960s-1970s, with the appearance of the first computers, that the CAI (Computer Assisted Instruction) systems emerged. CAI software is usually made up of lessons, which in turn are divided into concepts that the learner must acquire one by one. A teaching session is presented as a series of questions or simple exercises that the computer offers to the learner, who must answer them in order to progress in the lesson. The required answers and the criteria for understanding are then pre-established. Thus, such pre-programmed systems have difficulty in having a global vision of the behavior and level of the learner (Demaizière et al., 1992,P212).

1.3.2.2. Computer-Assisted Intelligent Teaching Systems (CAIT)

In the 1980s, the CAI evolved towards a gradual integration of methods and techniques derived from Artificial Intelligence, which made it possible to have a capacity for analysis and deduction of the same type as expert systems. These so-called CAIT (Computer-Assisted Intelligent Teaching) systems include ITS(Intelligent Tutorial Systems), where the learner is then fully tutored by software "expert in the field of learning and expert in pedagogy" which dialogues with him. and assists him in problem solving activities. A large number of intelligent tutors have been designed, among them the most important (Balacheff, 1994, p33):

- SCHOLAR is one of the first, intended for learning the geography of South America (Carbonell, 1980, p56).
- WHY (Stevens et al., 1982, P327) for meteorology.
- GEOMETRY-TUTOR (Anderson, 1985, P166) for geometry.

Computer-based learning research has gradually led to a change in the architecture of these systems. Indeed, the weakness of ITS lies mainly in the modeling of the knowledge of the pedagogical module, the student's model and the expert module, which proves difficult to implement (Bruillard, 1997, PP 359-360). The difficulties in developing the educational

module have in particular highlighted the need for the intervention of a "human" tutor. It is then the questioning of "the computer as a tutor".

1.3.2.3. Micro-world systems :

In parallel with the CAIT systems, there were other teaching systems known as "micro-world" type systems. Their philosophy is to leave all the initiative to the learner. This type of system provides a certain number of basic objects or primitives that the learner uses to design more complex objects as the exploration progresses (Bruillard et al., 1987, P270). An illustration of this type of system is given by the software Cabri-Géomètre, a micro-world for experimenting with geometry. It allows its user to build geometric figures with certain properties from elementary objects such as points, lines, etc.

Micro-world systems are rich environments because they allow the user to express their own understanding, but require the presence of a teacher who guides and controls the activities of the learner. A micro-world must be included in a didactic device (artificial or human) to ensure effective learning.

1.3.2.4. Interactive Learning Environments (ILE) :

In the 90s, ILE(Interactive Learning Environments) developed as a compromise between rather directive systems, such as ITS, and rather open and free micro worlds. new research directions in educational informatics (Baron et al., 1991,P242). First of all, the term Teaching has been replaced by the term Learning because these systems are now more concerned with the learning activity of the learner and the construction of his knowledge, rather than how these knowledge is transmitted to him. Then, the word "Computer Assisted" is replaced by "With" Computer, where the computer is no longer the tutor, it becomes one of the actors in the learning scenario induced by the ILE, in the same way as the teacher or the co-learners. Several ILE systems have emerged, we can mention:)

- The APLUSIX system, in the field of factorization of polynomials and the solution of equations (Nguyen and al.,1997,P301)
- The SCHNAPS system to help solve problems in chemistry (Blondel, 1994,P296).

1.3.3. E-learning :

In the mid-1990s, the development and generalization of communication technologies and in particular that of the global network placed the concept of distance at the center of research issues in educational informatics. New systems are developing and emphasizing the distributed and cooperative aspect of learning, and this is the emergence of distance education (e-learning) platforms. Its platforms must manage different modes of interaction: between learners; between learners and tutors; between a learner (s) and software (s): "It is a question of designing complex environments, integrating machines assuming several roles with different human actors" (Horton, 2003,P15).

1.3.3.1. Definition

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

E-learning is defined as "the use of new multimedia technologies and the Internet, to improve the quality of learning by facilitating access to resources and services, as well as exchanges and collaboration in distance "(Horton, 2003,P16).

E-learning is a distance learning process, which is based on the provision of educational content via an Internet or intranet-type network and thus allows people to train using a computer. The media supports used can contain text, graphics, sound, image, animation and video. These materials allow a new pedagogical approach, with the use of more attractive methods where interactivity plays an important role, and with the possibility of adapting more to the learning process of the learner.)

The user can train at his own pace, according to his needs and availability. The choice of e-learning eliminates the notion of time and space, because learners do not have to be all at the same time and in the same place. This type of education brings several advantages:

- Any type of learner can be accommodated, even learners with disabilities.
- Information is available wherever there is the Internet, and at any time.
- La opportunity to complete the work at their own pace.
- Distance is irrelevant; students may be in the same class or on different continents.
- The class is not inherently limited in size.
- Cost reductions can be achieved in the number of learners, their travel, optimal use of teachers and shorter teaching times.
- The automation of teaching management functions (administrative, of course, knowledge control, etc.)

1.3.3.2. The components of an e-learning system:

E-learning device consists of two main entities: Educational engineering and technical solutions implemented.

1.3.3.2.1. Educational engineering:

It deals with the entire process of designing and distributing training content, learning strategies and learner assessment. This is the heart of the teaching profession. We can cite the two main functions for the smooth running of distance education:

A. The design and creation of educational material (lessons, exercises, activity, etc.

B. Tutoring (supervision) and support for learners in all stages of learning.

A. The design and creation of educational materials:

E-learning device borrowed the principles of industrial design for the production of course; the latter is called to several factors such as: technologist education, didactics, pedagogical editors, writers, graphic designers and computer designers (Bouthry, 2003, PP126-127):

- **Definition and structuring:** In this part, a team of teachers is responsible for defining and structuring the content of the course (introduction, explanation, exercises, etc.) to be carried out, as well as identifying the elements that the course must contain and which

must be digitized as (sounds, texts, videos, animations, simulations etc.). In this part the work is typically pedagogical.

- **Scenarisation:** The course content is divided into several scenarios, the learner must follow in order to understand the content of the course and achieve the goals set by teachers. This work is carried out by a group of teachers with the collaboration of a computer designer.

- **Digitization:**

    The objective of this step is to digitize the elements identified in the definition and structuring step in order to be integrated into the course. These elements are created by recording and acquisition tools, or they are resources that already exist on the Internet and need to be adapted.

- **Technical realization:**

    In this part, a computer designer is responsible for integrating digital media (sound, text, video, animations, etc.), as well as programming the scenarios, through course design tools called "Authoring System". Today there are several authoring systems used for the creation of online courses. We can cite among them the most used:

    ✓Icon Author : It is presented as a possible solution for course designers and professional developers of educational applications accessible on a network, or on CD-ROM. It is compatible with UNIX and Windows platforms and allows the integration of multimedia documents (videos in MPEG, Quick time, and AVI format) in advanced training courses, upgrade systems, online help or real-time simulation. It combines a page viewing environment with a simple but powerful flowchart to manage the degree of interactivity of the application (Ranwez, 2000, P37).

    ✓Macro media Director : It's a more complete multimedia authoring environment than Icon Author. It enables the creation of web applications and e-learning applications. Developers, course authors or experts in a field can create documents, which are usable in all platforms, accessible online or on CD-ROM, intended for teaching (Ranwez, 2000, P36).

B. Tutoring (Framing):

    The role of the tutor at the distance training platforms is very important for the effectiveness of the training. The tutor monitors the work of the learners as well as provides assistance in the learning of the latter. It can possibly regulate their educational paths. Depending on the tools available in the distance training platforms used, two types of training can be distinguished:

- Synchronous training: During synchronous training participants can connect simultaneously. They can communicate in real time, either through chat, video conferencing or video conferencing. Synchronous training allows applications to be shared and interacted with when the tutor takes control of the shared document.)

- Asynchronous training: In this type of training, the exchange with other learners or with tutors is carried out via modes of communication that do not require simultaneous

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

connection, generally the tools used are discussion forums, and messaging tools (mail electronic). This mode of training is based on so-called self-directed learning, with courses, exercises and automated assessments, involving a certain autonomy of the learner)

1.3.3.2.2. Technical solutions:

The e-learning system now uses information and communication techniques for the transmission of knowledge, relying on so-called computer platforms for distance learning.

1.3.3.2.2.1. The Distance Education Platform :

A platform is a set of software or computer tools that support the conduct of distance learning. These platforms aim to design, remote consultation of educational content, and remote tutoring. These integrate tools for the various actors of distance education (Professor, Computer Designer, Tutor, Learner and Administrator), in order to facilitate the roles and functions held by each of these actors (George, 2002, P183).

1.3.3.2.2.2. The actors in distance education:

Distance education platforms call on several actors (Professor, IT Designer, Tutor, Learner and Administrator). Each actor has his own role in the training process (George, 2002, P183).

- **The teacher :**

He is responsible for designing the educational materials used in the courses, and creating typical and individualized educational paths for his teaching.

- **The tutor :**

The tutor keeps track of learners' work and assistance in learning these, assesses learners, communicates and interacts with them, as it may regulate their learning paths.

- **The learner**

The learner consults online or downloads the educational content recommended to him, organizes his work, submits reports, projects, participates in discussion forums, performs exercises, self-assesses and sends work to tutors who assess them.

- **The computer designer**

It is responsible for producing the educational materials in digital form (text, sound, image, course, activity, etc.) using the authoring tools available, so that these materials can be used in the platform in the process of training.

- **The administrator:** The administrator installs and maintains the system, takes care of the administrative registration of students, manages access rights to educational resources.

1.3.3. Types of platforms according to pedagogy

Depending on the pedagogy used for the transmission of knowledge, we can distinguish two types of platforms:

1.3.3.1. Non-interactive Platform

The pedagogical model used by these platforms is based mainly on the transmission of knowledge through the transmission of lessons and does not include interactive activities.

Although the latter benefit from tools to carry out individual or collective learning tasks (such as the implementation of training courses, the management of communications between learners and teachers), they include the following limits:

- These platforms integrate a set of tools from a technical point of view, but do not place them explicitly in an educational framework.
- These platforms implicitly promote a type of learning that focuses more on the resources and tools offered than on the activities of the learner.
- The support (tutoring) in these platforms adopts an asynchronous mode using only messaging and forums.
- The evaluation of learners is done by the answers to the tests (question answer) or multiple choice questions, which are insufficient for the evaluation of the learners.)

1.3.3.2. Interactive platforms

The new distance learning platforms are based on learning by doing such as practical work or projects involving real or virtual objects. The particularity of these activities is that they are highly interactive and require synchronous pedagogical monitoring from the tutor in order to prevent learners from finding themselves in a situation of failure. So we are talking about synchronous educational monitoring, which is a form of distance tutoring where the tutor intervenes with learners and follows the progress of their actions in real time. We can distinguish two types of platform (Mbala, 2003,P96):

The practical framework:

1. The kinds of the study:

This study is included in the descriptive studies which "the researcher wants to study any phenomenon, so the first step which he undertakes is the descriptive of the phenomenon which she/he wants to study and collect descriptions and precise information about it, and the descriptive method relies on studying the reality or the phenomenon as it exists in reality and focuses on its accurate qualitative description, so the qualitative expression describes to us the phenomenon and clarifies its characteristics, whereas the qualitative expression gives us a suite numerical description and clarifies the amount of this phenomenon, its size, and the degree of its relationship with the other different phenomena" (Abidat Doken, 1973, P187), through it this study trends to describe distance communication technology and its extent effect on the university student in the case of attainment especially in situations of covid19 crisis.

2. The method of the study:

The method is generally defined as: the tool which the researcher uses to reach his objective or purposes and to discover the truth or reach the knowledge(Mehdi Fadl Allah, 1993, P165). And in our study, we relied on the method of case study as it is the most suitable method which goes with the subject of distance communication technology and its

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

effect on the students in the department of information and communication sciences, because it is the only way which can be used to study social situations and human behavior appearances, and the case study research is characterized with the biggest capacity to study current issues, so it focuses on the present and deals with existing things at the time of carrying out the study. (Saad Suleiman, 2017, P165).

3.   The tools of the study:

In our study, we used the questionnaire technique to collect data because the precise scientific research relies on a big extent of the choice of the suitable tools, which go with the nature of the subject and enable the researcher to obtain information and data which serve the goals of the study in a deep form. And it is known as one of the tools with extensive use to obtain information and truths concerning the opinions and audience trends about a specific subjects or a specific attitude, the principal goal of the data is to obtain realistic questionnaire and not only impressions and marginal opinions (Kamel Mohamed, 2009, P135)**.**

4.   The research community:

The phase of specifying the research community is considered one of the important methodological steps on which the researcher relies when making any study and which requires from his/ her precision and competence, and Mohamed Abdelhamid sees that the study community is the biggest community or the total of individuals, the researcher aims to study in order to achieve the study results and this community represents the whole or the largest total of the community which the researcher aims to study, and the results are generalized to every individual, but it is difficult to reach this target community cause of its hugeness, so concentration is on the available community or the one whose approaching is possible to collect data (Mohamed Abdelhamid 2000, P130)**.**

As our subject study is the distance communication technology effect on the students' attainment in information and communication so the research community are the information and communication students at the faculty of social and human sciences at Djillali Liabes university, Sidi Bel Abess, department of Information and communication sciences.

5.   The study sample:

We used the non-probability sampling method and that because the probability sampling was impossible cause of the lack of the students, due to the batch system which was imposed cause of the crisis and the target sample represented the students of information and communication sciences "second year license, third year license, first year master and second year master, and 200 forms were distributed.

Table N⁰ 01: Represents the distribution of sample individuals according to gender variable.

Gender	Repetition	Percentage	The mode
Male	71	35.5%	01

Female	129	64.5%
Total	200	100%

The source: The table was elaborated by the researcher.

Table Nº 02: Represents the distribution of the sample individuals according to the age variable.

Age	Percentage	Repetition	The mode
22-18	122	61%	
27-23	68	34%	
33-28	6	03%	01
More than 33	4	02%	
Total	200	100%	

The source: The table was elaborated by the researcher.

Table Nº 03: Represents the distribution of the sample individuals according to the educational level.

Educational level	Repetition	Percentage	The mode
2nd year license	94	47%	
3rd year License	20	10%	01
1st year master	58	29%	
2nd year master	28	14%	
Total	200	100%	

Table Nº 04: Represents the distribution of the sample individuals according to the residence.

Residence	Repetition	Percentage	The mode
Family house	154	77%	
University accommodation	46	23%	01
Total	200	100%	

The source: The table was elaborated by the researcher based on the study form.

In order to identify the kinds and reasons of the students of information and communication sciences use of distance technology communication, the results came in the following tables to clarify that.

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

Table N⁰ 05: Represents the users of technology communication.

The number of the communication technology users	Repetition	Percentage
Yes	200	100%
No	00	00%
Total	200	100%

The source: The table was elaborated by the researcher.

Through the registered number in the table which shows us the number of the users of communication technology and it demonstrates that all the respondents declared using it at 100%, from the global sample composed of 200 students and from here we conclude that all the students use the communication technology in their daily lives and they can't do without it.

Table N⁰ 06: Represents the most used tools by students in communication technology.

Tools of using communication technology	Repetition	percentage
Computer	20	7.29%
Laptop	46	16.78%
Smart phone	200	72.99%
Electronic board	8	2.91%
Total	247	100%

The source: The table was elaborated by the researcher.

The table above represents the student preferred means in using communication technology and in which the respondents were given more than one answer, and its results came as follows: That 20 individuals use the computer and their percentage was represented by 07.29% out of the global total which is 274 choices, and we find that 46 students use laptop with percentage of 16.78% but concerning the electronic board we find that 8 students use it in communication technology and finally, we find that the largest percentage represented by 72.99% that is to say 200 users of cell phones in using communication technology. Perhaps, the use of the smart phone is the most preferred by the most respondents because it available to them, it's easy carrying to any place with its possible use in a lot of matters such as communication, research… etc.

Table N⁰ 07: Represents the number of the users of the E-learning platform.

The number of the users of the E-learning platform	Repetition	Percentage

Yes	109	54.5%
No	91	45.5%
Total	200	100%

The source: The table was elaborated by the researcher.

Table N° 08: Represents the causes of the students' use of the E-learning platform.

The causes of the students' use of the E-learning platform	Repetition	Percentage
During the period of exams	43	39.44%
During the revision	25	22.93%
While making a scientific research	15	13.76%
While consulting the lectures	26	23.85%
Total	109	100%

The source: The table was elaborated by two students relying on the research form.

Through our study of the table above which represents the number of the students who rely on the E- learning platform in distance in their educational attainment, through the qualitative results it is observed that more than half of the sample declared relying on the E-learning platform in distance in the educational attainment process and that with a percentage of 54.5% that is to say what equals 109 out of the total of the sample individuals, whereas 45.5% refrained this use, in order to know the underlying causes behind. Only those who declared their use of the digital terrestrial, the results of this table are to clarify that 43 individuals rely on it in the period of the exams with a percentage of 39.44%, and 25 other individuals with a percentage of 22.93% use this platform during revision, and on the other hand we obtained 26 individuals with a percentage of 23.85% who use the platform during consulting the lectures, and the rest percentage represented 13.76% with the total of individuals depend on the platform while making a scientific research, and this what reflects that the period of the exams is the most attended reason for the students, on the other hand we conclude that the motives and reasons differ among the students and this what shows us the utility of the electronic platform in different sides, therefore the percentages were approximate between the causes which motivate and help the students to use it in their educational attainment.

Table N° 09: Represents the causes of the students' based on communication technology in distance

the causes of the students' based on distance	Repetition	Percentage
The easy quick access and continuous up dating and precise information	117	58.5%
Its ability in exchanging information of solving it at distance	40	20%
To perform work and services which were not available previously	43	21.5%
Total	200	100%

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

Table N° 10: Represents the motives of the students used the E-learning platform

the motives of the students used the E-learning platform	Repetition	Percentage
To increase your understanding of the lectures	98	28.24%
For its developed technical characteristics	36	10.37%
For its easy use	113	32.56%
For its being a practical substitute to attendance education	100	28.81%
Total	347	100%

The source: The table was elaborated by two students relying on the research form.

It appears to us through this table which represents to us the students of the information and communication motivation in using the E-learning platform from distance and which the respondents are allowed more than one answer, we obtained 374 answers out of 200 samples and the biggest percentage was 32.56% with total of 113 individuals who use this platform due to its easy utilization but the second percentage was 28.81% with 100 individuals whose motivation in using this platform is its being a practical alternative for attendance education and obtained a percentage of 28.24% with 98 individuals of the total students who use it for more comprehension of the lectures, and the rest of percentage was represented by 10.37% with a total of 36 students who use this platform because of its developed characteristics, and from here we notice that the causes are similar and the students of information and communication sciences motives in using it are similar, so their majority use it because it is easy, so the student follows the easiest method, and they also use it for its being an alternative for attendance education in this period in order to avoid infection and the spread of the epidemic students prefer stay at home and study in distance while they also use it to increase their understanding of the lectures and a small group of students use it cause of its development characteristics.

We are trying to get to know the obstacles which stand as barrier behind the students of information and communication sciences in using the digital terrestrial in the educational attainment process, the table which was handed to the respondents contained a choice of more than one answer and shows that the first obstacle is lack of training the students and the teacher concerning the use of education technology at distance in the faculty with percentage 26.55% and comes the obstacle of personal lack interest in using technological tools with a percentage of 19.31%. And finally, students are not convinced by using this technology in distance cause of its negative effects with a percentage of 17.24%, and from this we deduce that the student faced a lot of obstacles which affected his/her educational attainment while using distance education technology.

Table N^o11 : Represents the number of the students who faced obstacles in using the E-learning in distance.

Facing obstacles in using the platform	Repetition	Percentage

Yes	135	67.5%
No	65	32.5%
Total	200	100%

Table Nº12: Represents the obstacles that led to the weak educational attainment through using educational technology at distance.

The obstacles which led to weak educational attainment	Repetition	Percentage
Weak personal interest in using technological tools	56	19.31%
Lack of training the student and the teacher concerning using this technology in the communication process	107	36.89%
Not convinced of the necessity of using the communication technology at distance because of its negative effects	50	17.24%
Lack of specialists in the field of using education technology at distance in faculty	77	26.55%
Total	290	100%

Table Nº13: Represents the most important problems faced by the student in his educational attainment through distance education.

The main important problem	Repetition	Percentage
Not owning a recent technological tools	19	9.5%
Not availability of the net in the family house or at the campus	46	23%
Not used with this new electronic sort of education	125	62.5%
Other	10	05%
Total	200	100%

Table Nº14: Represents the most important obstacles faced by the student in his educational attainment in distance with university institution.

The difficulties that the student faces in educational attainment in distance	Repetition	Percentage
Facing late receiving letters from the teachers in charge of the module	41	20.5%
Difficulty of accessing the private digital terrestrial	136	68%
No availability of means of using the communication technology for educational attainment	23	11.5%
Total	200	100%

The source: The table was elaborated by two students relying on the research form.

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

Table N^o14: Represents the relationship between the gender and motives of the students' use of the communication technology at distance.

gender / Motives the use of distance communication	Male		Female		Total	
	Repetition	%	Repetition	%	Repetition	%
For easy quick access and constant up-dating and precise information	41	57.47%	76	58.91%	117	58.5%
For its ability in exchanging information and solving it at distance	16	22.53%	24	18.60%	40	20%
Performing works and services which were not available before	14	19.71%	29	22.48%	43	21.5%
Total	71	100%	129	100%	200	100%

Table N^o15: Represents the relationship between the student's residence and the difficulties that he faces in his distance educational attainment with the university institution.

Residence / Difficulties faced by the student	The family house		The Accommodation university		Total	
	Repetition	%	Repetition	%	Repetition	%
Facing the late reception of the letters from teachers in charge of the module	30	19.48%	11	23.19%	41	20.5%
Difficult access to the university private digital terrestrial	105	68.18%	31	67.39%	136	68%
No available means of using communication technology for the education attainment process	19	12.33%	4	8.69%	23	11.5%

Total	154	100%	46	100%	200	100%

Table N°16: Represents the relationship between the number of the internet users and E-learning platform users.

the internet users / Electronic Education platform users	Yes		No		Total	
	Repetition	**%**	**Repetition**	**%**	**Repetition**	**%**
Yes	108	54.54%	1	50%	109	54.5%
No	90	45.45%	1	50%	91	45.5%
Total	198	100%	2	100%	200	100%

The source: The table was elaborated by two students relying on the research form.

Through this study, it appears to us that most of the respondents either males or females use the communication technology at distance because of easy and quick access, constant up dating and precise information as first principal and from here, we conclude that the different genders agree on a reason and one motive which is the easy use and the quick access to information and its being an alternative to the attendance to avoid daily attendance.

And this what makes the communication technology at distance distinctive in the case when the good flow of the electronic net is available for the student, so it decreases a lot of matters for him, as decrease in time and the distance and developing the intellectual electronic environment of the student, and the study discovered that the majority of the respondents either those living family house or in the campus face the same difficulties and it is possible that the first problem refers to the flow of the interest which leads to the difficult reference to the digital terrestrial in the first range for both kinds.

The study showed us that not all the students of information and communication who use the internet all a daily basis, use at the same time the E-leaning platform at distances and rely on it, perhaps the cause is that the platform contains difficulties and obstacles which prevent the student from his educational attainment and the big disinterest of the public of the information and communication students in using the electronic tools as regard to the services that they provide and which were not available before and the achieved satisfaction, while concerning the users of the distance platform learning the cause refers according to what was seen in the theoretical frame from benefits and goals in the benefit of its users and it provides the learner with variety of educational sources which lead to the restriction of differences between learners and increase the cultural, scientific and intellectual level to those who were deprived of it in the society &and the effect and the effectiveness which were carried out on distance education system that it is equal on higher in effect and effectiveness than traditional ,educational system and that when these techniques are used with competence.

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

6. Exposure of the field study results and discussion:

Through carrying out the field study, analyzing and explaining the data we arrived to the following results:

The study discovered that the majority of the respondent use the recent communication technology in the education attainment with big percentage and this refers to what it provides as beneficial applications and its suitability to them.

And it became clear that the cause for the sample individuals depending on the communication technology at distance comes back to the easy and quick access and constant up-dating and precise in information and the motives of the sample individuals in using the E-learning platform in distance refer to the easy utility, our study shows that the gratifications which are achieved through using communication technology in distance are represented by increasing the educational attainment of the student with the percentage of 38%, and so satisfaction appeared on the sample in using the platform in distance in education attainment because it will be the reason in getting information easily and saving effort and time.

Communication technology in distance contributes and that the institution does not perform activities about distance education in the benefit of the students and the teachers with a percentage of 67% which led to the creation of difficulties which the respondents face with the university institution in the distance education attainment and the most important is the difficulties access to the university digital terrestrial with a percentage of 68%.

7. Conclusion:

Finally, we can say that the use of educational technology at distance for information and communication sciences students did not realize the expected objectives due to the obstacles and difficulties which the student still faces on the platforms, and for this a new kind of digital terrestrial should be followed in distance education in Algeria; therefore on adapting the educational subjects with what is basically in accordance with student desires and needs in the way of his use of lectures and guided work for instance.

DCMI(Dublin Core Metadata Initiative), LOM (Learning Objects Meta) . data) , SCORM (Shareable Content Object Reference Model), ARIADNE (Alliance of distance Instructional Authoring and Distribution Networks for Europe), CANCORE (Canadian Core Learning Resource Metadata Application Profiles).

8. Bibliography List :

Abdelmounim Ben Aouira, the impact of educational technology used in teaching the scientific subjects, Experimental sciences as modal, a field study in some secondary schools in Messila, Algeria, Assina for researches and studies, volume eight,1st issue, Constantine university2, Algeria, June 2017.

Abderrezek Edelimi, Communication theories in twenty-one century, Dar Eliazouri for publishing and distributing, Oman Jordan, 2016.

Abderrezek Kassir, The role of educational technology in improving the educational attainment level to the students of sciences and physical and sports techniques, sport creative magazine, 10th volume, issue 02 repeated 2nd parts, Lamin Dbaghin university, Setif, Algeria, 2019.

Abidat Dukan and others, The scientific research its concept, tools and types, Dar Elfikr, 1973.

Anderson, J.R. and Reiser, B.J. – "The Lisp tutor", Byte, vol. 10., n° 4, 1985.

Balacheff N, "Didactique et intelligence artificielle", Recherches en Didactiques des Mathématiques, édition La Pensée Sauvage, vol.14, n°1.2, 1994.

BARON M., GRAS R. & NICAUD J.-F. (eds). "*Deuxièmes journées EIAO de Cachan*" , Editions de l'ENS de Cachan.1991

BLONDEL F.M., SCHWOB M. (eds), Sixièmes Journées "Informatique et Pédagogie des Sciences Physiques", INRP-UDP, Lille, 1994.

Bouthry Anne , Christophe Jourdain, "Construire son projet de formation en ligne", Editions d'Organisation, 2003.

Bruillard E., I. Pareira, "Quelques problèmes d'apprentissage avec Logo et Prolog ", Actes du Congrés Francophone sur l'Enseignement Assisté. par Ordinateur, 1987.

Bruillard E.,: "*Les machines à enseigner ''*. Paris: Hermes. 1997

Carbonell G. Jaime : "Towards a Process Model of Human Personality Traits". 15(1-2): 1980.

Crozat Stéphane , "Eléments pour la conception industrialisée des supports pédagogiques numériques", Thèse pour obtenir le grade de Docteur de l'Université de Technologie de Compiègne Discipline : Informatique, 2002.

Demaizière F, Dubuisson C, "De l'EAO aux NTF : Utiliser l'ordinateur pour la formation", édition OPHRYS, 1992.

GEORGE Sébastien , "Apprentissage collectif à distance SPLACH : un environnement informatique support d'une pédagogie de projet", *Revue Sciences et technologies de l'information et de la communication pour l'éducation et la formation (STICEF)*, juillet 2002.

Hassen Imad Elmakaoui and Leila Essayed, Communication and its recent theories, Dar Egypt Lebanon, Egypt, 2nd edition, 2006.

Horton William, Katherine Horton,"E-learning tools and technologies", Edition Wiley publishing .Inc. 2003.

Kamel Mahmoud Elmaghrebi, The kinds of scientific research in human and social sciences, Dar Eltakafa for distributing and publishing , Oman, 1st edition, 2009.

Kaye, A., "L'enseignement à distance : un état de la question". *Perspectives*, vol. XVIII, n°1, 1988.

Keegan, D. "Foundations of distance education". London, Croom Helm. 1994

Loris bergia, "Conception et réalisation d'une plate-forme multi-agents pour l'apprentissage et l'enseignement à distance", 2002.

The impacts of distance communication technology
on the educational attainment of information and communication
sciences students

MBALA HIKOLO, "Analyse, conception, spécification et développement d'un système multi-agents pour le soutien des activités en formation à distance", octobre 2003.

Mehdi Fadl Allah, The principles of research writing and the investigation rules, 1st edition, Dar Eltliaa, Beirut, Lebanon, 1993.

Mohamed Abd Elhamid Ezziani, the scientific research in media studies, 1st edition, Dar Elkitab for publishing, Cairo.2000.

Mohamed Abd Elhamid, Communication and its pointing directions, the books world for publishing, 2nd edition, Cairo, 1998,

Mohamed Ahmed Mekdadi, The specialty of methods of social studies and its teaching kinds – teacher in international agency Elghouth (Elanoura) the perceptions of the secondary school stage students in Jordan government schools for the distance educational use in during of corona crisis and its developments, issue 19th, 2020.

Nguyen-Xuan A., Nicaud J.F. & Gélis J.M. "Effect of feedback on learning to match algebraic rules to expressions with an intelligent learning environment". *Journal of Computers in Mathematics and Science Teaching*, 16, 1997.

Ranwez S., "Composition Automatique de documents hypermédia adaptatifs à partir d'Ontologies et de Requête Intentionnelles de l'Utilisateur". Thèse de doctorat, Université de Montpellier II, France, 2000.

Saad Salmane Elmechhadani, The informative research methods, 1st edition, Dar Elkotob Eldjamii, Emirate, 2017.

Stevens, Kathleen C. "Can We Improve Reading by Teaching Background Information?", *Journal of Reading 25(4),* EJ 257 791, January 1982.