STRATEGIC LABOR INDUCTION: A METHODOLOGICAL PROPOSAL TOWARDS THE PROFESSIONAL DEVELOPMENT OF ACADEMIC STAFF IN THE POLYTECHNICAL UNIVERSITIES OF THE STATE OF HIDALGO, MEXICO

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ABSTRACT

Objective: This research analyzes the perceptions and experiences of the academic staff of the Polytechnic Universities (UP) of the state of Hidalgo, Mexico, regarding the receipt of job induction at the beginning of their hiring or reinduction every time said staff has been promoted or transferred to another area of academic nature. This study aims to substantiate, contrast and interpret how essential strategic job induction is in the (UP) subsystem to trigger the long-term professional development of academic staff in said sector.

Theoretical Framework: The present study examines background research that conceptualizes, substantiates and theoretically and pragmatically interprets the phenomenon of job induction as an important requirement after the process of recruitment, selection and hiring of personnel, through its documentation in a procedure, manual, program and records.

Design/Methodology/Approach: The methodology used in the present study was grounded theory as a methodological paradigm of the qualitative approach to analyze and interpret the perceptions, sensations and experiences when receiving or not receiving induction/reinduction practices, with the purpose of substantiating the importance of strategic job induction to trigger the professional development of the academic staff of the (UP) of the state of Hidalgo, Mexico.

Findings: Theoretical conceptions dictate that job induction is a process that should be applied to newly hired employees and solely for the purposes of welcoming and adapting to the work environment; however, the results of the study showed that job induction should be strategic by allowing permanent two-way communication between collaborator and organization and lead towards the professional development of the academic staff of the (UP) of the state of Hidalgo, Mexico.

Research, Practical and Social Implications: The perception and analysis of the induction actions received by the academic staff of the (UP) of the state of Hidalgo, Mexico, can allow the formulation of a methodological guide that strategically guides labor induction and thus triggers the development professional of the academic staff of the (UP) of the state of Hidalgo, Mexico.

Originality/Value: This article shows an orientation to understand the vitality of strategic job induction focused on the academic staff of the (UP) of the state of Hidalgo, Mexico, and its impact on professional development.

Keywords: Strategic Labor Induction, Reinduction, Academic Staff, Professional Development, Polytechnic Universities (UP).

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INDUÇÃO ESTRATÉGICA DE TRABALHO: UMA PROPOSTA METODOLÓGICA PARA O DESENVOLVIMENTO PROFISSIONAL DO PESSOAL ACADÊMICO NAS UNIVERSIDADES POLITÉCNICAS DO ESTADO DE HIDALGO, MÉXICO

RESUMO

Objetivo: Esta pesquisa analisa as percepções e experiências do corpo docente das Universidades Politécnicas (UP) do estado de Hidalgo, México, a respeito do recebimento de indução profissional no início de sua contratação ou reindução sempre que esse pessoal foi promovido ou transferido para outra área de natureza acadêmica. Este estudo visa fundamentar, contrastar e interpretar o quão essencial é a indução estratégica ao trabalho no subsistema (UP) para desencadear o desenvolvimento profissional a longo prazo do pessoal acadêmico do referido sector.

Referencial Teórico: O presente estudo examina pesquisas de base que conceitueiam, fundamentaram e interpretaram teoricamente e pragmáticamente o fenômeno da indução ao emprego como um requisito importante após o processo de recrutamento, seleção e contratação de pessoal, por meio de sua documentação em procedimento, manual, programa e registros.

Desenho/Metodologia/Abordagem: A metodologia utilizada no presente estudo foi a teoria fundamentada nos dados como paradigma metodológico da abordagem qualitativa para analisar e interpretar as percepções, sensações e experiências ao receber ou não práticas de indução/reindução, com o objetivo de fundamentar as importância da indução estratégica ao trabalho para desencadear o desenvolvimento profissional do corpo docente da (UP) do estado de Hidalgo, México.

Resultados: As concepções teóricas ditam que a indução ao emprego é um processo que deve ser aplicado aos funcionários recém-admitidos e apenas com a finalidade de acolhimento e adaptação ao ambiente de trabalho; No entanto, os resultados do estudo mostraram que a indução ao trabalho deve ser estratégica, permitindo uma comunicação bidirecional permanente entre o colaborador e a organização e conduzindo ao desenvolvimento profissional do corpo docente da (UP) do estado de Hidalgo, México.

Pesquisa, Implicações Práticas e Sociais: A percepção e análise das ações de indução recebidas pelo corpo docente da (UP) do estado de Hidalgo, México, pode permitir a formulação de um guia metodológico que oriente estrategicamente a indução ao parto e, assim, desencadeie a desenvolvimento profissional do corpo docente da (UP) do estado de Hidalgo, México.

Originalidade/Valor: Este artigo apresenta uma orientação para compreender a vitalidade da indução estratégica ao trabalho focada no corpo docente da (UP) do estado de Hidalgo, México, e seu impacto no desenvolvimento profissional.


LA INDUCCIÓN LABORAL ESTRATÉGICA: UNA PROPUESTA METODOLÓGICA HACIA EL DESARROLLO PROFESIONAL DEL PERSONAL ACADÉMICO EN LAS UNIVERSIDADES POLITÉCNICAS DEL ESTADO DE HIDALGO, MÉXICO

RESUMEN

Objetivo: Esta investigación analiza las percepciones y experiencias del personal académico de las Universidades Politécnicas (UP) del estado de Hidalgo, México, en cuanto a la recepción de inducción laboral al inicio de su contratación o a reinducción cada vez que dicho personal ha sido promovido o transferido a otra área de naturaleza académica. Dicho estudio pretende fundamentar, contrastar e interpretar lo esencial que es la inducción laboral estratégica en el subsistema de (UP) para detonar a largo plazo el desarrollo profesional del personal académico en dicho sector.

Marco Teórico: El presente estudio examina investigaciones antecedentes que conceptualizan, fundamentan e interpretan teóricamente y pragmáticamente el fenómeno de la inducción laboral como un requerimiento importante posterior al proceso de reclutamiento, selección y contratación de personal, a través de su documentación en un procedimiento, manual, programa y registros.
Diseño/Metodología/Enfoque: La metodología utilizada en el presente estudio fue la teoría fundamentada como paradigma metodológico del enfoque cualitativo para analizar e interpretar las percepciones, sensaciones y experiencias al recibir o no prácticas de inducción/reinducción, con el propósito de fundamentar la importancia de la inducción laboral estratégica para detonar el desarrollo profesional del personal académico de las (UP) del estado de Hidalgo, México.

Hallazgos: Las concepciones teóricas dictan que la inducción laboral es un proceso que se debe aplicar a los recién contratados y únicamente con fines de bienvenida y adaptación al entorno laboral, sin embargo, los resultados del estudio mostraron que la inducción laboral debe ser estratégica al permitir una comunicación bidireccional de forma permanente entre colaborador y organización y conducir hacia el desarrollo profesional del personal académico de las (UP) del estado de Hidalgo, México.

Investigación, Implicaciones Prácticas y Sociales: La percepción y análisis sobre las acciones de inducción que recibe el personal académico de las (UP) del estado de Hidalgo, México, puede permitir formular una guía metodológica que oriente estratégicamente la inducción laboral y detone así el desarrollo profesional del personal académico de las (UP) del estado de Hidalgo, México.

Originalidad/Valor: El presente artículo muestra una orientación para comprender la vitalidad de la inducción laboral estratégica enfocada hacia el personal académico de las (UP) del estado de Hidalgo, México, y su incidencia en el desarrollo profesional.

Palabras clave: Inducción Laboral Estratégica, Reinducción, Personal Académico, Desarrollo Profesional, Universidades Politécnicas (UP).

1 INTRODUCTION

Professional development (PD) is a constant process of acquiring generic and specific competencies to optimize, over time, the professional strategies and practices of personnel according to the type of profile and scope of work performance.

Currently in the subsystem of Polytechnic Universities (UP) of the state of Hidalgo, Mexico, there are 6 work centers under said administration (2024) of which, the Metropolitan Polytechnic University of Hidalgo (UPMH), the Polytechnic University of Pachuca (UPP) and Polytechnic University of Tulancingo (UPT), include in their Quality and/or Integrated Management Systems (SGC/SGI, 2024) a job induction procedure and some type of document (format) for the registration of some type of practice referring to Labor Induction (IL). It should be noted that no workplace has a formal job induction program and even more so, aimed at academic staff, both subject (PA) and full-time (PTC), towards whom this research study is directed as subjects of study.

Due to the aforementioned, the diagnosis made to said research subjects under a qualitative approach, using grounded theory as a methodological paradigm and for the collection of information through convenience sampling for the selection of subjects through
the interview as a technique, showed through theoretical saturation, that the absence of a job induction and the lack of a strategic praxis in these (IL) practices, directly and deficiently impact professional development given that the scarce acquisition of learning experiences for new academic staff and the lack of follow-up for staff promoted or transferred to other academic areas conceived as an important pillar for professional development, are particularly related to strategic work induction and reinduction as a theory and practice inherent to human resources and the organization.

As already mentioned, the present study was originally carried out on a population of 836 subjects defined as full-time academic staff, taken from the (UP) subsystem of the State of Hidalgo, which amounts to six work centers and such. As cited by Hernández and Mendoza (2023), a sample in the qualitative route is the group or set of people, events, events, communities, among others, on which the data will be collected, without necessarily being statistically representative of the universe. or population being studied. Therefore, solely as a reference, an arithmetic sample of 263 subjects was calculated, with a confidence level of 95%, which is equivalent to 32.75% of the total of said population. For the purposes of this study using a qualitative approach, in data collection, an approximate number of cases was outlined under convenience sampling and with the selection of contributions by a saturation of categories, which was through 84 interviews proportional to the 10% of each (UP), for greater representativeness of the selected sample and for the analysis of results and their interpretation. After collecting the data, they were adjusted to 4 definitive categories in the study: labor induction, Academic Personnel, Professional Development and Strategic Labor Induction Model (MILE), equally presenting each of their respective subcategories, code and variables.

According to the analysis, comparison and interpretation of the data obtained, it was concluded that the limited induction actions carried out by the (UP) are not part of an institutional strategy, lacking certainty, registration/documentation and efficiency of the department of human resources towards academic staff, projected towards their professional development. Likewise, the perception of the interviewees denoted in the few cases, some merely informative induction actions after hiring, without follow-up, feedback, evaluation and channeling to subsequent complementary actions. Finally, it was possible to conclude the excellent acceptance of the study subjects with a view to designing a proposal for a Strategic Labor Induction Model as an agent of value and change with characteristics of flexibility, comprehensiveness, relevance and with the support of Information Technologies and Communication (ICT) that give it a greater spectrum of identity, efficiency and projection.
engine towards a joint institutional strategy towards constant learning experiences and in the search for professional development as the main objective.

2 THEORETICAL REFERENCES

2.1 HUMAN RESOURCES MANAGEMENT (HRA) AND INDUCTION

There are various studies that support the importance and need of job induction as part of a variety of activities of the Human Resources Administration (HRA) for the analysis and competitive projection of any organization, coupled with the design of job profiles, in such a way that any organization can overcome the competitiveness challenges faced by various competitors in the sector in which it deals.

Labor induction as a strategy of the Human Resources area in the (UP) of the state of Hidalgo, Mexico, represents an investment and acceleration in the production of intellectual capital committed to the latter with its institution, with the academic professional service, with its internal clients and society in general as an agent of change and transformational leader.

As cited by Snell & Morris (2020), to comply with said competitiveness strategy, efficiency is necessary in the process of identification, recruitment and selection of personnel for jobs, where strategies such as motivation, performance evaluation, Compensation policies and development plans to assume leadership of organizations are essential aspects for this purpose.

However, one of these current fundamental strategies that has regained importance in organizations, not exempting the educational sector, is job induction seen not only as a procedure or an operational action for the insertion of personnel into the work and/or professional field.

According to Snell & Bohlander (2013), the main objective of HRM is the development of human capital, making it one of the most determining business assets in the environment of both the staff and the organization itself. It is important to conceive job induction as a process of permanent learning and training that allows greater identity, commitment, competence and adhesion to the group, which generates stability, certainty, job satisfaction and professional development for staff in the medium and long term.
2.2 STRATEGIC HUMAN RESOURCES MANAGEMENT

Some relevant practices and policies of the (ARH) as cited by Dessler and Varela (2017) highlight planning the needs of personnel and applying induction and training programs for new workers. This implies being in a constant strategy of diagnosis, training and monitoring that both new staff and those who already have experience or seniority participate not only by procedure, but by conviction in formal activities through both in-person and virtual programs. of new information, experience and motivation according to the requirements to enhance the job and the objectives of the organization through induction and reinduction that integrally lead to the professional development of academic staff in the case of this study.

Figure 1
Graphic representation of the essential activities of evaluation and development to achieve the objectives of the ARH

![Diagram](image)


Las prácticas de (ARH), potencian el rendimiento del personal, lo cual suma a las ventajas competitivas de la organización que, a su vez conducen a logro de sus objetivos. Alfaro (2013). En dicho sentido, por medio de la (ARH) y específicamente por medio de la inducción se intensifica una corresponsabilidad, donde el personal adquiere conocimientos, identidad, valor, competencias de desempeño, satisfacción dentro del clima laboral, motivación y sentido de pertenencia, lo cual genera de forma recíproca, compromiso, dedicación, lealtad, responsabilidad y eficiencia.

Actualmente las (UP) del estado de Hidalgo, México, experimentan una serie de cambios en políticas nacionales de diseño curricular y adhesión a estructuras de otro tipo de instituciones como son las Universidades Tecnológicas (UT), lo cual conlleva a retos y
dinámicas de cambio de estructura, funciones administrativas y sobre todo académicas, las cuales el personal académico con un compromiso altamente efectivo y con la formación permanente de su (UP) a través de la inducción y capacitación, afrontará siempre con gran profesionalismo dichas tareas hacia una mejora continua constante.

2.3 ORGANIZATION OF HUMAN RESOURCES

It is important to mention that in the organization of human resources and as an essential contribution of strategic job induction in terms of its content, it must address three main issues, as cited by Tejedo (2013) to the workers that comprise it, the functions assigned to them and the hierarchical and functional relationships between them. It should be noted that according to this study, although only the personnel (ARH) practices enhance staff performance were considered, which adds to the competitive advantages of the organization that, in turn, lead to the achievement of its objectives. Alfaro (2013). In this sense, through the (ARH) and specifically through induction, co-responsibility is intensified, where staff acquire knowledge, identity, value, performance competencies, satisfaction within the work environment, motivation and sense of belonging, which reciprocally generates commitment, dedication, loyalty, responsibility and efficiency.

Currently, the (UP) of the state of Hidalgo, Mexico, are experiencing a series of changes in national curricular design policies and adherence to structures of other types of institutions such as Technological Universities (UT), which leads to challenges and dynamics of change. of structure, administrative and above all academic functions, which the academic staff with a highly effective commitment and with the permanent formation of their (UP) through induction and training, will always face these tasks with great professionalism towards constant continuous improvement. academic because it is the most important agent of change in this type of organizations that belong to the educational and public sector, the dynamics of personnel rotation or promotion are in some way constant and constant decisions according to the needs of both said institutions chosen as a sample and according to the stability and permanence needs of the same personnel already mentioned.

2.4 CONCEPT AND TYPES OF LABOR INDUCTION

In the context of newly hired personnel or those with certain experience and/or seniority who are promoted and reassigned to new areas or functions by an organization, and when it is
intended that they be immediately and efficiently placed in their new position, This is where job induction emerges as an initial training process for new experiences of job and professional development.

As cited by Dessler & Varela (2017), induction provides substantive information about the job and the company, essential for efficiency in their work, but it is also part of a socialization process that must be planned and encouraged by the employer. instilling the organizational philosophy, standards, rules, policies and other guidelines that the receiving area and organization expect in terms of compliance with these.

It is imperative that through the proposal to be developed from this study, a Strategic Labor Induction Model (MILE) is flexible, efficient, supported by ICT and with expert mentors who follow up on the content specifically of the organization with all the changes already mentioned and with competent training towards the position that each member of the academy receives in turn to trigger significant changes in the internal environment and lead them towards their professional development.

As cited by Chiavenato (2009), in the model for human talent management, induction is an indispensable source for the processes of integration, organization, audit, retention and development of personnel given that it is an eminently training and administrative process that enhances the individual capacities of human and institutional resources to transform it into human talent.

2.4.1 General induction to the company

The general induction to the company includes basic information aspects about the organization, which, through a mentor and in person, welcomes the newly hired and provides information about the organizational structure, products and/or services, number of collaborators, etc. It is desirable that in addition to the presence of a mentor from the human resources department, some type of platform, website and/or audiovisual media be used for a more agile experience with the personnel to be inducted. Dessler (as cited in Grados (2013) mentions that this type of induction begins with the contract of the new employee for an adaptation as immediately as possible to the institution, to his work environment, to his colleagues, obligations and rights. Therefore, it is essential to provide this information through digital tools and promote the socialization of the new collaborator.
2.4.2 Induction to the position

After the general induction into the organization, the employee must appear in his or her specific work area to begin the induction process to the position. As described by Grados (2013), the induction to the position includes: the introduction of the immediate boss of the area, the introduction of co-workers, presentation of the organization chart of the area, objectives and functions of the position, in addition to the specific operations of which will take charge, among others. This particular type of induction, not only in terms of its content, but also in terms of its objective, should also be included in the reinduction for personnel who have been promoted or reassigned to another academic area.

2.5 SOCIALIZATION

According to Werther and Davis (2008), the socialization process is the result of an efficient induction program, which manages to facilitate and accelerate said process with collaborators. It is worth mentioning that it is thanks to this socialization that the inductees manage to accept and understand values, norms and organizational objectives, essential to establish a sense of belonging.

Socialization is an essential aspect not only for induction, but also contributes to other essential learning experiences focused on the professional development of work personnel.

Figure 2

Socialization process in terms of the progressive adjustment between the values of the organization, on the one hand, and those of the individual, on the other.


2.6 FUNDAMENTAL ELEMENTS OF AN INDUCTION PROGRAM

It is essential to establish a formal induction program within the (MILE), which is the main guide for induction and reinduction activities, including aspects such as; the employment contract, worksheets, welcoming new staff through a manual, feedback and presentation
activities with their immediate work bosses and other internal clients, internal work regulations. Alfaro (2013).

Table 1

**Most common elements of an induction program**

<table>
<thead>
<tr>
<th>TOPICS OF THE GLOBAL ORGANIZATION</th>
<th>PERSONNEL BENEFITS AND SERVICES</th>
<th>PERSONAL PRESENTATIONS</th>
<th>SPECIFIC FUNCTIONS AND DUTIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Company history</td>
<td>● Safety regulations</td>
<td>● To the supervisor</td>
<td>● Location of the workplace</td>
</tr>
<tr>
<td>● Company structure</td>
<td>● Product or service lines</td>
<td>● To the trainers</td>
<td>● Tasks in charge of the employee</td>
</tr>
<tr>
<td>● Name and functions of the main executives</td>
<td>● Description of the production process</td>
<td>● To supervisor heads</td>
<td>● Specific safety regulations</td>
</tr>
<tr>
<td>● Structure of buildings and facilities</td>
<td>● Company rules and policies</td>
<td></td>
<td>● Job description</td>
</tr>
<tr>
<td>● Trial periods</td>
<td></td>
<td></td>
<td>● Objective of the position</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>● Relationship with other positions</td>
</tr>
</tbody>
</table>


2.7 EVALUATION OF AN INDUCTION PROGRAM

According to Grados (2013), the three phases that the induction evaluation must include are; the diagnosis or pretest, in which previous aspects of the personnel to be induced are analyzed and which will serve as a basis for comparison with the posttest. Subsequently, a training stage or interface will be applied, which aims to estimate the progress after each topic and the progress of each induced. Finally, a terminal evaluation or post-test will be applied, which will weigh the final learning achievements and determine the effectiveness of the induction.

It is important to highlight that the evaluation of induction in the (MILE) proposal has as its substantive action, not only to obtain static weighting statistics, but also to analyze the results qualitatively for the monitoring of the academic staff of the (UP) of the state of Hidalgo and channel it to other complementary sources of training such as training and promoting other strategies towards professional development.
2.8 LABOR INDUCTION AND STRATEGY

Job induction, seen under this approach towards the academic staff of the (UP) of the state of Hidalgo, Mexico, clearly defines its strategic quality by focusing not only on benefits with the newly hired staff in terms of training and the organization in terms of to compliance with performance indicators by registering the greatest number of induction courses, but the vision of an organization is the permanence of its human capital, through organizational learning and knowledge management, which will allow better performance and an increase in productivity under the premise of the production of lasting, satisfied intellectual capital and with career plans that ensure the permanence of said academics. The organization gains competitiveness thanks to the investment of strategies focused on loyalty, values, identity and competent performance that allow the fulfillment of said objectives.

2.9 SUBSYSTEM OF TECHNOLOGICAL AND POLYTECHNIC UNIVERSITIES IN MEXICO

The General Directorate of Technological and Polytechnic Universities (DGUTyP) is the national body that integrates all Technological Universities (UT) and Polytechnic Universities at the national level, whose main objective is to offer a quality higher level education that allows the training of leaders and agents of change, committed to their social, economic, political, technological and cultural environment through technological coverage and transfer through the joint efforts of a national training policy, research and technological transfer. DGUTyP (2024).

The Polytechnic Universities (UP) offer a bachelor's and postgraduate degree (specialty, master's and doctorate) that, together with new lateral exit policies such as Higher University Technicians (TSU), seek an alternative to not being able to complete a degree at the bachelor's level. The educational model based on competencies prevails in the study plans and graduation profiles of such offer, responding to the needs of the different productive sectors with quality training. Currently there are 62 Polytechnic Universities in 28 states. Undersecretary of Higher Education (2024).
2.10 POLYTECHNICAL UNIVERSITIES OF THE STATE OF HIDALGO, MEXICO

In the State of Hidalgo, Mexico, there are 6 Polytechnic Universities, dependent on the Government of the State of Hidalgo, which were born under a creation decree and have legal personality and their own resources for their operations and administration.

Table 2

<table>
<thead>
<tr>
<th>#</th>
<th>ACRONYM</th>
<th>NAME</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>UPE</td>
<td>UP of Energy</td>
</tr>
<tr>
<td>2</td>
<td>UPFIM</td>
<td>UP by Francisco I. Madero</td>
</tr>
<tr>
<td>3</td>
<td>UPH</td>
<td>UP of Huejutla</td>
</tr>
<tr>
<td>4</td>
<td>UPT</td>
<td>UP of Tulancingo</td>
</tr>
<tr>
<td>5</td>
<td>UPMH</td>
<td>Metropolitan UP of Hidalgo</td>
</tr>
<tr>
<td>6</td>
<td>UPP</td>
<td>UP of Pachuca</td>
</tr>
</tbody>
</table>

Source: Own elaboration with data from the Ministry of Public Education of Hidalgo, Mexico (2024).

3 METHODOLOGY

3.1 METHODOLOGICAL DESIGN

Once the problem has been posed, it is necessary to respond in a practical and concrete way to the research questions through the objectives set in the study. This will involve the use of one or more research designs (Hernández and Mendoza, 2023). The research design responds to the problem statement or will provide a starting point for discussion of the research assumption within the qualitative route.

The research will have “grounded theory” as its methodological design and the systemic method as a guide or critical path for its development. The reason for this choice is because this paradigm is the one that best adapts to the search for a new theoretical construct and characteristics of the research, which highlight the comparison of categories and variables in the research (Strauss and Corbin, 2002).

According to Hernández and Mendoza (2023), grounded theory was chosen for this study given that: its basic approach is that the theoretical propositions arise from the collection of data. Their specific designs can be: systematic, emergent, and their procedures encompass: and for this purpose, selective coding was selected.

Given the present study, theoretical propositions such as job induction practices, academic staff and their professional development, as well as a strategic job induction model,
will allow these categories to be adjusted selectively according to the data to be obtained in the qualitative research.

Table 3
Categories, Subcategories and Variables

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>SUBCATEGORY</th>
<th>CODE</th>
<th>VARIABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. LABOR INDUCTION</td>
<td>Current induction practices in the (UP) of the State of Hidalgo.</td>
<td>FIPILP</td>
<td>Lack of integration of relevant job induction practices</td>
</tr>
<tr>
<td></td>
<td>Organizational and Position Induction</td>
<td>AEEIIL</td>
<td>Absence of strategies for the execution of comprehensive labor induction in its two dimensions.</td>
</tr>
<tr>
<td></td>
<td>Induction Procedure</td>
<td>FPEI</td>
<td>Lack of an effective procedure for induction.</td>
</tr>
<tr>
<td></td>
<td>Induction Program</td>
<td>FPIP</td>
<td>Lack of relevant induction programs</td>
</tr>
<tr>
<td>1 ACADEMIC STAFF</td>
<td>Income</td>
<td>AIOYP</td>
<td>Absence of Induction to the organization and the position</td>
</tr>
<tr>
<td></td>
<td>Promotion</td>
<td>ARE</td>
<td>Absence of re-induction</td>
</tr>
<tr>
<td></td>
<td>Succession</td>
<td>FPCG</td>
<td>Lack of plans for generational change</td>
</tr>
<tr>
<td>2 PROFESSIONAL DEVELOPMENT</td>
<td>Employment stability</td>
<td>IEGEL</td>
<td>Inefficiency of strategies for generating job stability</td>
</tr>
<tr>
<td></td>
<td>Job performance</td>
<td>INDLAIL</td>
<td>Negative impact on job performance due to the absence of job induction</td>
</tr>
<tr>
<td></td>
<td>Development plans</td>
<td>IEPDP</td>
<td>Ineffectiveness in the execution of staff development plans</td>
</tr>
<tr>
<td>3 STRATEGIC LABOR INDUCTION MODEL (MILE)</td>
<td>Relevance</td>
<td>NMILEP</td>
<td>Need for a (MILE) with relevance</td>
</tr>
<tr>
<td></td>
<td>Permanence</td>
<td>MCMILECV</td>
<td>The continuous improvement of a (MILE) for its constant validity</td>
</tr>
<tr>
<td></td>
<td>Use of ICTs</td>
<td>IITMILE</td>
<td>Importance of the inclusion of ICTs in the (MILE)</td>
</tr>
<tr>
<td></td>
<td>Flexibility</td>
<td>NFMIILEMO</td>
<td>(MILE) need for flexibility in its method of operation</td>
</tr>
<tr>
<td></td>
<td>Innovation</td>
<td>DIMILLEEOYR</td>
<td>Innovative design of the (MILE) in its structure, operation and results.</td>
</tr>
</tbody>
</table>

Source: Own elaboration through ATLAS.ti 24

3.2 RESEARCH APPROACH

Hernández & Mendoza, (2023) points out in agreement and for the convenience of this study that a route for qualitative research was carried out, which guides to respond to the problem statement. Relocate and recalculate the best route according to the circumstances and
objective of the study. It includes thematic analysis and interpretation of meanings based on the results that are collected from the study.

The present study was designed under the methodological approach of the qualitative approach, given that it is better adapted in terms of diagnosis and the final product as a proposal focused on the professional development of academic staff based on a (MILE) to be proposed to the (UP) of the Hidalgo state, Mexico.

3.3 POPULATION AND SAMPLE

The population is defined as the total number of research subjects or units of analysis where the study is carried out. Condori-Ojeda (2020).

In the present research, a population of 836 study subjects classified as part-time and full-time academic staff was contemplated, given the justification and objective of the research, where those already mentioned are the majority as work staff and are those with greater continuity they participate in hiring and promotion processes within the (UP) of the state of Hidalgo, Mexico.

### Table 4

**Study population by type of academic staff and by (UP) of the state of Hidalgo**

<table>
<thead>
<tr>
<th>TYPE OF ACADEMIC STAFF</th>
<th>POLYTECHNICAL UNIVERSITIES OF THE STATE OF HIDALGO</th>
<th>Total population of PTC and PA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>UPT</td>
<td>UPMH</td>
</tr>
<tr>
<td>Full Time Teachers (PTC)</td>
<td>75</td>
<td>57</td>
</tr>
<tr>
<td>Subject Teachers (PA)</td>
<td>121</td>
<td>97</td>
</tr>
<tr>
<td>Total PTC and PA by UP</td>
<td>196</td>
<td>154</td>
</tr>
</tbody>
</table>

Fuente: Elaboración propia a partir de indicadores en informes estadísticos y apartados de transparencia, alojados en las páginas web de las seis (UP) del estado de Hidalgo.

3.3.1 Sample

According to Hernández & Mendoza (2023), a sample in the qualitative route is a selective part of the population on which the data will be collected, without necessarily being statistically proven from the universe being studied.
Table 5
Sample calculation (n)

<table>
<thead>
<tr>
<th>SAMPLE SIZE</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Trust</td>
<td>95%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Z</td>
<td>N</td>
<td>E</td>
<td>p</td>
<td>q</td>
<td>803</td>
</tr>
<tr>
<td>1.96</td>
<td>836</td>
<td>0.05</td>
<td>0.5</td>
<td>0.5</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>n=</td>
<td>263</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For a total population of 836 full-time and subject-specific teachers, the sample size is 263, which is equivalent to 32.75%.

Source: self made

In the qualitative approach, it is important to mention that at the beginning a sample is not set before collecting the data, rather, a type of sampling unit is determined with an approximate number of cases, confirming that said final sample will be known until achieve theoretical saturation.

Table 6
Absolute and percentage values of the academic staff of the (UP) of the State of Hidalgo, Mexico.

<table>
<thead>
<tr>
<th>ABSOLUTE AND PERCENTAGE VALUES BY TYPE OF ACADEMIC STAFF</th>
<th>Full Time Teachers (PTC)</th>
<th>Subject Teachers (PA)</th>
<th>Total PTC and PA by UP</th>
<th>% of PTC and PA by UP</th>
<th>No. of interviews applied, based on convenience sampling for each (UP)</th>
</tr>
</thead>
<tbody>
<tr>
<td>POLYTECHNICAL UNIVERSITIES OF THE STATE OF HIDALGO</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPT</td>
<td>75</td>
<td>121</td>
<td>196</td>
<td>23.44</td>
<td>20</td>
</tr>
<tr>
<td>%</td>
<td>38</td>
<td>62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPMH</td>
<td>57</td>
<td>97</td>
<td>154</td>
<td>18.42</td>
<td>15</td>
</tr>
<tr>
<td>%</td>
<td>37</td>
<td>63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPP</td>
<td>133</td>
<td>168</td>
<td>301</td>
<td>36.00</td>
<td>30</td>
</tr>
<tr>
<td>%</td>
<td>44</td>
<td>56</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPH</td>
<td>5</td>
<td>25</td>
<td>30</td>
<td>3.59</td>
<td>3</td>
</tr>
<tr>
<td>%</td>
<td>17</td>
<td>83</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPFIM</td>
<td>31</td>
<td>99</td>
<td>130</td>
<td>15.55</td>
<td>13</td>
</tr>
<tr>
<td>%</td>
<td>24</td>
<td>76</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>UPE</td>
<td>5</td>
<td>20</td>
<td>25</td>
<td>2.99</td>
<td>3</td>
</tr>
<tr>
<td>%</td>
<td>20</td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL VALUES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total population</td>
<td>306</td>
<td>530</td>
<td>836</td>
<td></td>
<td></td>
</tr>
<tr>
<td>% Total of PTC y PA</td>
<td>37</td>
<td>63</td>
<td>100</td>
<td>84</td>
<td></td>
</tr>
</tbody>
</table>

Source: Own elaboration with data from statistical reports and transparency sections, hosted on the websites of the six (UP) of the state of Hidalgo.
4 RESULTS

To carry out the analysis and interpretation of the qualitative data, the main themes raised in the research study were considered, such as; the current state of job induction in the academic staff of the (UP) of the state of Hidalgo, its professional development and the proposal of a strategic job induction model. Consequently, a series of questions totally related to the research topic were developed, which allowed us to obtain a diversity of information collected through the interview technique.

4.1 INTERPRETATION OF RESULTS

4.1.1 Category 1: labor induction

Next, the relationships and comparisons of the different variables within category 1 referring to job induction are described. Here are responses related to the current labor induction practices in the (UP) of the state of Hidalgo, the inclusion or not of organizational and position induction for academic staff and the existence or not of related procedures, programs and records. to this theme.

Figure 3

Analysis and interpretation of results referring to the category of “Labor Induction”

Source: Own elaboration through ATLAS.ti 24

It can be concluded based on the results obtained in the interviews carried out with the convenience sample of the six (UP) of the state of Hidalgo and reaching theoretical saturation that the lack of integration of labor induction practices (FIPILP), is it is largely due to the
absence of strategies for the execution of organizational and job induction (AEEIL), in addition said absence of strategies is a consequence of the lack of an effective procedure for induction (FPEI) and the lack of programs relevant labor induction plans (FPIP).

4.1.2 Category 2: academic staff

The following figure describes the relationships and comparisons of the different variables within category 2 referring to academic staff. This presents responses related to the absence of job induction and re-induction actions, following hiring and promotion processes of academic staff that directly affect as a triggering factor for professional development, which provides certainty, competence and job satisfaction. Likewise, it helps in the succession processes of the teaching staff according to the new needs and academic profiles of said study subjects.

**Figure 4**

*Analysis and interpretation of results referring to the category of “Academic Staff”*

Source: Own elaboration through ATLAS.ti 24

Regarding category 2 referring to academic staff, it can be concluded according to the perceptions collected in the interviews of the sample, that the lack of development plans and for generational change of academic staff (FPCG), is associated with the absence of organizational and position labor induction (AIOYP) through procedure and program and is similarly associated with the absence of the reinduction process (ARE) in cases of personnel promoted or transferred to another area or academic program. Reinduction is a process that
must also be permanent during the work career of the work personnel according to the perception of the responses of the interviewed sample.

4.1.3 Category 3: professional development

Next, the relationships and comparisons of the different variables within category 3 referring to professional development are described. This document shows responses related to stability, competence, satisfaction and job performance, in addition to the possibilities of generating succession plans, which, conceptually and pragmatically as a whole, ideally define “professional development”. Strategic job induction will be, based on this proposal, a trigger for said development in the academic staff of the six (UP) of the state of Hidalgo.

Figure 5
Analysis and interpretation of results referring to the category of “Professional Development”

Source: Own elaboration through ATLAS.ti 24

It can be concluded that the ineffectiveness of the execution of professional development plans (IEPDP) is caused in all cases, given the absence of said plans, both for newly hired and promoted teachers, of a negative impact on the job performance due to the absence of job induction (INDLAIL). Likewise, this last mentioned phenomenon is totally associated with the lack of strategies for generating job stability (IEGEL), by the human resources department that trigger significant changes in the start-up practices of academic staff. Finally, it is concluded that the human resources department, by not formulating these strategies, generates in most cases ineffectiveness in job induction practices and therefore, professional development plans.

4.1.4 Category 4: Strategic Labor Induction Model (MILE)

The following figure describes the relationships and comparisons of the different variables within category 4 referring to the proposal of a Strategic Labor Induction Model as a proposal to trigger the professional development of the academic staff of the (UP) of the state of Hidalgo. This presents responses related to the perception of the proposal of a strategic,
relevant, permanent, flexible, versatile in its operationality through ICT and innovative labor induction model at the sector level of the subsystem of polytechnic universities in the state of Hidalgo. This perception was favorable given the positive impact it will have on many functions, work environment and performance that in the long term as a whole trigger the professional development of the academic staff of said subsystem of the state of Hidalgo, all this in accordance with the diverse manifestations and expressions and sensitive of the interviewed subjects.

**Figure 6**

*Analysis and interpretation of results referring to the category of “Strategic Labor Induction Model”*

![Fig 6](https://via.placeholder.com/150)

Source: Own elaboration through ATLAS.ti 24

Regarding the present category, it can be concluded according to the perception of the interviewed sample, that the proposal of a strategic job induction model requires the inclusion of ICT's (IITMILE) for better effectiveness and dynamism in the application of the induction. Likewise, the use of said technologies is associated with the relevance that the model would have as a proposal. On the other hand, the need for a pertinent model (NMILEP) will allow, in its operation and exercise when implemented, a continuous improvement of said scheme, but above all of the comprehensive labor induction process. Furthermore, the requirement of the model proposal regarding its flexibility for operation with applicants (NFMILEMO), will have a positive impact by providing part of its relevance. Likewise, the continuous improvement of the model (MCMILECV) is a direct cause of the need for the design of the flexible model. Finally, the presentation of an innovative model in terms of its structure, operation and results...
Strategic Labor Induction: a Methodological Proposal Towards the Professional Development of Academic Staff in the Polytechnical Universities of the State of Hidalgo, Mexico

(DIMILEEOYR), will allow in the first instance its flexibility for the application of induction and subsequently the confirmation of its relevance.

5 DISCUSSION

According to the general objective of the present study and according to the four main categories on which the study was based and from which the most sensitive results were obtained from the convenience sample studied of the six (UP) of the state of Hidalgo, concludes with the following proposal of (MILE), which, contextualized in the global human resources management process, seeks to generate value and be a differentiator in the search through its subsequent implementation to trigger long-term professional development.

Figure 7
Proposal for a Strategic Labor Induction Model (MILE) for the (UP) of the state of Hidalgo.

Based on the present proposal, which, through a two-level methodology, aims to comprehensively include all the academic staff of the (UP) of the state of Hidalgo, segmenting these into those recently hired and those who have seniority, but with some mobility of assignment or promotion. The (MILE) is characterized by the establishment of an induction
procedure which will be housed in the quality management system with all the formats or records necessary to comply with said process. Likewise, this model will be based on an annual induction program, which will be permanently open through a b-Learning platform and through the personal assistance of expert mentors from the human resources area and the academic area. Likewise, the present, through the aforementioned digital tool, will carry out feedback and evaluation to confirm the induction received and the outstanding result, sufficient and not sufficient to access, if necessary, reinforcement and/or complementary training actions and plans. Subsequent development processes, applied by the human resources department. To conclude, the (MILE) has as specific objectives to address the academic staff, the socialization process upon admission for the first time, the promotion of institutional identity and the formation of generic competencies of the organization and specific to the position. With the latter, it is expected that work will begin in an optimal state with the information, communication and basic tools necessary for their work and professional practice. Subsequently, it is expected that other skills for job development will be strengthened until reaching the strategy that with all the information provided, the specific training provided, the personal attention of the mentors, both human and academic resources, the feedback and evaluation with support of the digital platform and other types of experiences provided to the newly hired or to the most senior academic staff, it is possible to trigger the professional development of said staff, generating identity, value in what they do, how they do it and that said intellectual capital is a long-term and lasting investment for the organization, generating better future development plans and meeting the expectations of an eminently productive work life.

6 CONCLUSIONS

Strategic job induction based on the research carried out is defined as an innovative construct in the area of economic-administrative sciences, specifically in relation to Human Resources Administration (HRA). Likewise, the research under a qualitative route allowed us to perceive not only the absence or presence of elements (categories) of the research, but also allowed us to understand the sensations and/or suggestions that the study sample has regarding improving the training of the human capital through the new theoretical construct and the Strategic Labor Induction Model (MILE) that, based on its characteristics and its implementation, will determine a new praxis of labor induction through a comprehensive strategy that will focus all resources and efforts on trigger the personal and professional
development of academic staff in their respective work centers of the (UP) of the state of Hidalgo, Mexico.

The possibility remains open that in future studies the present proposal of (MILE) can be piloted, these first results evaluated and implemented in the already mentioned (UP) to fulfill its main objective.

It is concluded that job induction continues to have theoretical and scientific validity in the (ARH) and that the inclusion of operational and administrative strategies focused on the same practice, energize and innovate the purposes of an organization and motivate academic staff in the face of any change. or internal staff rotation, giving them certainty and satisfaction through learning and induction as an institutional strategy.

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