The Organizational Disgnosis in An Educational Institution - Case Study: Industrial Polytechnic Institute

Yanara Aróstica Lugones[1*], Dislayne González Morales[2], Orlando Martínez Rodríguez[2]

[1] Department of Psychology, Faculty of Humanities, Municipal University Center, Trinidad, Sancti Spíritus, Cuba
[2] Department of Information Sciences, Faculty of Humanities, Municipal University Center, Trinidad, Sancti Spíritus, Cuba

Email Address

yanara104@gmail.com (Yanara Aróstica Lugones), dislaynegonzalez@gmail.com (Dislayne González Morales), orlandomartinez@gmail.com (Orlando Martínez Rodríguez)
*Correspondence: yanara104@gmail.com

Abstract:

Given the importance of the study of organizations, especially in the educational field, this article intends to base the need for organizational diagnosis in educational units as a way to improve their performance in fulfilling their social responsibility. First, the methodological design is described, which contemplated the application, procedure and interpretation of qualitative methods and techniques such as: document analysis, in-depth interview, brainstorming and the SWOT matrix in the study of Human Resources Management (HRM), Culture and Organizational Climate, subcategories of organizational diagnosis analysis. The population studied was composed of 60 employees of the entity, 30 of them formed the sample. In the end, the action plan is proposed as an essential step in the process and the results of its application.

1. Introduction

In recent times, organizations have reached an important boom where the competitive challenge they face in most activities is constantly intensifying and consequently they are obliged to develop new behaviors to correct their objectives in these environments. Many institutions are not exempt from the need to resort to these changes through interventive diagnosis, which constitutes an important and necessary tool in the development of labor organizations to obtain a comprehensive knowledge of them through a detailed description of the current state that let you know where they are, where they want to go, how they should project the path to get there, contributing to their optimal functioning and the implementation of their own development.

There are several investigations that include the organizational diagnosis in different sectors [1,2,3,4,5] with emphasis on the study of varied topics such as Human resources management, culture and organizational climate [6], among other purposes, with the aim of obtaining positive changes in the development of labor organizations from a psychosocial perspective. On the other hand, organizational diagnoses focused on educational fields are not sufficient [7,8,9,10,11] as schools, universities, polytechnics, but the studies directed to these centers mostly focus on the teaching-learning process and the processes linked to it. However, the educational units are also labor organizations that require a comprehensive analysis of all their processes and their current situation to achieve changes that favor organizational development and social learning in order to improve their functioning.

The Andrés Berros Macías Industrial Polytechnic Institute of the municipality of Trinidad is located in the Armando Mestre Popular Council. It emerged in 2004 as a new modality of study. It shows a modern architectural structure composed of 17 installations. It constitutes a small work group composed of 38 men and 22 women. In the center different specialties are studied. As for the occupational category, there are teachers who teach the subjects of general training and technical education and other different specialties. There are also non-teaching workers who belong to the service sphere.

It is an educational center that has been showing some problems in its operation, from which it is proposed as a general objective: To base the need for organizational diagnosis in educational units as a way to improve their performance in the fulfillment of their social order.

The work was extremely important because it allowed for an integral diagnosis from an organizational point of view in an educational center, on the aspects that typify the physical, psychological, social, cultural and human resources environment. It offered the opportunity to make a detailed description of the state taking into account the potentialities; In addition to identifying the main problems, needs, strengths, weaknesses, opportunities and threats of the center, as well as possible alternative solutions. Another significant aspect of the research was the ability to motivate and sensitize the active participation of workers in the process of change and learning resulting from the diagnosis of the center, making them protagonists of their own development

2. Materials and Methods

It constituted a qualitative investigation, this paradigm was assumed because "Study reality in its natural context, as it happens, trying to make sense of, or interpret the phenomena according to the meanings they have for the people involved" [12].

The use of the case study applied to the organizational diagnosis has been based on several authors who specify, among other elements, that it is a research strategy that focuses on the understanding of the dynamics that occur in specific scenarios, paying attention to their particularity and complexity [13]; which is widely used in organizational analysis as a contemporary phenomenon within the context of real life [14], as well as this type of study tends to focus the situation on a limited number of facts and situations to be able to address them in depth necessary to understand them in a holistic and contextualized way [13,14,15].

Fassio concludes: "The qualitative approach is relevant and recommended for the study of the organization in depth (case study / s)" [15]

The case study carried out followed the phases of the organizational diagnosis and studied its categories of analysis, Human Resources Management (GRH), Culture and Organizational Climate from a group of methods and techniques such as:

• Document analysis: It was used during the review and consultation of the literature related to the subject under study, for the logical historical foundation of the research process. Reference was made to official internal documents such as the disciplinary regulations, which allowed to know the rules that govern the behavior of workers in the labor discipline. The analysis of the document of the general workforce of the workers was also carried out, where all the representative data that characterize the work group of the organization is captured, made it possible to obtain an integral knowledge of them and distribute them by classification ranges. The characterization of the center was also discussed, which contributed to familiarization with the proposed project, understood as the mission, vision and strategic objectives pursued, related to them. These documents were studied at first with the objective of characterizing the organization in a general way.

• The in-depth interview: it is a research technique that was characterized by direct contact between the researcher and the members of the organization. Specific questions were presented that left open the nature of the responses, which contributed to greater confidence based on the ability of respondents to express themselves freely. The opinions, feelings, criteria and attitudes of the members of the organization on different aspects were taken into account and information about personal concerns and needs regarding the organization was obtained. Two interviews were conducted, one to characterize the organization and know its general level of operation and the other with the purpose of characterizing its Human Resources Management In general, it allowed to know and deepen its functions, ways of proceeding, as well as its Main problems and needs.

• Brainstorming: it is characterized by being a participatory technique, integrated by the researcher who directs the process and the members of the organization, who raised all the current problems of the center, listing in order of priority according to intensity, extent and perception That the workers had. It was done with the purpose of identifying the fundamental problems that affect the proper functioning of the organization.

• Participant observation: it is a technique that was used to obtain information in a direct, systematic and objective way about the real characteristics of the organization and consolidate the general impression of the Institute and the context in which it is developed. This method was applied throughout the entire research process and in each of the techniques developed allowing enriching the results obtained on the categories of analysis treated.

• The SWOT matrix: was used to identify weaknesses (D), strengths (F), threats (A) and opportunities (O) of the organization, through a brainstorm as a participatory technique, where workers contributed their assessments Regarding the subject. It made possible through his study not only to identify (D and F, A and O), but also to project actions to turn weaknesses into strengths and mitigate threats. This idea was the main objective for its application.

Participants:

The research population consisted of the 60 workers of the Andrés Berros Macías Industrial Polytechnic Institute of Trinidad; 30 formed the sample that was characterized by being non-probabilistic, since they were intentionally chosen by the researcher following the voluntary nature of the subjects as the main selection criteria. This procedure is common in qualitative research, in this regard it is pointed out that "qualitative studies are carried out in general from non-probabilistic samples" [15,16]. "These can be determined a priori or gradually defined during the research process. In the first case (representative samples, intentional, accessible, among others) " [15].

3. Results and Discussion

• The organization has defined its mission as the integral professional technical training of the students of the middle level of the territory and its vision is to be the polytechnic center of municipal reference with a human capital endowed with the professional skills that respond to the integral formation Professional technique of middle level students.

• It has an organizational chart that responds to its hierarchical and functional structure.

• It is an educational organization for the provision of services where two trades are studied: the average technician for students with ninth grade in civil construction, operation of transport and roads and, the skilled worker in students who do not exceed this degree in masonry profiles, electrical installations, textiles, carpentry, hydraulic installations, automotive mechanic, among other trades.

• They have norms and rules that govern the development of activities and the fulfillment of the labor discipline as well as work methods to achieve the objectives set.

• Presents values that are promoted and shared in the organization among them: responsibility, industriousness, patriotism, honesty, solidarity being reflected by the collective as aspirations to improve and deepen them.

• The center has an unwritten history that only exists in the memory of some workers and most of them do not have an integral domain of the entity's vision, of its history, so it influences the knowledge of its culture.

• The interpersonal relationships established between managers, between workers, between managers and workers are generally manifested in an adequate manner, although interdepartmental conflicts were evidenced due to generational differences and the lack of preparation of new teachers.

• They establish in general a proper communication system and the exchange of information that flows both formally and informally, where there is active participation of workers in work orientations and in the decision-making process at the organizational level. Criticism is also used as an educational element and the misconduct is sanctioned according to the disciplinary regulations.

• They have professors with experience in professional technical education and have general mastery over the social project of the center, its functions and tasks, being consistent with their job. However, there are difficulties in the process of selecting new staff because personal characteristics are not adapted to the job, which is due to the deficit of teachers who present and have a negative impact on work discipline.

• Spaces for improvement and training such as master's degrees, methodological preparations according to workers' requirements are promoted, which do not fully respond to the immediate needs of the organization because all human, material and financial assurances are not created for The development of the courses.

• There is dissatisfaction with the physical and environmental conditions of work, poor lighting and ventilation of some premises, high temperatures and noise. There are also difficulties in the construction status of certain classrooms, departments, workshops and the warehouse.

• Workers assume a negative attitude and little motivation to solve problems. In certain situations, the entity does not have sufficient capacity to adapt effectively to the changes that affect its operation, nor do they have sufficient learning skills to deal with them since they do not tolerate conflict to some extent as an element of organizational development.

• They have little training to develop the initiative, innovation, good and new projects. They present a pessimistic perspective regarding the achievement of the expected objectives in the immediate and mediate future since they do not have all the necessary conditions created, which has a significant impact on the state of psychological well-being of the majority of the members because they do not they feel satisfied with their individual needs in the active life that they establish in the entity.

• It was also possible to verify external, positive aspects that significantly influence the center, where opportunities are identified, among them: the existence of organisms in the territory related to the specialties that are developed in the organization, the disposition they receive from some institutions linked to the needs of the pre-professional practices of students in some specialties (civil construction, electrical installations, transportation operation, automotive mechanic) and the alternatives of the modality of self-employment of trades in the territory that are of interest to the center to practice.

After performing the analysis of the results, and as a consequence of the organizational diagnosis, an action plan is drawn up. According to [17]: "The Organizational Diagnosis is an experiential activity that involves a group of people in an organization ... interested in proposing solutions to problematic situations ... undergoing a self-analysis that must conclude with a concrete action plan that allows solving the situation problematic. "

Based on the objectives to be achieved in the action plan, the actions, oriented to the workers, are described. In addition, the participants, responsible, the frequency and the human, technical and material resources necessary for its implementation are required.

Action plan as part of the organizational diagnosis to improve the performance of educational units in the fulfillment of their social order:

Objective 1: Strengthen the ability of workers to adapt and learn from problems at the center

Action 1: Development of group dynamics with workers where debate and reflection on the confrontation of problems and other issues of related interest.

Action 2: Model problematic situations where conflicts arise and their possible solutions and then encourage their debate from their experiences.

Objective 2: Strengthen the pre-professional preparation of new teachers.

Action 1: Conducting seminars, workshops, advice to new teachers related to the contents of their subjects and of a methodological and pedagogical nature.

Objective 3: Improve working conditions in the center and areas of teaching activities.

Action 1: Management with the superior instances of the territory the material resources for the repair and maintenance of the work places.

Objective 4: To promote the integral formation of the students in the center from the fulfillment of the curricula.

Action 1: Management with municipal managers, companies and community organizations work centers and spaces for pre-professional practices of students in the specialties of carpentry, hydraulic installations, roads, masonry and textile apparel.

Objective 5: Improve the organizational climate of the center and increase the unity and integration of workers

Action 1: Development of group dynamics with the group of workers that make up the different areas of the entity to discuss the nature of interpersonal relationships between members of different departments

Action 2: - Carrying out various activities in groups that promote cohesion and the sense of belonging among the members of the center on significant dates, both for the organization and for its members.

Goal 5: Educate workers about Organizational Culture

Action 1: Execution of talks, conferences and debates on topics related to the history of the center, its vision and other significant aspects that denote its organizational culture.

Objective 6: Encourage compliance with training plans for center leaders

Action 1: Management with the training department of Education cadres the realization of training, courses and other ways of overcoming with the managers and interested staff of the center.

In all the actions the participants were: the workers of the center and the trained personnel (psychologists, methodologists, municipal director) according to the case; The main resources were: specialized personnel, teaching means (books, brochures, folding, magazines), recorders, stores, chairs and tables. The actions were carried out with a quarterly frequency for a more systematic control.

Main results of the Action Plan to improve the performance of educational units in the fulfillment of their social order

Once the designed actions were applied, the status of those aspects that during the diagnosis constituted problems was verified. The results reflected a better work on the part of the management of the center in solving the weaknesses identified; Given the poor management of pre-professional practice, managers made work agreements with companies in the territory to ensure the incorporation of students and respond to the study plan. They also improved working conditions by recovering some premises and others receiving maintenance, as there were poor physical and environmental conditions in the main spaces of the center.

The preparation of the Institute's workers was also achieved through training courses including: computer, related to teaching didactics and others of interest to teachers; Emphasis was placed on the participation of novice professors, and during the diagnosis the poor improvement on the part of teachers in particular of the youngest ones emerged. Both results are important because both the improvement of working conditions and the preparation of staff constitute cardinal indicators in the organization for the fulfillment of its mission. [18] affirm: the human development dimension, the labor conditions dimension, and the productivity dimension…. They intertwine allowing the identification of key organizational success factors.

An essential result of the action plan due to the low tolerance and problem solving was the change in the behavior of the workers and the learning of positive attitudes towards the resolution of problems by the reinforcement of appropriate attitudes in the labor performance of certain workers and from Modeling situations. In this case, the modeling allowed to work only some of the objectives set and that is to say of [19,20, 21]: "modeling is a component of a global intervention strategy", so the rest of the results were due to other techniques such as group dynamics.

The reflection by the workers of their main problems; the assessment of their individual and group position before them, as well as the recognition of negative and positive attitudes in the resolution of the identified conflicts were the most significant results based on the group dynamics developed. This technique was essential in strengthening the capacity for adaptation and learning of workers to the problems in the center and that is how [22] refer "constitute a means to foster closer relationships, developing attitudes of cooperation and establishing emotional ties between group members. They also facilitate the search for solutions to the problems, the resolution of internal conflicts of the group, the integration and intergroup communication, the development of the critical sense and make the group work more effective"

The group cohesion and the sense of belonging were also strengthened during the process, since given a new vision of the problems and a better assessment of the group also changed the perception towards the organization and its members.

Before the implementation of the action plan, there was little knowledge of the institution's history, of the elements that identified it, however, from the development of talks, conferences and debates, the interest and knowledge of the institution's culture grew. These techniques are widely used in solving problems resulting from diagnostic organizations. Authors such as: [23,24] refer to them as part of the action plan or in the organizational diagnostic process itself.

During the development of each of the proposals there was an exchange between the participants that allowed the knowledge of stories, anecdotes related to the center, learn from the experiences of the guests the routines and traditions of the institution, as well as the main shared values in the organization throughout its existence.

In summary, to the extent that the actions were developed, the solutions to the problems detected were implemented and with it the climate of the organization was gradually optimized. A better physical and psychological environment was perceived, expressing itself in the interpersonal relationships of the center.

4. Conclusions

The organizational diagnosis is a necessity in the educational units since it allows to know in depth its current state from the application of a group of methods and

techniques that guarantee it. Indicates the categories of analysis that from their perspective offer that integral vision of the teaching unit as an organization as it addresses from the organizational culture (thoughts, attitudes, values, customs), the climate (physical and psychological environment, satisfaction of their needs individual) and human resources management (analysis, planning, organization, motivation and control).

Based on the problems detected in the organizational diagnosis, an action plan was elaborated in which the participation of the participating subjects was guaranteed. It was necessary to define the objectives of the actions to be followed, the participants and those responsible; the necessary time and resources, both human and technical and material, taking into account the development potential of the center's workers and other trained people who acted as external facilitators.

The results of the actions demonstrated the changes achieved in the functioning of the organization from the individual and group learning of the members of the institution.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Author Contributions

Conceptualization: Y.A.L.; Methodology: D.G.M.; Software: Y.A.L.;　Validation: D.G.M.; Formal analysis: Y.A.L.; Investigation: Y.A.L.; Resources: D.G.M.; Data Curation: O.M.R.; Writing – original draft preparation: Y.A.L.; Writing – review and editing: O.M.R.; Visualization: O.M.R.; Supervision: O.M.R.

Funding

Acknowledgments

References

[1] Lara, R. Organizational diagnosis of a construction company in Mexico Instituto Tecnológico de Tuxtla Gutiérrez. 2011. Available online: https://www.gestiopolis.com-diagnostic-organizational-of-a-company (accessed on 2 December 2019).

[2] Alfaro, B.Y.; Argueta, I.M.; Rivera, M. Organizational Diagnosis of the company of Calzado GW S.A. from C.V. and improvement plan. Degree thesis, Dr. José Matias Delgado University, San Salvador, 2011. Available online: https://webquery.ujmd.edu.sv.siab.THESIS.MER.ADTESAD0001424 (accessed on 2 December 2019).

[3] Medrano, C.M. Organizational Diagnosis of the Café del Mar company. Degree thesis, University of Cartagena, Colombia, 2014. Available online: https://www.scribd.com-document-Diagnostico-CDM-Edicion-Terminada-1 (accessed on 2 December 2019).

[4] Galindo, N. Organizational Diagnosis for a brandy company as a support process for the implementation of a quality management system. 2017. Available online: https://www.uv.mx.iiesca.files (accessed on 2 December 2019).

[5] Asencio, L.; Caiche, W.; Medina, V.V. The organizational diagnosis, contextualized in the manufacturing businesses of the province of Santa Elena-Ecuador 2015-2016. *Innova Research Journal*, 2017, 2(5), 137-147.

[6] Villa, E.M.; Pons, R.Á.; Obando, J. Application of a diagnostic methodology for the change of organizational culture in higher education institutions. *Espacios*, 2018, 39(30), 16-25.

[7] Pérez, I.; Maldonado, M. Organizational analysis in educational institutions. *Educational Meeting*, 2004, 11(3), 448-459.

[8] Trejo, A. Organizational diagnosis of the general high school "Villa Bernal". Master's Thesis, Technological and Higher Studies Institute of Monterrey, Mexico, 2004.
Available online: https://repositorio.tec.mx/bitstream/handle/11285/567362/Docs Tec_4382.pdf?sequence=1 (accessed on 2 December 2019).

[9] Segredo, A.M. Organizational development. A look from the academic field. *Medical Education*, 2016, 17 (1), 3-8.

[10] Garbanzo, G.M. Organizational development and change processes in educational institutions, a challenge of education management. *Education*, 2016, 40 (1), 67-87.

[11] Cantos, M.E. Organizational diagnosis in public schools of basic education of the Canton Cañar–Ecuador, to promote its effectiveness. *Population and Development*, 2017, 44, 86-92.

[12] Rodriguez, G.; Gil, J.; García, E. *Qualitative research methodology*; Editions Aljibe. Granada, Spain, 1996. ISBN 9788487767562. Available online: https://issuu.com.docs.128205939-methodology-of-research (accessed on 2 December 2019).

[13] Forni, P. Case studies: origins, design issues and their contribution to social theory. *Myriad. Research in social sciences*, 2010, (5), 61-80, ISSN: 1851-9431. Available online: https://p3.usal.edu.ar.index.php.miriada.article.download (accessed on 10 December 2019).

[14] Yin, R.K. Case study research. Design and methods, 4th ed.; SAGE Publications: Thousand Oaks, CA, USA, 2016; DOI: 10.3138/cjpe.30.1.108. Available online: https://journals.nipissingu.ca/index.php/cjar/article/view/73 (accessed on 10 December 2019).

[15] Fassio, A. Reflections on the qualitative methodology for the study of organizations. *Administrative Sciences*, 2018, 6(12).

[16] Fassio, A.; Pascual, L. Basic research tools for diagnosis and organizational intervention in public organizations. In Methods and techniques of diagnosis and

intervention in public administration; 1th ed.; M. Krieger Editions: Buenos Aires, Argentina, 2015, 2016, 47-80.

[17] Sánchez, J.A. Importance of organizational development in a public institution of Higher Education. Master's Thesis, Universidad Autónoma "Benito Juárez" de Oaxaca, Mexico, 2011.
Available online: http://www.eumed.net/libros-gratis/2008b/390/index.htm (accessed on 10 December 2019).

[18] Tamayo, Y.; Del Rio, A.; García, D. Organizational management model based on the achievement of objectives. *Sum of Business*, 2014, 5 (11), 70-77, DOI: 10.1016/S2215-910X(14)70021-7.

[19] Puchol, D. Modeling: Definition, key factors and fields of application in psychotherapy. 2018. Available online: https://www.psicologia-online.com/el-modelado-definicion-factores-clave-y-ambitos-de-aplicacion-en-psicoterapia-1214.html (accessed on 7 December 2019).

[20] Muñoz, M.; Bermejo, M. Stress Inoculation Training. 1ra ed.; Synthesis: Madrid, Spain, 2001; ISBN 13: 9788477388890   .

[21] Cormier, W.Y.; Cormier, L. Estrategias de entrevista para terapeutas, 3rd ed.; Desclée de Brouwer: Bilbao, España, 2013, 723, ISBN: 978-84-330-2257-8. Available online: https://www.edesclee.com/img/cms/pdfs/9788433010216.pdf (accessed on 17 December 2019).

[22] Solis, F.; Luis, A. Importance of group dynamics in the socialization of five-year-olds in Early Education. Master's Thesis, University of Huancavelica, Perú, 2017. Available online: http://repositorio.unh.edu.pe/handle/UNH/1550 (accessed on 17 December 2019).

[23] Sánchez, G. Organizational development: a strategy of change for documentary institutions. *Annals of documentation*, 2009, (12), 235-254.

[24] Mondragón, A.A. Proposal to improve the organizational work culture of the DGTIC of SEDESOL. Master's Thesis, Research and innovation center in information and communication technology, Mexico, 2016. Available online: https://infotec.repositorioinstitucional.mx.jspui.handle (accessed on 17 December 2019).