

Digital communication between family and school and its role in reducing the phenomenon of student absenteeism (a case study at Al-Arabi Al-Tabssi Middle School in Al-Qolea)

Djamila Boungab*

Mhammed Aït Mouhoub

Laboratory of Studies in Culture, Personality and Development, University Center of Tipaza
(Algeria)

boungab.djamila@cu-tipaza.dz

aitmouhoub.mhamed@cu-tipaza.dz

Received date:12-5-2025

Acceptance date:24-5-2025

Abstract:

The study aims to highlight one of the middle education institutions, "Al-Arabi Al-Tabssi," in Kolea, Tipaza province, which has successfully implemented the "Daily Digital Attendance System for Students" to manage unauthorized absences. The researchers relied on descriptive methodology, using a questionnaire as the primary data collection tool and interviews as supplementary support.

The study revealed that this digital system played several crucial roles in the digital communication process, including:

Facilitating communication with parents, eliminating the need for students to act as intermediaries in reporting absences; innovatively activating the correspondence notebook in a digital format; monitoring students' attendance and absences both in the morning and evening; and empowering the school administration to enhance the educational and learning process within the school environment.

Keywords:

Family, School, School Absenteeism, Digital Communication, Digital Daily Attendance System for Students

*Corresponding author

Introduction:

The family and school are among the most important institutions responsible for reforming society and strengthening its cohesion. They contribute fundamentally to the maturation of social action in all its manifestations in school life. Therefore, strengthening the relationship between these two institutions and bridging the gaps between them is an urgent necessity, given the overlapping and interconnected nature of their roles, which are based on the unity of goals, functions, and responsibilities.

Continuous supervision of the child by both the family and the school is therefore crucial to preventing phenomena such as absenteeism or school dropout, in addition to consolidating the educational skills that the child must acquire in school. This requires constant support from the family within the home, through daily monitoring of the child and ongoing coordination with the school. The interaction between school and family is a necessity imposed by the child's best interests. Their educational roles complement each other, and their relationship is based on continuous communication and effective cooperation, founded on the principle of give and take, to develop and improve the educational process. This includes the need for both families and schools to be aware of the importance of communication in building a strong relationship between them, through approved mechanisms that ensure the achievement of this goal.

Recognizing the importance of this relationship, the Ministry of Education has taken the initiative to introduce digital technology into Algerian schools, a step aimed at raising the educational level and enhancing communication between the various actors in the educational system.

The Problem:

Communication is one of the fundamental pillars of human societies, as it enables the exchange of ideas and information and strengthens social ties. Since ancient times, humans have relied on various means, from physical signs to writing in its various forms, to the various technologies imposed by today's digital imperative, with technological advancements. (Al-Khader and Al-Kouda .2020) Emphasized that communication has witnessed a qualitative shift with the emergence of the internet and digital communication tools, which have brought about a radical transformation in the way individuals interact. In the educational field, specialists seek to employ digital technology to improve the quality of education and enhance communication between stakeholders in the educational process, such as working to reduce some negative phenomena in the school environment. Many studies have focused on the phenomenon of student absenteeism. (Muhammad Qaradi 2022) Confirmed that frequent absences negatively impact academic achievement, while attendance enhances academic performance. (Korat and Bouanani .2017) Also indicated that the weak relationship between school and family is one of the main factors contributing to this phenomenon.

In response to this challenge, the Algerian government initiated the "School Digital Communication Environment" portal to enhance the connection between educational institutions and families, to provide modern digital services. This is even though the study by Bouchakshoukha and Sidi Dris 2022) revealed that teachers' weak use of these digital platforms, as they still rely on traditional methods despite their awareness of the importance of technology in facilitating the educational process. In the search for innovative solutions, the

Al-Arabi Tebessi Completion School has emerged as one of the leading institutions in implementing digitalization. It has adopted the "Daily Digital Student Attendance Device" system, which has contributed to transforming the traditional correspondence notebook into a more effective digital version, enhancing communication between the administration and parents. This institution is also the second school nationwide to adopt this system, after the Martyr Mohamed Zernukh School in Djelfa.

Despite the developments, studies on digital communication between schools and parents remain scarce in Algeria, calling for further research to understand its role in reducing absenteeism rates and transforming educational institutions into a more modern model. Hence, this study aims to pose the following question:

- How effective is the digital communication device adopted at the Al-Arabi Tebessi School in reducing student absenteeism? What are the mechanisms by which it impacts improving communication between schools and parents, and enhancing school discipline?

Hypotheses:

Based on the question posed, we formulated two basic hypotheses as follows:

1. The ability of the Al-Arabi Al-Tabssi Foundation to enforce discipline within the school environment contributed to reducing student absences.
2. The ability of the Al-Arabi Al-Tabssi Foundation to effectively communicate with parents contributed to reducing student absences.

2. Study Concepts:

2.1. Definition of Absence:

In Lisan Al-Arab by Ibn Manzur, it is stated: "He was absent from the matter by occultation, absence, absence, coma, absences, and occultation, and occultation, and occultation, and occultation, and occultation, meaning to be absent." He was absent, and he was absent from him. (Ibn Manzur, 654)

- Ihsan Muhammad al-Hasan defines it as: "A negative phenomenon in which an employee is absent from work for specific days or weeks without notifying the organization." (Al-Hasan, 2005, 95)

and (Qahha, 2021-2022) defines it as: "The employee's failure to report to work at the time they are supposed to be present. Absenteeism is an accidental interruption in the organization, and it can violate an agreement. The risks that can result from this social act are primarily economic, related to the economic and social effectiveness of the organization and the performance of individual workers or employees."

Procedurally, absenteeism can be defined as the failure of a student to attend classes on official school days without an acceptable excuse or prior permission from the administration. Absenteeism can be classified into several types according to its causes and duration.

Types of Student Absence:

1. **Excused Absence:** The student is absent but provides an official justification, such as a medical certificate, parental permission, or an official document confirming the reason for the absence.

2. **Unexcused Absence:** When a student is absent without providing a clear justification, it may impact their academic achievement and lead to administrative action.

3. Frequent or Chronic Absence: When a student is frequently absent, whether with or without an excuse, it negatively impacts their academic performance and may lead to their dropping out of school.

4. Partial Absence: When a student misses only a few classes during the school day, such as arriving in the morning and being absent in the evening, or vice versa.

5. Mass Absence: Student absence and attendance at Al-Arabi Al-Tabsi School are monitored using digital systems, including:

A. The digital attendance system automatically records students' entry and exit.

B - A digital correspondence notebook, which, when scanned, sends notifications to parents immediately upon a student's absence.

C - Direct communication with parents via text messages or educational apps.

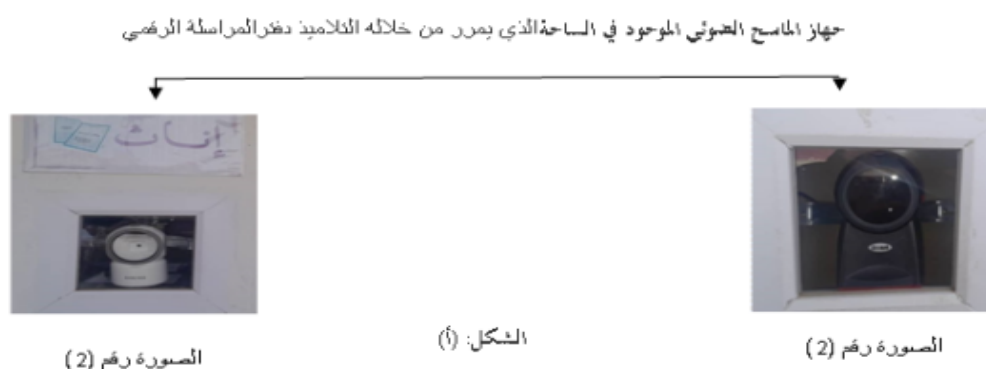
2-2- Communication: George Lenderg defines it as interaction through symbols and signals that act as a stimulus or stimulus, leading to a certain level of excitement in the recipient (Salwa et al., 2005, 8).

2-2-1- Digital communication: It is defined as the process of exchanging information or providing entertainment, whether on a personal or professional level, using modern technology. These technologies have evolved in our time, making it possible to communicate between one continent and another, or even between one country and another, in a matter of seconds, to the point that the world has become a small village where news reaches everyone (Zainab Ibrahim, 2013, 20).

2-2-2- Effectiveness of School Digital Communication:

Procedurally: By effectiveness of school digital communication, we mean the extent to which the digital tools used in educational institutions achieve communication goals between various parties (administration, teachers, students, and parents) smoothly and successfully. This effectiveness is measured by improving the quality of interaction and reducing information gaps. And increasing the level of participation and follow-up among all stakeholders in the educational process.

-2-2-3- The digital attendance system device for students: This is a web diffusion device, as shown in Figure (A). It connects a computer to two barcode scanners and an audio amplifier. This device also connects to a mobile phone containing an application filled with the numbers of parents, teachers, and administrators. Through this application, text messages are sent to parents informing them of their children's absence immediately after the students enter the classroom and the school gates are closed, or to inform them of all matters related to their children's education, behavior, and administrative matters.



2-2-4 - Digital Correspondence Book:

This is a classic correspondence book with the scanning device number entered, making it a "digital correspondence book." The digital attendance system only records attendance if the student indicates their attendance upon entering school using the "scanning device number" interface on the scanner shown in Figure A. Figure 2 is for males, and Figure 3 is for females. Students who do not indicate their attendance are recorded as absent on the device. Using this technology, the device can count absences. The digitization supervisor sends short messages via the digital phone connected to the device, filled with the phone numbers of all students' parents, informing them of their children's absence from school at that time. This process enables parents to follow up on their children's progress in all school matters, without the student's mediation, which was previously relied upon by the classic attendance book.

2-3 Definition of School Discipline:

Technically, (Al-Omari 1996, p. 19) defined school discipline as "an educational process aimed at controlling behavior and emotions under directed leadership to achieve a specific goal and achieve the desired behavior." (Omdi. 2008, p. 6) defined it as "school discipline involves the application of strategies and rules that facilitate the learning process and achieve order that contributes to the student's personal growth by responding to their psychological and personal needs, both as individuals and within the group."

Procedurally, we define it as students' adherence to school guidelines and instructions to create an organized and effective learning environment. This discipline helps improve academic achievement, enhance a sense of responsibility, and instill the values of commitment and self-discipline, which prepare students for success both inside and outside of school. School discipline contributes to creating an organized and stimulating learning environment, helping students maximize their learning. It helps students focus on lessons without distraction, enhancing comprehension and understanding. It also promotes personal responsibility for their actions, a necessary skill in practical life. It also improves social relationships, as it contributes to instilling values of respect and cooperation between students and teachers, creating a positive school environment that reduces behavioral problems and inappropriate behavior, such as violence and bullying. This makes schools a safer place for everyone and paves the way for academic and professional success. It prepares students for the job market by accustoming them to adhering to punctuality and rules, traits required in any professional field.

3 - Theoretical Approach:

In this study, we relied on role theory because it is the closest to understanding the phenomenon. (Ghaith 2008, 390) defines a role as "a set of actions and duties that society (represented by its institutions and individuals) expects a person to occupy a specific social position at a specific time." (Maan Khalil. 1982, 242) defines it as "the idea of a role stems from society, as a set of interconnected social centers that include social roles performed by the individuals who occupy these centers." The change that has occurred in the function of classical communication existing between the institutions of the family and the school lies in the set of roles occupied by digital communication, which we will mention during our analysis of the results of this study.

4 - Previous Studies:

4-1 - Studies on the Phenomenon of Student Absence:

4-1-1 - Mohamed Qarad's study (2022) entitled "Repeated Absences and Their Relationship to Academic Achievement among Middle School Students." The study aimed to determine the relationship between repeated school absences and academic achievement among middle school students. To achieve this goal, the researcher studied the results of a sample of 216 students distributed across three middle schools in the city of Laghouat in the achievement tests for the second semester of the 2020/2021 academic year, linking these results to the variable of repeated absences. He concluded that all the results of the sample targeted by the study demonstrated that the level of students with repeated absences was weak and low, while the level of regular students with constant attendance was high. This indicates a correlation between repeated school absences and students' academic achievement.

4-1-2 - René Halberstadt's (2023) study on "Opening the Black Box of School Absence: Explaining Authorized and Unauthorized Absence." The study aimed to understand the relationship between authorized and unauthorized absences, the influence of peers on absences, and the impact of parenting styles on absences. It also aimed to evaluate the role of school policies in reducing absences. The study used data from Dutch schools and relied on multilevel statistical analysis models, including analyses at the individual, class, and school levels. The study results concluded that students who are willing to be absent use authorized and unauthorized absences, and that absences are significantly influenced by peer behavior.

Furthermore, an authoritarian parenting style is associated with lower absences, and students from immigrant or low-income families often attend schools with stricter absence policies.

4.2 - Studies on Digital Communication:

4.2.1 - MakawiFawzia's study, "Digital Communication in the Economic Institution" (2016), aimed to explore the reality of digital communication and digital technology at Sonelgaz. This study used a case study approach, selecting 62 employees as a purposive sample. Using observation and questionnaire tools, the researcher reached the following conclusions:

- The use of digital communication in the institution has become an inevitability imposed by modern technologies.

- Digital communication in all its modern technological forms is present at Sonelgaz.

4.2.2 - NasimaDaifallah's study on the use of information and communication technology to improve the quality of the educational process (2017). The study aimed to identify the impact of using information and communication technology on improving the educational process with its various components, and to identify the obstacles to the use of information and communication technology that prevent its effective use. The researcher used the descriptive-analytical approach and relied on a sample of 406 professors from seven universities. She also relied on questionnaires and observation as tools.

The study yielded the following results:

Strengthening the use of information and communication technology in the educational process by creating educational communication sites between professors and their students; using distance learning to create lectures, exercises, and model answers; connecting the university to a strong internet network; and raising students' awareness of the importance of using information and communication technology in the educational process.

4-2-3 - A study by Bint Nasser Al-Dahli, Bint Salem Al-Harthi, Thabet Al-Ani, and Al-Kharousi (2023) entitled: "Employing Electronic Communication between School Administration and Parents in the Sultanate of Oman in Light of the Epstein Model for Community Partnership." The study aimed to identify the reality of employing electronic communication between school administration and parents in the Sultanate of Oman in light of the "Epstein Model for Community Partnership." The study followed a descriptive approach using a dual research method. The study population consisted of all administrators, technicians, teachers, and parents of students at all levels of government school education. A questionnaire was applied to an available sample of 1,340 individuals, and a semi-structured individual interview was applied to a purposive sample of 24 individuals. The questionnaire results showed that school administrations employ technology in communication partnerships, with a medium rating from the study sample's perspective. An analysis of the interviews revealed three axes describing how this use is implemented, namely: The study focused on best school management practices in partnerships in the field of electronic communication, challenges, and development proposals. In light of the findings, the study presented several recommendations, the most important of which was building the financial and human capacity of school administrations and parents' councils to utilize electronic communication.

4-2-3- Katelin Jean Burns's (2016) study, titled "The Quality of Communication Between Parents and Teachers of Students with Specific and Unspecified Special Needs," sought to determine parents' and teachers' perceptions and preferences regarding digital communication, and how digital communication affects parental engagement. One of the most important findings of this study was that parents of children receiving special

support (such as special education or RTI intervention) preferred to communicate via email, text messages, and social media. The "richness of the medium" theory was applied to understand how parents choose communication methods with teachers.

5- Human Scope of the Study:

The study population consists of teachers at Al-Arabi Al-Tabsi Intermediate School in Al-Qalaa. The researchers selected the entire study population through a comprehensive survey rather than selecting a sample. The study population consisted of 25 teachers, four of whom were unwilling to complete the questionnaire. This resulted in a total of 21 teachers eligible for the study.

6- Study Methodology:

The study followed the descriptive approach, which is considered "a method for describing the phenomenon under study." And its quantitative depiction, by collecting standardized information about the problem, classifying it, analyzing it, and subjecting it to careful study." (Sultaniya and Al-Jilani, 2013, 168)

6-1 - Research Tools: The tool used in this study (the questionnaire) was defined by (Maurice Angers, 2004, 204) as: "A direct technique for scientific investigation, used with individuals and allowing them to be questioned in a directed manner and to conduct quantitative surveys to find mathematical relationships and make numerical comparisons." The research questionnaire was designed by the researchers according to the dimensions of the research variables. It consists of (20) paragraphs, 19 of which are closed (yes, no), and the final question was open.

To have confidence in the results obtained through a study, the researcher must ensure the validity of the tool used to collect data in terms of its validity and reliability in the study field environment. Therefore, we verified the validity and reliability of the questionnaire used in the study results. Instrument Validity: Examining the validity of the instrument is considered the most important step in standardizing it, and it is indispensable. (Maamaria, 2007, 92) In this study, we relied on methods to determine the validity of the instrument: "arbitrator validity." The questionnaire items were presented to the institution's professors, and the arbitrators' comments were taken into account, modifying some of the wording of the items and rejecting others.

- Questionnaire Reliability: The questionnaire's reliability was calculated in the study results.

- The researchers chose the free interview as a supplementary tool for the questionnaire, defined as: "A method based on dialogue or (oral) conversation between the researcher and the respondent" (Ali Gharbi et al., 1999, 191).

- The researchers in this study conducted a semi-structured interview with the director of the Al-Arabi Al-Tabsi Foundation in Al-Qalaa. This interview was conducted on May 29, 2024. The interview guide consisted of four questions that included the objectives and hypotheses of the study. We will mention the most important points in them during the study results.

7 - Study Results:

1. Analysis of Personal Data:

Table No. (01): Sample Distribution According to Personal Variables

	Personal variables	n	%
Gender	Male	5	22,7
	Female	17	77,3
Age	20-30 years	5	22,7
	31-40 years	13	59,1
	41 years and older	4	18,2
Certification	Bachelor's	2	9,1
	Master's	12	54,5
	Training Institute	8	36,4
Seniority	1-5 years	6	27,3
	6-10 years	2	9,1
	11-15 years	7	31,8
	16 years and older	7	31,8
Subject of study	Scientific	9	40,9
	Social and Literary	12	54,5
	Artistic and Activities	1	4,5
	Total	22	100,0

We note from the table above, which represents the frequencies and percentages of the personality variables (gender, age, degree, seniority, and subject of study), that the sample is distributed by gender as follows: 77.3% of the sample was female, while 22.7% of the sample was male. As for the age variable, the percentage of teachers aged 31-40 years was 59.1%, while the percentage of teachers aged 20-30 years was estimated at 22.7%, and the percentage of teachers over 41 years was estimated at 18.2%. We also note the distribution of the sample according to the degree: the number of teachers with a master's degree was (n=12) at a rate of 54.5%, while the number of teachers with a training institute degree was (n=8) at a rate of 36.4%, and the number of teachers with a bachelor's degree was (n=2) at a rate of 9.1%. Regarding the seniority variable, we find that the number of teachers with seniority ranging from 11 to 15 years and over 16 years was the same (n=7), representing 31.8%. Those with seniority ranging from one to five years (n=6) represented 27.3%, while those with seniority ranging from six to ten years (n=2) represented 9.1%. Regarding the subject area taught by teachers, we find that there were social studies and literature teachers (n=12), representing 54.5%, science teachers (n=9), representing 40.9%, and one arts and activities teacher, representing 4.5%.

Validity

Internal consistency validity:

Internal consistency refers to the degree of consistency of each questionnaire item with the axis to which it belongs. The internal consistency of the questionnaire was calculated by:

1_ Calculating the correlation coefficients between each questionnaire item and the total score for the axis itself.

Table No. (2): Shows the correlation coefficients between each item of the axes and the total score of the axis.

Axis I		Axis II	
Item	Rp	Item	Rp
1	*0,486	1	*0,453
2	**0,575	2	*0,545
3	*0,467	3	**0,803
4	*0,435	4	**0,802
5	*0,334	5	**0,726
6	*0,339	6	**0,500
7	0,353	7	*0,468

The table above shows that all correlation coefficient values between the items and the total score for each axis are statistically significant at the 0.01 and 0.05 levels. This indicates the validity of internal consistency in the questionnaire scores.

2_ Calculating the correlation matrix between the questionnaire dimensions and the total score for the questionnaire as a whole.

Table No. (3): Shows the correlation matrix between the questionnaire axes and the total score for the questionnaire.

	Total score
Axis I	0,767^{**}
Axis II	0,818^{**}

The table above shows that all correlation coefficients across all questionnaire dimensions are statistically significant at the $\alpha=0.01$ level. Therefore, all questionnaire dimensions are considered valid for what they were designed to measure.

Second: Reliability

The reliability of the scale scores was calculated using Cronbach's alpha method, as illustrated in the following table:

Table No. (4): Results of measuring the reliability coefficient

	items	Cronbach's alpha
Axis I	7	0.603
Axis II	7	0.631
Total	36	0.611

The results shown in the table above indicate that the Cronbach's alpha coefficient for the questionnaire as a whole was high, estimated at 0.611. The Cronbach's alpha coefficient for the questionnaire's dimensions was also high, ranging between 0.631 and 0.603, indicating that all questionnaire items enjoyed a high degree of reliability.

Analysis of the results of the hypotheses:

1. The ability of the Arab Tebessi Foundation to enforce discipline within the school environment contributed to reducing the phenomenon of student absenteeism.

Table No. (4): Shows the extent to which students are more interested in the correspondence notebook than before.

	n	%	K ²	Sig	DF
Yes	19	86,4	11,636	0,001	1
No	3	13,6			
Total	22	100,0			

We note from the table above that the largest percentage of teachers, representing 86.4%, confirmed that students have become more interested in the correspondence notebook than before, while the smallest percentage, representing 13.6%, indicated that students are not interested in it. The value of the coefficient of squared (11.636) at the significance level of 0.001 and the degree of freedom (1), which is a statistically significant value at the 0.05 level, meaning that there are differences in teachers' answers in favor of those who believe that students have become more interested in the correspondence notebook than before.

Table No. (5): Shows the extent to which the institution allows students to enter the classroom if they do not bring a correspondence notebook.

	n	%	K ²	Sig	DF
Yes	9	40,9	0,727	0,044	1
No	13	59,1			
Total	22	100,0			

We note from the table above that the largest percentage of teachers, representing 59.1%, confirmed that the institution would not allow students to enter the classroom if they did not bring a correspondence notebook, while the smallest percentage, representing 40.9%, indicated that the institution would allow this. The value of the coefficient of squared (0.727) reached a significance level of 0.044 and a degree of freedom of 1, which is a statistically significant value at the 0.05 level. This means that there are differences in the teachers' answers in favor of those who believe that the institution should not allow students to enter the classroom if they do not bring a correspondence notebook.

Table No. (6): Shows the extent to which the institution's use of the new digital device has affected students' greater interest in studying.

	n	%	K ²	Sig	DF
Yes	14	63,6	1,636	0,021	1
No	8	36,4			
Total	22	100,0			

We note from the table above that the largest percentage of teachers, representing 63.6%, confirmed that students have become more interested in the educational process within the classroom since the institution's use of the new digital device, while the smaller percentage, representing 36.4%, indicated the opposite. The value of C-squared (1.636) at a significance level of 0.021 and a degree of freedom of (1), which is a statistically significant value at the 0.05 level, meaning that there are differences in teachers' answers in favor of those who believe that students have become more interested in the educational process within the classroom since the institution's use of the new digital device.

Table No. (7): Shows the statistical analysis of the statement: "Has the rate of student absence decreased?"

	n	%	K2	Sig	DF
Yes	21	95,5	18,182	0.000	1
No	1	4,5			
Total	22	100,0			

The table above shows that the largest percentage of teachers, representing 95.5%, confirmed that the rate of student absences had decreased, while the smallest percentage, representing 4.5%, indicated the opposite. The value of the C-squared (18.182) at the significance level of 0.000 and the degree of freedom (1), which is a statistically significant value at the 0.05 level, meaning that there are differences in teachers' responses in favor of those who believe that the rate of student absences has decreased.

Table No. (8): Shows the extent to which students have justified their absences since the institution began using this new device.

	n	%	K2	Sig	DF
Yes	15	68,2	2,909	0.048	1
No	7	31,8			
Total	22	100,0			

The results of the table above show that the largest percentage of teachers, representing 68.2%, confirmed that student absences have become justified since the introduction of the new device, while the smallest percentage, representing 31.8%, indicated the opposite. The value of the C-squared (2.909) at a significance level of 0.048 and a degree of freedom of (1), which is a statistically significant value at the 0.05 level, meaning that there are differences in teachers' responses in favor of those who believe that student absences have become justified since the introduction of the new device.

Table No. (9): Shows the extent of attendance verification for secondary subjects

	n	%	K2	Sig	DF
Yes	20	90,9	14,727	0.000	1
No	2	9,1			
Total	22	100,0			

The table above shows that the largest percentage of teachers, representing 90.9%, confirmed that students now maintain attendance in secondary subjects as well as in core subjects, while the smallest percentage, representing 9.1%, indicated the opposite. The value of the C-squared (14.727) at the significance level of 0.000 and the degree of freedom (1), which is a statistically significant value at the 0.05 level, meaning that there are differences in teachers' answers in favor of those who believe that students have now maintained attendance in secondary subjects as well as in core subjects.

Table No. (10): Shows the importance of introducing the digital system device

	n	%	K ²	Sig	DF
Yes	5	22,7	6,545	0.011	1
No	17	77,3			
Total	22	100,0			

We note from the table above that the largest percentage of teachers, representing 77.3%, confirmed that the correspondence notebook was not given this importance before the

device was introduced, while the smaller percentage, representing 22.7%, indicated the opposite. The value of the co-squared (6.545) at a significance level of 0.011 and a degree of freedom of (1), which is a statistically significant value at the 0.05 level, meaning that there are differences in the answers of teachers in favor of those who believe that the correspondence notebook was not given this importance before the device was introduced. From the previous tables (4-10), we conclude, based on the opinions of the surveyed teachers, that discipline within the school environment (Al-Arabi Al-Tabasi Intermediate School) has contributed to reducing student absenteeism and increasing student interest in learning. The new digital system has accelerated and facilitated communication between the school and the family (parents), making it instantaneous for parents to be notified of their children's absences. Students are now unable to be absent without a valid reason. This can be explained by the fact that the aforementioned system has become a means of social control, known as the mandatory authority, which represents a monitoring mechanism for students and requires them to attend school daily, because obligation breeds commitment, as Imam Al-Shatibi said.

2. The effective contribution of communication with parents in reducing student absenteeism:

Table No. (11) shows the relationship between the presence of the digital attendance system for students and the speed and real-time communication between the school and parents.

	n	%	K2	Sig	DF
Yes	22	86,4	/	/	/
No	0	0			
Total	22	100,0			

The table above shows that 100% of teachers confirmed that the digital in-person system for students made communication with parents quick and immediate. This, we believe, will also accelerate parental intervention when necessary to address various problems related to their children's education and learning, as well as monitor all aspects of their children's schooling. This contributes to making the educational process more effective and potentially achieving higher levels of success.

Table No. (12): Illustrates the positive impact of the school's digital communication with parents on the educational process.

	n	%	K2	Sig	DF
Yes	21	95,5	18,182	0,000	1
No	1	4,5			
Total	22	100,0			

We note from the table above that the largest percentage of teachers, representing 95.5%, confirmed that the school's digital communication with parents had a positive impact on the educational process, while the smaller percentage, representing 4.5%, indicated the opposite. The value of C-squared reached (18.182) at a significance level of 0.000 and a degree of freedom of (1), which is a statistically significant value at the 0.05 level. This means that there are differences in teachers' answers in favor of those who believe that the school's digital communication with parents had a positive impact on the educational process.

Table No. (13): Shows the extent of the school's communication with parents regarding problems other than absenteeism.

	n	%	K2	Sig	DF
Yes	19	86,4	11,636	0,001	1
No	3	13,6			
Total	22	100,0			

The table above shows that the largest percentage of teachers, representing 86.4%, confirmed that the institution communicates with parents regarding educational problems other than absenteeism, while the smallest percentage, representing 13.6%, indicated the opposite. The value of the C-squared (11.636) at the significance level of 0.001 and the degree of freedom (1), which is a statistically significant value at the 0.05 level, meaning that there are differences in teachers' answers in favor of those who believe that the institution communicates with parents regarding educational problems other than absenteeism.

Table No. (14): Shows the extent of parents' interaction with the school when informed of their children's absence.

	n	%	K2	Sig	DF
Yes	17	77,3	6,545	0,011	1
No	5	22,7			
Total	22	100,0			

We note from the table above that the largest percentage of teachers, representing 77.3%, confirmed that all parents interact with the school when informed of their children's absence, while the smallest percentage, representing 22.7%, indicated the opposite. The value of the C-squared (6.545) at a significance level of 0.011 and a degree of freedom of (1), which is a statistically significant value at the 0.05 level, meaning that there are differences in teachers' answers in favor of those who believe that all parents interact with the school when informed of their children's absence.

Table No. (15): Statistical analysis of the statement "Communication with the student's guardian through the administration by sending him a text message" shows

	n	%	K2	Sig	DF
Yes	8	36,4	1,636	0,021	1
No	14	63,6			
Total	22	100,0			

The table above shows that the largest percentage of teachers, representing 63.6%, confirmed that the administration does not communicate with the student's guardian by sending them a text message, while the smallest percentage, representing 36.4%, indicated the opposite. The value of the C-squared (1.636) at a significance level of 0.021 and a degree of freedom of (1), which is a statistically significant value at the 0.05 level, meaning that there are differences in the teachers' answers in favor of those who believe that the administration does not communicate with the student's guardian by sending them a text message.

Table No. (16): Shows the extent to which parents approve of the new digital method of communication with the school:

	n	%	K2	Sig	DF
Yes	21	95,5	18,182	0,000	1
No	1	4,5			
Total	22	100,0			

The results of the table above confirm that the largest percentage of teachers, representing 95.5%, confirmed that parents favored this new (digital) method of school communication, while the smallest percentage, representing 4.5%, indicated the opposite. The value of C-squared reached (18.182) at a significance level of 0.000 and a degree of freedom of (1), which is a statistically significant value at the 0.05 level. This means that there are differences in teachers' responses in favor of those who believe that parents favored this new (digital) method of school communication.

Table No. (17): Shows differences in teachers' opinions regarding the need to generalize the use of digital devices in other educational institutions.

	n	%	K2	Sig	DF
Yes	20	90,9	14,727	0,000	1
No	2	9,1			
Total	22	100,0			

We note from the table above that the largest percentage of teachers, representing 90.9%, emphasized the need to generalize the use of this digital device in other educational institutions, while the smallest percentage, representing 9.1%, indicated the opposite. The value of the C-squared (14.727) at the significance level of 0.000 and the degree of freedom (1), which is statistically significant at the 0.05 level, means that there are differences in teachers' answers in favor of those who believe it is necessary to generalize the use of this digital device in other educational institutions.

We conclude from the previous tables (11-17) that the new digital system has contributed to activating the communication process between the family and the school at Al-Arabi Al-Tabsi Intermediate School, as it played a role in reducing the phenomenon of student absence from school, according to the teachers' opinions.

7 - 3 - Discussion of the results:

Table No. (18) represents the decrease in student absence rates for the third semester between 2023 and 2024.

	2023	2024
March	2,18 %	1,78 %
April	2,68 %	1,75%
May	2,70 %	1,05%

The digital attendance system, which began operating at the Arab Tebessi Foundation on February 4, 2023, represents a qualitative shift in school communication with families. It has significantly contributed to reducing student absences and increasing student commitment to attendance compared to the previous traditional system. The director of the foundation revealed a clear decline in absence rates during March, April, and May of 2024 compared to the same period in 2023. It is worth noting that recent absences are limited to justifiable reasons, such as health reasons or emergency circumstances.

We note here that digital communication contributes to reducing the phenomenon of absence through several mechanisms, most notably:

- Eliminating traditional mediation between students and their parents, which enhances transparency in reporting.

- Enhancing cooperation among educational staff (teachers and administrators) in monitoring absences.
- Facilitating communication between schools and parents, ensuring continuous monitoring.
- Instilling a sense of responsibility and discipline among students through their awareness of school and family oversight.
- Creating a positive impact that encourages students who are habitually absent to adhere to academic and behavioral commitment.
- Achieving integration and cooperation between the school and family environments to address educational and social difficulties.
- Updating the traditional correspondence notebook and replacing it with a more effective digital system.

According to the study results and teachers' opinions, adopting a digital system contributed to improving the level of discipline and increasing the efficiency of communication between the school and family, which positively impacted reducing absenteeism and enhancing school commitment. We can also conclude from the results of this study that there are clear links between student absenteeism and the impact of digital communication between family and school institutions.

The effective implementation of the digital communication system at the Al-Arabi Al-Tabasi Foundation contributed to a significant reduction in absenteeism rates. This is consistent with studies by Makkawi Fawzi (2016) and NasimaDaif Allah (2017), which confirmed that digital technology has become a necessity in educational institutions, demonstrating the pivotal role of technology in improving overall performance and facilitating interaction between individuals.

The Omani study (2023) on electronic communication between school administration and parents also showed that schools that employed technology to communicate with families achieved a moderate degree of success. This reflects the importance of developing these mechanisms to enhance school commitment. We also confirmed the effectiveness of this technology in improving student academic performance, which is consistent with Katelin Jean Burns' study (2016), which provided insights into the impact of digital communication between parents and teachers. The study showed that parents with children in need of special academic support preferred digital communication methods.

Conclusion:

According to teachers, the results of the current study confirmed the importance of digital systems in improving educational institutions' control over student behavior. It contributes to enhancing school communication, reducing absences, and achieving a qualitative leap in the educational process. This highlights the role of digitization as an effective means of improving administrative and educational performance, taking advantage of technological development to achieve positive results at lower costs and in a faster time. Therefore, we propose conducting extensive studies that include interviews with parents and students to understand the impact of digital communication on educational and behavioral aspects, comparing student results between classes before and after implementing the digital system to measure its effectiveness, coordinating the efforts of school administrations to pressure the relevant authorities to provide this system in educational institutions, and supporting the establishment of parents' associations to enhance the role of families in implementing the digital system to ensure a modern and safe educational environment.

References:

- Ibn Manzur (no date). Lisan al-Arab. Beirut: Dar al-Sadr.
- Ihsan Muhammad al-Hasan (2005). Industrial Sociology. Jordan: Wael Publishing and Distribution House.
- Al-Zain al-Khalifa al-Khader, Abu Dhar Mubarak al-Koda (2020). School Administration. Our Books for Personal Publishing.
- Ibrahim al-Omari (1996). Human Behavior and Modern Management. Alexandria. University House.
- Bashir Maamria (2007). Research and Studies in Psychology. Algeria: Al-Habr Publications.
- BelkacemSultania and Hassan al-Jilani (2013). Foundations of Social Curricula. Cairo: Dar al-Fajr Publishing and Distribution.
- Bouchakshoukha Louisa, Amar Sidi Dris (December 31, 2022). The Reality of Digital Communication among Primary School Teachers - The Teachers' Space as a Model - Al-Risala Journal of Scientific Studies. Volume 6 (Issue 4).
- Reda Qaha. (2021-2022). The Effectiveness of Industrial Organization and Its Impact on Employee Performance within the Institution. Doctoral Thesis. Department of Law, Faculty of Law and Political Science, University of Hadj Lakhdar, Biskra, Algeria.
- Zainab Yassin Muhammad Ibrahim. (2013). The Effectiveness of Content Delivery Tools Based on Electronic Communication Applications in Developing the Skills of Employing Some Technological Innovations among Educational Technology Students. Doctoral Thesis. Institute of Educational Studies, Faculty of Specific Education, Menoufia University, Cairo, Egypt.
- Othman Salwa et al. (2005). Communication and Social Work. Alexandria: Dar Al-Ma'rifa Al-Jami'a.
- Ali Gharbi et al. (1999). Foundations of Methodology in the Social Sciences. Constantine, Algeria: Mentouri University Publications.
- Omar Ma'an Khalil. (1982). Critique of Contemporary Social Thought - An Analytical and Critical Study: Dar Al-Afaq Al-Jadida, Beirut. Karima Korat, Mustafa Bouanani (January 15, 2017). Reasons for school absenteeism among middle school students - from the perspective of their teachers. Scientific Observer Journal. Volume 1 (Issue 4).
- Linda Oumdi (2007/2008). Discipline within the educational institution and its impact on student behavior. Master's thesis. Faculty of Social and Human Sciences. Sociology of Social Change. University of Algiers.
- Mohamed Atef Ghaith (2008). Dictionary of Sociology: Dar Al-Ma'rifa Al-Jamia'a. Alexandria.
- Mohamed Qaradi (March 31, 2022). Frequent absences and their relationship to academic achievement among middle school students - A field study in the city of Laghouat. Journal of Social Sciences. Volume 16 (Issue 1).
- Mohamed Lamine Ben Arous (January 1, 2021). Role and social status in society. Journal of Legal and Social Sciences.
- Maurice Angers, trans. Bouzerd Sahraoui et al. (2004). Scientific Research Methodology in the Humanities. Algeria: Dar El Kasbah Publishing House.

- Quality of Parent-Teacher Communication for Students with and without Identified Special Needs, Katelin Jean Burns (2016), USA, Fordham University - Dissertations ETD Collection.

- Opening the Black Box of School Absenteeism: Explaining Authorized and Unauthorized Absenteeism; Rene Halberstadt (2023), University of Rotterdam, Erasmus.

Link to the study on the website: <https://pure.nl/en/publications/opening-the-black-box-of-school-absenteeism-explaining-authorized>