

VERIFYING THE RELATIONSHIP BETWEEN TECHNOLOGICAL READINESS AND CREATIVE PERFORMANCE: A CASE STUDY AT THE COLLEGE OF PHARMACY – TIKRIT UNIVERSITY

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Abstract

The study aims to verify the relationship between technological readiness and creative performance at the College of Pharmacy – Tikrit University. The descriptive approach was adopted using the case study method, as it provides the ability to describe and analyze reality accurately. Data were collected based on officially approved documents from the college, in addition to real field data obtained in coordination with the relevant technical and administrative units. The results revealed a significant overall gap between the targeted and the available levels, as the actual availability rate for the variables of readiness and organizational performance reached only (48.86%), compared to a total performance gap of (51.14%). Based on this result, the study concluded that the college needs to activate more realistic and flexible implementation mechanisms to enhance its ability to narrow the performance gap and achieve higher levels of technological readiness and creative performance. The originality of this research lies in being, to the best of the researchers' knowledge, the first local attempt to apply the performance gap analysis approach as a tool to measure the relationship between technological readiness and creative performance in the academic context. The study departed from traditional measurement tools by employing documented real data obtained from the college, which gave the results high credibility and a stronger link to actual reality, away from subjective estimations.

Keywords: Technological readiness, creative performance, College of Pharmacy – Tikrit University.

Introduction

The contemporary work environment, particularly within academic organizations such as universities, is witnessing rapid transformations driven by technological advancement and knowledge openness. These transformations directly impact the creative performance of universities, as they may pose challenges to the quality of academic outputs, as well as the ability to innovate and create. This situation compels such organizations to continuously strive to enhance their organizational capabilities in line with the requirements of excellence and educational quality. In this context, technological readiness has emerged as one of the modern concepts reflecting the organization's ability to provide an appropriate technological infrastructure that contributes to enhancing creative performance and achieving its strategic objectives. The significance of this relationship is further amplified in academic institutions, as they endeavor to improve their educational and research outputs and to align with quality and accreditation standards. This, in turn, places them before challenges that require a profound understanding of the current state of technological readiness and its capacity to support creative performance.

Based on the practical reality of the College of Pharmacy at Tikrit University, this study was conducted to shed light on diagnosing the current state of technological readiness and creative performance in the college by analyzing the performance gap between what is targeted and what has actually been achieved. The significance of the study lies in its adoption of a methodology that differs from traditional questionnaires, as it developed an organizational readiness plan based on quality standards. This plan was formulated and discussed in coordination with relevant entities within the college to ensure the objectivity and realism of the adopted indicators. The plan was

then compared with the actual situation, which enabled the derivation of more objective and field-related results.

The study relied on four main analytical dimensions: defining the measurement framework for the technological readiness and creative performance plan, verifying the validity of the standard through comparison with quality benchmarks, exploring the actual field conditions, and analyzing the performance gap between the existing and the targeted levels. This design allowed for the identification of gaps, the extraction of precise conclusions, and the proposal of practical, applicable recommendations aimed at improving performance and enhancing the quality of education within the studied organization.

During the implementation of this study, the researcher encountered several challenges, including difficulties in obtaining official documents and data, as well as the adoption of an innovative approach to analyzing the practical aspect. This required the development of a readiness plan and the organization of analytical tools in a novel manner. To ensure scientific and structural coherence in achieving the study's objectives, the research was divided into four sections: the first addressed *the methodological framework of the study*; the second focused on *the variables of technological readiness and creative performance*; the third presented *the practical aspect of the study*; and the fourth concluded with *findings and recommendations*.

Section One

The Methodological Framework of the Study

First: The Research Problem

Business organizations in general, and educational institutions in particular, face increasing challenges resulting from economic, social, cultural, and technological changes occurring in their environments, which may negatively affect their creative performance.

Practically, the current study focused on the College of Pharmacy at Tikrit University as its research field and examined it as a case study. The researchers conducted extensive field visits to the college during the study period, engaged with its administrative units, and held continuous discussions and consultations. These efforts enabled the researchers to obtain information indicating disparities in certain aspects of creative performance. This suggests the existence of a gap between what has been actually achieved in the college and what is targeted regarding the variables adopted in the study—thus necessitating analysis and interpretation.

Through this process, the researchers were able to identify the key features and boundaries of the problem realistically and empirically, forming a clear understanding of the study's directions and objectives based on the problem as it was actually observed. The clarity of the problem motivated the researchers to address it, examine its dimensions and details, and seek suitable solutions by adopting *technological readiness* as one of the potential approaches believed to contribute to solving this issue.

Accordingly, the research problem can be expressed through the following main question:

What is the relationship between technological readiness and creative performance at the College of Pharmacy, Tikrit University?

The main research question gives rise to the following sub-questions:

1. To what extent does the technological readiness and creative performance plan developed by the College of Pharmacy align with the quality standards applied at the College of Pharmacy – Tikrit University?
2. What are the available requirements for technological readiness and creative performance in the College of Pharmacy?

3. What is the magnitude of the gap between what is actually available and what is targeted within the readiness plan?

Second: The Importance of the Study

1. **Introducing a new perspective:** This study adopts a new variable in the field of organizational studies—*technological readiness*.
2. **Innovative analytical integration:** The study integrates the variables of technological readiness and creative performance through the *performance gap analysis* methodology. This approach offers a new perspective on how academic organizations can assess their readiness to achieve effective organizational outcomes.
3. **Research field significance:** The study gains additional importance by selecting Tikrit University as its research field, given its status as one of Iraq's key universities. It is also among the first studies to address technological readiness in this institution, providing it with an applied and realistic dimension. Furthermore, the study's reliance on a *field-based approach*—analyzing the performance gap between current and targeted levels—offers an accurate understanding of the college's actual capabilities and areas of deficiency.

In addition, the study contributes by proposing a *new measurement model* based on specific standards and indicators, thereby enhancing the accuracy and applicability of its findings within academic and organizational contexts.

Third: Study Objectives

Based on the research problem and its related questions, this study aimed to achieve a set of objectives, the main one being:

To verify the relationship between technological readiness and creative performance at the College of Pharmacy – Tikrit University.

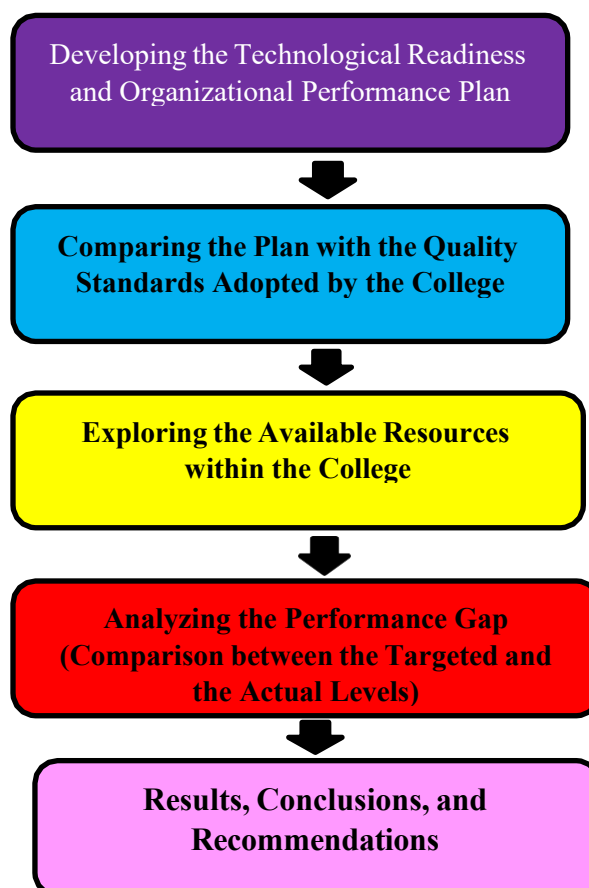
From this main objective, the following sub-objectives emerge:

1. To measure the level of alignment between the technological readiness and creative performance plan and the quality standards at the College of Pharmacy – Tikrit University.
2. To identify the actual availability of technological readiness and performance requirements in the College of Pharmacy.
3. To analyze the performance gap between what is actually available and what is targeted within the technological readiness and creative performance plan.

Fourth: The Procedural Framework of the Study

The following schematic diagram illustrates the methodological steps adopted by the researcher in conducting the study. The performance gap is analyzed by comparing the organizational readiness plan with quality standards, then measuring the actual reality, and finally analyzing the gap between the targeted and the available levels. This process enhances understanding of the organizational gap and supports the proposal of appropriate corrective measures.

Figure (1): The Procedural Framework of the Study



Source: Prepared by the Researcher

Fourth: Study Hypotheses

To answer the questions raised in the research problem, the following main hypothesis was formulated:

There is a relationship between technological readiness and creative performance at the College of Pharmacy – Tikrit University.

From this main hypothesis, the following sub-hypotheses are derived:

1. **First Hypothesis:** The technological readiness and creative performance plan developed by the college shows a high degree of alignment with the quality standards of the College of Pharmacy.
2. **Second Hypothesis:** The College of Pharmacy possesses an adequate level of technological readiness and creative performance requirements.
3. **Third Hypothesis:** There is a manageable gap between the available and the targeted levels in the technological readiness and creative performance plan at the College of Pharmacy.

Section Two

Theoretical Framework

First: Technological Readiness

This section addresses the following:

A. Definition of Technological Readiness

The term *technological readiness* refers to the ability of employees within an organization to adapt to the use of technology, where the organization focuses on activating these capabilities rather than merely improving efficiency to achieve its objectives (Ziyadi & Al-Khafaji, 2022: 2094). Blut and Wang et al. (2020: 650) indicate that technological readiness is a trait similar to personal traits, reflecting individuals' general attitudes toward new technologies.

Kalambo et al. (2024: 4) and Abd Barsim et al. (2024: 524) argue that technological readiness refers to individuals' preparedness to adopt and use modern technologies in their daily lives and work to achieve their goals. On the other hand, Kaushik and Agrawal (2021: 484) define technological readiness in education as students' preparedness to use digital learning, representing a set of factors that influence their willingness to adopt such technology.

Rajendru et al. (2022: 7) define technological readiness as an individual's general attitude toward technology, linked to personal preparedness to adopt modern technologies and the ability to fully benefit from information and communication technologies.

Additionally, Qatawneh and Al-Okaily (2024: 3) describe technological readiness as the practice of monitoring systems to detect security risks and potential vulnerabilities, including proactive protection to address potential threats through technology and applications.

The researchers view technological readiness as the highest level of preparedness and capability to effectively adopt and utilize modern technologies. This is achieved through developing digital infrastructure, enhancing the skills of academic and administrative staff, and integrating smart solutions into educational and administrative processes. Such readiness contributes to improving learning quality, supporting innovation, and achieving sustainable digital transformation within university organizations.

B. Benefits of Technological Readiness

Technological readiness is considered a fundamental element in promoting innovation, as it facilitates the collection of scientific and technical information and its utilization in developing modern technological solutions (Boudin & Soltani, 2021: 94). Abd Al-Jawad and Abd Al-Halim (2023: 14) view it as an early alert mechanism that protects the organization from cyberattacks or data loss, while also improving internal and external communication by accelerating information transfer. Bedjadj (2024: 460) emphasizes that technological readiness is a necessary and dynamic activity for generating the knowledge and information required for organizational decision-making.

The benefits of technological readiness can be summarized as follows:

1. Technological readiness enables organizations to keep up with scientific developments, modern theories, and new technological experiments (Netu, 2023: 101).
2. Technological readiness facilitates the establishment of digital businesses compared to traditional businesses, allowing entrepreneurs to launch innovative projects quickly and at lower costs in both local and international markets (Biclesanu et al., 2023: 2).

3. Technological readiness depends on organizations' ability to access and utilize modern technologies, regardless of whether these technologies are developed locally or externally (Razavi et al., 2011: 322).

Additionally, Summak et al. (2010: 2672) note that technological readiness is essential for academics to successfully integrate technology into the educational process. If they are psychologically and technically prepared to use technology, they are more capable of effectively incorporating it into teaching.

Abdel Mawla and Al-Ayeb (2021: 639) argue that technological readiness reduces organizational conflicts, as the introduction of new technologies helps minimize conflicts related to the redistribution of roles and tasks among employees, fostering a more collaborative work environment.

In the health sector, Miglietta et al. (2021: 2) indicate that technological readiness plays a vital role in responding to health emergencies, particularly in assessing and utilizing health technologies such as vaccines, medications, diagnostic tests, and medical devices.

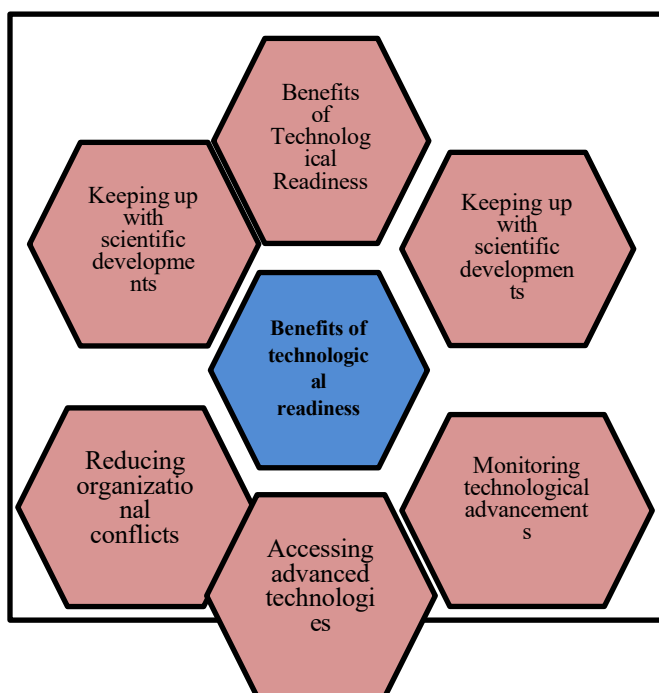


Figure (3): Benefits of Technological Readiness

Source: Prepared by the researcher based on the referenced sources

C. Barriers to Implementing Technological Readiness

The obstacles that hinder the achievement of technological readiness objectives include the following:

1. **High costs:** Technological readiness requires substantial financial investment and large budgets.
2. **Lack of specialized human resources:** There is a shortage of skilled personnel in the technological field within the organization (Abd Al-Jawad & Abd Al-Halim, 2023: 21).

3. **Resistance due to established habits:** Deeply rooted organizational habits can hinder adaptation to technology, as some individuals prefer traditional methods and tend to avoid new approaches.
4. **Expectation of loss:** Some individuals perceive technological readiness as a means to reduce expenses, which may affect their personal interests or the work environment, leading to resistance to such changes (Abdel Mawla & Al-Ayeb, 2021: 634).

From an academic perspective, Moore-Hayes et al. (2011: 3) note that despite rapid transformations in technology and education, academics have not received adequate support to enhance their technological readiness, resulting in professional challenges that impede their ability to adapt effectively to these changes. Faddis et al. (1982: 20) argue that colleges face difficulties in providing the necessary resources to update curricula and educational programs in line with technological advancements, affecting the quality and relevance of programs to organizational needs.

The researchers conclude that technological readiness faces fundamental challenges related to weak infrastructure, lack of specialized competencies, absence of academic support, and resistance to change associated with habits and interests. Overcoming these barriers requires sustainable investment in technology and a shift in organizational culture toward openness and innovation.

Second: Creative Performance

This section addresses the following:

A. Definition of Creative Performance

Under unstable conditions, the need for creative performance within organizations becomes evident (Atti, 2024: 2). Mutony et al. (2020: 616) argue that creative performance is essential for survival and maintaining competitiveness in dynamic work environments, whether in the public or private sectors. Yuhertiana et al. (2024: 2) emphasize the importance of creative performance in higher education, noting that enhancing creativity is a policy priority.

Al-Fitouri (2023: 80) points out that creative performance reflects an organization's orientation toward promoting new ideas and experiences and seeking innovative solutions. Ayad (2024: 971) confirms that creative performance helps organizations renew themselves and ensures their continuity and growth in a changing and competitive business environment. Al-Najjar et al. (2021: 121) note that creative performance plays a crucial role in enhancing organizational innovation, effectiveness, and sustainability.

Employees, therefore, need to be prepared to contribute creative ideas and performance to respond effectively to organizational changes. Kafková (2023: 372) highlights the importance of creative performance in the contemporary world, where the ability to address problems creatively is increasingly in demand. Liu et al. (2023: 3) define it as an assessment of employees' effectiveness in achieving their objectives through creative performance by generating and implementing new ideas in the workplace. Similarly, Al-Madadha et al. (2023: 33) describe creative performance as the ability to present innovative ideas and solve problems in novel ways.

Based on this, the researchers view creative performance as the organization's ability to develop education and research through innovation and by stimulating creative thinking, thereby enhancing the quality of academic outputs and contributing to scientific excellence.

B. Benefits of Creative Performance

Creative performance seeks to achieve benefits in the workplace, as organizations rely on employees' creativity and innovations to survive and thrive in a competitive business environment (Shaw & Choi, 2023: 1). Mahdi and Saad (2024: 264) note that it contributes to the growth and

development of organizations, serving as a fundamental means for continuous improvement. Mansour and Abbas (2024: 1323) add that it provides innovative solutions by enabling organizations to find creative and effective approaches to the challenges they face.

Accordingly, some of the benefits of creative performance can be summarized as follows:

1. **Positive image:** Creative performance reflects a positive image of the organization due to its creative human resources striving to deliver excellence (Bolghetti & Sofi, 2022: 11).
2. **Transforming ideas into practical methods:** It contributes to converting creative ideas from traditional teaching approaches to direct educational methods, as implementing solutions requires updating teaching methods to effectively convey ideas, facilitating individuals' understanding and practical application of knowledge (Shako & Faiq, 2023: 616).

Kafková (2023: 372) emphasizes the role of creative performance in education, noting its increasing importance in meeting current global needs and its expected growing significance in the future. Al-Madadha et al. (2023: 34) highlight that creative performance is a critical factor in organizational success, especially in competitive work environments, as it helps differentiate the organization from competitors and achieve strategic benefits.

The researchers conclude that creative performance represents a source of competitive strength for organizations by stimulating innovation and transforming it into practical practices that enhance organizational effectiveness and future performance quality.

D. Barriers to Creative Performance

Creative performance faces challenges that hinder its initiation and limit its effectiveness, potentially preventing individuals and organizations from fully realizing their innovative potential. To overcome this, it is necessary to understand these barriers. Some of these obstacles are presented as follows:

1. **Cognitive barriers:** These relate to employees' inability to properly understand the aspects of a problem due to its narrow scope or the difficulty of perceiving complex relationships associated with it, which consequently affects creative performance (Abbas, 2023: 15).
2. **Emotional and personal barriers:** These include fear of taking initiative, anxiety about making mistakes, mental fatigue, and the desire for quick success, which ultimately weakens creative performance and reduces opportunities for development and innovation (Qarash, 2023: 28).
3. **Differences in personalities and opinions among team members:** Such differences can lead to conflicts, reducing productivity and performance and wasting organizational resources. These conflicts may also generate negative feelings such as dissatisfaction and frustration, which adversely affect creative performance (Liu et al., 2023: 1).

Additionally, Nour Al-Din and Wafaa (2018: 250) indicate that other barriers to creative performance include strict adherence to rules and regulations, lack of trust among managers in themselves, ineffective implementation of administrative structures that limit individual freedom in expression and initiative, and insufficient financial resources.

The researchers argue that if these barriers are not addressed with organizational awareness, they will weaken opportunities for academic development and hinder the achievement of excellence. Therefore, it is necessary to promote a culture of trust and openness and to provide a supportive environment that encourages free thinking and initiative.

Section Three Field Framework

First Axis: Description of the Study Scale

This study is distinguished by adopting a new scale that differs completely from previously used measures, as it relies on *realistic data* rather than the traditional questionnaire-based approach. This shift in the adopted standard represents a significant turning point in the methodology for evaluating readiness and performance, as it reflects the reality of the targeted college with higher accuracy and makes the results more closely linked to practical application.

The researchers examined these standards through field analysis and direct coordination with the relevant authorities at the College of Pharmacy. They conducted in-depth discussions with the Quality Assurance and Performance Evaluation Division of the college, through which they were able to construct a table known as the “*Technological Readiness and Creative Performance Plan for the College of Pharmacy*”, which was subsequently approved. The final form of the scale appeared as illustrated below:

Technological Readiness and Creative Performance Plan

<p>Republic Of Iraq Ministry of Higher Education and Scientific Research Tikrit University College of Pharmacy</p>		<p>جمهورية العراق وزارة التعليم العالي والبحث العلمي جامعة تكريت كلية الصيدلة شعبة الشؤون الإدارية وحدة الموارد البشرية</p>
<p>التاريخ: ٢٠٢٥/٨/٢٤</p>	<p>العدد: ١٢٤٦٣/٧</p>	
<p>إلى/ كلية الإدارة والاقتصاد / قسم إدارة أعمال - الدراسات العليا</p>		
<p>م/ تأييد خطة التأهب والأداء التنظيمي لكلية الصيدلة - جامعة تكريت للعام (٢٠٢٥)</p>		
<p>تحية طيبة ...</p>		
<p>بناءً على اختيار طالبة الدراسات العليا في برنامج الماجستير - إدارة أعمال (سالي إسماعيل إبراهيم) (كلية الصيدلة - جامعة تكريت) ميداناً بحثياً لدراساتها الموسومة (التحقق من العلاقة بين التأهب التنظيمي والأداء التنظيمي : دراسة حالة في كلية الصيدلة - جامعة تكريت) , نؤيد لكم بأن خطة التأهب التي وضعتها الكلية لمواجهة التغيرات والتحديات المستقبلية لعام (٢٠٢٥) تتمثل بالآتي :</p>		
<p>أ.م.د. عمر صالح حسن عميد كلية الصيدلة ٢٠٢٥/٦/٢٩</p>		
<p>نسخة منه إلى///</p>		
<ul style="list-style-type: none"> • مكتب السيد معاون العميد للشؤون الإدارية...للتعلم مع التقدير. • شعبة الشؤون الإدارية / وحدة الموارد البشرية. • الاضمارا الشخصية . • الصادرة . 		
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وحدة الموارد البشرية

التاريخ: ٢٠٢٥/ ٦/ ٢٤

العدد: ١٣٤٨/٦٣/٧

أولاً : متغير التأهب التنظيمي :

١- بعد التأهب التكنولوجي

العدد	ت	التفاصيل
٢٢٠	١	الأجهزة الطبية والمختبرية التي تحتاجها الكلية لتحقيق التأهب التكنولوجي .
٥٠	٢	أجهزة الحاسوب التي تحتاجها الكلية لتحقيق التأهب التكنولوجي .
١٤	٣	تحتاج الكلية الى مختبرات علمية لتدريب الطلبة تكنولوجيا سواء في الحاسوب وتطبيقاته او الأجهزة العلمية والمختبرية في اختصاصات الصيدلة .
٣ تيرا	٤	سعة الانترنت الذي تحتاجها كليتنا لتحقيق التأهب التكنولوجي هي .

٢- بعد التأهب المعرفي

العدد	ت	التفاصيل
٣	١	تستهدف كليتنا المشاركة في التصنيفات العالمية (Shanghai ,Times,QS Scimago)
١٢	٢	تستهدف كليتنا لتحقيق التأهب المعرفي اجراء برامج ودورات تدريبية للكادر التدريسي والعاملين في الكلية لتنويع معارفهم .
٧	٣	تستهدف كليتنا شراكات معرفية محلية مع كليات مماثلة .
٣	٤	تسعى كليتنا لعقد اتفاقات مع جامعات دولية .
٢	٥	المؤتمرات العلمية التي تستهدفها كليتنا لتحقيق التأهب المعرفي .



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التاريخ: ٢٠٢٥/ ٦ / ٢٠

العدد: ١٣٤٨/٦٢/٧

ثانياً : متغير الأداء التنظيمي :

١- بعد الأداء الإبداعي

العدد	ت	التفاصيل
٦	١	تسعى الكلية الى تنفيذ مشاريع طلابية ابتكارية سنوياً.
٧	٢	تستهدف الكلية اجراء مسابقات رياضية سنوياً للطلبة والتدريسين والعاملين .
٦	٣	المبادرات المجتمعية التي تستهدفها الكلية .
٦	٤	براءات الاختراع التي تستهدفها الكلية .

٢- بعد التميز الأكاديمي

العدد	ت	التفاصيل
٦٠	١	الألقاب العلمية (مدرس فما فوق) التي تحتاجها الكلية لتحقيق التميز الأكاديمي عن باقي الكليات المناظرة .
٣٠	٢	تحتاج الكلية لتحقيق التميز الأكاديمي نشر بحوث في مستوعب Scopus .
٦	٣	تستهدف الكلية تحقيق التميز الأكاديمي تأليف ونشر كتب .
٤٠	٤	الكلية تستهدف نشر بحوث محلية لتحقيق التميز الأكاديمي .

مع التقدير ...



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The researchers collected these data through repeated field visits, specifically by directly reviewing the Quality Division's records and communicating with the heads of technical departments. These figures were carefully discussed, and the college confirmed its actual need for this number in line with a future vision to develop infrastructure and achieve full readiness for adapting to environmental changes.

Second Axis: Verification of the Validity and Quality of the Scale

To ensure the reliability and accuracy of this new scale, the researchers conducted a comparison between the *Technological Readiness and Creative Performance Plan* approved by the College of Pharmacy and the official quality standards. These standards are based on the criteria adopted by the Ministry of Higher Education as well as the college's internal Quality Assurance Unit, specifically covering the items addressed in the study. The quality standards included the following details:

<p>Republic Of Iraq Ministry of Higher Education and Scientific Research Tikrit University College of Pharmacy</p>		<p>جمهورية العراق وزارة التعليم العالي والبحث العلمي جامعة تكريت كلية الصيدلة شعبة ضمان الجودة وتقييم الأداء</p>
<p>التاريخ ٢٠٢٥/٧/١٩</p>		<p>العدد ٤١</p>
<p>إلى كلية الإدارة والاقتصاد / قسم إدارة الأعمال - الدراسات العليا</p>		
<p>م / معايير إدارة الجودة في كلية الصيدلة</p>		
<p>تحية طيبة...</p>		
<p>نرسل إليكم المعايير الخاصة بإدارة الجودة في كلية الصيدلة جامعة تكريت وذلك بناءً على الطلب المقدم من قبل طالبة الدراسات العليا في برنامج الماجستير - إدارة الأعمال (مبالي إسماعيل إبراهيم) كونها اختارت (كلية الصيدلة - جامعة تكريت) ميداناً بحثياً لدراساتها الموسومة (التحقق من العلاقة بين التأهب التنظيمي والأداء التنظيمي: دراسة حالة في كلية الصيدلة - جامعة تكريت)، تتمثل بالآتي:</p>		
<p>للتفضل بالاطلاع مع التقدير.....</p>		
		
<p>ا.م.د. عمر صالح حسن العميد ٢٠٢٥/٧/١٩</p>		
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		<p>العراق - محافظة صلاح الدين - تكريت ص.ب: (٤٢)</p>
<p>نسخة منه الى: - السيد معاون العلمي للعلم لطفاً. - شعبة ضمان الجودة والأداء الجامعي للعلم لطفاً. - الصناديق.</p>		

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شعبة ضمان الجودة وتقييم الأداء
وحدة تقييم الأداء

التاريخ: ٢٠٢٥/٨/٤

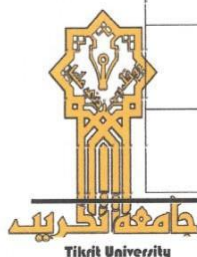
العدد: ٤١١

١- المحور التكنولوجي

ت	التفاصيل	العدد
١	الأجهزة الطبية والمختبرية التي تحتاجها الكلية لتحقيق الجودة.	٢١٤
٢	أجهزة الحاسوب التي تحتاجها الكلية لتحقيق الجودة.	٤٠
٣	تحتاج الكلية الى مختبرات علمية لتدريب الطلبة تكنولوجيا سواء في الحاسوب وتطبيقاته او الأجهزة العلمية والمختبرية في اختصاصات الصيدلة.	١٢
٤	سعة الانترنت التي تحتاجها كليتنا لتحقيق الجودة هي.	٢ تيرا

٢- المحور البحثي

ت	التفاصيل	العدد
١	تستهدف كليتنا المشاركة في التصنيفات العالمية (Shanghai ,Times, QS, Scimago).	٣
٢	تستهدف كليتنا لتحقيق الجودة اجراء برامج ودورات تدريبية للكادر التدريسي والعاملين في الكلية لتنوع معارفهم.	١٠
٣	تستهدف كليتنا شراكات معرفية محلية مع كليات مماثلة.	٥
٤	تسعى كليتنا لعقد اتفاقات مع جامعات دولية.	٣



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العراق - محافظة صلاح الدين - تكريت
ص. ب. (٤٣)

Republic Of Iraq
Ministry of Higher Education and
Scientific Research
Tikrit University
College of Pharmacy



جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة تكريت
كلية الصيدلة
شعبة ضمان الجودة وتقييم الأداء
وحدة تقييم الأداء

التاريخ: ٢٠٢٥/٨/٨

العدد: ١١

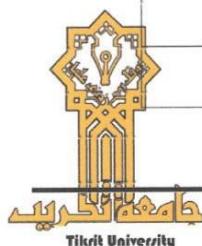
٥	المؤتمرات العلمية التي تستهدفها كليتنا لتحقيق الجودة .	١
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٣- محور الأداء

ت	التفاصيل	العدد
١	تسعى الكلية الى تنفيذ مشاريع طلابية ابتكارية سنويا .	٤
٢	تستهدف الكلية اجراء مسابقات رياضية سنويا للطلبة والتدريسين والعاملين .	٥
٣	المبادرات المجتمعية التي تستهدفها الكلية .	٤
٤	براءات الاختراع التي تستهدفها الكلية .	٤

٤- محور التميز الأكاديمي

ت	التفاصيل	العدد
١	الألقاب العلمية (مدرس فما فوق) التي تحتاجها الكلية لتحقيق الجودة عن باقي الكليات المناظرة .	٥٠
٢	تحتاج الكلية لتحقيق الجودة نشر بحوث في مستوعب Scopus .	٢٥
٣	تستهدف الكلية لتحقيق الجودة تأليف ونشر كتب .	٤
٤	الكلية تستهدف نشر بحوث محلية لتحقيق الجودة .	٣٠



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ت.ب: (٤٣)

The researchers conducted a comparison between the *Technological Readiness and Creative Performance Plan* and the Quality Management Standards of the College of Pharmacy. This comparison involved analyzing each item individually. The researchers found a high degree of alignment between the figures set by the college as future targets (for technological readiness and creative performance) and those proposed by the college's Quality Management Standards.

The comparison was calculated as follows:

Alignment Percentage = (Quality Standard ÷ Technological Readiness and Creative Performance Plan) × 100

This formula was used to measure the extent to which the *Technological Readiness and Creative Performance Plan* aligns with the quality standards.

1. Technological Readiness:

The following table shows the alignment percentage between the *Technological Readiness and Creative Performance Plan* and the quality standards for each item of this variable, as follows:

Table (7): Partial-Level Comparison between the Items of Technological Readiness and the Technological Axis

Items	Technological Axis Values	Technological Readiness Values	Alignment Percentage
Medical and laboratory equipment	210	220	95.45%
Computer devices	40	50	80.00%
Number of scientific laboratories	12	14	85.71%
Internet capacity	2 TB	TB	66.67%

The table above shows that there is a strong alignment between the quality standard and the readiness standard for medical and laboratory equipment, with an alignment percentage of 95.45%, which is the highest. For computer devices, the alignment percentage is 80.00%. The alignment for scientific laboratories is 85.71%, while the lowest alignment is observed in Internet capacity at 66.67%.

Table (8) illustrates the overall alignment percentage between the *Technological Readiness Plan* and the quality standards for the technological readiness variable:

Table (8): Overall Comparison between the Technological Readiness Variable and the Technological Axis

Items	Alignment Percentage
Medical and laboratory equipment	%95.45
Computer devices	%80.00
Number of scientific laboratories	%85.71
Internet capacity	%66.67
Overall alignment percentage for the Technological Readiness dimension	%81.96

The table above shows a strong alignment between the *Technological Readiness* variable in the organizational readiness plan and the technological axis in the quality standards adopted by the

college. The overall alignment percentage for the Technological Readiness variable was calculated using the following formula:

Overall Alignment Percentage for Technological Readiness = Sum of Alignment Percentages ÷ Number of Items = $327.83 \div 4 = 81.96\%$

Thus, the overall alignment percentage is **81.96%**.

2. Creative Performance:

Table (12) presents the alignment percentage between the readiness plan and the quality standards for each item of this variable:

Table (12): Partial-Level Comparison between the Items of Creative Performance and the Performance Axis

Items	Performance Axis	Creative Performance	Alignment Percentage
Student innovation projects	4	6	%66.67
Entrepreneurial competitions	5	7	%71.43
Community initiatives	4	6	%66.67
Patents	4	6	%66.67

The table above shows that there is alignment between the quality standard and the performance standard for entrepreneurial competitions, with the highest alignment percentage of 71.43%. For student innovation projects, community initiatives, and patents, the alignment percentage is equal, at 66.67% each.

The following table illustrates the overall alignment percentage between the readiness plan and the quality standards for the *Creative Performance* variable:

Table (13): Overall Comparison between the Creative Performance Variable and the Performance Axis

Items	Alignment Percentage
Student innovation projects	%66.67
Entrepreneurial competitions	%71.43
Community initiatives	%66.67
* Patents	%66.67
Overall alignment percentage for the Creative Performance variable	%67.86

The table above shows that there is alignment between *Creative Performance* in the Technological Readiness Plan and the performance axis in the quality standards adopted by the college. The overall alignment percentage was calculated using the following formula:

Overall Alignment Percentage for the Creative Performance Variable = Sum of Alignment Percentages for the Creative Performance Variable ÷ Number of Items = $271.44 \div 4 = 67.86\%$

Thus, the overall alignment percentage is **67.86%**.

Table (17) illustrates the overall alignment percentage between the readiness plan and the quality standards for the combined *Technological Readiness and Creative Performance* variable:

Table (17): Overall Comparison for the Technological Readiness and Creative Performance Variable

Variable	Alignment Percentage
Technological Readiness Variable	٪81.96
Creative Performance Variable	٪67.86
Overall Alignment Percentage for the Technological Readiness and Creative Performance Variable	٪74.91

The table above shows that there is alignment between the study variables—*Technological Readiness* and *Creative Performance*—and the quality standards adopted by the college. The overall alignment percentage was calculated using the following formula:

Overall Alignment Percentage for the Technological Readiness and Creative Performance Variable = $(81.96 + 67.86) \div 2 = 74.91\%$

Thus, the overall alignment percentage is **74.91%**.

Third Axis: Verification of the Relationship between Variables and Measurement of the Performance Gap

Introduction

The researchers were present in the field at the College of Pharmacy and conducted a comprehensive survey to obtain accurate data regarding the resources relevant to the study. This survey was carried out through multiple visits to the college and direct communication with administrative units to acquire the most precise data. As a result of these visits, the researchers obtained the required data from the relevant units and authorities within the college. This section will address the following axes:

1. Available Information Related to the Study Variables

This section addresses the following:

A. Technological Readiness

1. **Medical and Laboratory Equipment:** The college actually possesses **234 devices**, as verified by the researchers through inventory tables provided by the Stores Division of the college, as shown in Appendices (1)–(9).
2. **Computer Devices:** The number of available computer devices is **32**, confirmed by reviewing the inventory tables provided by the Stores Division, as shown in Appendix (10).
3. **Number of Scientific Laboratories:** The actual number of available scientific laboratories is **11**, verified in coordination with the Quality Assurance and Performance Evaluation Division and through the researchers' on-site inspection.
4. **Internet Capacity:** The actual Internet capacity is **400 KB**, confirmed through the college's Media Division.

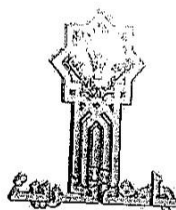
B. Creative Performance

Regarding the creative performance aspect:

1. **Innovation Projects:** The actual number of student innovation projects is **1 project**, as verified by the researchers through a review of the Quality Assurance and Performance Evaluation Division and by examining the documented activities on the college's official website.

Documentation of Innovation Projects at the College of Pharmacy

Republic Of Iraq
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Tikrit University
College of Pharmacy



جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة تكريت
كلية الصيدلة
شعبة الشؤون الادارية
وحدة الموارد البشرية

التاريخ: ٢٠٢٥ / ٢ / ٢٥

المعبر: ٢٤٨ / ٤٠ / ٧

إلى / رئاسة الجامعة - مكتب السيد رئيس الجامعة المحترم

م / إقامة بازار



تحية طيبة ...

يرجى التفضل بالموافقة على إقامة بازار في كليتنا ليومين ٢٥-٢٦/٢/٢٥٢٥.



١- لا سبرك
مع التقدير...

ما الغائب
لتر يتخطى
الب...



ح احمد علي حسين عباس
٢٠٢٥ / ٢ / ٢٥
معاون العميد لشؤون الادارية والمالية



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نسخة منه الى III

- من الشؤون الادارية ... مع الاوليات .
- الادارة الشخصية .
- الصادرة .

العراق - محافظة صلاح الدين - تكريت

V

Republic Of Iraq
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Dep. of Media and Government
Communication



جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة تكريت
قسم الاعلام والاتصال الحكومي
استثمار الطاقة النظيفة طريقنا نحو التنمية المستدامة

التاريخ: ٢٠٢٥/٤/٢٠

العدد: /

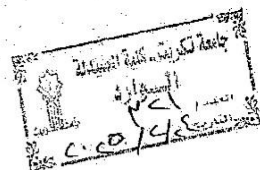
الى / كلية الصيدلة / شعبة الشؤون الادارية / وحدة الموارد البشرية

م/ اقامة بازار

تحية طيبة

اشارة الى هامش السيد رئيس الجامعة المحترم على اصل كتابكم ذي العدد
٣٤٨/٤٠/٧ في ٢٠٢٥/٢/٢٠ والخاص باقامة بازار في الكلية، يرجى تزويدنا
بالفعايلات التي يتضمنها بازار اصلاحه لنتسنى لنا عرضها على السيد رئيس
الجامعة

مع التقدير...



أ.د. ميثم علي عباد
مدير قسم الاعلام والاتصال الحكومي
٢٠٢٥/٢/٢٠



نسخه منه الى:
الصادرة.

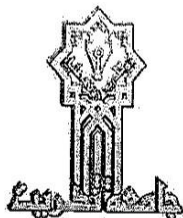
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ص.ب. (٤٢)

Republic Of Iraq
Ministry of Higher Education and
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Tikrit University
College of Pharmacy



جمهورية العراق
وزارة التعليم العالي والبحث العلمي
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كلية الصيدلة
شعبة الشؤون الادارية
وحدة الموارد البشرية

التاريخ: ٢٠٢٥/٤/٢١

العدد: ٨٢٣ / ٤٠ / ٧

الى / رئاسة الجامعة - مكتب السيد رئيس الجامعة المحترم

م/ إقامة بازار

تحية طيبة ...

يرجى تفضلكم بالموافقة على إقامة بازار في كليتنا ليومي الاربعاء و الخميس
الموافق ٢٣-٢٤/٤/٢٠٢٥ ، دعماً للطلبة الموهوبين والشباب أصحاب الحرف اليدوية
والفنون الشعبية.

... مع التقدير ...

المرفقات //

• جدول مرفق ربطاً بفعاليات البازار.

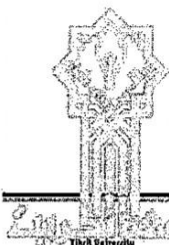
أ.م.د عمر صالح حسن

عميد كلية الصيدلة

٢٠٢٥/٤/٢١

نسخة منه الى //

- مكتب السيد العميد... للعلم مع التقدير.
- مكتب السيد معاون العميد للشؤون الادارية... للعلم مع التقدير.
- شعبة الشؤون الادارية والمالية لوحدة الموارد البشرية... للمتابعة مع الاونيات.
- الارشدة الالكترونية.
- الصادرة.



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Iraq-Salahddin-Tikrit

العراق - محافظة صلاح الدين - تكريت

V

قاعدة بيانات المشتركين

ت	الاسم	المهن والحرف	صفحات التواصل الاجتماعي
١	لبنى مضر فلاح	ورود طبيعية	بيج ورد طبيعي
٢	عبد الرحمن خوام محمد	اسماك	بيج زعزوع
٣	مصطفى محمد محمود	هدايا	بيج هدايا
٤	اية فراس العزاوي	شموع وحجر	
٥	صفاء وليد خالد	شموع / ريزن	
٦	مصطفى كريم	عطور	الاحمدي العطور المركزة
٧	الا صابر مهدي	النقش على الزجاج والزخف	
٨	منتهى عامر عبد	بوكيهات ورد وهدايا	بيج البرقة للورد والهدايا
٩	لمياء منثى جمعة	خياطة واكسسوارات	بيج خياطة العسل
١٠	صابرين طه حسون	اسماك زينة	بيج اسماك زينة
١١	اخلاص برزان حمودي	الخياطة والحياكة	بيج خيط وبره
١٢	شهد بشير كرم	ورود	بيج شهود ستور
١٣	نور سامي عنبر	كوزماتك	كوزماتك نور كوين
١٤	هدى ربيع خماس	شموع ومباخر حجر	
١٥	هبة حسن عمر	اكسسوارات وكوزماتك	
١٦	نور غالب	خط ورسم على الخشب	
١٧	ليلي باسم	اكسسوارات	

قاعدة بيانات الطلبة

١_ فقرة معلومات طبية خاطئة وتصحيحها - (مسابقة).

٢_ ركن التصوير: ديكور صيدلي.

٣_ صور كوميديا.

٤_ فقرات ترفيهية.

٥_ صيدلي تحت الضغط، (لعبة تحدي السرعة).

Photographic Documentation of the College's Innovation Projects



2. **Entrepreneurial Competitions:** The actual number of entrepreneurial competitions conducted is **2 competitions**, verified with the Quality Assurance and Performance Evaluation Division and through a review of the college's documented activities on its official website. These competitions were as follows:
 - **First Competition:** Awarded to a student from the College of Pharmacy who won the title of *Best Speaker* at the second edition of the Iraqi Universities World Championship.

Photographic Documentation from the Competition



- **Second Competition:** Awarded to a team from the College of Pharmacy, which won the championship title in the Medical Group Colleges Football Tournament.

Photographic Documentation from the Competition



3. **Community Initiatives:** The number of implemented community initiatives is **4 initiatives**, verified through records from the Quality Assurance and Performance Evaluation Division and supported by relevant documentation. These initiatives include:
 - **First Initiative:** The College of Pharmacy, in collaboration with the Presidency of the University of Tikrit, visited *Al-Farah Orphan School* in Tikrit as part of the university's efforts to promote social solidarity and support vulnerable groups. This initiative was coordinated between the College of Pharmacy and the College of Science, with participation from the Community Police and the *Ornina* volunteer team. During the visit, the delegation met with the school administration and provided in-kind assistance to the orphaned children, reflecting support and care. The College of Pharmacy is also considering signing a future agreement to provide medical care and health supplies, as well as organizing on-site medical visits in collaboration with university physicians, contributing to improving the health conditions of the orphans.

Documentation through Photographs

A Glimpse of the College of Pharmacy – University of Tikrit Delegation Visit to Al-Farah Orphan School



As Part of a Second Humanitarian School Initiative Organized by the College of Pharmacy in Tikrit

Documentation of Community Initiatives

The Third and Fourth Initiatives: Targeted at orphanages and underprivileged individuals.

Republic Of Iraq
Ministry of Higher Education and
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Tikrit University
College of Pharmacy

التاريخ: ٢٠٢٥ / ٤ / ٢٠



جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة تكريت
كلية الصيدلة
شعبة ضمان الجودة والاداء الجامعي

العدد: ١٨٦ / ١٨ / ٧

م / امر اداري

يتاء على مقتضيات المصلحة العامة واستناداً للصلاحيات المخولة لنا تقرر ما يلي:

اولاً- تشكيل لجنة جمع التبرعات للمدارس في مدينة تكريت للعلم ٢٠٢٤-٢٠٢٥ في كلتا من الذوات المعجزة اسمائهم ادناه:-

<p>رئيساً</p> <p>عضواً</p> <p>عضواً</p> <p>عضواً</p> <p>عضواً</p> <p>عضواً</p> <p>عضواً</p> <p>عضواً</p>	<p>١- م. د. عماد مثنى يوسف</p> <p>٢- م. د. غفران مرشود لطيف</p> <p>٣- م. م. امته موسى صالح</p> <p>٤- م. م. شيرين ناظم صالح</p> <p>٥- م. م. صباح فرحان محمد</p> <p>٦- م. م. ميثا عماد طه</p> <p>٧- ص. لقاؤم زياد طارق</p> <p>٨- ص. مشعل غاتم عبد الهادي</p> <p>٩- السيدة عيبر حسن عيبر</p>
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ا. م. د. عمر ضالح حسن
العميد

٢٠٢٥ / ٤ / ٢٠

ثانياً- يتخذ امرنا من تاريخه اعلاه.



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العراق - محافظة صلاح الدين - تكريت
ص. ب: (٤٧)

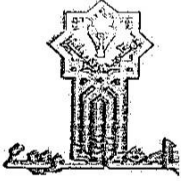
تسعة منه الورق:

- مكتب السيد العميد للعلم لطفاً.
- السيد معاوني العلمي للعلم لطفاً.
- شعبة ضمان الجودة والاداء الجامعي للعلم لطفاً.
- شعبة الموارد البشرية
- امانة مجلس الكلية

Documentation of the Community Initiative

Republic Of Iraq
Ministry of Higher Education and
Scientific Research
Tikrit University
College of Pharmacy

التاريخ: ٢٠٢٥/٤/٢٧



جمهورية العراق
وزارة التعليم العالي والبحث العلمي
جامعة تكريت
كلية الصيدلة
شعبة ضمان الجودة والاداء الجامعي

العدد: ٨٩٠/١٨/٧

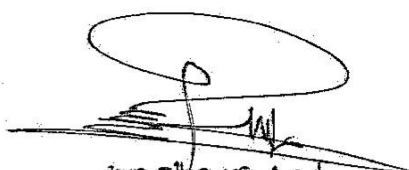
م / أمر اداري

بناءً على مقتضيات المصلحة العامة واستناداً للصلاحيات المخولة لنا نقرر ما يلي:

اولاً- تشكيل لجنة لجمع التبرعات لدار الايتام والمحتاجين في مدينة تكريت من يلب خدمة المجتمع للعلم (٢٠٢٤-٢٠٢٥) من القوائم المدرجة اسمائهم اتيها:-

١- م. د. عمر صلاح صديق	رئيساً
٢- م. د. دلال صالح مهدي	عضواً
٣- م. د. مسلمي أنور عبد الله	عضواً
٤- م. د. يوسف كمال يونس	عضواً
٥- م. د. تقول جابر حميد	عضواً
٦- م. د. ياسمين ناصح توفيق	عضواً
٧- م. د. أويس عبد الموجود عبد القادر	عضواً
٨- م. د. لينى وليد محمد	عضواً
٩- السيدة منتهى جمعة هزاع	عضواً


ثانياً- ينفذ امرنا من تاريخه أعلاه.



ا.م. د. عمر صالح حسن
العميد
٢٠٢٥/٤/٢٧

نسخة منه الى:

- مكتب السيد العميد للعلم لطفاً.
- السيد معاون العلمي للعلم لطفاً.
- شعبة ضمان الجودة والاداء الجامعي للعلم لطفاً.
- شعبة الموارد البشرية
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4. **Patents:** The actual number of patents is **1 patent** at the time of the study, verified through discussions with the Quality Assurance and Performance Evaluation Division. The

College, through the Head of the Pharmaceutical Chemistry Department, applied for a patent that has not yet been issued, as it was submitted for testing and quality control at the Ministry of Planning. The patent involves the invention of a new treatment for allergies and dermatitis in humans. The College of Pharmacy places strong emphasis on drug development and therapies. The patent is titled:

"Study of the Biological Efficacy of Certain Newly Synthesized Chemical Compounds for the Treatment of Allergy Cases on Human and Murine Skin"

Second: Measuring the Performance Gap

Performance gap analysis is considered an important diagnostic tool in administrative and academic studies, as it helps identify the gap between actual performance and the targeted performance level, allowing for the recognition of deficiencies and the determination of areas for improvement. Through this analysis, efforts and resources can be directed toward closing gaps and achieving higher levels of efficiency and excellence. In this context, it is essential to examine the related concepts and definitions that form the theoretical basis for this analysis. Langford et al. (2007:5) indicated that the performance gap represents a tool aimed at identifying the locations of gaps and differences between the current state of the organization and the ideal future state. Kim & Ji (2018:1) argued that it refers to the difference between the behaviors and actual performance delivered by the organization and what is expected by markets, customers, or other stakeholders. The performance gap reflects a misalignment between organizational actions and external expectations, highlighting the need for corrective measures to improve performance and ensure alignment with required standards.

The performance gap analysis methodology was selected because it provides a precise tool to diagnose the difference between actual and targeted conditions in technological readiness and creative performance plans, allowing for the identification of shortcomings. This methodology offers both quantitative and qualitative insights into reality and contributes to the formulation of actionable conclusions and recommendations. Performance gaps were analyzed by comparing available data on current conditions with the targeted levels of technological readiness and creative performance, calculating the percentage of availability for readiness, determining the gap percentage at both the partial and overall levels, and then interpreting the results as follows:

To analyze the performance gap, the following formulas were adopted:

- **To measure the availability percentage of readiness:**
- Availability Percentage of Readiness = Available / Targeted
- **To measure the performance gap:**
- Performance Gap = Availability Percentage of Readiness - 100%

1- Technological Readiness:

Table (18) presents the performance gap analysis between the available and targeted levels in the readiness plan for each item of this variable:

Table (18) Performance Gap at the Partial Level for Technological Readiness Items

Item	Available	Target	Preparedness Percentage	Performance Gap
Medical and Laboratory Equipment	234	220	%106.36	%6.36
Computers	32	50	%64.00	%36.00
Number of Scientific Laboratories	11	14	%78.57	%21.43
Internet Capacity	0.40 TB	3TB	%13.33	%86.67

Source: Prepared by the researcher based on study data.

Table (18) shows that there is a performance gap between the available resources at the College of Pharmacy and the target levels required to achieve technological readiness at the partial level of the variable. The performance gap is as follows: the college achieved a positive performance gap in the item (**medical and laboratory devices**) of **6.36%**, whereas the performance gap percentages for the items (**scientific laboratories, computer devices, Internet capacity**) were negative, recorded as **21.43%, 36.00%, and 86.67%**, respectively.

Table (19) presents the analysis of the performance gap for the variable **technological readiness**:

Table (19) Performance Gap at the Overall Level for the Technological Readiness Variable

Item	Availability Percentage of Readiness	Performance Gap
Medical and laboratory devices	%106.36	%6.36
Computer devices	%64.00	%36.00
Number of scientific laboratories	%78.57	%21.43
Internet capacity	%13.33	%86.67
Overall Availability Percentage and Performance Gap for the Technological Readiness Variable	%65.57	%34.43

Source: Prepared by the researcher based on study data.

Table (19) shows the overall performance gap for the technological readiness variable. It was calculated using the following formula:

Availability percentage of technological readiness

$$= (106.36 + 64.00 + 78.57 + 13.33) \div 4 = 65.57\%$$

Performance gap for technological readiness

$$= 65.57 - 100 = -34.43\% \rightarrow \text{negative deviation.}$$

Thus, the college recorded an overall negative performance gap for the technological readiness variable of **(-34.43%)**.

1. Creative Performance:

Table (23) shows the analysis of the performance gap between available and targeted levels in the readiness plan for each item of this dimension:

Table (23): Performance gap at the sub-dimension level for creative performance items

Item	Available	Target	Readiness Availability (%)	Performance Gap (%)
Student Innovative Projects	1	6	%16.67	%83.33
Entrepreneurial Competitions	2	7	%28.57	%71.43
Community Initiatives	4	6	%66.67	%33.33
Patents	1	6	%16.67	%83.33

Source: Prepared by the researcher based on study data.

The table (23) shows that there is a gap between the available resources at the College of Pharmacy and the targeted levels to achieve creative performance at the sub-dimension level. All gaps were negative, with (-83.33%) in two items (Innovative Student Projects and Patents), (-33.33%) in the Community Initiatives item, and (-71.43%) in the Entrepreneurial Competitions item.

Table (24) presents the performance gap analysis for the overall creative performance variable

Item	Availability Percentage of Readiness	Performance Gap
Innovative Student Projects	%16.67	%83.33
Entrepreneurial Competitions	%28.57	%71.43
Community Initiatives	%66.67	%33.33
Patents	%16.67	%83.33
Overall Availability Percentage and Performance Gap for the Creative Performance Variable	%32.15	%67.86

Source: Prepared by the researcher based on the study data.

Table (24) shows the overall performance gap for the creative performance dimension, where the college recorded a negative overall performance gap of (-67.86%) in the creative performance variable.

Table (28) presents the performance gap analysis for the technological readiness and creative performance variables:

Table (28) Overall Performance Gap for the Technological Readiness and Creative Performance Variables

Item	Availability Percentage of Readiness	Performance Gap
Technological Readiness Variable	%65.57	%34.43
Creative Performance Variable	%32.15	%67.86
Overall Availability and Performance Gap for the Technological Readiness and Creative Performance Variables	%48.86	%51.14

Source: Prepared by the researcher based on the study data. Table (28) shows the overall performance gap for the variable of technological readiness and creative performance. It was calculated according to the following equation:

Availability percentage for the variable of technological readiness and creative performance = $(65.57 + 32.15) \div 2 = 48.86\%$.

The performance gap for the variable of technological readiness and creative performance = $48.86 - 100 = -51.14\%$, indicating a negative deviation.

Thus, the college recorded an overall negative performance gap for the variable of technological readiness and creative performance of (-51.14%) .

Chapter Four

Results and Conclusions

This chapter aims to present the practical results of the study related to verifying the relationship between technological readiness and creative performance at the College of Pharmacy – University of Tikrit. The chapter presents the results at three levels: first, the reliability of the measure (comparison between the readiness plan and quality standards); second, the actual reality of the available resources and capabilities; and third, the analysis of the performance gap between the targeted and available levels. Following this, conclusions derived from these results are presented, followed by practical recommendations and implementation mechanisms to ensure the enhancement of technological readiness and improvement of creative performance in the college. The chapter covers the following:

First: Results

The study reached a set of results, most notably:

A. Results of comparing the readiness plan with quality standards:

1. The overall technological readiness and creative performance standard adopted by the study achieved a convergence rate with the quality standard of 74.91%.

B. Results at the level of available resources:

1. The availability percentage for the study variables as a whole reached 48.86%.

C. Results of performance gap analysis:

1. The performance gap for the study variables as a whole reached -51.14% .

Second: Conclusions

Based on these results, the researchers reached a set of fundamental conclusions that form a reliable scientific basis for developing performance and enhancing the level of readiness at the College of Pharmacy. The most important conclusions are as follows:

A. Conclusions at the level of comparison between the readiness plan, organizational performance, and quality standards:

1. It is evident that the readiness plan formulated by the college is well-aligned with quality standards. This reflects that the plan's design was not random but was based on an accredited academic standard to ensure its validity and reliability. The presence of some items at levels higher than the quality standards indicates that the college adopted a proactive philosophy in building its plan. By nature, readiness surpasses minimum quality thresholds to form a more ambitious future vision. Items that align exactly with quality standards reflect the plan's realism, as it would not have been logical to raise targets without first achieving the foundational requirements in practice (based on Result 1).

B. Conclusions at the level of available resources:

1. The low level of availability indicates that the college achieved less than half of the targets in the technological readiness and creative performance plans. This suggests that current efforts need intensification, with clear priorities established to focus on addressing weaknesses (based on Result 1).

C. Conclusions at the level of performance gap analysis:

1. It is clear that the performance gap across the study variables is wide and evident between the targets set in the technological readiness and creative performance plan and what was actually achieved at the college level. This necessitates redirecting efforts to strengthen the technological dimension and to specifically develop creative performance (based on Result 1).

Third: Recommendations

In light of the results and conclusions reached, a set of recommendations emerges to address deficiencies and enhance strengths:

1. Strengthening the college's technological infrastructure

Implementation mechanisms:

- a. Increase the number of computers and update them periodically.
- b. Expand the number of scientific laboratories in accordance with departmental requirements and equip them with the latest devices and equipment.
- c. Upgrade the Internet network and increase its capacity to cover the existing gap.
- d. Allocate an annual budget for the maintenance and development of devices and equipment.

2. Encouraging student creativity and organizational innovation

Implementation mechanisms:

- a. Organize annual competitions for innovative student projects.
- b. Expand the scope of community initiatives by establishing an annual program in cooperation with local community organizations, setting quantitative objectives for each activity, and periodically monitoring the impact of initiatives on the community.
- c. Provide an incubating environment for student ideas and transform them into feasible, applicable projects.

3. Periodic review of the readiness plan according to actual performance

Implementation mechanisms:

- a. Form a permanent committee to monitor the implementation of the organizational readiness plan.
- b. Use the performance gap metric periodically to identify progress or regression.
- c. Adjust the readiness plan annually based on the objectives achieved.

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