

# Pedagogical Innovation and Knowledge Transfer : Levers of Effective Learning in Higher Education - The Case of Students in Public Health Sciences Institutions

Ennadi Mouad

Laboratory for Organizational Management Research (LAREMO), Hassan II University – Higher School of Technology, Casablanca, Morocco

ennadi.mouad1@gmail.com

Mdarbi Said

Laboratory for Organizational Management Research (LAREMO), Hassan II University – Higher School of Technology, Casablanca, Morocco

Said.mdarbi@estc.ma

## Abstract

*Faced with profound transformations in the academic environment marked by innovation, evolving competency needs, and the demand for greater personalization of learning pathways, Moroccan public institutions are increasingly called upon to rethink their pedagogical approaches to meet the expectations of students and stakeholders in the health sector. Indeed, pedagogical innovation and knowledge transfer have emerged as major strategic levers for fostering effective learning within higher education institutions, particularly in health sciences programs (Ahessad J. & Lahboub I., 2024).*

*In this context, our research aims to analyze the combined impact of pedagogical innovation and knowledge transfer on the quality of learning among students enrolled in Moroccan public health sciences institutions. Based on a confirmatory quantitative methodology, this study aims to test how innovative practices can foster not only the active appropriation of knowledge but also its effective mobilization in professional settings. Knowledge transfer, in this perspective, appears as a key process to strengthen student autonomy, develop critical thinking, and enhance their ability to address complex situations.*

*Our article highlights the structuring role of pedagogical innovation in transforming learning dynamics, while emphasizing the importance of a supportive ecosystem for knowledge transfer. However, the results of our study reveal several persistent obstacles: resistance to change among certain actors, insufficient pedagogical training for instructors, limited infrastructure, and the absence of a clear institutional framework that promotes the systemic integration of these practices.*

*Keywords— University student learning, knowledge transfer, pedagogical innovation, public health sciences institutions*

## VI. INTRODUCTION

The pervasive presence of technology and digital tools is reshaping behaviors and practices across all areas of activity, both professional and personal. In the digital era, higher education systems are confronted with new challenges that must take into account the emerging expectations of 21st-century students. These systems increasingly question which fundamental competencies need to be developed in order to respond to the growing interest in innovation and to meet the needs of tomorrow's society.

Today, it is difficult to envisage the evolution of pedagogical approaches without harnessing the potential of Information and Communication Technologies (ICT). ICTs are increasingly regarded as an integral component of contemporary university education systems. Their integration into teaching methods has already initiated innovation, which should also extend to students' learning modes and to instructors' pedagogical practices.

Numerous forms of innovative pedagogy are well documented in the literature, including collaborative learning and project-based pedagogy, learner-centered approaches aimed at fostering autonomy, the hybridization of training systems, and flipped classroom scenarios. All these perspectives are grounded in the innovative potential offered by ICTs in teaching and learning processes.

Despite the difficulties faced by the education system in disseminating pedagogical successes and genuinely fostering innovation among its stakeholders, many initiatives have emerged. This study is aligned with this perspective, as it is the result of reflection and effort on the part of students to promote change through the innovation of teaching practices. Accordingly, our ambition is to provide elements of response to the following research question:

*To what extent does knowledge transfer promote university students' learning in the era of innovative pedagogical practices?*

Within this context, the objective of our research is to highlight innovative practices in university pedagogy, as well as the prospects for integrating these practices into higher education. It also seeks to examine a number of issues that we believe may influence the future of technology integration in university pedagogy.

To achieve the objectives of this research, we adopt a post-positivist paradigm, also referred to as modified positivism, which assumes that reality exists independently of the mind and of the descriptions constructed about it. This paradigm is particularly suited to our analysis, as the construction of our research object primarily involves examining empirical facts in order to uncover the underlying reality of the knowledge transfer process within higher education institutions.

Accordingly, we employ a hypothetico-deductive approach, since our research aims to test formulated hypotheses in order to measure the impact of knowledge transfer on students' learning within public health sciences institutions.

Finally, we consider it appropriate to conduct a quantitative study based on questionnaire distribution, combined with reliability analysis and structural equation modeling, using SPSS and AMOS version 29. This methodological approach allows us to address our research question through numerical data and to analyze the results of the statistical survey in a rigorous and logical manner.

## VII. LITERATURE REVIEW

### A. Theoretical Foundations of University Students' Learning

Organizations need to rapidly acquire and learn knowledge in order to enhance their productivity and efficiency and to deliver value to their clients (Salomon & Martin, 2008). Organizational learning is therefore widely recognized as a key mechanism for developing competitive advantage (Kuo, 2011).

Yli-Renko et al. (2001) argue that the accumulation of knowledge through learning constitutes a driving force for organizational growth and development. The ability of an organization to learn, as suggested by Moingeon and Métais (2000), represents a core capability that enables the creation and implementation of knowledge and know-how. The literature on organizational learning is extensive and well established (Koenig, 1994; Huber, 1991; Levitt & March, 1988; Fiol & Lyles, 1985; Argyris & Schön, 1978).

Koenig's (1994) theory of organizational learning is based on the idea that learning modifies both situations and the way situations are managed. Organizational learning theories generally consider learning to be organizational as soon as the acquisition of knowledge—even when it is individual—leads to a change in organizational behavior.

Huber (1991) also states that an organization learns when one of its units acquires knowledge that it recognizes as potentially useful to the organization. Organizations primarily learn through their individual members, who continuously acquire new knowledge (Reid et al., 2010). The organization itself does not learn independently; rather, individuals are the main actors in the learning process.

According to Huber, organizational learning theory places the individual at the center of the learning system by considering them the primary actor within it. Organizational learning initially occurs through individuals who share newly acquired knowledge with one another before it is disseminated and generalized across the organization.

Similarly, Levitt and March (1988) demonstrate that organizations can learn from direct experience. To do so, they must interpret experience, which is not always straightforward because existing routines shape interpretations. Organizations can also learn from the experiences of others.

Learning as the development of the knowledge base: Organizational choices are grounded in prior knowledge, and organizational effectiveness is determined by the quality of the knowledge base available for strategic decision-making. Knowledge distributed across the organization is transferable among members through shared understanding; it is embedded in work procedures and organizational structures. Knowledge thus emerges as the outcome of the learning process.

Organizational learning as the capitalization of experience: Learning can occur through the accumulation of experience or through experimentation (Koenig, 1994). Knowledge is produced through the acquisition of know-how and through reflection-in-action. Consequently, learning is oriented toward the intelligence of experimentation, which is based on constructive reflexivity.

It can therefore be argued that organizational learning theories manifest themselves when there is either exploitation or exploration of knowledge within organizational action, where routines, rules, and values exist. These theories explain that individuals make organizational choices progressively as they gain experience (exploitation) or when they are confronted with new experiences (exploration).

In addition, learning is not limited to the acquisition of individual competencies; rather, its primary objective is the renewal or transformation of collective knowledge and competencies, which constitute the central foundation of learning at the organizational level.

Finally, it should be noted that individual interactions are a necessary condition for learning at the group and organizational levels (Argyris & Schön, 1978). Individuals learn through interaction and by acting as mediators in information exchanges, while groups learn when members cooperate in pursuit of a shared objective (Bennis & Nanus, 1985).

### B. Innovative Practices in University Pedagogy

The concept of pedagogical innovation, at the core of which lies the teaching–learning dynamic, takes on particular significance when combined with a program-based approach and when reflection encompasses all or a substantial part of the training activities within an academic curriculum.

The Higher Council for Education, Training and Scientific Research (CSEFRS) has developed a strategic vision covering the period 2015–2030. This vision emphasizes the need to renew pedagogical practices through the integration of Information and Communication Technologies (ICT), by “developing a national strategy that will place them at the

service of learning quality at the level of programs and training from the earliest cycles of education, through various digital media, interactive programs, and networks” (CSEFRS, 2015).

In recent years, new technologies and video-based teaching formats - such as flipped classrooms and, in particular, Massive Open Online Courses (MOOCs) - have contributed to the evolution of university pedagogy. They have also fostered the emergence of new modalities for training instructors in university-level pedagogy.

Unlike flipped classrooms and MOOCs, in which distance learners generally follow courses asynchronously, virtual classrooms allow learners to attend courses synchronously in real time, as well as asynchronously through recorded sessions for those who are unable to attend live. In the context of virtual classrooms, distance learners participate in courses simultaneously with on-site learners, within the same digital space and on the same online platform.

The use of ICT in the learning process currently represents a key competence for students, enabling them to better adapt to a constantly evolving environment. Although ICTs have not yet fully revolutionized the traditional classroom, they have already transformed students’ learning experiences by reducing constraints related to time and space and by facilitating access to information.

In the contemporary context, pedagogical innovation constitutes a major challenge for the development of higher education institutions worldwide. Driven by major political initiatives, pedagogical innovation represents one of the principal levers of progress for any higher education institution.

### C. Research Hypotheses

Based on the key concepts presented in this theoretical section and on the initial assumptions previously outlined, we propose a preliminary research model derived from theory, integrating the relationship between the two variables under investigation.

On the one hand, the literature review, academic conferences, and para-university events conducted across various institutions, and on the other hand, empirical studies, field observations, and the quantitative approach adopted, have all served as a foundation for formulating and refining our research hypotheses. We first focus on the direct effects of the determinants of knowledge transfer on the different dimensions of organizational learning.

This leads us to formulate the following main hypothesis:

**H1: Knowledge transfer has a positive impact on the dimensions of organizational learning among university students.**

This main hypothesis is further specified through the following sub-hypotheses:

*H1.1: The nature of knowledge positively affects organizational learning among university students.*

*H1.2: The sender–receiver relationship positively affects organizational learning among university students.*

*H1.3: Knowledge transfer capacity positively affects organizational learning among university students.*

*H1.4: Knowledge transfer characteristics positively affect organizational learning among university students.*

## VIII. RESEARCH METHODOLOGY

This section focuses on the research methodology adopted in this study. It begins with a justification of the choice of the target population, followed by a presentation of the epistemological positioning and the sampling procedure, and concludes with a description of the data collection process and the measurement instruments used to address the research problem.

### A. Selection of University Students

The study of learning within the context of health sciences students represents a logical choice due to the numerous advantages it offers, both in terms of theoretical knowledge acquisition and practical skill development. Health sciences are characterized by continuous evolution, driven by new discoveries, techniques, and technologies. Consequently, students are required to rapidly integrate and apply up-to-date information.

Research in medical education has demonstrated that learning and the use of active pedagogical methods are essential for enabling students to cope with this growing complexity. For instance, a study by Cook et al. (2010) on active learning in medicine highlights that the integration of active pedagogical strategies enhances knowledge acquisition and retention.

Similarly, Davis et al. (2013) emphasizes that learner-centered pedagogical approaches, which promote autonomy and reflective thinking, enable health sciences students to better develop decision-making and reasoning skills that are essential for real-world practice. Indeed, health sciences students are expected to develop practical competencies while simultaneously applying theoretical knowledge.

Education in the health sciences is not limited to individual competencies; it also involves the ability to work within interprofessional teams, which constitutes a crucial component of health sciences practice (Reeves et al., 2016). Boud and Falchikov (2007) show that health sciences students are more engaged in their learning when they participate in practical and collaborative activities, leading to improved retention of knowledge and skills.

Overall, the study of learning and knowledge transfer in the field of health sciences is essential to ensure that students acquire not only solid theoretical knowledge but also practical skills and the ability to solve complex problems.

### B. Epistemological Positioning

We adopted a quantitative methodology to structure the scientific approach followed in this research, both to ensure the rigorous achievement of the study objectives and to guarantee the validity and reliability of the quantitative results obtained. The quantitative methodology aims to generalize the study’s conclusions by collecting data from a representative sample of the target population. This approach is grounded in a positivist epistemological stance, based on the principle that scientific inquiry constitutes the primary foundation of reality

and that the scientific method is the only means of establishing objective truth.

Within this framework, we assume that the techniques, procedures, and methods employed enable a more precise understanding of the research problem and the subject of this article. We rely on a deductive, or hypothetico-deductive, epistemological positioning in order to measure the variables of the model and to test the resulting research hypotheses through empirical analysis. Specifically, structural equation modeling (SEM) was employed to test causal relationships and to evaluate the proposed model using AMOS software.

The objective of this study is therefore to highlight and empirically test the dimensions of knowledge transfer and their impact on the learning of health sciences students within Moroccan public higher education institutions.

### C. Sampling Procedure, Data Collection, and Measurement Instruments

In any research endeavor, the ideal approach would be to study the entire population; however, in most cases, populations are sufficiently large that it is impractical to include all individuals. Snowball sampling is a non-probabilistic technique in which data are collected from participants who are easily accessible within the researchers' networks. Participation may be influenced by respondents' interest in the research topic, their willingness to express opinions, their level of dissatisfaction, their motivation to support specific viewpoints, and, most importantly, the inclusion and exclusion criteria established for the study.

The use of this method was justified by field constraints that necessitated the adoption of non-probabilistic empirical approaches. Nevertheless, such methods limit the scope and generalizability of the findings. To measure knowledge transfer, we adopted the four dimensions proposed by Prévot (2005). The measurement instrument consists of 22 items covering the four dimensions of knowledge transfer, namely the nature of knowledge, the sender–receiver relationship, transfer capacity, and organizational characteristics. The measurement scale developed by Prévot (2005) was followed to assess knowledge transfer.

A questionnaire survey was conducted among students enrolled in public health sciences institutions in Morocco. Responses were received from nearly 34 institutions out of a total of 37. The majority of respondents were affiliated with the Faculties of Dental Medicine in Rabat (57 respondents) and Casablanca (53 respondents), representing 25.4% and 23.7% of the sample, respectively. These were followed by the Faculties of Medicine and Pharmacy in Rabat (31 respondents), Marrakech (28 respondents), and Casablanca (20 respondents). The Faculties of Medicine and Pharmacy in Fès, Agadir, Tangier, and Oujda accounted for 6.7%, 3.6%, 3.1%, and 2.2% of respondents, respectively.

The study highlights the diversity of the institutions included, encompassing all Moroccan regions, thereby providing an overview of the distribution of students enrolled in health sciences programs. The Rabat–Salé–Kénitra region accounted for 28.3% of respondents, while the Casablanca–Settat region represented 24.3%, together accounting for more than half of the total number of health sciences students (52.6%).

A total of 548 questionnaires were collected. The sample comprised 48% male and 52% female respondents, with an average age ranging between 18 and 30 years. Participation in the survey was voluntary. Data collection methods varied across institutions due to specific constraints related to reaching students. Accordingly, the questionnaire was disseminated through university portals, email communications, and student groups on social networking platforms such as LinkedIn. In addition, the snowball sampling technique was also employed to further distribute the questionnaire and reach a larger number of students.

## IX. RESULTS

### A. Analysis of Dimensionality and Reliability of the Independent Variables: Knowledge Transfer

Four main dimensions of knowledge transfer were identified: the nature of knowledge, the sender–receiver relationship, transfer capacity, and knowledge transfer characteristics.

#### - Homogeneity and Reliability of the Variables:

The nature of knowledge was measured using three items. The Kaiser–Meyer–Olkin (KMO) index of 0.624 indicates that these three items are suitable for factor analysis. In addition, Bartlett's test of sphericity confirms that the correlations among all items are acceptable, as evidenced by a significance level of 0.000. The dimensionality analysis reveals the existence of a single dimension for the nature of knowledge, measured by the following items: NC1, NC2, and NC3. These items explain approximately 53.103% of the total variance.

The sender–receiver relationship was measured using nine items. The KMO index of 0.853 indicates that these items are highly appropriate for factor analysis. Bartlett's test of sphericity also shows acceptable correlations among all items, with a significance level of 0.000. The dimensionality analysis reveals the existence of two dimensions for the sender–receiver relationship. The first dimension is measured by the following items: RER5, RER6, RER7, RER8, and RER9. The second dimension is measured by the following items: RER1, RER2, RER3, and RER4. However, the items constituting the second dimension explain only 12.565% of the variance. Consequently, we decided to separate the items into two components and to remove those associated with the second dimension. The transfer capacity dimension was measured using three items.

The KMO index of 0.614 indicates that these items are suitable for factor analysis. Bartlett's test of sphericity confirms acceptable correlations among the items, with a significance level of 0.000. The dimensionality analysis reveals a single dimension for transfer capacity, measured by the following items: CAPT1, CAPT2, and CAPT3. These items explain approximately 52.585% of the variance.

The knowledge transfer characteristics were measured using seven items. The KMO index of 0.718 indicates that these items are appropriate for factor analysis. Bartlett's test of sphericity confirms acceptable correlations among all items, with a significance level of 0.000. The dimensionality analysis reveals the existence of two dimensions for knowledge transfer characteristics. The first dimension is

measured by the following items: CT1, CT2, CT3, CT4, and CT7. The second dimension is measured by the following items: CT5 and CT6. However, the items constituting the second dimension explain only 12.565% of the variance. As a result, we decided to separate the items into two components and to remove those associated with the second dimension.

The separation of dimensions reflects the theoretical contributions of the SECI model proposed by Nonaka and Takeuchi (1995), which is based on the distinction between explicit and tacit knowledge. This model comprises four stages: socialization, externalization, combination, and internalization. In this context, the first dimension is theoretically linked to socialization, where new knowledge emerges through interactions, whereas the second dimension refers to externalization, which involves the transformation and capitalization of knowledge acquired during the socialization process.

As previously mentioned, and according to the table above, two factorial axes were identified. The first axis (socialization) includes five items and accounts for 36.62% of the initial variance, while the second axis (externalization) comprises two items with an eigenvalue of 53.50%. We subsequently proceeded with a reliability analysis of the retained component.

Table 1: Analysis of Variable Homogeneity

Variables	(KMO) Index	Bartlett's Test	Cronbach's Alpha
Knowledge Transfer	0,700	0,000	0,649
Organizational Learning	0,689	0,000	0,686
Nature of Knowledge	0,624	0,000	0,557
Sender–Receiver Relationship	0,853	0,000	0,766
Transfer Capacity	0,614	0,000	0,546
Organizational Characteristics	0,718	0,000	0,691

Source: Results derived from the survey data analyzed using SPSS 22

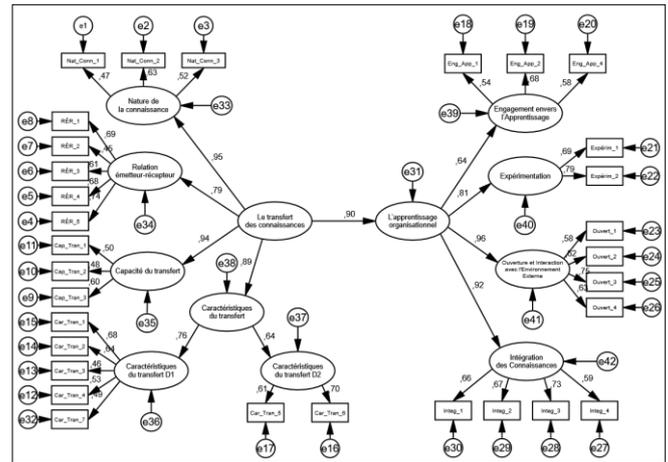
B. Structural Model Analysis: Testing the Main Model

Knowledge transfer has a positive and statistically significant impact on university students' learning, with an estimated value of 0.90. This effect is reflected through the dimensions of knowledge transfer, namely the nature of knowledge (0.95), transfer capacity (0.94), transfer characteristics (0.89), and the sender–receiver relationship (0.79). It is also reflected through the dimensions of learning, including openness and interaction with the external environment (0.96), knowledge integration (0.92), experimentation (0.81), and commitment to learning (0.64). The positive and significant impact is likewise observed at the

level of the items measuring both the learning dimensions and the knowledge transfer dimensions.

The figure below presents the factor loadings of the tested model across variables, dimensions, and items, thereby providing an overall view of the relationships and results discussed above.

Figure 1: Main Model of the Direct Effect



Source: AMOS 29

X. DISCUSSION OF RESULTS

Structural equation modeling, using AMOS software, was employed to analyze all the variables included in our model and to derive a set of results that provide significant added value to this study.

Within the context of knowledge transfer and organizational learning, the findings reveal a positive and statistically significant relationship between the dimensions of knowledge transfer (the nature of knowledge, the sender–receiver relationship, transfer capacity, and transfer characteristics) and student learning. This indicates that students' learning is positively influenced by these factors.

These results are consistent with prior studies that have examined the relationship between knowledge transfer and students' organizational learning (Prévoit, 2005; Lawson et al., 2008; Lauzier et al., 2013). These authors found that knowledge transfer oriented toward best practices has a positive effect on organizational learning among university students in the health sciences.

According to the study by Barrette et al. (2012), the acquisition and transformation of knowledge constitute the primary facilitators influencing individual learning, while also exerting a significant impact on organizational learning. This dual effect is consistent with information processing theory (Huber, 1991), which considers knowledge acquisition and transformation as essential levers for stimulating organizational learning. This theory further suggests that formalizing these processes enhances not only individual

knowledge but also the organization’s overall learning capacity.

Moreover, Hansen et al. (1999) emphasize that knowledge is often closely tied to the individual who developed it and is primarily transferred through direct person-to-person contact. Human networks that foster sharing and flexibility play a crucial role in knowledge transfer (Vătămănescu et al., 2020; Lardón-López et al., 2022). In addition, within the university learning context, trust between parties enhances knowledge transfer (Becerra et al., 2008). Hansen et al. (1999) also highlight the importance of information technologies in the storage and transfer of explicit knowledge. Although digitalization is pervasive in today’s environment, the impact of digital technologies on knowledge transfer remains underexplored. Venkitachalam and Schiuma (2022) identify four research directions related to knowledge management in the digital era that warrant further in-depth investigation.

The establishment of a knowledge-sharing culture, along with corresponding practices, represents a central pillar for strengthening knowledge-sharing behaviors. Nowacki et al. (2015) stress that promoting such practices requires the development of an appropriate organizational culture. Knowledge sharing is, in itself, a learning process that fosters organizational learning.

Soares and Almeida (2014) argue that “appropriate knowledge sharing is crucial for organizational learning,” which, in turn, contributes to competency development. They further reinforce this view by asserting that competency development stems from organizational learning practices.

Numerous scholars thus emphasize the importance of knowledge sharing and its effect on strengthening organizational learning practices, which support the development of learning processes and the enhancement of competencies. Wang et al. (2014) point out that competencies emerge directly through learning. Furthermore, as knowledge is an individual resource that is shared within the organization, it is essential to promote organizational learning to ensure the internal transfer, development, and sustainability of knowledge (Argyris & Schön, 2002).

Among contextual factors, learning culture emerges as the most decisive. An organization with a well-established learning culture, in which learning is perceived as a core value, creates a favorable climate for the recognition of work and reflective practice. This finding aligns with the perspectives of numerous scholars who acknowledge the decisive impact of learning culture on organizational learning.

Finally, the results of this study corroborate our assumptions and are consistent with the conclusions of researchers such as Dragnić (2014) and Eruemegbe (2015), who demonstrate the positive impact of organizational learning on knowledge transfer. These findings are also aligned with Piaget’s (1976) learning theories.

Table.1: Overview of the Quantitative Findings

Hypotheses	Hypothesis Status
H1: Knowledge transfer has a positive impact on	Supported

the dimensions of organizational learning among university students.	
H1.1: The nature of knowledge positively affects organizational learning among university students.	Supported
H1.2: The sender–receiver relationship positively affects organizational learning among university students.	Supported
H1.3: Knowledge transfer capacity positively affects organizational learning among university students.	Supported
H1.4: Knowledge transfer characteristics positively affect organizational learning among university students.	Supported

## XI. CONCLUSION

Within the scope of this research, we aimed to make a modest contribution to the study of factors related to the learning of students in Moroccan public health sciences universities. Our approach sought both to explain and describe, by presenting the main variables related to our research topic, as well as the profile of Moroccan university students. This final section provides a retrospective overview of the research process and offers a general synthesis of the key findings.

From our literature review and empirical study, it is evident that organizational learning must be emphasized, particularly its relationship with knowledge transfer. It is also essential to identify the different configurations of knowledge transfer, to highlight the types, drivers, motivations, and barriers of organizational learning, and to assess their influence on university behavior.

Learning and knowledge transfer are pervasive in Moroccan universities. Organizational learning is integral to university strategies, which primarily aim to develop the competencies and skills of students through knowledge transfer. Universities strive to create relationships, interactions, and connections among all members, reducing hierarchical barriers and fostering a work environment conducive to learning and knowledge sharing.

Successful knowledge transfer requires an overall volume of know-how and expertise, strong interpersonal relationships among members, well-structured work organization, and

favorable organizational and cultural characteristics. Learning is based on the creation, retention, and transfer of knowledge, which confirms that organizational learning in universities relies heavily on the internal dissemination of knowledge.

Finally, knowledge transfer is a critical factor for the success and development of the teacher–student relationship. It plays a decisive role and significantly impacts organizational learning.

The empirical part of our research primarily aimed to validate our theoretical model and test the research hypotheses. To achieve this, structural equation modeling was employed in a comprehensive quantitative analysis, combining both descriptive and explanatory approaches. In this process, we followed a hypothetico-deductive reasoning framework. We selected a relatively large sample to ensure better representativeness. Targeting students from public health sciences universities was essential, as these students possess deep knowledge and insight into learning within their institutions.

Our sample included Moroccan health sciences universities, and a total of 548 questionnaires were distributed and carefully analyzed. This research provided valuable answers to critical questions concerning the factors that enhance the learning of higher education students in Morocco.

#### REFERENCES

- [39] Ahessad, J., & Lahboub, I. (2024). Enseignement supérieur et innovation technopédagogique : Un changement paradigmatique, une mutation pédagogique. *Korását*.
- [40] Argyris, C., Schön, D. A., (1978). *Apprentissage organisationnel : théorie, méthode et pratique*, Edition Boeck Université, traduction de la 1ère édition américaine.
- [41] Barrette, J., Lemyre, L., Corneil, W., & Beauregard, N., (2012). Organizational learning facilitators in the public sector. *International Journal of Public Administration*, 35, 137–149. <http://dx.doi.org/10.1080/01900692.2011.625179>
- [42] Bennis, W. et B. Nanus., (1985). *Leaders: The Strategies for Taking Charge*, Harper and Row, New York.
- [43] Boud, D., & Falchikov, N. (2007). "Assessment and learning in the higher education context". *Assessment & Evaluation in Higher Education*.
- [44] Cook, D. A., et al. (2010). "Advances in medical education". *Medical Education*.
- [45] Davis, M. H., et al. (2013). "Problem-based learning: A practical guide". *Medical Education*.
- [46] Dragnic, D., (2014). Impact des facteurs internes et externes sur la performance des petites et moyennes entreprises à croissance rapide. *Gestion*, 19 (1), 119-159. Récupéré de <https://hrcak.srce.hr/124611>
- [47] Eruemegbe, G. O., (2015). Impact of business environment on organization performance in Nigeria study of Union Bank of Nigeria. *European Scientific Journal*, ESJ, 11(10), 478-494.
- [48] FIOL, C. M., et LYLES, M. A., (1985). Organizational learning. *Academy of management review*, 10(4), 803-813.
- [49] Hansen, M.T., (1999). The search-transfer problem: the role of weak ties in sharing knowledge across organization subunits, *Administrative Science Quarterly*, vol. 44, p. 82-111.
- [50] HUBER, G. P., (1991). Organizational learning: The contributing processes and the literatures. *Organization science*, 2(1), 88-115.
- [51] KOENIG, G., (2006). *L'apprentissage organisationnel : repérage des lieux*. *Revue Française de Gestion*, n° 97.
- [52] Kuo, T., (2011). How to Improve Organizational Performance through Learning and Knowledge? *International Journal of Manpower*, 32, 581-603.
- [53] Lauzier, M., Barrette, J., Lemyre, L., et CORNEIL, W., (2013). Validation francophone de l'inventaire des facilitateurs de l'apprentissage organisationnel (IFAO) : étude comparative de l'apprentissage perc, u au niveau des individus, des groupes et de l'organisation, *Revue européenne de psychologie appliquée*, 63, pp.353–362 ;
- [54] Lardón-López, M.E., Martín-Rojas, R. and García-Morales, V.J., (2022). Social media technologies: a waste of time or a good way to learn and improve technological competences?, *Journal of Knowledge Management*, Vol. 26 No. 11, pp. 348-377. <https://doi.org/10.1108/JKM-02-2022-0130>
- [55] Levitt, B. and J. March., (1988). Organizational learning, *Annual Review of Sociology*, 14, pp.319-40.
- [56] Moingeon, B. et Métails, E., (2000). Le management des compétences et capacités organisationnelles : illustration par le cas de l'entreprise Salomon, in Quélin, B. et J.L. Arrègles (eds), *Le management stratégique des compétences*, Paris : Ellipses, pp. 263-286.
- [57] Nonaka, I. and Takeuchi, H., (1995). *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York.
- [58] Prévot., (2005). *Managing inter-organizational transfer of competence: A case study*, *Competence Perspectives on Managing Interfirm Interactions*, Emerald Group Publishing Limited, 165-186
- [59] Reeves, S., et al. (2016). "Interprofessional education: A research guide for healthcare students". *Journal of Interprofessional Care*.
- [60] Reid WD, Brown JA, Konnyu KJ, Rurak JM, Sakakibara BM., (2010). Physiotherapy secretion removal techniques in people with spinal cord injury: a systematic review. *J Spinal Cord Med*. 2010;33(4):353-70. doi: 10.1080/10790268.2010.11689714. PMID: 21061895; PMCID: PMC2964024.
- [61] Salomon et Martin., (2008). Learning, knowledge transfer, and technology implementation performance: A study of time-to-build in the global semiconductor industry, *Management Science*, 54, 7, 1266-1280
- [62] Soares, A-L et Almeida, M-V., (2014). Knowledge sharing in project-based organizations: Overcoming the informational limbo, *International Journal of Information Management*, Vol.34, pp.770-779.
- [63] Tomasz Stanisław Szopiński & Robert Nowacki., (2015). The Influence of Purchase Date and Flight Duration over the Dispersion of Airline Ticket Prices, *Contemporary Economics*, University of Economics and Human Sciences in Warsaw., vol. 9(3), September.
- [64] Vătămănescu, E. M., Cegarra-Navarro, J. G., Andrei, A. G., Dincă, V. M., and Alexandru, V. A., (2020). SMEs strategic networks and innovative performance: a relational design and methodology for knowledge sharing. *J. Knowl. Manag.* 24, 1369–1392. doi: 10.1108/JKM-01-2020-0010
- [65] Wang, H., L. Long, A. Kumar, W. Wang, J.-K.E. Schemm, M. Zhao, G.A. Vecchi, T.E. LaRow, Y.-K. Lim, S.D. Schubert, D.A. Shaevitz, S.J. Camargo, N. Henderson, D.Y. Kim, J.A. Jonas, and K.J.E. Walsh., (2014). How well do global climate models simulate the variability of Atlantic tropical cyclones associated with ENSO? *J. Climate*, 27, no. 15, 5673-5692, doi:10.1175/JCLI-D-13-00625.1.
- [66] Yli-Renko, H., Autio, E. and Sapienza, H.J., (2001). Social Capital, Knowledge Acquisition, and Knowledge Exploitation in Young Technology-Based Firms. *Strategic Management Journal*, 22, 587-613. <https://doi.org/10.1002/smj.183>