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# Digital Transformation Journey: Assessing Higher Education Experience in Algeria

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**Abstract**

This study aims to assess the digital transformation in Algeria's higher education sector, recognizing its pivotal role. Utilizing the IMRAD methodology, the research outlines pertinent prior studies and presents an analysis of a survey conducted with a cohort of professors and students at Khenchela University. It also examines the Digitalization Steering Plan. Upon analyzing the data, the study offers a favorable assessment of the digital transformation experiences in higher education and scientific research. It further proposes several strategies to enhance and sustain the success of digital initiatives, including: Embracing leading international practices in the digitalization of higher education. Strengthening internet infrastructure and providing special subscription rates for students.

*Keywords:* Assessment, digital platforms, digital transformation, experience, Higher Education

**ملخص**

هدفت هذه الدراسة إلى تقييم التحول الرقمي في الجزائر في قطاع التعليم العالي، الذي يُعد قطاعًا مهمًا وحيويًا. وقد اعتمدت الدراسة على منهجية IMRAD، حيث عرضت الدراسات السابقة ذات الصلة بموضوع البحث، كما حللت استبيانًا وُزِّع على عينة من أساتذة وطلبة جامعة خنشلة. إضافة إلى ذلك، تم تحليل المخطط التوجيهي للرقمنة (SDN).وبعد مناقشة النتائج، توصلت الدراسة إلى تقييم إيجابي لتجربة التعليم العالي والبحث العلمي، واقترحت مجموعة من التوصيات التي من شأنها المساهمة في دعم التحول الرقمي ونجاحه، ومن أهمها: استيراد التجارب الرائدة عالميًا في رقمنة التعليم العالي؛تحسين شبكة الإنترنت وإجراء تخفيضات خاصة لاشتراكات الطلبة.

**كلمات مفتاحية** :التحول الرقمي، التعليم العالي، المنصات الرقمية.

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## Introduction

In the 1990s, the advent of the internet marked an era of limited use and accessibility, constrained by an underdeveloped internet culture, the prohibitive costs of computers and accessories, and the absence of social media platforms such as Facebook, Twitter, Instagram, TikTok, etc. Reflecting on the electronic landscape today, it is evident that a significant digital revolution has unfolded, particularly with the evolution of mobile phones into smartphones and digital tablets.

These devices, which double as portable computers, offer features surpassing those of traditional computers, including photography, video recording, live broadcasting, and the use of various specialized smartphone applications, as well as digital platforms and social media. These ubiquitous devices have transformed into essential tools for learning, e-commerce, and communication. The ongoing information revolution discussed here has been a driving force behind the digital transformation, which continuously adapts to new technological advancements.

Consequently, higher education institutions have transitioned towards diverse forms of e-learning. This paper scrutinizes the efficacy of the digital transformation in Algerian higher education, specifically under the guidance of the Ministry of Higher Education and Scientific Research, which has embraced digital platforms for various administrative processes and supported the adoption of distance learning as a legitimate pedagogical approach alongside traditional face-to-face instruction, as demonstrated by the remote master's programs at the University of Continuing Education.

This study poses a critical question: How effective is the digital transformation in Algerian higher education? Assuming that the digital transformation in Algeria is mainly positive, yet not without areas for improvement, this research aims to provide an objective evaluation of digital transformation efforts in the higher education sector and to recommend strategies to enhance its success.

To substantiate this hypothesis, the research employs the IMRAD framework, incorporating a review of previous studies, a case study, and various methodologies, including descriptive analysis, analytical methods, and document analysis, complemented by the researcher's firsthand observations as a PhD student with experience in digital transformation.

## Literature Review

**Study by Abida Salima and Mohammed Ali Hussein Echami (2023) "*The Role of Digital Transformation in Enhancing the Quality of Higher Education*":**

This study underscores the significant impact of digital transformation on enhancing the quality of higher education. Employing both descriptive and analytical methodologies, the research is structured around three primary areas:

- An exploration of the existing literature on digital transformation.
- A detailed examination of scholarly works about the quality of higher education.
- An analysis of how digital transformation manifests within the higher education sector.

This study aligns with Moore's Law, formulated in 1965, which predicts that the power of computers will double approximately every two years while the cost decreases correspondingly. This exponential advancement is evident in the ubiquitous spread of

technologies such as laptops, cloud storage solutions, and artificial intelligence. These advancements are meticulously detailed in a comparison of technological capabilities and costs from 1980 to 2023.

Digital transformation is meticulously defined as "a process associated with the intensive use of digital technologies and information technology, through which innovative products and services are created. It also enhances operational efficiency and productivity, thereby achieving the highest level of accomplishment. This, in turn, allows institutions to capture a larger segment of customers and audience and to excel over competitors" (Echami, 2023, p. 451).

Furthermore, the quality of higher education is articulated as "the ability to meet the requirements of students, professors, and staff at various levels on one hand, and external beneficiaries of educational services on the other, according to specific indicators and characteristics intended to raise the university's overall level and particularly that of the students. This is aimed at keeping up with environmental developments, improving adaptability, meeting needs and expectations of beneficiaries, and achieving their satisfaction with educational services" (Echami, 2023, p. 456).

The comprehensive review of literature across the specified axes leads to the conclusion that the quality of higher education is intrinsically linked to digital transformation. This link is primarily because quality in education entails delivering services efficiently to satisfy and be accepted by stakeholders.

Digital transformation significantly contributes to this by enhancing educational efficiency, facilitating the spread of education, and providing modern methods to diversify university services. These services include, but are not limited to, visual lectures, distance training courses, downloading of e-books, electronic testing, electronic certification, and electronic advertising.

The study also underscores the crucial role of governmental support in fostering an environment conducive to digital transformation, which necessitates a robust technical infrastructure, widespread adoption of modern communication technologies, and comprehensive training in these technologies (Echami, 2023, p. 465).

**Study by Zamoura Jamal and Ben Issa Leila (2022) "*The Role of Digital Leadership in the Success of Digital Transformation of Public Services in Algeria*":**

This study aims to elucidate the pivotal role of digital leadership in the successful digital transformation of public services in Algeria. It is a theoretical study that underscores the indispensable need to develop digital leaders who can facilitate and ensure the success of digital transformation. This necessitates adopting a robust human resources training and qualification policy as a strategic imperative in the age of artificial intelligence. The central inquiry of this study is whether digital leadership significantly influences the success of digital transformation in public services. The study is systematically divided into the following thematic areas:

- **First Axis:** The Conceptual Framework of Digital Leadership.
- **Second Axis:** The Nature of Digital Transformation of Public Services.
- **Third Axis:** Developing Digital Leadership to Support the Digital Transformation of Public Services in Algeria.

The research elaborates on the convergence of related terms such as Leadership in the Digital Age, Digital Leadership, E-Leadership, and Cyber Leadership, reflecting a growing scholarly interest in these concepts. Additionally, the corporate sector is increasingly focused on appointing Chief Digital Officers (CDOs) to oversee all aspects of digital content, including images, sound, video, and text.

Wilson articulates digital leadership as "leadership in the key sectors of the information society (information processing, communications, multimedia)". He adds that this definition is only functional with contributions from digital leaders who are pivotal in transitioning to the information society (Leila, 2022, pp. 300-301).

Characteristics of a digital leader are diverse and subject to different scholarly interpretations, typically emphasizing the following traits (Leila, 2022, p. 303):

- Strategic thinker.
- Resolute in navigating market changes and competition.
- Creative and innovative in transforming ideas into reality.
- Visionary with a global perspective.
- Capable of operating effectively in a complex and rapidly changing environment.
- Skilled in building and leading digital teams.
- Proficient in managing change.

In terms of digital leadership styles, the study identifies four distinct types: Commander, Communicator, Collaborator, and Co-Creator. These styles are based on the roles that digital leaders may assume within a team and when interacting with members of the organization (Leila, 2022, p. 304).

The researchers underscore the necessity for managers to evolve into digital managers and equip the human cadre with essential digital and technological skills, which entails a significant cultural and mindset shift. Chaivaset Promsri advocates for the adoption of six characteristics of the digital leader as a model for spearheading digital transformation in public administrations:

- Knowledge and digital literacy.
- A clear vision for digital transformation.
- Insight into the impact of digital transformation on clients.
- Agility and adaptability in digital contexts.
- Willingness to take calculated risks.
- Collaboration with team members and promotion of digital initiatives.

The study also references significant achievements in digitization in Algeria, including the Electronic Algeria project, the establishment of a ministry dedicated to digitization and statistics, and tangible progress in local communities, education, justice, and other sectors. It reaffirms the critical role of digital leadership in driving digital transformation success.

**Study by Amel Ben Rejedal, 2023, "*Ethics of Higher Education in the Digital Transformation Era":***

The study aimed to examine various manifestations of digital indiscipline in the university environment and also to propose possible solutions to address unethical practices that have emerged as a negative aspect of digital transformation. This study was conducted through a survey directed at a target group of 23 university professors who reported annoying practices and poor digital behaviors in dealing with their students via email, chat groups, or the distance learning platform (Moodle) following the official shift to remote education due to the COVID-19 pandemic.

This recent study reflects the researcher's courage and boldness in addressing a topic closely related to the quality of higher education in Algeria and the ethics and decorum of the academic profession.

The researcher summarized the unethical practices observed among the professors sampled as follows:

- Professors are being contacted at all hours via email with unnecessary questions, which could easily be answered by referring to the lectures and lessons.
- The use of professors' emails to request personal assistance.
- Misuse of social media by some students that goes beyond academic communication.
- Attempts to hack email accounts on multiple occasions.
- Lack of polite phrasing in communications.
- Errors in formulation and expression.
- Use of abbreviations.
- Use of reaction icons in responses to professors.

- Phrasing questions as commands.
- Late submission of research work and assignments.
- Use of colloquial language.
- Communication with professors during late-night hours.
- Impatience of students demanding quick responses from professors.
- Disrespect for the presence of professors in chat groups meant for supervision or support, such as engaging in written arguments among members, or removing the professor from the group and denying them re-entry permissions.

These practices fall under digital indiscipline, electronic discourtesy. According to the study, the solution lies in employing humor to handle difficult situations, appropriate deterrence in some instances, and educating students on the ethics and etiquette of the university environment (Ben Rejedal, 2023).

**Study by Masoud El-Bli and Sara Oudjidj (2021) "*Towards Digitizing Public Administration in Algeria - Higher Education and Local Communities as a Model":***

This study aimed to delve into the reality of the higher education and local communities sectors in Algeria, particularly in the context of transitioning towards electronic administration. It highlights that these sectors were pioneers in connecting to the internet and demonstrated either precise digitization or robust efforts towards it.

In higher education, significant strides have been made in digitizing libraries and establishing the National Documentation System (SNDL). This system encompasses a wide range of Arabic and global databases. Additionally, all doctoral theses have been made accessible digitally through a dedicated portal within the SNDL.

In the local communities sector, notable digital advancements include the digitization of civil status records, the issuance of biometric passports, and the introduction of biometric identity cards, among other achievements (Oudjidj, 2021).

**Study by Ben Arrous Mohamed Lamine (2022) "*Digital Transformation and the Challenges of Distance Education in Algerian Universities":***

This study focuses on the pivotal role of distance education in Algerian universities, examining the essential tools and strategies relevant to this educational modality, as well as the challenges and barriers it faces.

The research identifies that contemporary tools such as Zoom and Google Meet are critical for facilitating self-learning and enabling research through databases to access books, articles, and dissertations, including platforms like ASJP, ResearchGate, Google Scholar, SNDL, and academic or social media platforms like YouTube, ORCID, and Facebook. These tools collectively make electronic learning accessible, diverse, and enriching (Ben Arrous, 2022).

**Study by Hanachi Souria (2023) *"Digital Transformation Strategies in Higher Education Institutions: Lessons for Algerian Universities":***

This investigation aims to explore the strategic development of digital transformation within higher education institutions. It involves a case study of three international universities—the University of Geneva, Ulster University, and Laval University—and performs a SWOT analysis on the digitization efforts of Algerian universities.

The findings indicate that universities must transcend traditional educational forms and embrace digital capabilities to enhance their learning mechanisms. The study asserts that such a strategic embrace is crucial, given the widespread use of the internet, the burgeoning exchange of information, advancements in artificial intelligence, and the proliferation of social media.

It concludes that digital transformation is indispensable for improving teaching quality and elevating the international stature of Algerian universities. Though the Algerian experience is still nascent, the SWOT analysis provides a framework for identifying strengths, weaknesses, opportunities, and threats, thereby facilitating the adoption of measures to enhance digital transformation in higher education in Algeria, drawing on successful models such as those of Swiss universities (Hanachi, 2023).

## Methodology

In this paper, the research methodology adheres to the recently adopted IMRAD format, which is extensively utilized across Western universities. The structure of the study is systematically organized into several sections:

1. Introduction
2. Literature Review
3. Methodology
4. Expected Results
5. Results Discussion
6. Conclusions and Recommendations
7. References

The study is exploratory, aiming to assess digital transformation experiences in higher education comprehensively. To this end, the research draws on various sources, including the Digitalization Steering Plan (DSP), relevant scholarly literature, and websites. Additionally, a questionnaire was distributed to master's and doctoral students to gather direct insights and data pertinent to the study's objectives.

Haut du formulaire

**Expected Results**

The researcher assumes that the evaluation of Algeria's experience in higher education will be positive, given that this sector leads in digital transformation. It reflects the intention of the officials at the top of the state hierarchy (political decision), both at the head of the state where the President of the Republic expressed the state's direction towards digitization and e-government, as well as the Minister of Higher Education Kamal Badari's direction towards digitization, which he embodied in the field of digital platforms and floors, setting a special plan for that.

From browsing the ministry's website, we find a special link to access the digital platforms page, noting the creation of many such as:

- Platform for alums and certification custody.
- Platform for student schooling (averages, marks...).
- Orientation platform towards specializations.
- Platform for new students.
- Platform for Algerian medical publications.
- Integrated information system PROGRES.
- Platform for managing users.
- Platforms for university services.

## Results and Discussion

***Survey Analysis Results***

A survey was distributed to a total sample of 43 individuals, comprising 26 males (60.46%) and 17 females (39.54%), with professors accounting for 23.25%, alums for 51.16%, and current students for 25.58%. Their age distribution was as follows: 18-25 years, six individuals (13.95%); 26-35 years, 11 individuals (25.58%); 36-45 years, 23 individuals (53.48%); and 46 years and above, three individuals (6.97%).

Their responses were as follows:

- 88.37% observed that teaching and learning processes have changed due to digital transformation.
- 74.41% rated their digital experience as good to excellent.
- 88.37% believed that digital transformation has a positive impact on the quality of education at the university.
- 93.02% indicated that there is a need for improvement in the integration of digital technologies.

Regarding difficulties, they varied among the sample; some found no difficulty, while those with a classical education who tried to integrate with the LMD system through completing their studies in a Master's program to advance in their careers, noted challenges, mainly belonging to the 26-35 and 36-45 age groups.

Professors did not encounter difficulties, possibly due to ongoing training and knowledge accumulation, as well as ministry workshops for professors and their personal ability to keep up with technology, which is also required by the job.

Regarding programs, most of the sample mentioned using Zoom, Telegram, Google Meet, Moodle, Email, Messenger, Dispense universitaire, and Web-based education.

Some participants saw opportunities in access to information, communication, collaboration, training quality, and greater employment prospects through remote training. At the same time, many found no opportunities to mention. They had difficulty expressing them, possibly due to personal experiences, a lack of trust, or a lack of understanding of digital transformation.

Proposals expressed by half of the sample included similar suggestions:

- Partnership with foreign universities.
- Conducting training seminars.
- Improving network quality.
- Creating more local digital platforms and floors.
- Innovating smartphone applications.
- Reforming the integrated registration system, Progress.
- Improving curricula to align with digital transformation.
- Including a mandatory and fundamental course related to digitization.

In our study, we observed distinct digital behavior patterns across different age groups within the academic community. The youngest age group, 18-25, shows ease with computers and communication platforms but limited engagement with academic databases such as ASJP, Google Scholar, and ResearchGate. This lack of utilization stems from their youth, limited experience, and underdeveloped scientific maturity despite their digital fluency.

Conversely, older graduates aged 36-45 face pronounced challenges in adapting to digital transformation due to their traditional training and inadequate digital skills. Professors, on the other hand, demonstrate adeptness with digital technologies, particularly evident in their embrace of remote conferencing for meetings and seminars. However, they note persistent issues among students, such as sporadic email checking, offline status due to connectivity issues, and distractions from social media.

Among Master's degree holders in our sample, there's a perception that digital transformation remains superficial, with manual procedures persisting and educational approaches largely conventional. Concerns about inconsistent internet connectivity and the need for a deeper integration of technology in education echo widely among researchers, professors, and doctoral students.

One professor's remark about the absence of a projector, essential for digital education, raises pertinent questions about infrastructural support for effective digital implementation within academic institutions.

While writing this paper, we received communication from the University of Biskra administration regarding a platform offered by the National Office of University Publications, highlighting ongoing efforts towards digital integration in Algerian academia. This development aligns with the broader global trend accelerated by the COVID-19 pandemic, emphasizing digital adoption while recognizing the enduring value of in-person educational interactions as foundational in teacher-learner dynamics.

***The Digital Steering Plan (DSP)***

On October 24, 2022, the Ministry of Higher Education and Scientific Research issued the Digital Steering Plan, with a scheduled implementation timeline extending through December 2024.

This initiative reaffirms the ministry's dedication to integrating digitization as a core component across all pedagogical, research, and governance activities within university institutions and the central administration (Ministry of Higher Education and Scientific Research, October 24, 2022, p 13).

The plan identifies multiple challenges (Ministry of Higher Education and Scientific Research, October 24, 2022, p 14), including:

- The challenge of equipping professors with the skills to enhance their pedagogical effectiveness and proficiency in modern communication technologies.
- The challenge of overcoming disparities in internet and digital technology access, highlighted by shortcomings during the COVID-19 pandemic when lessons had to be delivered online, sometimes in the absence of adequate computers or insufficient internet service.
- The challenge of improving administrative performance to manage institutional activities effectively.
- The challenge of aiding professors in developing their pedagogical activities and mastering digitization techniques.

The strategy comprises 12 principal objectives, detailed in the subsequent table:

Table 1. *Goals of the digital steering plan*

| Goal Number | Title |
|---|---|
| 1 | Acquiring digital competencies |
| 2 | Establishing successful and secure infrastructures |
| 3 | Digitization as a support for training and visibility |
| 4 | Success and professional integration of students |
| 5 | Scientific research with visibility and value generation |
| 6 | Utilization of artificial intelligence |
| 7 | Pedagogical innovation and new forms of knowledge acquisition |
| 8 | Modernization of society (lifelong training) |
| 9 | Training modes and multimedia supports |
| 10 | Information systems |
| 11 | Intangibility and digitization |
| 12 | Visibility and attractiveness of the institution and its national and international relations |
| | |

*Note 1.* Ministry of Higher Education and Scientific Research ( 2022, p 24)

To realize these objectives, the ministry has articulated seven key strategies (Ministry of Higher Education and Scientific Research, October 24, 2022, pp. 21-22):

- **First Axis:** Developing an ecosystem conducive to fostering digital skills.
- **Second Axis:** Enhancing students' digital competencies to facilitate their studies, training, or use of electronic devices such as tablets, smartphones, and laptops.
- **Third Axis:** Amplifying research through digitization initiatives, such as electronic publishing in repositories and on digital platforms.
- **Fourth Axis:** Establishing high-quality and secure digital infrastructure and services.
- **Fifth Axis:** Utilizing technology to boost visibility and strengthen the institutional reputation.
- **Sixth Axis:** Modernizing services through digitization and enhancing student comfort in daily activities.
- **Seventh Axis:** Fostering national and international relations.

To deploy these strategies, the ministry has delineated 16 programs, primarily focused on support, training, platform development, activities, enhancing Wi-Fi network coverage, site security, and electronic signatures.

To effectively execute this plan, a National Committee for Digitization, along with regional subcommittees, has been established. Qualified personnel, including the director of the

National Research Center and the director of the National Office for University Publications, have been appointed and supported with the necessary material resources.

***Evaluation of the Digital Transformation Experience in Algerian Higher Education***

Assessing the impact of digital transformation in higher education is a complex undertaking. Despite survey results affirming a digital shift that has positively influenced the quality of higher education, the Ministry of Higher Education in Algeria has initiated an extensive digitization agenda set to continue until December 2024.

This includes the modernization of university websites in a move towards e-government, the expansion of digital platforms (Digital Platforms Portal), and various electronic registrations. This strategy also involves tracking and discussing doctoral theses through electronic documents as part of a "zero paper" policy, along with activating programs to detect plagiarism and academic misconduct.

Despite many modern students being adept at using contemporary communication technologies and heavily relying on their smartphones and computers for exchanging PDF documents and sharing information through social media groups like Telegram, Messenger, WhatsApp, etc., several challenges hinder the full realization of digitization:

- In the early stages of university education, students are often not accustomed to self-directed learning methods.
- There is a predominant reliance on social media over academic sites and professional research platforms among students.
- Some students opt for using photographs of ready-made summaries taken with their phones, rather than creating these summaries themselves or utilizing specialized AI programs.
- The social and historical backdrop in Algerian society reveals a limited relationship with the internet and computer technology. Typically, Algerian society faces information illiteracy as computers and programs are seldom used in daily activities such as budgeting, supplementing income through electronic work, e-commerce, or engaging in online training courses—contrary to practices observed in leading countries in this field, such as Ireland, Lithuania, the USA, Russia, China, Finland, Canada, and the UK.
- High-tech digital devices like scanners, smartphones, and e-book readers remain unaffordable for impoverished and even middle-income families.
- The ability to adapt to digital transformation varies among students, professors, and staff, with considerable resistance to change still evident. Many continue to prefer traditional teaching methods involving blackboards, chalk, pens, paper, physical books, and bulletin board announcements.
- Poor mobile and fixed internet connectivity significantly impedes the digital transformation in higher education.
- Accessing global databases often requires proficiency in English and computer literacy, while the majority of the university community relies on Arabic and French with limited to moderate computer skills.
- The PROGRES integrated education system platform frequently experiences heavy usage that pushes it to capacity, necessitating ongoing maintenance.

In conclusion, these challenges are typical of any transformative process, which is inherently complex. However, they should be swiftly addressed, particularly amid the ongoing transition towards e-government and efforts to boost the visibility of Algerian universities and enhance their international standing.

Our assessment of the digital transformation in Algerian higher education is overwhelmingly positive, recognizing it as a recent yet substantial shift that all members of the university community should embrace. There is a particular need for individual contributions in informatics and English to foster this evolution.

## Conclusion

Based on our comprehensive review of previous studies, the results from the current survey analysis, the examination of the Digital Steering Plan (DSP), and the personal observations of the researcher derived from their experience within the digital transformation at Algerian universities, we can affirmatively conclude that the hypothesis stands correct: Algeria's higher education sector is positively evaluated in terms of digital transformation.

This sector is at the forefront, mirroring the intentions of top state officials, including the President of the Republic, who has articulated a clear direction towards digitization and e-government. Similarly, the Minister of Higher Education, Kamal Badari, has actively promoted digitization, as evidenced by his initiatives on digital platforms and the establishment of a dedicated plan for this purpose.

Despite starting late, Algeria's digital transformation journey in higher education and scientific research has achieved significant milestones, setting a benchmark for other sectors. This paper validates the substantial progress made, though it acknowledges that these achievements are not yet adequate. The Ministry of Higher Education must align its efforts with those of universities, professors, students, and IT experts to drive further advancements.

The researcher offers the following recommendations to bolster this transformation:

- Expand computer science courses across all university levels and disciplines.
- Negotiate with internet service providers to offer discounted internet subscriptions for students.
- Import and implement leading global digitization practices within Algeria.
- Enhance both local and international cooperation among universities.
- Provide training for students and professors in modern scientific research tools, including artificial intelligence, ensuring adherence to professional ethics.

Facilitate the adoption of international e-payment methods for purchasing software and devices, catering to the significant needs of the university community, with a focus on quality.

**About the Author**

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**AI Statement**

This document has benefited from AI-driven tools that were minimally used to proofread the manuscript. While the incorporation of these technologies may introduce some AI-generated linguistic patterns, it is important to note that the core intellectual content, data interpretation, and conclusions presented are entirely the work of the authors.

**Statement of Absence of Conflict of Interest**

The authors declare that there are no conflicts of interest related to the research, findings, or recommendations presented in this paper. All conclusions drawn are independent and unbiased.

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# Appendices

## Appendix A

السلام عليكم ورحمة الله وبركاته

الرجاء منكم الإجابة على هذا الاستبيان الموجه لغرض البحث العلمي حول : رحلة التحول الرقمي : تقييم تجربة التعليم العالي في الجزائر

1المعلومات الشخصية:

الجنس: ذكر السن: المستوى الدراسي :

أنثى 18–25 سنة طالب جامعي

26–35 سنة خريج جديد

36–45 سنة خريج سابق

45– فمافوق استاذ

2–أ.هل شهدت تغييرات في عملية التدريس والتعلم بسبب التحول الرقمي؟ نعم لا

2–ب. كيف تصف تجربتك الرقمية في الدراسة أو التدريس؟

.....

3–أ. ماهي الأدوات أو التقنيات الرقمية التي وجدتها أكثر فاعلية في التعليم أو التدريس؟

.....

3–ب.هل وجدت صعوبات في استخدام بعض التقنيات الرقمية ؟ إذا كان الجواب نعم يرجى التوضيح؟

.....–

.....–

4–أ.هل تعتقد أن التحول الرقمي أثر ايجابي على جودة التعليم في الجامعة؟ نعم لا

4–ب.هل تعتقد أن هناك حاجة إلى تحسين في تكامل التقنيات الرقمية؟ نعم لا

5–أ ماهي أكبر التحديات التي واجهتها في تكامل التقنيات الرقمية في التعليم أو التدريس؟

.....

.....

5–ب.هل ترى فرصا جديدة أو محتملة نتيجة التحول الرقمي في التعليم العالي؟ إذا كان الجواب نعم ماهي هذه الفرص؟

.....

.....

.....

6.هل لديك أي توجيهات أو مقترحات لتحسين التحول الرقمي في التعليم العالي؟

.....

.....

السلام عليكم ورحمة الله وبركاته

الرجاء منكم الإجابة على هذا الاستبيان الموجه لغرض البحث العلمي حول : رحلة التحول الرقمي : تقييم تجربة التعليم العالي في الجزائر

1المعلومات الشخصية:

الجنس: ذكر السن: المستوى الدراسي :

أنثى 18–25 سنة طالب جامعي

26–35 سنة خريج جديد

36–45 سنة خريج سابق

45– فمافوق استاذ

2–أ.هل شهدت تغييرات في عملية التدريس والتعلم بسبب التحول الرقمي؟ نعم لا

2–ب. كيف تصف تجربتك الرقمية في الدراسة أو التدريس؟

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3–أ. ماهي الأدوات أو التقنيات الرقمية التي وجدتها أكثر فاعلية في التعليم أو التدريس؟

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3–ب.هل وجدت صعوبات في استخدام بعض التقنيات الرقمية ؟ إذا كان الجواب نعم يرجى التوضيح؟

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4–أ.هل تعتقد أن التحول الرقمي أثر ايجابي على جودة التعليم في الجامعة؟ نعم لا

4–ب.هل تعتقد أن هناك حاجة إلى تحسين في تكامل التقنيات الرقمية؟ نعم لا

5–أ ماهي أكبر التحديات التي واجهتها في تكامل التقنيات الرقمية في التعليم أو التدريس؟

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5–ب.هل ترى فرصا جديدة أو محتملة نتيجة التحول الرقمي في التعليم العالي؟ إذا كان الجواب نعم ماهي هذه الفرص؟

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6.هل لديك أي توجيهات أو مقترحات لتحسين التحول الرقمي في التعليم العالي؟

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