



DOI: 10.5281/zenodo.17487762

UNIVERSITY-ENTERPRISE LINKAGES IN THE REGIONALISATION OF HIGHER EDUCATION: INTERNSHIPS AND THEIR ROLE IN STUDENTS' PROFESSIONAL GROWTH

Alex Dueñas-Peña^{1*}, Diana Mireya Cuellar-Sánchez², Luis Fernando Vasquez-Zora³

'Universidad Colegio Mayor de Cundinamarca: Funza, Colombia. ORCID iD: https://orcid.org/0000-0002-2940-416X. Email: aduenasp@unicolmayor.edu.co

²Universidad Colegio Mayor de Cundinamarca: Funza, Colombia. ORCID iD: https://orcid.org/0000-0002-9500-1799 Email: dmcuellar@unicolmayor.edu.co

³Universidad Colegio Mayor de Cundinamarca, Bogotá, Colombia. ORCID iD: http://orcid.org/0000-0002-8172-0602 Email: lfernandovasquez@unicolmayor.edu.co

Received: 18/09/2023 Accepted: 02/01/2024 Corresponding Author: Alex Dueñas-Peña (aduenasp@unicolmayor.edu.co)

ABSTRACT

The internship enables students to apply their theoretical knowledge in a real work environment. Through this experience, they become familiar with the functioning of an organisation and face challenges specific to their discipline. However, the skills acquired in the classroom do not always align with the demands of the labour market, making it necessary to analyse this relationship. Accordingly, this study aims to assess the impact on academic training and the requirements of the business sector in the Western Region, as well as the role of internships in the development of professional competences. A quantitative and qualitative approach was adopted, considering a population of students who undertook their internships between 2021 and 2023. Data collection was conducted through a survey containing both closed and open-ended questions. The findings reveal that at least 65% feel that the internship has had a significant impact on their skills across the various subject areas studied in the classroom. The study confirms that "The internship contributes significantly to the development of professional competences in students, strengthening skills in their disciplinary areas of training" and that "Students who undertake internships perceive a greater applicability of the knowledge acquired in the classroom, which positively impacts their confidence, autonomy, and professional performance."

KEYWORDS: Internship, Relevance, Experiential Learning, Meaningful Learning.

1. INTRODUCTION

Higher education institutions seek, through internships undertaken in companies, to enable students to become familiar with the methods inherent to professional practice (Martínez-Rueda, 2021). Since these internships complement the training of future professionals and respond to the expectations of companies-which require young people with experience in organisational functioning (Sánchez, 2024) - the importance of professional placements is highlighted as a key tool for students' comprehensive education. They allow students not only to test their academic knowledge, but also to become familiar with the methods, processes, and procedures specific to the business sphere. In many cases, these experiences constitute the first contact with an authentic work environment, where professional socialisation begins (Guarnizo, 2018). In sum, professional internships are fundamental to students' education, as they enable them to acquire work experience in a suitable environment, become acquainted with professional methods, and respond to labour-market expectations.

The time students spend interacting in a business environment plays a crucial role in their preparation as future workers, as it allows them to apply knowledge acquired in the classroom within a real context. According to Soto (2024), immersion in the workplace facilitates the development of initial professional competences, given that the student faces situations specific to the sector in which they (Arboleda et al., 2024). Moreover, operate organisational structure and culture shape the way students learn and adapt to workplace dynamics, strengthening skills such as problem-solving, communication, and time management (Martínez-Rueda et al., 2021). Therefore, experience in a business setting is essential to students' professional formation, as it enables them to develop competences and adapt to the demands of the world of work, thereby consolidating their readiness for an effective transition to the labour market.

Practical experiences in real companies form a vital bridge between theoretical knowledge acquired in the classroom and its application in concrete work settings. Such learning enables students to confront real challenges in the business environment, fostering the development of essential skills such as decision-making, problem-solving, and adaptability (Figueroa & García, 2017). Furthermore, through interaction with sector professionals, students strengthen their understanding of organisational dynamics and improve their capacity to integrate effectively into the labour market (Peña et al., 2016).

In this way, internships not only complement academic training, but also contribute to the development of competences for professional performance and facilitate labour-market insertion.

The integration of students into real processes of the productive sector through internships not only enables them to apply their knowledge in authentic work contexts, but also constitutes a validation mechanism for educational institutions (Guzmán, 2024). Internship experiences allow students to evaluate their own performance and level of preparedness in relation to labour-market demands. According to Arias (2021), this self-evaluation is fundamental, as it provides students with the opportunity to identify their strengths and weaknesses within a real work environment. Through this process, they can recognise the competences they have developed and those requiring improvement, thereby facilitating more conscious and targeted learning (Oyarzún & Falabella, 2022). Likewise, such feedback enables educational institutions to adjust their academic programmes to ensure training that is more closely aligned with the needs of the productive sector (Cruzado, 2022). Thus, internships not only represent a necessary opportunity for students to apply their knowledge in real environments; they also function as a mechanism for self-evaluation and continuous improvement for educational institutions. Through these experiences, students identify strengths and areas for development, allowing them to refine their professional growth in line with labour-market demands (Martínez, 2019).

Despite efforts to expand higher education in Colombia, the figures reveal significant challenges in terms of access, retention, and graduation. According to the National Higher Education Information System (SNIES), in 2018, of 985,786 university applicants, only 55% were admitted. This situation has not improved significantly over the years: in 2021, only 53.94% of young people aged 17-21 accessed higher education in the country. Even more concerning is the low graduation rate, which in 2023 stood at 49.16%, indicating that more than half of those who enrol do not complete their degrees. These figures become even more striking when considering the situation of young people in rural areas. Vásquez (2023) notes that only 2% of young people in regional Colombia undertake an undergraduate programme, evidencing an alarming gap between urban and rural areas in terms of educational opportunities. Likewise, though higher-education training proposals exist, they are not always aligned with students' real needs or with the specific demands of

the business context, generating a disconnect between the training offered and the contribution of companies to professional formation (Parejo & Clemenza, 2022). This inequality limits the prospects for individual and collective development in regional urban centres and perpetuates exclusion and poverty in these regions.

Internships constitute a fundamental space for the training of competent professionals, where the theory acquired in the classroom is validated and enriched through direct experience. This process fosters the development of professionals capable of confronting complex situations through combination of academic knowledge and practical skills, preparing them to lead in an interconnected world in which change is the only constant. In this context, the article compiles experiences based on students' perceptions of internships undertaken in the productive sector, exploring the alignment between academic training and the demands of the labour environment, as well as the impact on the development of professional competences. The objective, therefore, was to analyse how students perceive the contribution of internships to the development of their professional competences and the extent to which skills acquired in the classroom align with the demands of the real work environment.

Accordingly, from students' perspectives, it is documented how internships enable them to apply theoretical knowledge in a real work setting, confronting concrete situations that require practical skills. The study shows that university-enterprise linkages-particularly in the Western Region examined here-through the internship, contribute significantly to the development of students' professional competences, strengthening skills in disciplinary areas of their programmes. Furthermore, students who undertake internships perceive greater applicability of classroom knowledge, which positively affects their confidence, autonomy, and professional performance. At the same time, internships help identify gaps between academic training and labour-market demands, thereby informing improvements educational to programmes to strengthen students' preparation.

1.1. Exploration of the State of the Object of Study

The literature review includes findings from various investigations that underpin the context of this study on the relevance of professional training during students' internship processes.

For example, Poveda et al. (2021) highlight the

importance of initial teacher training across two fundamental contexts: the university educational centres. They analyse how studentteachers perceive the learning developed in each of these spaces, and explore their beliefs about the effectiveness of the connection between them. Through a qualitative study involving 36 students via an open-ended questionnaire, the results underscore the value of the practicum in the training of future teachers and reveal that students consider theoretical learning provided by the university to be central. The study also identifies four types of link between the university and the practicum: unidirectional, bidirectional, indirect or scarcely evident, and a gap or rupture. These relationships help to elucidate the theory-practice connection in teacher training. On this basis, the authors recommend redesigning the curriculum to more closely reflect school realities, optimising practicum organisation, and fostering narrative strategies that promote observation, analysis of situations, and practical reflection.

Álvarez-Álvarez (2015) reports findings on the principal challenges hindering the connection between academic knowledge about education and teaching practices in Spain. The paper traces the historical gap between university and school, noting problems such as the separation of theory and practice, the theoretical orientation of teacher training, and the lack of communication between researchers and teachers. It proposes strategies to overcome these limitations in teacher education, including action-research cycles, institutional agreements, the development of specific professional knowledge, a realistic approach, and the creation of more personalised pedagogical practices. The article concludes by emphasising the importance of the teacher's role in bridging these divisions and the need to connect university learning with professional practice.

In the study by Zapatero et al. (2021), focused on the disconnection between theory and practice in the initial training of teachers at the Complutense University of Madrid, the quality of such training is seen to be compromised by insufficient integration of academic theory and practical experience. The methodology was based on qualitative content analysis using documented information from students' practicum experiences, with Atlas.ti employed for analysis. Among the findings, students' accounts reveal a significant disconnection between what is learnt at university and what is experienced in professional practice. Students also propose suggestions to improve the linkage between

the university and placement schools, reflecting their desire to contribute to the enhancement of their own training and recognition of the importance of collaboration between both contexts. Despite expressed dissatisfaction with certain aspects of their training, students perceive positively the transfer of theoretical knowledge to practice within modules. The researchers conclude that a critical approach is needed that values both theory and reflection-inpractice, advocating active methodologies more closely aligned with school and professional realities. This study the importance underscores connection between establishing a stronger university and professional practice, consistent with prior research that also stresses the need to improve coordination and support in internships (Poveda et al., 2021).

Saiz and Susinos (2017), in their work on supervised practicum experiences in teacher education, recognise the practicum as a central element in redefining initial teacher training. Classroom experience is considered crucial for preparing future teachers, serving as a bridge between theory and practice. The authors emphasise the need to design placement programmes that promote reflection and collaboration, arguing that mere practical experience is insufficient: students must reflect on their experiences to develop a deep and critical understanding of their teaching role. They propose a practicum model centred on inquiry and reflection about pedagogical problems identified by the students themselves, providing a personalised and meaningful approach to their training. Employing a qualitative methodology, the study examines student experiences across five inquiry projects, exploring their pedagogical interests, reflective approaches, and the influence of personal experiences on professional development. Results indicate that students' pedagogical perceptions are strongly influenced by placement schools and by a prevailing technical approach in their training; family and schooling experiences also play a crucial role in how they interpret and live their pedagogical

Donet (2020) analyses the use of Non-violent Communication (NVC) since 2010, highlighting its relevance in academic and scientific contexts. This documentary study conducted a bibliographic search in recognised databases such as PubMed, Scopus, and Google Scholar. The results demonstrate NVC's positive impact on conflict management, violence prevention, and emotional health. The paper also notes significant practical applications in everyday life and professional contexts. One conclusion

stresses the importance of NVC as a valuable tool in academic and professional spheres, advocating its broader integration and study to maximizer its benefits in education and human relations.

1.2. Conceptual References

According to Gutiérrez et al. (2011), the process of convergence of European education systems towards the European Higher Education Area represents a significant and unifying change in member countries. Through legislative reforms driven by the Sorbonne Declaration and the Bologna Declaration, key objectives have been defined, such as mutual recognition of qualifications, harmonisation of degrees, the creation of a common credit system, and the promotion of educational mobility. These changes seek not only to improve educational quality and promote student mobility, but also to develop competences and skills essential to students' comprehensive formation, pointing towards a model of continuous, lifelong learning (UNESCO, 2010).

The development of knowledge is an important factor for social progress, as it drives innovation, improves productivity, and impacts competitiveness across sectors. However, for Blanco and Latorre (2012), in a society increasingly immersed in globalisation, knowledge not only defines organisational competitiveness but also enhances economic growth and the capacity to adapt to change-achieved through organisations whose workers are up-to-date with the dynamics of professional contexts with specific and demanding social requirements (Castillo, 2003). In response to these demands and the constant shifts of the labour market, workers with skills, competences, and specialised knowledge are needed to address complex situations and help achieve objectives efficiently in their professional sphere. Thus, according to Ferreyra (2007), academic training is fundamental, as it provides essential knowledge in educational contexts; equally, the development of technical and transversal competences is not confined to what is learnt in the classroom-these skills are also cultivated and refined in the context of professional practice.

The constant evolution of society and the changing needs of labour markets require teaching to adapt to increasingly diverse and complex contexts. Today, learning is not limited to early formal education; it extends throughout life, demanding flexible and dynamic educational models (Hirsch, 2020). To serve a heterogeneous student population—from young people with advanced digital skills to adults seeking to re-enter the labour

market—education systems must offer inclusive and personalised strategies (Morillo, 2020). Adapting to these needs entails not only modifying methods and content, but also recognising the specific demands of students and companies, thereby ensuring that training remains relevant, pertinent, and effective in a constantly changing labour environment (Espinoza et al., 2020).

Exposure to the workplace provides future professionals with key learning experiences which, according to Cabezas (2017), encompass several dimensions: "knowing" (new knowledge and deeper understanding of existing knowledge), "knowing how" (use of tools and resources, dealing with clients, among others), "knowing how to behave" (teamwork, leadership, and coordination), and "knowing how to be" (professional responsibility, among others). Educational institutions must therefore assume an active role in preparing professionals who respond to global market demands through educational processes in which students in administrative areas focus on developing and strengthening skills that enable them to manage situations and seize challenging opportunities, both personally and professionally (Marín et al., 2009).

Relevant education—aligned with society's needs—is one of the fundamental pillars for social development and progress, acting as a driver of change and a tool for equity (Moreno, 2024). By providing knowledge, skills, and values, education not only empowers individuals to improve their living conditions but also strengthens social cohesion and a nation's capacity to confront complex challenges. Economically, an educated population tends to be more productive and innovative, contributing to sustainable growth. As Márquez (2017) indicates, education plays a key role in the social and economic fabric: a more educated society is also a more aware, critical society, capable of building an inclusive and equitable future for all.

This reflection resonates when educational institutions offer academic programmes that respond to their context, aligning with regional, national, and international challenges. This connects with Senge's (2005) idea of "seeing the structures" in which we are embedded, which not only makes visible the impact of the forces influencing us but also enables us to act upon and transform them. This perspective promotes a break with traditional learning paradigms, encouraging the construction of feedback and exchange spaces and fostering leadership among all members, whereby each person assumes active responsibility for group learning, contributing to greater adaptability and commitment in support of

productive units that are effective and collectively understood (Schön, 1998).

The assimilation of knowledge in education features two complementary approaches: technological and scientific development, and the formation of the individual-both holistic fundamental today, as they prepare students not only in technical skills but also in communicative, cognitive, and affective competences (Cardona, 2024). In a globalised context, students bring prior knowledge and diverse perspectives, enriching the learning process and fostering an environment of dialogue and tolerance. This context poses a challenge for educators: balancing the increasing demand for knowledge with the need to avoid education becoming a menu of options lacking cohesion or purpose (Carbonell, 2015). Díaz-Barriga (2005) reinforces the idea that teachers should go beyond offering quick answers; instead, they should focus on developing strategies that encourage research, critical thinking, and adaptability in students, ensuring autonomous learning oriented more to the learner's needs than the teacher's (Coll,

Adult education and the discipline of Human Resource Development (HRD) share a focus on adult learning, albeit with different aims. According to Knowles et al. (2001), the main difference lies in goal control: the former emphasises self-directed learning, whereas the latter prioritises organisational objectives. For decades, HRD has gained global prominence not only as an alternative technological innovation or the acquisition of advanced systems but also as a direct investment in human capital (Mariño, 2004). Londoño (2004) highlights that workforce training and education positively affect economic growth, underscoring individuals as the essential resource in productive processes. HRD stresses the importance considering the individual as a producer, given that production enables consumption. Through this discipline, the aim is to improve individuals' skills, knowledge, and competences, reflected in the quality of goods and services produced (Aquino, 2017). Human capital is thus understood as an investment each person makes to increase their value in the labour market to the point of obtaining benefits exceeding costs. Guided by these principles, developed countries have implemented reforms in higher-education curricula with the objective of making training more efficient and optimising the performance of human capital through innovative technologies adapted to market changes (Zambrano et al., 2019).

Andragogy, or adult learning theory, as outlined by Knowles (2001), proposes a four-phase process in learning design. In the first phase, adults identify their own learning needs, choosing the competences they wish to develop. The second phase entails devising strategies and mobilising resources—such as time—to achieve their goals. In the third phase, the strategy is implemented with instructor support, fostering learner autonomy alongside collaboration. Finally, in the fourth phase, adults evaluate their learning through evidence, comparing achievements based on their experiences and external goals. This process seeks to align individual development with organisational aims, promoting practical and effective learning (Dueñas-Peña, 2010).

In this way, experiential learning fosters meaningfulness, contributing to deep understanding that emerges from active practice. This approach is grounded in the principle that direct participation and action encourage lasting assimilation of knowledge, in contrast to passive learning (Espinar-Álava & Vigueras-Moreno, 2020). By engaging actively, students not only acquire knowledge but also develop metacognitive skills-learning how they learn best. By understanding and directing their processes, students learning autonomous and strengthen their capacity to adapt and solve problems, essential skills in a constantly changing work and social environment (Calderón & Ulate, 2020).

2. METHODOLOGY

This is a mixed-methods study in which, through qualitative component, a perspective is constructed from the perceptions of students undertaking internships in the productive sector of the Western Region. These perceptions enable researchers to explore in detail and subjectively how experience and understand internships, considering their daily interactions and the activities specific to their job roles. The qualitative approach sought to understand in depth the experiences, meanings, and perceptions that these individuals have of their reality, as suggested by Alonso et al. (2017), given that this approach is essential to capturing the complexity of social phenomena: it focuses not only on describing facts but also on interpreting experiences from the actors' own perspectives.

From the quantitative approach, the study was supported by the collection of impartial, measurable data (González, 2016), using tools such as multiple-choice surveys that facilitated the quantification of responses and statistical analysis of the results.

Numerical information was constructed from the coding of a multiple-choice survey that allowed measurement of the extent of internship impact on three variables: strengthening in knowledge areas of administrative professionals, cognitive competences, and attitudinal competences.

This research is descriptive in nature, as its purpose is to provide a clear view of the characteristics and trends observed in the competences and skills developed in the context of professional practice, thereby offering a foundation for a better understanding of the phenomenon under study. It focuses on characterising the impact of the internship on the three variables described above. Rather than establishing causal relationships or intervening in the variables, the study observes, analyses, and describes how students perceive the development of their competences and knowledge through their workplace experiences.

The study employed both a form with openended questions to capture students' perceptions and subjective experiences, and a form with closed Likert-type questions to quantify responses regarding the internship's impact on specific variables. This integration of techniques—qualitative data to explore nuances and meanings in students' experiences, and quantitative data to analyse trends and measure the level of impact in terms of competences (Arenas, 2021)—was applied to the study population: students who undertook their internships between 2021 and 2023.

The process consisted, first, of approaching students at two points in time through the designed instruments. Second, the information was systematised using software such as SPSS for statistical analysis and Atlas.ti for analysis of responses from students who had undertaken or were undertaking their internship. Third, the final report was produced.

2.1. Development

The Impact of Internships on Professional Development: A Perspective Based on Students' Reflections

Below are students' reflections in response to four open questions concerning aspects related to their internships. These questions explore students' perceptions of how their internships have contributed to strengthening their professional development through learning, acquired skills, challenges faced, improvement in performance, and personal commitment to their own development within the workplace.

In responding to the question "What learning and

skills have you developed during your internship, and how have they contributed to your professional growth?", testimonies were gathered that reflect a wide range of experiences and learning, such as: practical experiences that have added value to their professional lives; confronting their academic training with the challenges of the business sector; entrepreneurial and intrapreneurial vision; new learning; and the exploration and application of regulatory, accounting, and financial aspects, among others. Responses converge on the view that "companies enable engagement with specific tools and programmes in accounting and administrative management", as well as "the application of knowledge acquired in the classroom to optimise processes and propose improvements". Students also highlight that "autonomy forms part of daily life in the execution of activities".

This context supports the assertion that internships represent a key stage in students' professional growth, enabling them to apply classroom knowledge in a real work environment. It is notable that the majority of students agree that they encounter, in their workplaces, situations they have already addressed in modules throughout their degree, recognising topics studied since the first semester. This underscores the applicability of academic content in professional contexts and fosters a proactive, adaptable attitude, while providing opportunities to exercise autonomy in work activities. The relevance of what has been learnt is boosting students' professional reaffirmed, confidence and assurance as they observe how theoretical concepts are transferred to, and valued in, work situations.

Students also affirm that "knowledge of administrative and regulatory aspects is necessary", as some report involvement in tasks ranging from payroll management to supervising processes and staff changes—processes linked to regulation. Other recurring themes include the need to engage with clients, teamwork, and report writing: "customer service—both by telephone and in person—has been strengthened"; "it is important to develop communication skills and work in teams to achieve results"; "my day-to-day activities involve drafting various types of written reports".

For students in the *Technology in Managerial Assistance* programme, internships have enabled the application of theoretical knowledge, the development of practical skills, and the strengthening of autonomy and confidence as future professionals. The link between academia and the business world has become evident, contributing to

their holistic growth and preparing them to face challenges in their future professional lives.

In response to "What are the main challenges you have faced during your internship, and how have they helped you to develop key skills for your professional growth?", the following patterns emerge: interns face diverse challenges ranging from attentiveness and dedication in their tasks to strategic management oriented towards business growth. Many concur that each day entails learning and integrating knowledge in real situations, describing the internship as a constant challenge. Several identify administrative management—particularly payroll preparation—as a significant challenge requiring further consultation to apply accounting concepts in a concrete business setting.

The introduction of new technologies not covered in class such as systems supporting accounting and financial activity, databases, and customer service stands out as a specific challenge for interns. Coping with pressure, adapting to internal change, and stepping outside one's comfort zone are skills in development, as are tolerance of criticism and the ability to manage self-imposed demands. Time management and the efficient use of business resources are recurring challenges. Autonomy and self-directed learning consolidate as essential skills in the face of daily demands, while integration, teamwork, and effective communication are valued as crucial. Adaptability across tasks and areas reflects the complexity of the contemporary business commitment environment. In addition, continuous improvement, the application acquired knowledge, and a desire to implement new ideas for inventory control evidence a proactive, entrepreneurial mindset.

Thus, students are facing diverse challenges—spanning technical, administrative, and interpersonal domains while demonstrating a positive attitude towards learning and professional development.

Regarding aspects students consider fundamental for improving performance and adding value during the internship (in response to "What aspects do you consider essential to improve your performance and add more value during your internship?"), several key areas were identified: first, concentration is emphasised as essential to achieve greater agility in daily tasks, since focused attention enables greater efficiency and accuracy. In parallel, the ongoing acquisition of knowledge is valued as a means to strengthen professional skills, evidencing a strong commitment to continuous learning that facilitates personal growth and organisational contribution. Students

also stress the importance of monitoring and evaluating processes to ensure continuous improvement and optimise operations. Likewise, they highlight the desire to learn quickly and the capacity to organise the workstation—factors that enable agile and efficient responses. Reading is considered an essential source of self-development, reflecting a willingness to learn autonomously. They also seek to improve typing skills to streamline routine tasks and meet workplace demands.

In terms of roles and responsibilities, students demonstrate a commitment to learning and versatility, evidencing their willingness to assume multiple functions and contribute across areas. They also express the need to conduct deeper market research to gain a strategic, results-oriented perspective. Prior experience in other work contexts is appreciated as valuable to optimise and enrich current internships. The importance of process organisation and a focus on business development is underlined. Students recognise the value of leadership and strategic innovation as qualities that prepare them for leadership roles and promote organisational growth. They likewise propose

strategies to reduce unnecessary time, underscoring a focus on efficiency and process optimisation aligned with business objectives.

These insights reveal a group of students committed both to their personal development and to contributing meaningfully to the growth and efficiency of the companies in which they participate. The diversity of areas in which they seek improvement reflects a comprehensive understanding of key elements for professional and business success. Moreover, students recognise the importance of continued learning, ongoing skill enhancement, and active contribution to their companies' development through the application of new knowledge, innovation, and teamwork.

Finally, in response to "What do I lack – or what did I lack – to be more efficient in my on-site internship?", students share various reflections on their experiences. These views not only convey their perceptions, but also highlight common areas for improvement related to the curriculum. Table 1 contextualises their reflections on what they consider necessary to enhance efficiency during the on-site internship process.

Table 1: Reflections For The Curriculum.

Reflection	Suggestion			
Constant practice is essential to developing strong skills.	Establish a structured plan that includes additional practice sessions and			
Constant practice is essential to developing strong skins.	recommend specific resources that contribute to continuous learning.			
Academic content should be applied in practice.	Implement practical sessions and specific workshops that integrate			
Academic content should be applied in practice: applications that complement theory and make it more familiar to the business context.	theoretical concepts with applied experiences in the business environment.			
	There should be practical cases and concrete examples to demonstrate the			
	application of concepts learned in class.			
The importance of effort and discipline in achieving optimal	Provide strategies for time and discipline management, as well as			
performance is recognised.	additional resources to maintain a consistent commitment to work.			
	Guide students towards additional resources, such as supplementary			
It is necessary to broaden knowledge of specific topics.	courses, and offer suggestions for exploring other areas of the academic			
	programme in greater depth.			
Organisation is valued as an essential aspect to improve efficiency.	Propose organisational techniques and tools, and, where possible,			
	encourage meetings with supervisors to discuss the implementation of			
	organisational systems in the workplace.			
Effective communication and collaboration are valued in	Promote team-building activities and effective communication strategies to			
adapting to the work environment.	improve relationships and collaboration among colleagues.			

Note: This Table Presents the Reflections of Students Currently Undertaking or Who Have Previously Undertaken the Academic Internship Process in The Technology in Managerial Assistance Administrative Programme.

Students identify a range of areas for improvement that underscore the importance of a more practical, applied approach within their academic training. They recognise the need for more consistent practice, teaching that integrates theory with real-world application, and tools to apply acquired knowledge effectively. They also highlight the value of effort, discipline, and organisation in the workplace, together with the importance of effective communication and strong relationships with peers.

2.3. Perspectives on the Impact of Internships on Competence Development

Based on the survey data, the strengthening of skills in five programme areas. Accounting and Finance, Legislation, IT, Administration, and Foreign Language—was evaluated by interns using a categorical scale from *Very Low* to *Very High*, measuring the extent to which the internship contributes to strengthening competence in each domain.

Table 1: Strengthening Of Knowledge Areas through the Internship.

Level of strengtheni ng	Accountin g & Finance	Legislatio n	IT	Administrati on	Foreign languag e
Very low	7%	10%	2%	2%	20%
Low	10%	13%	7%	8%	23%
Moderate	18%	20%	18 %	15%	23%
High	35%	33%	25 %	33%	22%
Very high	30%	23%	48 %	42%	12%

Note. Authors, Based on Instrument Results.

Most students who have undertaken internships perceive a high impact on their skills - at least 65% of them. Within this group, 46% consider the impact to be Very high in strengthening their financial and accounting competences, indicating a substantial contribution in this area. However, some students perceive the impact as Very low or Low, at 7% and 10%, respectively. In Legislation, at least 56% of interns report a High level of strengthening (summing High and Very high). Nevertheless, 23% perceive only a Moderate contribution, while 13% and 10% consider the impact Low and Very low, respectively. These latter figures suggest that limited perceived strengthening may be linked to the specific areas in which students are placed, which may not frequently involve the legal knowledge acquired in class.

In IT, 48% report a Very high impact from the internship on their digital skills. Adding the 25% who report a high impact yields 73% of students who feel benefited by their engagement with this area. This is a clear strength, given that digital skills are fundamental to efficient performance in most companies today. However, 27% perceive that they have not experienced strengthening or remain undecided, which may indicate insufficient exposure or uncertainty about the internship's impact on these competences. The area with the strengthening is Administration, with 75% reporting High and Very high levels. This indicates that internships align with the development of management and administrative skills – core aspects reinforced in the classroom that support leadership and organisational capacity within firms. As in IT, low levels of strengthening are minimal. The Foreign Language area shows the lowest level of strengthening, with 43% of students reporting Very low and Low, and only 12% Very high. This suggests that, compared with other areas, the use of foreignlanguage competences is significantly lower in organisations. The Moderate level-reported by 13% - indicates limited opportunities to strengthen a second language during internships.

Table 2: Strengthening Of Competences for Organisational Management.

Level of strengthening	Α	В	С	D
Very low	0%	0%	0%	0%
Low	0%	0%	0%	0%
Moderate	7%	0%	3%	10%
High	42%	42%	37%	28%
Very high	52%	58%	60%	62%

Note: A = Ability to Recognise Issues in Administration,
Management and Leadership, And to Manage Solutions; B =
Ability to Reflect Critically on Organisational Change and
Shared Value; C = Ability to Analyse Information to Extract
Data and Insights; D = Ability to Interpret Professional
Arguments and Make Inferences.

Regarding students' perceptions of the strengthening of their cognitive competences (Table 2), the majority consider that internships have significantly reinforced their capacity to recognise administrative and management issues and to manage solutions in the business environment. Thus, the internship context is highly effective for applying and expanding theoretical knowledge, which is development crucial professional administration. A full 100% agree that internship experience has strengthened their capacity for critical reflection on organisational change and Shared Value. This indicates that, in their role as interns, students develop critical-reflection skills consistent with a shared-value approach-essential for a holistic and sustainable vision within organisations.

Some 97% of students occupy the top tiers of perception concerning the usefulness of the internship for developing data-analysis skills and knowledge in business projects. This is crucial, since the ability to analyse information underpins informed decision-making, and the internship context appears to provide experiences that drive this competence in real organisational settings. The development of the ability to interpret and draw inferences is highly valued: 90% indicate that internships have strengthened it. This is essential for professional performance, enabling students to complex arguments understand and inferences in ways that strengthen the organisation. The high perception in this area also suggests that students can connect theory with practice-vital for contributing effectively to the company. Overall, Table 2 shows a highly positive perception among students regarding the development of their cognitive competences through internships. This implies that internships play a fundamental role in the application of theoretical knowledge, the critical information, and of reflection organisational processes - making a significant contribution to students' professional profiles. The high valuation across competences reinforces the view that the business context robustly complements academic formation, particularly in administration, management, and organisational reflection.

Table 3: Capacity to Embrace Change Critically and Creatively.

Level of strengthening	Α	В	С	D
Very low	2%	2%	0%	0%
Low	0%	0%	0%	0%
Moderate	0%	7%	3%	5%
High	38%	27%	38%	35%
Very high	60%	65%	58%	60%

Note: A = Capacity to Embrace Change Critically and Creatively; B = Capacity to Generate Responses for The Well-Being of The Work Team; C = Capacity to Understand and Probe Different Aspects of Reality; D = Capacity to Practise and Foster Inclusive, Solidaristic Responsibility.

These metrics capture how students perceive their own capacities in four aspects during their internships: embracing change critically and creatively; generating responses for team well-being; developing an interest in understanding reality; and practising inclusive responsibility. First, results reflect a very positive perception: 98% of interns consider themselves highly competent at embracing change critically and creatively. This suggests they feel prepared to adapt and contribute positively to their teams and work environments, addressing change constructively. Likewise, 92% a very significant figure perceive that they demonstrate the capacity to generate responses aimed at team well-being, at least at a high level. This indicates strong interpersonal and leadership skills and suggests that students are prepared to contribute actively to a positive work climate. However, a small percentage fall within the lower and moderate levels (7% and 2%, respectively), inviting reflection on whether some placement environments may offer limited opportunities to deploy this capacity fully. Students demonstrate a deep understanding of various aspects of their work reality; at least 96% are at a high level in this capacity. This suggests they appreciate the importance of comprehensively understanding the workplace in order to optimise teamwork and achieve organisational objectives. Similarly, they show the capacity to practise and promote inclusive, solidaristic responsibility fundamental to building workspaces that respect individual rights and promote equity, qualities increasingly valued in business environments and fostered by the institution in the classroom.

3. DISCUSSION

The findings of this research confirm and extend prior results concerning the relevance of professional training during internships. In particular, the theorypractice gap remains a recurrent challenge in students' academic formation, aligning with reports by Poveda et al. (2021) and Zapatero et al. (2021). Students' perceptions of a disconnection between classroom knowledge and its applicability in the workplace draw attention to the need to redesign teaching strategies, reinforcing active and reflective methodologies that enable more effective integration of both learning spaces.

In this regard, the presence of unidirectional or scarcely evident links between university and professional practice, as posited by Poveda et al. (2021), was reflected in the present study. While students value the theoretical training provided by the university, the transfer of this knowledge to real contexts is perceived as insufficient or poorly aligned with labour-market demands. This also resonates with Álvarez-Álvarez (2015), who underscores the historical challenges of disconnection between academia and professional practice and highlights the importance of integrative mechanisms such as action research and interinstitutional agreements. The need for flexible, adaptive training emphasised by Hirsch (2020) and Morillo (2020) takes on particular relevance in the current context, where students must develop both technical and transversal skills to address a continually evolving market. Academic training, as Ferreyra (2007) argues, should go beyond theoretical knowledge acquisition and incorporate the construction of essential competences such as critical thinking, effective communication, and problem-solving in complex settings. In this vein, the findings suggest that internships should be conceived as comprehensive training spaces in which knowing, knowing how to do, knowing how to behave, and knowing how to be (Cabezas, 2017) are strengthened simultaneously.

The study's results do not allow full agreement with Parejo and Clemenza (2022): while higher-education training proposals do exist, articulation among these proposals, students' real needs, and the specific demands of the business environment remains insufficient. This disconnection limits the impact of professional training in the territories and highlights the need to strengthen ties between higher education institutions and productive sectors to create more pertinent, contextualised programmes aligned with local socio-economic dynamics. Moreover, this research reinforces the importance of reflection and mentoring during professional practice – elements underscored by Saiz and Susinos (2017). The findings indicate that students learn more when they have opportunities to analyse their experiences, receive feedback, and apply strategies to improve their performance. This suggests promoting supervised placement models that not only allow early insertion into the workplace but also foster

critical analysis of lived experiences, aligning with Schön's (1998) reflection-in-action approach.

The integration of tools such as Non-violent Communication (NVC), studied by Donet (2020), also emerges as key in the training of future professionals. Effective conflict management and the development of socio-emotional skills are fundamental to successful performance in any workplace. In this sense, this study shows that students who incorporate effective communication strategies during their internships display a greater capacity to face team challenges and adapt to diverse organisational dynamics. Accordingly, the hypotheses are supported: "Internships contribute significantly to the development of professional competences in students, strengthening skills in their disciplinary areas of training" and "Students who undertake internships perceive greater applicability of classroom knowledge, which positively impacts their confidence, autonomy, and professional performance." Additionally, the enduring challenge is that education must respond to the demands of a changing market, ensuring that future professionals possess not only technical knowledge but also adaptive skills, critical thinking, and reflective capacity to face the challenges of their field.

4. CONCLUSIONS

Internships—developed with institutional support represent a fundamental opportunity for students to develop essential skills by confronting real challenges that demand both focused dedication and the practical application of theoretical knowledge. Challenges related to administrative management—such as payroll preparation and financial tasks—underscore the need to adapt academic learning to concrete workplace situations, thereby promoting professional growth that goes beyond theory and strengthening students' capacity to meet labour-market demands. Interns face multiple challenges that extend beyond classroom knowledge, particularly in adopting new technologies and adapting to dynamic business environments. By managing pressure, adjusting to internal changes, and

developing skills such as autonomy, teamwork, and communication, students strengthen their capacity to face business realities. This experience fosters a proactive, entrepreneurial mindset oriented towards continuous improvement and the implementation of innovative solutions that add value to the organisation.

Interns demonstrate a proactive, committed attitude towards their professional formation, standing out for their adaptability, interest in market research, and leveraging of prior experiences. Their focus on organisation, process efficiency, and the implementation of optimisation strategies reflects a business-development mindset. Moreover, their appreciation of leadership and strategic innovation indicates solid preparation for leadership roles and contribution to organisational growth, aligning with corporate objectives and values. Internships have driven solid development in most areas; however, attention is drawn to the relatively limited use of Foreign Language and Legislation. Students report a very positive perception of the cognitive competences developed and strengthened through internships, underscoring the essential role these placements play in applying theoretical knowledge and conducting critical analysis – effectively complementing academic training in organisational management.

Overall, the evidence reinforces that internships positively impact the development of key competences for students' professional performance, notably fostering critical and creative skills, leadership, and inclusive responsibility. Through internships, future administrators not only strengthen technical and analytical competences but also gain a clearer view of their areas of interest and specialisation. By engaging directly with the workplace, students acquire a deep understanding of organisational dynamics and the importance of adapting to change and making informed decisions. This process helps to form more rounded professionals, prepared to meet market demands and better able to apply their knowledge to organisational development and their own professional growth.

REFERENCES

Alonso, J., Arboleda, A., Rivera-Triviño, A., Mora, D., Tarazona, R. y Ordoñez-Morales, P. (2017). Técnicas de investigación cualitativa de mercados aplicadas al consumidor de fruta en fresco. *Estudios gerenciales*, 33(145), 412-420. https://doi.org/10.1016/j.estger.2017.10.003

Álvarez-Álvarez, C. (2015). Teoría frente a práctica educativa: algunos problemas y propuestas de solución. *Perfiles educativos*, 37(148), 172-190. https://www.scielo.org.mx/pdf/peredu/v37n148/v37n148a11.pdf

Aquino H. (2017). Modelo de gestión por competencias para mejorar la satisfaccion laboral de los colaboradores del Centro de Formación Profesional (Senati)-Huancayo. https://repositorio.upla.edu.pe/bitstream/handle/20.500.12848/292/Heric%20Yuri%20Aquino%20De%20La%20Cruz.pdf?sequence=1&isAllowed=y

Arboleda, M., Marroquín, B. y Rodríguez, P. (2024). Mujer minera, activista para fortalecer el trabajo en la mina El Higuerillo, en el Municipio de Buenos Aires, Cauca. Revista Sapientía, 16(31). https://doi.org/10.

- 54278/sapientia.v16i31.174
- Arenas, A. (2021). Métodos mixtos de investigación. Magisterio.
- Arias, C. (2021). Evaluación de la empleabilidad de los estudiantes de pregrado de la Universidad César Vallejo en Piura. En E. Campechano-Escalona & L. E. Bohórquez Arévalo, *Educación, empleabilidad e inserción laboral* (pp. 58-80). Fondo Editorial Universidad César Vallejo. http://olr.udistrital.edu.co/educacion_empleabilidad_e_insercion_laboral.pdf
- Blanco, F.J., y Latorre, M.J. (2012). La enseñanza práctica o pre-profesional en el marco de las Ciencias Administrativas. *Innovar Revista de Ciencias Administrativas y Sociales*, 22(45), 69-82. http://hdl.handle.net/10481/29602
- Cabezas, M., Serrate, S., y Casillas, S. (2017). Valoración de los alumnos de la adquisición de competencias generales y específicas de las prácticas externas. Factores determinantes. *Revista mexicana de investigación educativa*, 22(74), 685-704.
- Calderón, Y. y Ulate, R. (2020). Caracterización social de la evaluación de los aprendizajes apoyada en entornos virtuales (autonomía, aprender a aprender y competencias), en la Escuela de Ciencias Exactas y Naturales (UNED). *Revista Ensayos Pedagógicos*, 15(1), 211-233. https://doi.org/10.15359/rep.15-1.11
- Carbonell, J. (2015) Pedagogías del siglo XXI: Alternativas para la innovación educativa. Editorial Octaedro.
- Cardona, C. (2024). El papel del Constructivismo en el Desarrollo de Competencias y Habilidades. Ciencia Latina Revista Científica Multidisciplinar, 8(3), 5509-5524. https://doi.org/10.37811/cl_rcm.v8i3.11754
- Castillo, A.M. (Dir.). (2003). Introducción a la Economía y Administración de Empresas. Pirámide.
- Coronel, J., Lescano, S., Sevilla, C. y Robles, L. (2023). Educación universitaria, juventud y trabajo en la región Cajamarca 2022-2023: habilidades y competencias necesarias en un contexto cambiante. *Caxamarca*, 22(1-2), 75-86. https://revistas.unc.edu.pe/index.php/caxamarcae/article/view/70
- Cruzado, J. (2022). La evaluación formativa en la educación. *Comuni@cción: Revista De Investigación En Comunicación Y Desarrollo*, 13(2), 149-160. https://doi.org/10.33595/2226-1478.13.2.672
- Danet, A. (2020). La comunicación noviolenta entre teoría y práctica. Una revisión sistemática. *Revista de Paz y Conflictos*, 13(1), 35-55. https://doi.org/10.30827/revpaz.v13i1.9547
- Díaz-Barriga, Á. (2005). El profesor de educación superior frente a las demandas de los nuevos debates educativos. *Perfiles educativos*, 27(108), 9-30.
- Dueñas-Peña, A. (2010). Gestión de la Innovación Educativa en el Programa de Administración de Empresas Comerciales en la Universidad Colegio Mayor de Cundinamarca: Un Estudio de Caso -Edición Única. (tesis de Maestría, Instituto de Altos Estudios de Monterrey). https://repositorio.tec.mx/bitstream/handle/11285/570233/DocsTec_11160.pdf?sequence=1
- Espinar-Álava, E. y Vigueras-Moreno, J. (2020). El aprendizaje experiencial y su impacto en la educación actual. *Revista Cubana de Educación Superior*, 39(3), http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0257-43142020000300012&lng=es&tlng=es.
- Espinoza, E. (2020). Dual training in Ecuador, challenges and challenges for higher education and business. *Revista Universidad y Sociedad*, 12(3), 304-311. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S2218-36202020000300304&lng=es&tlng=en.
- Figueroa, E., & García, V. (2017). Adoption of the competence-based educative model, from the Campus category of Bourdieu. *Actualidades Investigativas en Educación*, 17(2), 90-111. https://dx.doi.org/10.15517/aie.v17i1.28100
- García, E. (2006). Prácticas externas. En De Miguel, M. (Coord.). Metodologías de enseñanza y aprendizaje para el desarrollo de competencias (pp. 103-131). Madrid: Alianza Editorial.
- González, H. (2016). Metodología de la investigación: Propuesta, anteproyecto y proyecto. ECOE ediciones.
- Guarnizo, S. (2018). Importancia de las prácticas pre profesionales para los estudiantes de educación superior en la Universidad de Guayaquil. *INNOVA Research Journal*, 3(8), 14-25. https://doi.org/10.33890/innova.v3.n8.2018.717
- Gutiérrez, M., Romero, M. y Solórzano, M. (2011). El aprendizaje experiencial como metodología docente: aplicación del método Macbeth. *Argos*, 28(54), 127-158.
- Guzmán, A. (2024). Gestión curricular integradora, para el aseguramiento del aprendizaje: una apuesta por la calidad de la educación superior. [Tesis doctoral Universidad de la Costa]. https://repositorio.cuc.edu.co/server/api/core/bitstreams/37860f2a-1ca6-4c17-be88-ad21f54f414b/content
- Hirsch, M. (2020). Jóvenes y proyectos de futuro: entre la educación superior y el trabajo en Cañuelas, Provincia de Buenos Aires. *Estudios Rurales*, 10(19), 13.

- Knowles, M., Holton, E. y Swanson, R. (2001). Andragogía. El aprendizaje de los adultos. Oxford University
- Londoño, J. (2004) Capital Humano en América Latina, pobreza desigualdad y formación de capital humano en América Latina, Revista Informe Banco Mundial
- Marín, S., Antón, M., & Palacios, M. (December, 2009). An empirical study of economists and the new graduate and postgraduate economics' degrees. Innovar, Special issue, 111-129.
- Mariño, H. (2004) Planeación Estratégica de la Calidad Total (3ª ed.). Bogotá. TM Editores
- Márquez, A. (2017). Educación y desarrollo en la sociedad del conocimiento. *Perfiles educativos*, 39(158), 3-17. https://www.scielo.org.mx/pdf/peredu/v39n158/0185-2698-peredu-39-158-00003.pdf
- Martínez, L. (2019). La autoevaluación: alternativa constructivista para la metacognición y el rendimiento académico en un curso de Ingeniería Industrial. *Revista Educación en Ingeniería*, 14(27), 138-147. https://doi.org/10.26507/rei.v14n27.949
- Martínez-Rueda, N., Yurrebaso, G. y Pérez, J. (2021). Diseño y validación de la Escala de Factores de Empleabilidad (EFE) en empresas de inserción. *REOP Revista Española de Orientación y Psicopedagogía*, 32(3), 132–154. https://doi.org/10.5944/reop.vol.32.num.3.2021.32561
- Moreno, M. (2024). La escuela concertada. [Tesis de maestría, Universidad de La Laguna]. Repositorio institucional. https://riull.ull.es/xmlui/bitstream/handle/915/37373/%22La%20escuela%20concerta da%22%20%22Estudio%20del%20caso%20de%20la%20Comunidad%20Autonoma%20de%20Andaluc ia%22.pdf?sequence=1
- Morillo, J., Pérez, L., y Rodríguez, L. (2022). Tendencias y retos de la formación docente en Iberoamérica. *Revista de ciencias sociales*, 28(4), 315-334. https://doi.org/10.31876/rcs.v28i4.39133
- Organización de las Naciones Unidas para la Educación, la Ciencia y la Cultura -UNESCO. (2010). Educación superior y sociedad: *Las transformaciones de la Educación Superior en América, identidades en construcción*. N° 1. https://unesdoc.unesco.org/ark:/48223/pf0000191811
- Oyarzún, G, y Falabella, A. (2022). Indicadores de Desarrollo Personal y Social: La ilusión de la evaluación integral de la calidad. *Psicoperspectivas*, 21(1), 149-162. Epub 15 de marzo de 2022.https://dx.doi.org/10.5027/psicoperspectivas-vol21-issue1-fulltext-2194
- Parejo, N. y Clemenza, C. (2022). Evaluación de los aprendizajes por competencias: Una mirada teórica desde el contexto colombiano. *Revista de Ciencias Sociales*, 28(1), 106-122. https://dialnet.unirioja.es/servlet/articulo?codigo=8297213
- Peña, T., Castellano., Y., Díaz, D. y Padrón, W. (2016). Las Prácticas Profesionales como Potenciadoras del Perfil de Egreso: Caso: Escuela de Bibliotecología y Archivología de La Universidad del Zulia. *Paradígma*, 37(1), 211-230. http://ve.scielo.org/scielo.php?script=sci_arttext&pid=S1011-22512016000100011&lng=es&tlng=es.
- Poveda B., Barceló M., Rodríguez, I. y López-Gómez E. (2021). Percepciones y creencias del estudiantado universitario sobre el aprendizaje en la universidad y en el prácticum: un estudio cualitativo. *Revista Complutense de Educación*, 32(1), 41-53. https://doi.org/10.5209/rced.67953
- Saiz, Á. y Susinos, T. (2017). Problemas pedagógicos para un Prácticum reflexivo de Maestros. *Revista Complutense de Educación*, 28(4), 993-1008. https://doi.org/10.5209/RCED.50924
- Sánchez, D. (2024). Impacto de las prácticas académicas UCM entre 2016 y 2020. Sistematización de experiencias: reflexiones críticas frente a prácticas pedagógicas en la Universidad Católica de Manizales. pp. 133-156. Centro Editorial. https://repositorio.ucm.edu.co/handle/10839/4493
- Schön, D. (1998) El profesional reflexivo. Barcelona Valenzuela. Paidos.
- Senge et. al, (2002). Escuelas que Aprenden: Un manual de la Quinta Disciplina para educadores, padres de familia, y todos los que se interesen en la educación. Norma
- Senge, P. (2005). La Quinta Disciplina: El Arte y Práctica de la Organización Abierta al Aprendizaje. Granica.
- Soto, D., Palomo, A. y Soledispa, F. (2024). Evaluación para el aprendizaje en la práctica preprofesional: enfoque didáctico desde la relación teoría-práctica. Revista Conrado, 20(97), 489-505.http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S199086442024000200489&lng=es&tlng=es.
- Zambrano, L., Sarmiento, S., Luna, A., Chira, E. y Almeyda, L. (2019). Cultura de Investigación Científica y Formación del Capital Humano en la Educación Universitaria. https://core.ac.uk/download/pdf/270312609.pdf
- Zapatero, J., Ruiz, G., Avilés, C. y Miraflores, E. (2021). Universidad y escuela: reflexiones de los futuros maestros de Educación Física sobre la transferencia teórico-práctica. *Revista complutense de educación*. http://dx.doi.org/10.5209/rced.70234